

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: Carr St

Date: 31-Oct-13

Time: 13:35

Service Type: End of Season

Technician: NK

Status: Site Down

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port    Time    Count    Measure    Predicted

**Battery Tests**

Battery #    V Quiescent    V Load

**Problem:**

**Action Taken:** Could not check PT calibration or upload new firmware for AL200. Wrong cable in truck. PT was pulled up, battery taken out, and TB out. Replaced desiccant. Site down.

**Site Notes:**

**Follow-Up:** Upload new firmware into AL200. Check PT cal.

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**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Carr St	Date:	30-May-13
Service Type:	Installation	Technician:	SB
			Time: 16:00
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
PT D 3723935	100

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Installed site, Alert 1, only need 45 foot PT (approx)

**Site Notes:** ALERT2, ID 10012, Magnum Key

**Follow-Up:**

**MAINTENANCE RECORD**  
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<b>Service Log</b>			
Site Name:	Ralston Res	Date:	17-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	11:35
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
110	11:45	89		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT and riser fully submerged. Cant access PT water level to high (even with hip waders) to check calibration. PT tipped three times. TB clean and clear. TB OK

**Site Notes:**

**Follow-Up:**

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<b>Service Log</b>			
Site Name:	Ralston Res	Date:	05-Feb-13
Service Type:	OneRain Service Ca	Technician:	SB/ZC
		Time:	15:25
		Status:	PT Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Replaced conduit allowing access to PT during high water. PT will be installed in the spring.

**Site Notes:**

**Follow-Up:**

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**Service Log**

Site Name: **Ralston Res**      Date: **20-Mar-13**      Time: **13:21**  
 Service Type: **OneRain Service Ca**      Technician: **SB/FL**      Status: **OK**

**Configuration Changes**

Part #	Location
TX J 8698	110
TB J 2532	110
PT D 3533101	110
BY R 1216	110

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
113	0.012	0.0132	0.0055

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
110	14:12	1		0
110	14:12	2		0
113	13:55	1837	9.54 psi	2232
113	13:56	1321	6.87 psi	1610
113	13:57	977	5.08 psi	1194
113	13:58	592	3.08 psi	727
113	13:59	222	1.16 psi	279
113	14:00	914	4.75 psi	913

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 1216	13.16	

**Problem:**

**Action Taken:** Installed TXR, Battery, Desiccant, and TB. Installed new PT. Good hydraulic contact. RF OK. TB OK. PT OK.

{Auto Entry: Calibrated sensor 113 by linear regression. Modified calibration data. New calibration [Slope(0.0120), Calibration Offset(0.0132), Std Error(0.0055), Calibration Date(3/20/2013 1:59:52 PM)]}.

**Site Notes:****Follow-Up:**

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<b>Service Log</b>			
Site Name:	Ralston Res	Date:	26-Aug-13
Service Type:	Inspection	Technician:	ZC
		Time:	12:16
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
110	12:23	154		0	
110	12:23	155		0	
113	12:20	428	2.22 psi	426	
113	12:21	1030	5.34 psi	1025	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
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<b>Service Log</b>			
Site Name:	Croke Pump Stn	Date:	13-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	11:26
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1232	120

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
123	11:34	1089	5.35 psi	1083	
123	11:35	440	2.15 psi	435	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1232	13.10	

**Problem:**

**Action Taken:** TB OK, PT OK. Replaced Battery.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
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<b>Service Log</b>			
Site Name:	Croke Pump Stn	Date:	26-Aug-13
Time:	13:27	Service Type:	Inspection
Technician:	ZC	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
120	13:33	87		0	
120	13:33	88		0	
123	13:30	445	2.18 psi	442	
123	13:31	1054	5.19 psi	1050	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**



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<b>Service Log</b>			
Site Name:	Croke Pump Stn	Date:	12-Mar-13
Service Type:	Start Up	Technician:	SB
			Time: 13:19
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 28970	120
TB J 20912	120
BY R 1220	120

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0120-00E
Jumpers:	3,5 Removed
Eprom:	
Tx Freq:	169.500
Rx Freq:	171.875
Fwd Power:	3.8
Rev Power:	0.1
SWR:	1.39

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
120	13:47	1		0
120	13:48	2		0
123	13:34	1193	5.84 psi	1183
123	13:35	320	1.55 psi	314

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1220	13.29	

**Problem:**

**Action Taken:** Installed TXR, TB, Battery, and desiccant. Lowered PT. Flushed intake. RF OK. PT OK. TB OK.

**Site Notes:**

**Follow-Up:**

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<b>Service Log</b>			
Site Name:	Croke Pump Stn	Date:	31-Oct-13
Time:	10:40	Service Type:	End of Season
Technician:	NK	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
123	10:51	1479	7.24 psi	1466	
123	10:52	332	1.60 psi	325	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT intake flushed, and dug mud out from around riser. PT OK. TXR out, TB out. Site down.

**Site Notes:**

**Follow-Up:**

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<b>Service Log</b>			
Site Name:	Simm St	Date:	31-Oct-13
Time:	12:15		
Service Type:	End of Season	Technician:	NK
Status:	Site Down		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
133	12:22	1573	7.57 psi	1573	
133	12:23	375	1.80 psi	375	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT OK. TXR out. Site down.

**Site Notes:**

**Follow-Up:**

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**Service Log**Site Name: **Simm St**Date: **12-Mar-13**Time: **12:28**Service Type: **Start Up**Technician: **SB**Status: **OK****Configuration Changes**

Part #	Location
<b>BY R 1007</b>	<b>130</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>133</b>	<b>12:48</b>	<b>1144</b>	<b>5.51 psi</b>	<b>1146</b>
<b>133</b>	<b>12:49</b>	<b>429</b>	<b>2.07 psi</b>	<b>430</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1007</b>	<b>12.94</b>	

**Problem:** Missing PT Desiccant Box**Action Taken:** Installed TXR, Battery, and Desiccant. RF OK. PT OK. Need to bring a PT desiccant Box for PT signal conditioning.**Site Notes:****Follow-Up:** Missing PT Desiccant Box

**MAINTENANCE RECORD**  
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<b>Service Log</b>			
Site Name:	Simm St	Date:	13-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	12:23
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
133	12:27	782	3.76 psi	782	
133	12:28	454	2.19 psi	455	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
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<b>Service Log</b>			
Site Name:	Simm St	Date:	13-Aug-13
Service Type:	Inspection	Technician:	NK
			Time: 14:09
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1037	130

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1037	13.03	

**Problem:**

**Action Taken:** Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**

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<b>Service Log</b>			
Site Name:	Blue Mountain	Date:	17-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	12:15
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
140	12:20	949		0
140	12:20	950		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** @ 12:26 AT raw value = 109 = AT = 69 degrees. RH raw value = 55 = RH = 55%. @ 12:27 psychrometer readings. db = 70 and wb = 63. RH = 60% Dewpoint = 74 degrees. AT = 70 degrees. TB two tips. TB clear and clean. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Nott Creek	Date:	01-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	11:35
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0150-0012-0112-11011
Jumpers:	
Eprom:	B
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK

**Site Notes:** use combo lock (2012 is code) 796 lock it locked out of chain

**Follow-Up:**



**MAINTENANCE RECORD**  
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<b>Service Log</b>			
Site Name:	Nott Creek	Date:	02-Dec-13
Service Type:	End of Season	Technician:	NK/SB
			Time: 11:48
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1232	150

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0150-0012-0112-11011
Jumpers:	
Eprom:	B
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	2.2
Rev Power:	0.1
SWR:	1.54

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
150	12:10	1		0
150	12:10	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1232	13.06	

**Problem:**

**Action Taken:** Changed out battery and desiccant. Tested TXR with Watt meter. Radio should be replaced. TB OK. Site OK.

**Site Notes:**

**Follow-Up:** Replace radio in spring

**MAINTENANCE RECORD**  
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<b>Service Log</b>			
Site Name:	Nott Creek	Date:	12-Feb-13
Service Type:	Start Up	Technician:	SB
		Time:	13:41
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 25151	150
TB H 560	150
BY R 0842	150

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0150-0012-0112-11011
Jumpers:	
Eprom:	B
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
150	13:49	1		0
150	13:53	2		0
150	13:54	3		0
150	13:54	4		0
150	13:54	5		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Installed TXR, TB, Battery, and Desiccant. RF OK. Tb OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
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<b>Service Log</b>			
Site Name:	Leyden Reservoir	Date:	31-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 11:20
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Can not access PT. Lock out of lower structure. TXR out. TB out. Site down. PT was not pulled up.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
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**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Leyden Reservoir**      Date: **26-Aug-13**      Time: **13:54**  
Service Type: **Inspection**      Technician: **ZC**      Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
200	14:05	168		0
200	14:05	169		0
200	14:06	170		0
203	13:59	221	2.24 psi	238
203	14:00	514	5.15 psi	536

**Battery Tests**

Battery #      V Quiescent    V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
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<b>Service Log</b>			
Site Name:	Leyden Reservoir	Date:	15-Mar-13
Service Type:	Start Up	Technician:	ZC
			Time: 12:45
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 14148	200
TB J 23289	200
BY R 1203	200

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0200-00D
Jumpers:	C:J6,1-2,J3,5 off; L:J8,9,1-
Eprom:	R 1.8 9CA1
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	3.5
Rev Power:	0.1
SWR:	1.41

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
203	13:04	268	2.56 psi	271	
203	13:05	550	5.36 psi	558	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1203	12.90	

**Problem:**

**Action Taken:** Installed TXR, battery and TB. Lowered PT for season. PT tested OK RF OK TB OK

**Site Notes:**

**Follow-Up:** PT conduit broken at start of cat walk. Needs repair.

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**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Leyden Reservoir**      Date: **13-Jun-13**      Time: **11:54**  
Service Type: **Inspection**      Technician: **MZ**      Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
203	12:03	519	5.14 psi	535
203	12:04	231	2.33 psi	248

**Battery Tests**

Battery #      V Quiescent    V Load

**Problem:**

**Action Taken:** TB OK, PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Leyden Conf.	Date:	13-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	12:56
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
213	13:00	878	4.25 psi	892	
213	13:01	503	2.46 psi	517	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK, PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**Site Name: **Leyden Conf.**Date: **12-Mar-13**Time: **11:43**Service Type: **Start Up**Technician: **SB**Status: **OK****Configuration Changes**

Part #	Location
<b>TX J 8696</b>	<b>210</b>
<b>TB J 23174</b>	<b>210</b>
<b>BY R 1255</b>	<b>210</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: **0210-3-0**  
 Jumpers: **C:JB6,1-2 L:JB9,10, 1-2**  
 Eprom:  
 Tx Freq: **169.525**  
 Rx Freq:  
 Fwd Power: **5.0**  
 Rev Power: **0.1**  
 SWR: **1.33**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>210</b>	<b>12:05</b>	<b>1</b>		<b>0</b>
<b>210</b>	<b>12:07</b>	<b>2</b>		<b>0</b>
<b>213</b>	<b>11:54</b>	<b>1198</b>	<b>5.77 psi</b>	<b>1213</b>
<b>213</b>	<b>11:55</b>	<b>387</b>	<b>1.91 psi</b>	<b>402</b>

**Battery Tests**

Battery #	V Quiescent	V Load

**Problem:****Action Taken:** Installed TXR, Battery, TB, and Desiccant. Lowered PT. PT OK. RF OK. TB OK.**Site Notes:****Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Leyden Conf.	Date:	14-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	10:15
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0223	210

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
210	10:21	0		0
210	10:23	0		0
210	10:24	1		0
210	10:25	2		0
210	10:27	3		0
210	10:28	4		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1255	13.03	

**Problem:**

**Action Taken:** changed out battery. TB received four tips. TB OK Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Leyden Conf.	Date:	31-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 11:51
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
213	12:04	458	2.23 psi	469	
213	12:05	1451	6.96 psi	1461	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT OK. TXR out, TB out. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Upper Leyden	Date:	13-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	10:19
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Upper Leyden	Date:	26-Aug-13
Service Type:	Inspection	Technician:	ZC
		Time:	11:45
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** TB funnel clogged

**Action Taken:** Cleaned TB funnel. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Upper Leyden	Date:	01-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	12:59
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
220	13:00	188		0
220	13:01	189		0
220	13:01	190		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received four tips. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Upper Leyden	Date:	31-Oct-13
Service Type:	End of Season	Technician:	NK
		Time:	9:38
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Took out battery, desiccant, and TB. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Upper Leyden	Date:	12-Feb-13
Service Type:	Start Up	Technician:	ZC
		Time:	15:28
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0907	220

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0220-0012-0112-11011
Jumpers:	
Eprom:	B
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	3.5
Rev Power:	0.2
SWR:	1.63

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
220	15:29	3		0
220	15:29	4		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0907	12.80	

**Problem:**

**Action Taken:** Installed TB and battery. TB OK RF OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Van Bibber Park	Date:	31-Oct-13
Time:	12:40	Service Type:	End of Season
Technician:	NK	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TXR out, TB out. Site down.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Van Bibber Park	Date:	06-Feb-13
Service Type:	Start Up	Technician:	PB
		Time:	13:56
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 25451	300
TB J 19612	300
BY R 2231	300

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0300-3-D
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
300	14:07	1		0
300	14:08	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 2231	12.96	

**Problem:**

**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Van Bibber Park	Date:	30-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	14:01
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0324	300

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
300	14:04	207		0
300	14:05	0		0
300	14:05	0		0
300	14:09	1		0
300	14:10	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 2231	12.94	

**Problem:**

**Action Taken:** changed out battery. TB clean and clear on arrival. TB received three tips. TB OK SiteOK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Guy Hill	Date:	01-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	10:50
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
310	10:51	179		0
310	10:52	180		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Guy Hill	Date:	12-Feb-13
Service Type:	Start Up	Technician:	SB
		Time:	12:52
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 19666	310
TB J 24912	310
BY R 1237	310

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
310	13:02	1		0
310	13:04	2		0
310	13:04	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Installed TXR, Battery, TB, and desiccant. RF OK. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Guy Hill	Date:	18-Nov-13
Service Type:	End of Season	Technician:	SB
			Time: 13:27
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, and Desiccant for winter.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sports Complex	Date:	12-Mar-13
Service Type:	Start Up	Technician:	SB
			Time: 10:26
			Status: PT Down

<b>Configuration Changes</b>	
Part #	Location
TX J 28969	320
TB J 21318	320
BY R 0814	320

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0320-00E
Jumpers:	C: J6 1-2,J3.5 off L: J9,10
Eprom:	R1.8 57FE
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	4.2
Rev Power:	0.1
SWR:	1.36

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
320	11:14	1		0
320	11:14	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0814	13.12	

**Problem:** PT Unresponsive

**Action Taken:** installed TXR, Battery, TB, and Desiccant. PT was unresponsive needs replaced. Replaced top TB screen. RF OK. TB OK. TB DOWN.

**Site Notes:**

**Follow-Up:** Replace PT

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sports Complex	Date:	20-Mar-13
Service Type:	OneRain Service Ca	Technician:	SB/FL
		Time:	10:59
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
PT D 3533100	320

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
323	0.011	-0.0107	0.0069

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
320	11:46	3		0
320	11:46	4		0
323	11:29	1970	9.39 psi	1938
323	11:30	1485	7.07 psi	1459
323	11:31	1036	4.94 psi	1021
323	11:32	671	3.20 psi	663
323	11:33	223	1.05 psi	221
323	11:34	1021	4.88 psi	1024

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Installed new PT. Dug out intake for hydraulic contact. Continue to monitor riser. DO NOT NEED 100 foot PT. suggest 75 feet.

{Auto Entry: Calibrated sensor 323 by linear regression. Modified calibration data. New calibration [Slope(0.0110), Calibration Offset(-0.0107), Std Error(0.0069), Calibration Date(3/20/2013 11:33:54 AM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sports Complex	Date:	03-Jun-13
Service Type:	Inspection	Technician:	SB
		Time:	11:19
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
320	11:29	90		0	
320	11:29	91		0	
323	11:25	1254	6.01 psi	1260	
323	11:26	450	2.18 psi	457	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. PT OK. TB OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sports Complex	Date:	31-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 12:59
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
323	13:10	1585	7.53 psi	1581	
323	13:11	325	1.57 psi	330	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT OK. TXR out, TB out. Site down, PT up.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sports Complex	Date:	14-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	10:54
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1238	320

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
319	11:03	0		0
320	11:03	0		0
320	11:09	2		0
320	11:10	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0814	13.10	

**Problem:**

**Action Taken:** Changed battery. TB clean. TB received three tips. TB OK Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sports Complex	Date:	18-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	11:24
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
320	11:28	11		0
320	11:28	12		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** TB did not respond to flood event.

**Action Taken:** TB heavily clogged on arrival. TB funnel cleaned. TB tested. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Van Bibber @ 93	Date:	12-Mar-13
Service Type:	Start Up	Technician:	SB
			Time: 14:04
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 25154	330
TB H 557	330
BY R 0505	330

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
330	14:30	1		0
330	14:31	2		0
333	14:20	1518	7.38 psi	1509
333	14:21	320	1.56 psi	331

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0505	13.36	

**Problem:**

**Action Taken:** Installed TXR, TB, Battery, and desiccant. Lowered PT and Flushed intake. RF OK. Tb OK. PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Van Bibber @ 93	Date:	31-Oct-13
Time:	10:08	Service Type:	End of Season
Technician:	NK	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
333	10:11	1507	7.41 psi	1514	
333	10:12	324	1.60 psi	339	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT OK. TB out, TXR out. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Van Bibber @ 93	Date:	13-Jun-13
Time:	10:35	Status:	OK
Service Type:	Inspection	Technician:	MZ

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
333	10:44	1137	5.59 psi	1147	
333	10:45	477	2.35 psi	491	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK, PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Van Bibber @ 93	Date:	26-Aug-13
Service Type:	Inspection	Technician:	ZC
		Time:	12:38
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
330	12:44	205			0
330	12:44	206			0
333	12:42	462	2.27 psi		475
333	12:43	1041	5.12 psi		1051

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Montview Park	Date:	13-Nov-13
Service Type:	End of Season	Technician:	SB
			Time: 13:57
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
403	14:01	900	4.67 psi	893	
403	14:02	184	0.93 psi	181	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, Desiccant, and TB. PT tested within acceptable range.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Montview Park	Date:	13-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	11:39
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0810	400

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
400	11:46	206		0
400	11:48	0		0
400	11:54	1		0
400	11:55	2		0
500	10:59	21		0
500	11:05	0		0
500	11:06	0		0
500	11:11	1		0
500	11:11	2		0
500	11:14	3		0
500	11:14	4		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1135	13.10	

**Problem:**

**Action Taken:** Changed out battery. TB clean and clear on arrival. TB leveled. TB received four tips. TB OK  
 Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Montview Park**      Date: **12-Mar-13**      Time: **13:00**  
 Service Type: **Start Up**      Technician: **MZ**      Status: **OK**

**Configuration Changes**

Part #	Location
TB J 23318	400
BY R 1135	400

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
400	13:25	1		0
400	13:29	2		0
400	13:29	3		0
403	13:19	570	2.76 psi	556
403	13:20	137	0.63 psi	128

**Battery Tests**

Battery #	V Quiescent	V Load
TB J 23318	13.02	

**Problem:**

**Action Taken:** Start Up. RF OK, PT OK, TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Montview Park	Date:	20-Jun-13
Service Type:	Inspection	Technician:	
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
403	0.012	-0.0399	0.007

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
403	12:35	965	5.03	psi	1012
403	12:36	770	4.01	psi	807
403	12:37	576	3.00	psi	604
403	12:38	381	1.98	psi	399
403	12:39	180	0.92	psi	187
403	12:40	751	3.93	psi	752
403	12:41	361	1.88	psi	362

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK. Recalibrated PT.

{Auto Entry: Calibrated sensor 403 by linear regression. Modified calibration data. New calibration [Slope(0.0121), Calibration Offset(-0.0399), Std Error(0.0070), Calibration Date(6/20/2013 12:39:44 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Kelly Dam	Date:	13-Nov-13
Service Type:	End of Season	Technician:	SB
			Time: 13:22
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
413	13:26	1313	6.47 psi	1334	
413	13:27	268	1.29 psi	277	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant. PT tested within acceptable range. Pulled up PT

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Kelly Dam	Date:	18-Mar-13
Service Type:	Start Up	Technician:	ZC
			Time: 10:05
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 19663	410
TB J 25035	410
BY R 0415	410

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
413	0.011	-0.1493	0.0348

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0410-3-0
Jumpers:	
Eprom:	R1.8 57FE
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
413	10:22	1862	9.05 psi	1800	
413	10:23	1453	7.04 psi	1393	
413	10:24	1040	5.02 psi	985	
413	10:25	628	3.01 psi	576	
413	10:26	232	1.07 psi	186	
413	10:27	1056	5.10 psi	1055	
413	10:28	440	2.09 psi	439	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0415	12.90	

**Problem:**

**Action Taken:** Installed TXR, battery and TB. PT calibrated. RF OK TB OK Lowered PT for start of season.

{Auto Entry: Calibrated sensor 413 by linear regression. Modified calibration data. New calibration [Slope(0.0113), Calibration Offset(-0.1493), Std Error(0.0348), Calibration Date(3/18/2013 10:26:41 AM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Kelly Dam	Date:	24-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	10:39
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
410	10:35	53		0
410	10:35	54		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** possible TB clogged. Check PT cal after flood event.

**Action Taken:** TB clogged on arrival. TB cleaned. PT access under water. TB OK Need to check PT

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Kelly Dam	Date:	20-Jun-13
Time:	12:57	Service Type:	Inspection
Technician:		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
413	13:02	740	3.65 psi	758	
413	13:03	312	1.53 psi	326	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK, PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Kelly Dam	Date:	09-Aug-13
Service Type:	Service Call	Technician:	ZC
		Time:	13:47
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
410	13:58	1		0
410	13:58	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Low battery and possibly clogged TB

**Action Taken:** PT access underwater. Replaced battery. TB clogged-cleaned TB. TB OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Expo Park	Date:	24-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	11:41
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 18599	420
BY R 1252	420

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
420	12:03	1		0
420	12:03	2		0
423	11:47	1440	7.22 psi	1433
423	11:48	262	1.29 psi	254

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1116	12.90	

**Problem:**

**Action Taken:** Pumped out water from standpipe. Appears water came in from bottom (standpipe has been hit by lawnmower). Installed new TXR and battery. PT tested OK. Riser has very poor hydraulic contact. Attempted to clean however, water is still to high. Will need to flush with pump once water lowers.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Expo Park	Date:	12-Nov-13
Time:	14:44	Service Type:	End of Season
Technician:	NK/SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
423	14:46	1096	5.54 psi	1098	
423	14:47	574	2.96 psi	585	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant for the season. PT Tested OK. Pulled up. Dug out riser. Drilled hydraulic hole in riser as the pond bottom has risen.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Expo Park	Date:	12-Mar-13
Service Type:	Start Up	Technician:	MZ
		Time:	11:30
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 11036	420
TB J 13776	420
BY R 1116	420

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
423	11:45	568	2.78 psi	549	
423	11:46	203	0.97 psi	191	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
TB J 13776	13.05	

**Problem:**

**Action Taken:** Start Up. RF OK, PT OK, TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Expo Park	Date:	17-Sep-13
Service Type:	OneRain Service Ca	Technician:	GH
		Time:	16:21
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Low battery. Found transmitter floating in water in standpipe.

**Action Taken:** Removed transmitter to check for water damage. Water needs to be pumped, and entrance of water needs to be found & fixed.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Expo Park	Date:	20-Jun-13
Service Type:	Inspection	Technician:	
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0420--00D
Jumpers:	
Eprom:	R1.8 57FE
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
423	13:45	801	4.01 psi	794	
423	13:46	418	2.08 psi	412	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK. PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Expo Park	Date:	09-Aug-13
Service Type:	Inspection	Technician:	ZC
		Time:	13:28
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
420	13:30	297		0
420	13:30	298		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT access under water. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Utah Park	Date:	09-Aug-13
Service Type:	Inspection	Technician:	ZC
		Time:	13:05
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
430	13:12	389		0	
430	13:13	390		0	
433	13:09	429	2.18 psi	426	
433	13:10	1021	5.22 psi	1024	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Utah Park**                      Date: **12-Mar-13**                      Time: **10:22**  
Service Type: **Start Up**                      Technician: **MZ**                      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX J 27310</b>	<b>430</b>
<b>TB J 18553</b>	<b>430</b>
<b>BY R 0619</b>	<b>430</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>433</b>	<b>10:57</b>	<b>753</b>	<b>3.81 psi</b>	<b>746</b>
<b>433</b>	<b>10:58</b>	<b>189</b>	<b>0.93 psi</b>	<b>179</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 0619</b>	<b>12.94</b>	

**Problem:**

**Action Taken:** Start Up. RF OK, TB OK, PT OK, Solar OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Utah Park	Date:	12-Nov-13
Service Type:	End of Season	Technician:	NK/SB
			Time: 12:58
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
433	13:01	1189	6.07 psi	1193	
433	13:03	427	2.16 psi	422	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT OK. PT up. TXR out, TB out. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Utah Park	Date:	20-Jun-13
Time:	13:58	Service Type:	Inspection
Technician:		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
433	14:05	751	3.82 psi	749	
433	14:06	489	2.47 psi	484	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK. PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Utah Park	Date:	24-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	12:21
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
430	12:29	830		0
430	12:30	831		0
433	12:23	1404	7.17 psi	1408
433	12:24	131	0.64 psi	121
433	12:25	622	3.16 psi	618
433	12:26	1763	9.00 psi	1771

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Check PT cal, over reporting

**Action Taken:** Flushed PT intake. Did a four point PT test. Current calibration good. Will continue to monitor PT readings. PT OK TB clean and clear on arrival. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora FS#7	Date:	05-Feb-13
Service Type:	Start Up	Technician:	PB
			Time: 12:07
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 18543	440
TB J 10749	440
BY R 1231	440

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0440-00E
Jumpers:	5 Off
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
440	12:18	1		0
440	12:18	3		0
440	12:19	4		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1231	12.99	

**Problem:**  
**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.  
**Site Notes:**  
**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora FS#7	Date:	12-Nov-13
Time:	12:48	Service Type:	End of Season
Technician:	NK/SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB out, TX out, Site down for winter.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora FS#7	Date:	25-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	13:00
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0303	440

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
440	13:04	0		0
440	13:08	1		0
440	13:08	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1231	13.06	

**Problem:**

**Action Taken:** Changed out battery. TB clean on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Havana Park	Date:	13-Nov-13
Service Type:	End of Season	Technician:	SB
			Time: 12:50
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
503	12:55	1288	6.14 psi	1286	
503	12:58	187	0.82 psi	181	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant for the season. PT tested within acceptable range. Pulled up.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Havana Park	Date:	17-Sep-13
Time:	15:47	Status:	OK
Service Type:	OneRain Service Ca	Technician:	GH

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Not tipping.

**Action Taken:** Magnet arm rubbing switch. Adjusted & tested.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Havana Park	Date:	20-Jun-13
Service Type:	Inspection	Technician:	
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0500-00E
Jumpers:	3,5 Off
Eprom:	3 Min Sample
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
503	13:21	970	4.58 psi	962	
503	13:24	547	2.55 psi	540	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**  
**Action Taken:** TB OK. PT OK.  
**Site Notes:**  
**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Havana Park	Date:	13-Aug-13
Service Type:	Service Call	Technician:	NK
		Time:	10:58
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1231	500

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0509	13.10	

**Problem:** Possible TB clog

**Action Taken:** TB was clean and clear on arrival. TB received four tips. TB level. TB OK Two point PT test passed. PT OK Changed battery. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Havana Park**      Date: **12-Mar-13**      Time: **12:10**  
Service Type: **Start Up**      Technician: **MZ**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX J 15784</b>	<b>500</b>
<b>TB J 02531</b>	<b>500</b>
<b>BY R 0509</b>	<b>500</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>500</b>	<b>12:39</b>	<b>1</b>		<b>0</b>
<b>500</b>	<b>12:40</b>	<b>2</b>		<b>0</b>
<b>503</b>	<b>12:28</b>	<b>363</b>	<b>1.62 psi</b>	<b>347</b>
<b>503</b>	<b>12:31</b>	<b>112</b>	<b>0.41 psi</b>	<b>95</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 0509</b>	<b>12.86</b>	

**Problem:**

**Action Taken:** Start Up. RF OK, PT OK, TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Virginia Court**      Date: **05-Sep-13**      Time: **10:56**  
Service Type: **OneRain Service Ca**      Technician: **NK/SB**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 0405</b>	<b>510</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>510</b>	<b>11:00</b>	<b>0</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 0405</b>	<b>12.85</b>	

**Problem:** low battery

**Action Taken:** Replaced battery.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Virginia Court	Date:	06-Feb-13
Service Type:	Start Up	Technician:	PB
		Time:	10:05
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 18542	510
TB J 23177	510
BY R 0250	510

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0510-3-D
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
510	10:20	1		0
510	10:22	2		0
510	10:22	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0250	12.96	

**Problem:**

**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Virginia Court	Date:	12-Nov-13
Service Type:	End of Season	Technician:	NK/SB
		Time:	14:30
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant for the season.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Virginia Court	Date:	25-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	13:41
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
510	13:42	216		0
510	13:42	217		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Jewell Detention	Date:	05-Feb-13
Time:	12:38	Service Type:	Start Up
Technician:	PB	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TB J 10736	520
BY R 1137	520

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0520-00E
Jumpers:	5 off
Eprom:	R 1.8 9CA1
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
520	12:52	1		0
520	12:53	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1137	12.88	

**Problem:**

**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Jewell Detention	Date:	12-Nov-13
Service Type:	End of Season	Technician:	ZC
			Time: 13:54
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, battery and TB for end of season.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Jewell Detention	Date:	25-Jul-13
Time:	13:19	Service Type:	Inspection
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1035	520

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
520	13:29	1		0
520	13:29	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1137	13.20	

**Problem:**

**Action Taken:** Changed battery. TB a little clogged. TB cleaned. TB tipped two times. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Denver FS #19	Date:	11-Nov-13
Service Type:	End of Season	Technician:	NK/SB
		Time:	13:41
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0530-3-D
Jumpers:	
Eprom:	
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB out, TXR out. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Denver FS #19**      Date: **29-Jul-13**      Time: **14:45**  
Service Type: **Inspection**      Technician: **NK/SB**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 1240</b>	<b>530</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches: **0530-3-D**  
Jumpers:  
Eprom:  
Tx Freq: **169.525**  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>530</b>	<b>14:51</b>	<b>1</b>		<b>0</b>
<b>530</b>	<b>14:51</b>	<b>2</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1240</b>	<b>13.30</b>	

**Problem:** Battery low

**Action Taken:** TB OK. Replaced Battery

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>Denver FS #19</b>	Date: <b>05-Feb-13</b>	Time: <b>13:35</b>	
Service Type: <b>Start Up</b>	Technician: <b>PB</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
Part #	Location
<b>TX J 18533</b>	<b>530</b>
<b>TB J 23302</b>	<b>530</b>
<b>BY R 0336</b>	<b>530</b>

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	<b>0530-3-D</b>
Jumpers:	
Eprom:	
Tx Freq:	<b>169.525</b>
Rx Freq:	
Fwd Power:	<b>4.0</b>
Rev Power:	<b>0.1</b>
SWR:	<b>1.38</b>

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
<b>BY R 0336</b>	<b>12.92</b>	

**Problem:**

**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Parker and Miss.	Date:	12-Nov-13
Service Type:	End of Season	Technician:	ZC
			Time: 14:15
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, battery and TB for end of season.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Parker and Miss.	Date:	05-Feb-13
Service Type:	Start Up	Technician:	PB
			Time: 13:05
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 18532	540
TB J 3174	540
BY R 0825	540

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0540-00E
Jumpers:	5 Off
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
540	13:21	1		0
540	13:21	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0825	13.17	

**Problem:**

**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Harvard Gulch Pk**      Date: **08-Mar-13**      Time: **13:44**  
Service Type: **Start Up**      Technician: **MZ**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX J 8691</b>	<b>600</b>
<b>TB J 21334</b>	<b>600</b>
<b>BY R 1009</b>	<b>600</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>600</b>	<b>14:08</b>	<b>1</b>		<b>0</b>
<b>600</b>	<b>14:11</b>	<b>2</b>		<b>0</b>
<b>600</b>	<b>14:12</b>	<b>3</b>		<b>0</b>
<b>603</b>	<b>14:06</b>	<b>889</b>	<b>4.71 psi</b>	<b>876</b>
<b>603</b>	<b>14:07</b>	<b>456</b>	<b>2.41 psi</b>	<b>445</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>TB J 21334</b>	<b>12.92</b>	

**Problem:**

**Action Taken:** Start Up. PT OK, RF OK, TB OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Harvard Gulch Pk	Date:	12-Nov-13
Time:	10:28		
Service Type:	End of Season	Technician:	ZC
Status:	Site Down		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
603	10:32	407	2.10 psi	388	
603	10:33	962	5.10 psi	949	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT failed 2 point test. PT will need to be calibrated during spring start up. Removed TXR, TB and battery. PT pulled up for end of season.

**Site Notes:**

**Follow-Up:** Calibrate PT at Spring 2014 start up.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Harvard Gulch Pk	Date:	28-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	10:34
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0600-00E
Jumpers:	C:J6,1-2,J3,5off;L:J9,10,1-
Eprom:	R 1.8 57FE
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
603	10:37	763	4.09 psi	761	
603	10:38	340	1.80 psi	331	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**  
**Action Taken:** TB OK. PT OK.  
**Site Notes:**  
**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Harvard Gulch Pk	Date:	18-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	12:38
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1322	600

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
600	12:45	1		0
600	12:46	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1322	13.10	

**Problem:** low battery

**Action Taken:** Battery replaced. TB clogged on arrival. TB cleaned. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Harvard/Jackson	Date:	08-Mar-13
Service Type:	Start Up	Technician:	MZ
		Time:	14:27
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 148	610
TB J 19639	610
BY R 0634	610

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0610-00E
Jumpers:	3,5 off
Eprom:	R1.8 583E
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	2.7
Rev Power:	0.0
SWR:	1

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
613	14:37	891	4.36 psi	891	
613	14:37	505	2.47 psi	506	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0634	13.30	

**Problem:**

**Action Taken:** Start Up. RF OK, PT OK, TB OK.

**Site Notes:** Riser needs to be extended. Nearly completely covered in mud.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Harvard/Jackson	Date:	07-Mar-13
Service Type:	Start Up	Technician:	SB
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 148	610
TB J 19639	610
BY R 0634	610

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
613	0.013	-0.0781	0.0199

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0610-00E
Jumpers:	3,5 off
Eprom:	R1.8 583E
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	3.9
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
610	13:56	2		0
610	13:56	3		0
613	13:39	1797	9.61 psi	1964
613	13:44	1805	9.71 psi	1984
613	13:45	1317	7.06 psi	1443
613	13:46	921	4.95 psi	1011
613	13:47	615	3.29 psi	673
613	13:48	235	1.23 psi	253
613	13:49	954	5.11 psi	949
613	13:50	300	1.58 psi	298

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Installed TXR, TB, Battery, and Desiccant. Replaced desiccant in PT box. Calibrated PT. RF OK. PT OK. TB OK.

{Auto Entry: Calibrated sensor 613 by linear regression. Modified calibration data. New calibration [Slope(0.0125), Calibration Offset(-0.0781), Std Error(0.0199), Calibration Date(3/7/2013 1:48:13 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Harvard/Jackson	Date:	04-Nov-13
Service Type:	End of Season	Technician:	SB
			Time: 14:00
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
613	14:03	998	4.89 psi	995	
613	14:04	357	1.74 psi	353	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, TB, Battery and desiccant for season. Pulled up PT.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Harvard/Jackson**      Date: **06-Sep-13**      Time: **13:32**  
 Service Type: **Inspection**      Technician: **NK**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 1130</b>	<b>610</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
<b>613</b>	<b>0.011</b>	<b>0.0348</b>	<b>0.0078</b>

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>610</b>	<b>13:44</b>	<b>1</b>		<b>0</b>
<b>610</b>	<b>13:45</b>	<b>2</b>		<b>0</b>
<b>613</b>	<b>14:02</b>	<b>289</b>	<b>1.43 psi</b>	<b>270</b>
<b>613</b>	<b>14:03</b>	<b>680</b>	<b>3.35 psi</b>	<b>625</b>
<b>613</b>	<b>14:04</b>	<b>1192</b>	<b>5.87 psi</b>	<b>1089</b>
<b>613</b>	<b>14:05</b>	<b>1584</b>	<b>7.79 psi</b>	<b>1443</b>
<b>613</b>	<b>14:06</b>	<b>1949</b>	<b>9.58 psi</b>	<b>1773</b>
<b>613</b>	<b>14:07</b>	<b>1148</b>	<b>5.65 psi</b>	<b>1151</b>
<b>613</b>	<b>14:08</b>	<b>248</b>	<b>1.23 psi</b>	<b>249</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 0634</b>	<b>13.23</b>	

**Problem:** low battery

**Action Taken:** Replaced battery. TB clean and clear on arrival. TB OK Two point PT test failed. PT re-calibrated. PT riser flushed. PT OK Site OK

{Auto Entry: Calibrated sensor 613 by linear regression. Modified calibration data. New calibration [Slope(0.0113), Calibration Offset(0.0348), Std Error(0.0078), Calibration Date(9/6/2013 2:06:25 PM)]}.

**Site Notes:** Riser needs extension. 2" pipe. At least a foot extension.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Harvard/Jackson	Date:	28-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	11:07
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
613	0.011	0.032	0.0054

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
613	11:08	1051	5.18 psi	962	
613	11:09	823	4.06 psi	755	
613	11:10	629	3.11 psi	580	
613	11:11	422	2.09 psi	392	
613	11:12	219	1.09 psi	207	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK. Recalibrated PT.

{Auto Entry: Calibrated sensor 613 by linear regression. Modified calibration data. New calibration [Slope(0.0113), Calibration Offset(0.0320), Std Error(0.0054), Calibration Date(6/28/2013 11:12:51 AM)]}.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Quincy/Highline	Date:	06-Feb-13
Service Type:	Start Up	Technician:	PB
		Time:	10:47
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 15788	620
TB J 18560	620
BY R 1214	620

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0620-00E
Jumpers:	5 off
Eprom:	
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
620	10:59	1		0
620	11:00	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1214	13.19	

**Problem:**

**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Quincy/Highline	Date:	12-Nov-13
Service Type:	End of Season	Technician:	ZC
			Time: 11:07
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TB, TXR and Battery. Site down for end of season.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Quincy/Highline	Date:	25-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	10:53
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
620	10:53	160		0
620	10:54	161		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Temple Pond	Date:	07-Mar-13
Service Type:	Start Up	Technician:	MZ
		Time:	16:42
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 8697	630
TB J 18549	630
BY R 1249	630

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0630-00E
Jumpers:	C:JB3,5 off, JB6 1-2
Eprom:	3 min sample
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	3.8
Rev Power:	0.0
SWR:	1

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
630	11:29	1		0
630	11:29	2		0
633	11:16	794	3.71 psi	785
633	11:19	302	1.37 psi	299

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1249	13.18	

**Problem:**

**Action Taken:** Start Up. RF OK, PT OK, TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Temple Pond	Date:	12-Nov-13
Service Type:	End of Season	Technician:	ZC
			Time: 11:39
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
633	11:49	1067	5.09 psi	1096	
633	11:52	451	2.11 psi	460	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Tested PT. PT OK. Removed TXR, battery and TB for end of season. PT raised.

**Site Notes:**

**Follow-Up:** Check PT calibration at Spring 2014 start up

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Temple Pond	Date:	28-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	12:43
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
633	12:45	656	3.09 psi	656	
633	12:48	301	1.40 psi	306	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**  
**Action Taken:** TB OK. PT OK.  
**Site Notes:**  
**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Temple Pond	Date:	09-Sep-13
Service Type:	Inspection	Technician:	NK
		Time:	10:38
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
633	0.011	-0.0951	0.0304

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
630	10:47	440			0
630	10:47	441			0
633	10:42	1369	6.38 psi		1340
633	10:45	2009	9.39 psi		1965
633	10:48	1011	4.70 psi		992
633	10:51	473	2.18 psi		467
633	10:54	58	0.23 psi		62
633	10:57	1100	5.13 psi		1105
633	11:00	269	1.23 psi		271

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Two point PT test failed. PT re-calibrated. PT OK Site OK

{Auto Entry: Calibrated sensor 633 by linear regression. Modified calibration data. New calibration [Slope(0.0108), Calibration Offset(-0.0951), Std Error(0.0304), Calibration Date(9/9/2013 10:54:59 AM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Goldsmith/E'man	Date:	12-Nov-13
Service Type:	End of Season	Technician:	ZC
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
643	12:40	1719	9.11 psi	1860	
643	12:43	1714	9.10 psi	1858	
643	12:44	1298	7.09 psi	1444	
643	12:45	882	5.07 psi	1028	
643	12:46	477	3.09 psi	620	
643	12:47	61	1.05 psi	201	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Tested PT. Check PT zero and span at start up. Removed TXR, battery and TB. Raised PT for end of season.

**Site Notes:**

**Follow-Up:** Check PT cal, span and zero at Spring 2014 start up.



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Goldsmith/E'man	Date:	08-Mar-13
Service Type:	Start Up	Technician:	MZ
		Time:	11:47
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TB J 18554	640
BY R 0348	640

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0640-00E
Jumpers:	C:J6,1-2,J3,5off; L:J9,10 1
Eprom:	R1.8 57FE
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	2.9
Rev Power:	0.0
SWR:	1

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
640	12:08	2		0
640	12:08	2		0
643	12:00	985	4.82 psi	982
643	12:01	378	1.86 psi	377

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0348	13.07	13.00

**Problem:**

**Action Taken:** Start Up. RF OK. PT OK. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Goldsmith/E'man	Date:	28-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	12:11
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure		Predicted
643	12:17	452	2.13 psi		432
643	12:18	224	1.02 psi		206

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK. PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Goldsmith/E'man	Date:	06-Sep-13
Service Type:	Inspection	Technician:	NK
		Time:	14:26
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
643	0.011	0.1763	0.0508

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
643	14:32	1451	7.12	psi	1504
643	14:33	1908	9.33	psi	1964
643	14:34	1084	5.34	psi	1134
643	14:35	524	2.62	psi	569
643	14:36	66	0.40	psi	107
643	14:37	1242	6.09	psi	1239
643	14:38	313	1.59	psi	312

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Two point PT test failed. PT recalibrated. PT OK PT riser flushed. Site OK

{Auto Entry: Calibrated sensor 643 by linear regression. Modified calibration data. New calibration [Slope(0.0112), Calibration Offset(0.1763), Std Error(0.0508), Calibration Date(9/6/2013 2:36:41 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: Goldsmith/E'man      Date: 25-Jul-13      Time: 10:06  
 Service Type: OneRain Service Ca      Technician: NK      Status: OK

**Configuration Changes**

Part #	Location
BY R 0305	640

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
643	0.011	-0.2742	0.0782

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches: 0640-00E  
 Jumpers: C:J6,1-2,J3,5off; L:J9,10 1  
 Eprom: R1.8 57FE  
 Tx Freq: 169.525  
 Rx Freq:  
 Fwd Power: 3.2  
 Rev Power: 0.1  
 SWR: 1.43

**Test Transmission**

Port	Time	Count	Measure	Predicted
640	10:38	1		0
640	10:38	2		0
643	10:22	1917	9.14 psi	1864
643	10:24	1487	7.07 psi	1441
643	10:25	1135	5.37 psi	1093
643	10:26	634	2.95 psi	599
643	10:27	29	0.02 psi	2

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 0348	13.13	

**Problem:** Site completely down

**Action Taken:** Bad battery. Volts were 2.01. Changed out battery. Site now works. Two point PT test failed. Re-calibrated PT. PT OK TB received two tips. TB OK Site operational.

{Auto Entry: Calibrated sensor 643 by linear regression. Modified calibration data. New calibration [Slope(0.0111), Calibration Offset(-0.2742), Std Error(0.0782), Calibration Date(7/25/2013 10:27:32 AM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Iliff Pond	Date:	11-Apr-13
		Time:	9:57
Service Type:	OneRain Service Ca	Technician:	MZ/INK
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Tested PT's. Both Signal Conditioning units appear to be bad. Canal PT tested bad. Follow up site visit to verify Signal Conditioning units required.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Iliff Pond	Date:	08-Mar-13
Service Type:	Start Up	Technician:	MZ
		Time:	12:21
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 18531	650
TB J 18583	650
BY R 1024	650

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
654	0.011	0.2642	0.0481

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
650	13:02	1			0
650	13:02	2			0
654	12:47	1071	5.10 psi		1108
654	12:48	821	3.94 psi		857
654	12:49	598	2.92 psi		633
654	12:50	409	2.02 psi		439
654	12:51	176	0.93 psi		200

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
TB J 18583	13.23	

**Problem:**

**Action Taken:** Start Up. PT 654 new calibration. PT 653 unresponsive. TB OK. RF OK.

{Auto Entry: Calibrated sensor 654 by linear regression. Modified calibration data. New calibration [Slope(0.0107), Calibration Offset(0.2642), Std Error(0.0481), Calibration Date(3/8/2013 12:52:58 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Iliff Pond** Date: **24-Apr-13** Time: **11:49**  
 Service Type: **OneRain Service Ca** Technician: **NK/SB** Status: **OK**

**Configuration Changes**

Part #	Location
PT D 886724	650

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
653	0.011	-0.1862	0.0554
654	0.012	0.018	0.0047

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
650	12:36	57		0
650	12:37	58		0
653	12:04	1999	9.24 psi	1909
653	12:05	1554	7.23 psi	1492
653	12:06	1087	5.03 psi	1034
653	12:07	636	2.90 psi	591
653	12:08	216	0.91 psi	179
653	12:09	1297	6.01 psi	1302
653	12:10	611	2.78 psi	611
654	12:19	1720	9.04 psi	1924
654	12:20	1329	6.98 psi	1481
654	12:22	1068	5.62 psi	1186
654	12:23	615	2.24 psi	457
654	12:23	209	1.10 psi	213

**Battery Tests**

Battery #	V Quiescent	V Load
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**Problem:** Stream PT Down

**Action Taken:** Stream PT bad. Replaced PT and calibrated. Adjusted zero and span on detention pond signal conditioning. Recalibrated PT. Both PTs OK with good hydraulic contact.

{Auto Entry: Calibrated sensor 653 by linear regression. Modified calibration data. New calibration [Slope(0.0108), Calibration Offset(-0.1862), Std Error(0.0554), Calibration Date(4/24/2013 12:08:30 PM)]}.

{Auto Entry: Calibrated sensor 654 by linear regression. Modified calibration data. New calibration [Slope(0.0121), Calibration Offset(0.0180), Std Error(0.0047), Calibration Date(4/24/2013 12:28:49 PM)]}.

**Site Notes:** 653 is stream, 654 is detention pound. 653 is green wire and 654 is white wire going to transmitter. Installed 75 ft PT stream side

**Follow-Up:** captive nuts on top section

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>Iliff Pond</b>	Date: <b>28-Jun-13</b>	Time: <b>11:41</b>	
Service Type: <b>Inspection</b>	Technician: <b>MZ</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
<b>654</b>	<b>0.012</b>	<b>0.0314</b>	<b>0.0041</b>

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	<b>0659-00E</b>
Jumpers:	<b>3,4,5 Off</b>
Eprom:	
Tx Freq:	<b>169.500</b>
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
<b>653</b>	<b>11:51</b>	<b>748</b>	<b>3.57 psi</b>	<b>731</b>	
<b>653</b>	<b>11:52</b>	<b>356</b>	<b>1.71 psi</b>	<b>345</b>	
<b>654</b>	<b>11:56</b>	<b>781</b>	<b>4.12 psi</b>	<b>862</b>	
<b>654</b>	<b>11:57</b>	<b>650</b>	<b>3.42 psi</b>	<b>713</b>	
<b>654</b>	<b>11:58</b>	<b>533</b>	<b>2.81 psi</b>	<b>582</b>	
<b>654</b>	<b>11:59</b>	<b>348</b>	<b>1.84 psi</b>	<b>373</b>	
<b>654</b>	<b>12:00</b>	<b>191</b>	<b>1.02 psi</b>	<b>194</b>	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK. PT 653 OK. Recalibrated PT 654.

{Auto Entry: Calibrated sensor 654 by linear regression. Modified calibration data. New calibration [Slope(0.0121), Calibration Offset(0.0314), Std Error(0.0041), Calibration Date(6/28/2013 12:00:31 PM)]}.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Iliff Pond	Date:	22-Apr-13
Service Type:	Service Call	Technician:	SB/NK
		Time:	10:16
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT stuck in conduit. Need to replace 10 foot stick. 1/2". 654 is working. located near steps.

**Site Notes:** Red tape PT is located at pond.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Iliff Pond	Date:	12-Nov-13
Service Type:	End of Season	Technician:	ZC
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
653	13:15	461	2.15 psi	446	
653	13:16	1093	5.11 psi	1067	
654	13:23	411	2.15 psi	407	
654	13:24	966	5.08 psi	965	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Tested PTs. Removed TXR, battery and TB. Raised PTs for end of season.

**Site Notes:**

**Follow-Up:** Check cal on 653 on Spring 2014 start up. Check hydraulic contact on 653. Stand pipe needs captive nuts.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Iliff Pond	Date:	06-Sep-13
Service Type:	Inspection	Technician:	NK
		Time:	12:44
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0814	650

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
650	13:14	1		0	
650	13:15	2		0	
650	13:16	3		0	
650	13:16	4		0	
653	13:05	1405	6.83 psi	1427	
653	13:06	243	1.20 psi	247	
654	12:59	359	1.90 psi	361	
654	13:00	1103	5.82 psi	1109	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0814	13.14	

**Problem:** low battery

**Action Taken:** TB clean and clear on arrival. TB OK Two point test passed for both PT's. Current cal good. PT's OK Replaced battery. Site OK

**Site Notes:** All the captive nuts are gone. Needs new nuts

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>Iliff Pond</b>	Date: <b>26-Apr-13</b>	Time: <b>10:14</b>	
Service Type: <b>Service Call</b>	Technician: <b>NK/MZ</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
Part #	Location
<b>PT D 3570759</b>	<b>650</b>

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
<b>653</b>	<b>0.011</b>	<b>0.0502</b>	<b>0.0146</b>

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
<b>650</b>	<b>12:35</b>	<b>60</b>		<b>0</b>
<b>650</b>	<b>12:35</b>	<b>61</b>		<b>0</b>
<b>653</b>	<b>12:20</b>	<b>2031</b>	<b>6.70 psi</b>	<b>1448</b>
<b>653</b>	<b>12:20</b>	<b>1533</b>	<b>7.32 psi</b>	<b>1580</b>
<b>653</b>	<b>12:21</b>	<b>1097</b>	<b>5.24 psi</b>	<b>1137</b>
<b>653</b>	<b>12:21</b>	<b>662</b>	<b>3.17 psi</b>	<b>694</b>
<b>653</b>	<b>12:23</b>	<b>446</b>	<b>2.14 psi</b>	<b>475</b>
<b>653</b>	<b>12:23</b>	<b>209</b>	<b>1.01 psi</b>	<b>234</b>
<b>653</b>	<b>12:24</b>	<b>26</b>	<b>0.14 psi</b>	<b>48</b>
<b>653</b>	<b>12:26</b>	<b>1902</b>	<b>9.08 psi</b>	<b>1957</b>
<b>653</b>	<b>12:26</b>	<b>1495</b>	<b>7.15 psi</b>	<b>1544</b>
<b>653</b>	<b>12:27</b>	<b>1045</b>	<b>5.01 psi</b>	<b>1087</b>
<b>653</b>	<b>12:27</b>	<b>590</b>	<b>2.84 psi</b>	<b>625</b>
<b>653</b>	<b>12:28</b>	<b>194</b>	<b>0.94 psi</b>	<b>217</b>

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** {Auto Entry: Calibrated sensor 653 by linear regression. Modified calibration data. New calibration [Slope(0.0110), Calibration Offset(0.0502), Std Error(0.0146), Calibration Date(4/26/2013 12:28:21 PM)]}.

Installed new PT stream side (653). PT ok, TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Tollgate at 6th	Date:	28-Mar-13
Time:	12:22		
Service Type:	Start Up	Technician:	MZ/BL
Status:	OK		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0700-00E
Jumpers:	JB 3-5 off
Eprom:	R 1.8 57EE
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
700	12:25	177		0
700	12:25	178		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** RF OK. TB OK. Disabled Bubble transmissions. SWR = 1.06

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Tollgate at 6th	Date:	29-Jan-13
		Time:	11:54
Service Type:	OneRain Service Ca	Technician:	PB/ZC
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Changed frequency to 169.500 Mhz

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Tollgate at 6th	Date:	25-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	13:52
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
700	13:53	312		0
700	13:54	313		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clear and clean on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: Horseshoe Park

Date: 21-Mar-13

Time: 13:24

Service Type: Start Up

Technician: SB/FL

Status: OK

**Configuration Changes**

Part #	Location
TX J 8694	710
TB J 10739	710
BY R 0909	710

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
713	0.011	-0.1049	0.0239

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
710	13:50	1		0
713	13:37	1965	9.09 psi	1847
713	13:38	1542	7.12 psi	1448
713	13:39	1040	4.78 psi	976
713	13:40	671	3.08 psi	631
713	13:41	283	1.27 psi	265
713	13:42	859	3.95 psi	861

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 0909	12.94	

**Problem:**

**Action Taken:** Installed battery TXR, TB, desiccant and lowered PT. Calibrated PT. replaced top screen to TB. RF OK. Tb OK.

{Auto Entry: Calibrated sensor 713 by linear regression. Modified calibration data. New calibration [Slope(0.0107), Calibration Offset(-0.1049), Std Error(0.0239), Calibration Date(3/21/2013 1:41:18 PM)]}.

**Site Notes:****Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Horseshoe Park	Date:	12-Nov-13
Service Type:	End of Season	Technician:	NK/SB
		Time:	13:18
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
713	0.011	-0.1141	0.0236

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
713	13:20	1256	5.99	psi	1197
713	13:21	1901	9.10	psi	1814
713	13:21	1468	7.01	psi	1399
713	13:21	698	3.31	psi	663
713	13:22	264	1.22	psi	248
713	13:22	921	4.37	psi	919
713	13:23	581	2.75	psi	581

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test failed. Re-calibrated PT. PT OK. PT up. TXR out, TB out. Flushed PT riser. Site down for winter.

{Auto Entry: Calibrated sensor 713 by linear regression. Modified calibration data. New calibration [Slope(0.0111), Calibration Offset(-0.1141), Std Error(0.0236), Calibration Date(11/12/2013 1:22:27 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Horseshoe Park	Date:	27-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	14:27
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
713	0.012	-0.0166	0.0051

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	00E
Jumpers:	JB3&5
Eprom:	R1.8 9CA1
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
713	14:44	996	4.99 psi	1086	
713	14:45	793	3.97 psi	866	
713	14:46	598	2.98 psi	653	
713	14:47	399	2.00 psi	440	
713	14:48	193	0.97 psi	218	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB Clogged. Cleaned. TB OK. PT recalibrated.

{Auto Entry: Calibrated sensor 713 by linear regression. Modified calibration data. New calibration [Slope(0.0116), Calibration Offset(-0.0166), Std Error(0.0051), Calibration Date(6/27/2013 2:49:01 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Horseshoe Park	Date:	20-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	13:07
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
713	0.012	-0.063	0.0162

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
713	13:32	629	3.13	psi	683
713	13:33	1782	8.92	psi	1932
713	13:34	1374	6.87	psi	1490
713	13:35	1001	5.00	psi	1087
713	13:36	111	0.53	psi	124
713	13:37	1211	6.04	psi	1207
713	13:38	277	1.36	psi	276

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clogged on arrival. TB cleaned. TB received two tips. TB OK Two point PT test failed. PT recalibrated. PT OK Site OK

{Auto Entry: Calibrated sensor 713 by linear regression. Modified calibration data. New calibration [Slope(0.0116), Calibration Offset(-0.0630), Std Error(0.0162), Calibration Date(8/20/2013 1:36:51 PM)]}.

**Site Notes:** gate lock is a master type key. numbers hard to read on key #2396

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Confluence Pond**      Date: **08-Mar-13**      Time: **14:36**  
 Service Type: **Start Up**      Technician: **SB**      Status: **OK**

**Configuration Changes**

Part #	Location
TX J 11034	720
TB J 19636	720
BY R 0324	720

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: **0720-00E**  
 Jumpers: **C: JB6(12), J3,4 off;L:JB8,**  
 Eprom: **R 1.1.1 5C58**  
 Tx Freq: **169.525**  
 Rx Freq:   
 Fwd Power: **4.2**  
 Rev Power: **0.1**  
 SWR: **1.36**

**Test Transmission**

Port	Time	Count	Measure	Predicted
720	15:12	1		0
720	15:12	2		0
720	15:12	3		0
723	14:51	942	4.68 psi	941
723	14:52	462	2.28 psi	461
724	15:00	1285	6.14 psi	1299
724	15:01	476	2.25 psi	483

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 0324	13.15	4.20

**Problem:**

**Action Taken:** Installed TXR, Battery, Desiccant, and TB. RF OK. Tb OK. PT OK. Flushed pond PT intake.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Confluence Pond	Date:	09-Aug-13
Service Type:	Inspection	Technician:	ZC
			Time: 12:33
			Status: OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
720	12:49	19			0
720	12:49	20			0
720	12:49	21			0
723	12:45	1063	5.33 psi		1073
723	12:46	440	2.20 psi		445
724	12:39	483	2.27 psi		487
724	12:40	1078	5.16 psi		1094

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Both PT's tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Confluence Pond	Date:	09-Oct-13
Time:	13:46	Service Type:	End of Season
Technician:	SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
723	13:51	493	2.43 psi	490	
723	13:52	627	3.12 psi	630	
724	13:57	736	3.32 psi	708	
724	13:58	438	1.90 psi	410	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. Removed TXR, Battery, TB, and desiccant for the season. Pulled up PT. Flushed riser with pump.

**Site Notes:**

**Follow-Up:** calibrate pond PT.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Confluence Pond	Date:	27-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	13:50
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
723	14:01	581	2.92 psi	590	
723	14:02	201	1.00 psi	205	
724	13:55	898	4.29 psi	911	
724	13:56	424	2.01 psi	433	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK. PTs (2) OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Confluence Pond	Date:	25-Jul-13
Service Type:	Inspection	Technician:	NK
			Time: 12:11
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1204	720

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
720	12:22	1		0
720	12:23	2		0
720	12:23	3		0
720	12:23	4		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0324	12.99	

**Problem:**

**Action Taken:** Replaced battery. TB clean and clear. TB tipped four times. TB OK Site OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	No Name @ Quincy	Date:	09-Oct-13
Service Type:	End of Season	Technician:	SB
			Time: 11:37
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
733	11:41	351	1.63 psi	372	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. Removed TXR, Battery, TB, and desiccant for the season. Pulled up PT.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	No Name @ Quincy	Date:	05-Sep-13
		Time:	9:33
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
PT D 3892271	730

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
733	0.011	-0.0343	0.0144

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
733	10:08	1978	9.33 psi	2148	
733	10:09	1426	6.73 psi	1549	
733	10:10	1934	9.15 psi	2107	
733	10:11	497	2.34 psi	536	
733	10:12	1068	5.03 psi	1156	
733	10:12	75	0.35 psi	76	
733	10:15	770	3.62 psi	769	
733	10:16	1611	7.59 psi	1610	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Over reporting PT

**Action Taken:** Replaced PT. Calibrated new PT. Adjusted zero and span on sig board.

{Auto Entry: Calibrated sensor 733 by linear regression. Modified calibration data. New calibration [Slope(0.0109), Calibration Offset(-0.0343), Std Error(0.0144), Calibration Date(9/5/2013 10:13:08 AM)]}.

**Site Notes:** 50 ft PT will work fine, 75ft not needed.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	No Name @ Quincy	Date:	21-Aug-13
Service Type:	Repair	Technician:	NK/SB
		Time:	13:40
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
730	13:52	31			0
730	13:52	32			0
730	13:53	33			0
730	13:53	34			0
730	13:54	35			0
733	13:45	1468	6.36 psi		1463
733	13:46	362	1.57 psi		358

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Stand pipe leaning over too far for tipping bucket to catch rain accurately.

**Action Taken:** Dug up stand pipe, re-leveled, and poured concrete. Two point PT test passed. Current PT cal good. PT OK TB received five tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	No Name @ Quincy	Date:	27-Jun-13
Service Type:	Inspection	Technician:	MZ
			Time: 13:25
			Status: OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
733	13:30	792	3.45 psi	791	
733	13:31	479	2.08 psi	477	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT OK, TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	No Name @ Quincy	Date:	16-Sep-13
Service Type:	OneRain Service Ca	Technician:	GH
		Time:	15:37
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1024	730

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Bad rain reports.

**Action Taken:** TB intermittent. Replaced (s/n unknown). Batt & desiccant changed, TB leveled & test transmissions verified.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	No Name @ Quincy	Date:	09-Aug-13
Service Type:	Service Call	Technician:	ZC
		Time:	10:58
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
730	11:00	15		0
730	11:12	16		0
730	11:12	17		0
730	11:22	18		0
730	11:25	19		0
730	11:26	20		0
733	11:05	1225	5.31 psi	1220
733	11:06	510	2.20 psi	503

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** TB under reporting.

**Action Taken:** TB was not clogged. TB appears to be operation. Site is listing approx. 15deg possibly causing rain to be missed.

PT tested within acceptable range.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: No Name @ Quincy      Date: 08-Mar-13      Time: 13:41  
Service Type: Start Up      Technician: SB      Status: OK

**Configuration Changes**

Part #	Location
TX J 15783	730
TB J 19644	730
BY R 0636	730

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches: 0730-00E  
Jumpers: 3,5 Off  
Eprom: R 1.8 9CA1  
Tx Freq: 169.500  
Rx Freq:  
Fwd Power: 4.3  
Rev Power: 0.1  
SWR: 1.36

**Test Transmission**

Port	Time	Count	Measure	Predicted
730	14:13	1		0
730	14:13	2		0
733	13:59	1387	5.97 psi	1372
733	14:00	379	1.61 psi	367

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 0636	13.24	

**Problem:**

**Action Taken:** Installed TXR, TB, Battery, Desiccant, and lowered PT. Flushed PT intake. RF OK. PT OK. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Smoky Hill	Date:	29-Jul-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	13:31
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** ALERT down

**Action Taken:** Verified ALERT was transmitting via ALERT2 TX. Checked ALERT amp. Pushing 20 to 25 watts during TX. ALERT TX antenna SNR = 1.2. Replaced AC to DC charger on ALERT2 battery.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Smoky Hill	Date:	19-Feb-13
Service Type:	Start Up	Technician:	SB
		Time:	14:46
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY K 0001	13.46	

**Problem:**

**Action Taken:** Checked AC trickle charge due to concern of low output. Correct model is installed (500mA). RF OK. AC OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Smoky Hill	Date:	21-Jun-13
Service Type:	OneRain Service Ca	Technician:	SB
		Time:	13:47
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Low ALERT reports

**Action Taken:** Replaced ALERT transmit radio. Turned ON power amplifier. Output is 15 watts.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Quincy Reservoir	Date:	26-Jun-13
Time:	11:04	Service Type:	Inspection
Technician:	MZ	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1032	750

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Replaced battery due to low voltage. Poor solar connection, repaired.. RF OK. TXR OK. TB OK. Solar tests OK.

Wind OK. @ 11:12 ID 751 raw =50 => 12.23% RH, ID 752 raw = 288 => 86.75 deg.F, psychrometer readings Td = 90 deg.F, Tw = 62 deg.F implying RH = 21% and dp = 45 deg.F. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Quincy Reservoir	Date:	28-Mar-13
Service Type:	Start Up	Technician:	MZ/BL
		Time:	13:27
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1247	750

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1247	13.46	

**Problem:**

**Action Taken:** Replaced battery, desiccant. RF OK. TXR OK. TB OK. Solar tests OK, rechecked all connections, voltages, ohmed out. SWR = 1.08

Wind OK. @ 13:34 ID 751 raw = 119 => 29.1% RH, ID 752 raw = 222 => 57.7 deg.F, psychrometer readings Td = 61 deg.F, Tw = 47 deg.F implying RH = 36% and dp = 37 deg.F. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Quincy Reservoir**      Date: **12-Nov-13**      Time: **11:47**  
Service Type: **End of Season**      Technician: **NK/SB**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 1003</b>	<b>750</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
<b>TX J 239</b>		<b>333</b>	<b>2</b>	<b>0.00</b>

**Settings and Performance**

Switches: **0750-0012-1312-1111**  
Jumpers: **2km wind run**  
Eprom: **B**  
Tx Freq: **169.500**  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>750</b>	<b>12:06</b>	<b>1</b>		<b>0</b>
<b>750</b>	<b>12:06</b>	<b>2</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1003</b>	<b>13.21</b>	

**Problem:**

**Action Taken:** Replaced battery and desiccant. Tested TXR with IFR. TXR on outer limits of specs. Consider replacing radio. TB clean and clear on arrival. TB OK.

Station readings @ 11:53 AT = 57.2F = raw = 221. RH = 28.3% = raw = 116. WS = 3.08 mph = raw = 609. Anemometer free of movement. Readings are good.

Digital Psychrometer @ 12:04 AT = 66F. RH = 17.0%.

**Site Notes:**

**Follow-Up:** Replace Radio in spring 2014.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Quincy Reservoir	Date:	09-Aug-13
Service Type:	Inspection	Technician:	ZC
		Time:	11:53
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
750	11:59	25		0
750	12:00	26		0
750	12:01	27		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Wind OK. @ 11:47 ID 751 raw = 142 => 34.7% RH, ID 752 raw = 259 => 73.9 deg.F, psychrometer readings RH = 32% and Temp = 79.5 deg. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Mission Viejo Pk	Date:	09-Oct-13
Service Type:	End of Season	Technician:	SB
			Time: 12:41
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant for the season.

**Site Notes:**

**Follow-Up:** Needs new captive nuts

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Mission Viejo Pk	Date:	05-Feb-13
Service Type:	Start Up	Technician:	PB
			Time: 11:03
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 18534	760
TB J 8453	760
BY R 1021	760

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0760-00E
Jumpers:	5 off
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
760	11:16	1		0
760	11:18	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1021	12.96	

**Problem:**

**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Mission Viejo Pk	Date:	25-Jul-13
Service Type:	Inspection	Technician:	NK
			Time: 11:40
			Status: OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
760	11:53	1		0
760	11:53	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1201	13.24	

**Problem:**

**Action Taken:** changed out battery. TB clear and clean on arrival. TB received two tips.TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sable Ditch	Date:	21-Mar-13
Service Type:	Start Up	Technician:	SB/FL
		Time:	14:41
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
800	14:47	5		0
800	14:47	6		0
803	14:46	1461	6.96 psi	1462
803	14:47	458	2.16 psi	455

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Installed TXR, Battery, Desiccant, and TB. Lowered PT. PT tested within range. RF OK. TB OK.

**Site Notes:** key 2396

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sable Ditch	Date:	05-Sep-13
Service Type:	Inspection	Technician:	ZC
		Time:	11:44
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
800	11:55	223		0
800	11:55	224		0
803	11:54	1078	5.19 psi	1092
803	11:55	453	2.15 psi	454

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sable Ditch	Date:	09-Jul-13
Service Type:	Inspection	Technician:	MZ
		Time:	12:59
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
803	13:02	968	4.66 psi	980	
803	13:03	535	2.56 psi	541	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK, PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sable Ditch	Date:	11-Apr-13
Service Type:	OneRain Service Ca	Technician:	MZ/INK
		Time:	13:55
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Bad RF cable from Polyphaser to Antenna. Temp replacement installed

**Site Notes:** Install N-type (M) to UHF (M) from polyphaser to antenna. Polyphaser is currently bypassed.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sable Ditch	Date:	13-Nov-13
Service Type:	End of Season	Technician:	NK
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
803	0.011	-0.106	0.0332

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
803	14:40	1588	7.63	psi	1603
803	14:41	1917	9.22	psi	1937
803	14:42	1033	4.95	psi	1041
803	14:43	535	2.54	psi	535
803	14:44	9	0.00	psi	3
803	14:45	1564	7.51	psi	1569
803	14:46	423	1.99	psi	424

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test failed. Re-calibrated PT. PT OK. PT pulled up. TXR out, TB out. Site down.

{Auto Entry: Calibrated sensor 803 by linear regression. Modified calibration data. New calibration [Slope(0.0111), Calibration Offset(-0.1060), Std Error(0.0332), Calibration Date(11/13/2013 2:44:28 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sable Ditch	Date:	12-Mar-13
Service Type:	Start Up	Technician:	MZ
		Time:	13:48
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 15785	800
TB J 29967	800
BY R 1246	800

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1246	13.12	

**Problem:**

**Action Taken:** Start Up. RF OK, TB OK. PT to be installed at later date.

**Site Notes:** Install PT, need new 2" riser cap

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Grandby Ditch	Date:	20-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	14:26
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
810	14:33	221		0	
810	14:34	222		0	
813	14:29	1271	6.16 psi	1281	
813	14:30	403	1.95 psi	406	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Grandby Ditch	Date:	13-Nov-13
Service Type:	End of Season	Technician:	NK
		Time:	13:38
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
813	13:44	1547	7.47 psi	1553	
813	13:45	437	2.10 psi	437	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** End of season. Two point PT test passed. PT OK.PT pulled up. TXR out, TB out. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Grandby Ditch	Date:	12-Mar-13
Service Type:	Start Up	Technician:	MZ
		Time:	14:29
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 15787	810
TB J 10735	810
BY R 0603	810

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
813	14:37	917	4.32 psi	898	
813	14:38	289	1.32 psi	275	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0603	13.03	

**Problem:**

**Action Taken:** Start Up. RF OK, TB OK, PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Grandby Ditch	Date:	05-Jun-13
Service Type:	Inspection	Technician:	SB
		Time:	13:09
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
810	13:17	107			0
813	13:12	1032	4.96 psi		1032
813	13:13	398	1.90 psi		396

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. PT OK. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	ETG @ Buckley	Date:	20-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	14:02
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
820	14:16	186			0
823	14:11	1293	6.14 psi		1296
823	14:12	312	1.41 psi		304

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Two point PT test passed. PT cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	ETG @ Buckley	Date:	12-Nov-13
Service Type:	End of Season	Technician:	NK/SB
		Time:	13:56
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
823	13:57	949	4.51 psi	953	
823	13:58	445	2.10 psi	448	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT OK. PT up. TXR out, TB out, for season end. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	ETG @ Buckley	Date:	18-Mar-13
Service Type:	Start Up	Technician:	GH
			Time: 14:53
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TB J 23319	820
BY R 0335	820

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0820-3-0
Jumpers:	C:J6,1-2,J3,5off;L:J9,10,1-
Eprom:	R1.8 9CA1
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.6
Rev Power:	0.2
SWR:	1.53

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
820	15:38	1		0	
820	15:54	2		0	
820	15:54	3		0	
820	15:58	4		0	
820	15:59	5		0	
823	15:31	1038	4.94 psi	1044	
823	15:32	429	2.02 psi	432	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
TB J 23319	13.29	
BY R 0335	13.14	

**Problem:**

**Action Taken:** Installed TX, TB, BY. Cleaned and leveled. Checked PT and dropped.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	ETG @ Buckley	Date:	05-Jun-13
Service Type:	Inspection	Technician:	SB
		Time:	13:23
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
820	13:32	72			0
820	13:32	74			0
823	13:30	1139	5.41 psi		1143
823	13:31	333	1.55 psi		333

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. PT OK. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Side Creek Park	Date:	05-Feb-13
Service Type:	Start Up	Technician:	PB
		Time:	10:36
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 11037	830
TB J 23294	830
BY R 0810	830

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0830-3-D
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
830	10:47	1		0
830	10:49	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0810	12.87	

**Problem:**

**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Side Creek Park	Date:	25-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	12:33
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1220	830

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
830	12:36	0		0
830	12:41	1		0
830	12:42	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0810	13.08	

**Problem:**

**Action Taken:** Changed out battery. TB was cleaned. Some debris. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Side Creek Park	Date:	12-Nov-13
Service Type:	End of Season	Technician:	NK/SB
		Time:	13:40
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant for the season.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>Aurora FS 12</b>	Date: <b>05-Feb-13</b>	Time: <b>10:03</b>	
Service Type: <b>Start Up</b>	Technician: <b>PB</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
<i>Part #</i>	<i>Location</i>
<b>TB J 12717</b>	<b>840</b>
<b>BY R 1236</b>	<b>840</b>

<b>Transducer Calibration</b>			
<i>Sensor ID</i>	<i>Slope</i>	<i>Calib Offset</i>	<i>Std Error</i>

<b>Tx Maintenance</b>				
<i>Part #</i>	<i>Ref V</i>	<i>Freq Err</i>	<i>Deviation</i>	<i>ROM Batt</i>

<b>Settings and Performance</b>	
<i>Switches:</i>	
<i>Jumpers:</i>	
<i>Eprom:</i>	
<i>Tx Freq:</i>	<b>169.500</b>
<i>Rx Freq:</i>	
<i>Fwd Power:</i>	<b>4.0</b>
<i>Rev Power:</i>	<b>0.1</b>
<i>SWR:</i>	<b>1.38</b>

<b>Test Transmission</b>				
<i>Port</i>	<i>Time</i>	<i>Count</i>	<i>Measure</i>	<i>Predicted</i>
<b>840</b>	<b>10:14</b>	<b>1</b>		<b>0</b>
<b>840</b>	<b>10:14</b>	<b>2</b>		<b>0</b>

<b>Battery Tests</b>		
<i>Battery #</i>	<i>V Quiescent</i>	<i>V Load</i>
<b>BY R 1236</b>	<b>13.02</b>	

**Problem:**

**Action Taken:** Installed TB, battery, desiccant. Changed frequency to 169.500 MHz. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora FS 12	Date:	25-Jul-13
Time:	14:11	Service Type:	Inspection
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
840	14:12	203		0
840	14:12	204		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora FS 12	Date:	13-Nov-13
Time:	12:13	Service Type:	End of Season
Technician:	NK	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Replaced dessicant.TB out, Battery out. End of season. Test TXR with watt meter. TXR OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora FS 12	Date:	16-Sep-13
Time:	13:54	Status:	OK
Service Type:	OneRain Service Ca	Technician:	GH

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Plugged screen & funnel.

**Action Taken:** Cleaned & tested.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Flying J	Date:	09-Jul-13
Service Type:	Inspection	Technician:	MZ
		Time:	13:41
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1322	850

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1322	12.87	

**Problem:**

**Action Taken:** Replaced Battery. TB OK, PT OK>

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Flying J	Date:	15-Mar-13
Service Type:	Start Up	Technician:	GH
		Time:	13:40
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TB J 16628	850
BY R 1204	850

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	1.8
Rev Power:	0.5
SWR:	3.23

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
850	14:09	1		0
850	14:15	2		0
850	14:15	3		0
850	14:24	4		0
850	14:24	5		0
850	14:34	6		0
850	14:34	7		0
853	14:20	1133	4.97 psi	1138
853	14:21	473	2.09 psi	475

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
TB J 16628	13.07	
BY R 1204	13.03	

**Problem:**

**Action Taken:** Installed PT and TB, leveled. High SWR. Broken elbow to PT pipe.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Flying J	Date:	16-Sep-13
Service Type:	OneRain Service Ca	Technician:	GH
		Time:	14:34
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0509	850

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Low bat.

**Action Taken:** Changed batt. Enc damp, changed desc. Cleaned screen. Tested.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Flying J	Date:	13-Nov-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	11:30
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** PT riser cap seized.

**Action Taken:** TXR out, PT conduit and PT out. Can not free cap to riser. Will take riser back to shop and repair. TB out. Site down for winter

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sand Creek @ Colfax	Date:	09-Jul-13
Time:	13:12		
Service Type:	Inspection	Technician:	MZ
Status:	OK		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
863	13:18	655	3.16 psi	642	
863	13:19	151	0.75 psi	153	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK, PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sand Creek @ Colfax	Date:	13-Nov-13
Time:	13:13		
Service Type:	End of Season	Technician:	NK
Status:	Site Down		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
863	13:19	1453	7.17 psi	1453	
863	13:19	391	1.88 psi	383	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** End of season. Removed TB and Battery. Two point PT test passed. PT OK. PT up. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sand Creek @ Colfax	Date:	18-Mar-13
Service Type:	Start Up	Technician:	GH
			Time: 12:35
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TB J 21330	860
BY R 1126	860

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	2.0
Rev Power:	0.2
SWR:	1.92

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
860	14:06	1		0
860	14:06	2		0
860	14:09	3		0
860	14:10	4		0
863	14:04	3		0
863	14:17	429	2.11 psi	429
863	14:18	1039	5.12 psi	1038

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
TB J 21330	12.87	
BY R 1126	12.87	

**Problem:**

**Action Taken:** Changed freq. Installed BY, TB, clean and leveled, checked and dropped PT.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Murphy Creek	Date:	21-Mar-13
Time:	12:05	Service Type:	OneRain Service Ca
Technician:	SB/FL	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TB J 16621	870
BY R 0842	870

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
873	0.01	0.1224	0.0268

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	3.5
Rev Power:	0.1
SWR:	1.41

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
870	12:56	0		0
870	12:56	1		0
873	12:45	1918	8.37 psi	1885
873	12:46	1473	6.44 psi	1439
873	12:47	1142	5.00 psi	1107
873	12:48	673	2.97 psi	640
873	12:49	240	1.09 psi	206
873	12:50	1347	5.91 psi	1351

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Calibrated and lowered PT. PT has been drifting in the past. Will monitor before replacement. TB OK. Replaced radio.

{Auto Entry: Calibrated sensor 873 by linear regression. Modified calibration data. New calibration [Slope(0.0100), Calibration Offset(0.1224), Std Error(0.0268), Calibration Date(3/21/2013 12:49:23 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Murphy Creek	Date:	12-Nov-13
Service Type:	End of Season	Technician:	NK/SB
		Time:	9:55
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
873	0.01	0.1494	0.0323

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
873	9:56	1196	5.25 psi	1162	
873	9:57	584	2.60 psi	555	
873	9:59	1803	7.89 psi	1764	
873	10:00	1496	6.55 psi	1459	
873	10:01	246	1.13 psi	221	
873	10:02	1289	5.65 psi	1289	
873	10:03	455	2.04 psi	455	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed Battery, Desiccant, and pulled PT up for winter. Re-calibrated PT. RF OK.

{Auto Entry: Calibrated sensor 873 by linear regression. Modified calibration data. New calibration [Slope(0.0100), Calibration Offset(0.1494), Std Error(0.0323), Calibration Date(11/12/2013 10:01:48 AM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Murphy Creek	Date:	27-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	11:24
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
873	11:33	1130	5.03 psi	1148	
873	11:34	460	2.12 psi	477	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** RF OK, PT OK, TB OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Murphy Creek	Date:	20-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	12:18
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0637	870

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
873	0.010	0.3804	0.1397

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
870	12:27	0		0
870	12:27	1		0
873	12:32	1402	6.24 psi	1427
873	12:34	2047	9.24 psi	2120
873	12:35	1816	8.06 psi	1847
873	12:36	1428	6.38 psi	1459
873	12:37	697	3.20 psi	726
873	12:38	267	1.34 psi	296
873	12:39	0	0.02 psi	-8
873	12:41	1125	5.10 psi	1163
873	12:42	2028	9.03 psi	2071
873	12:43	1561	6.97 psi	1595
873	12:44	663	3.08 psi	699
873	12:45	229	1.20 psi	265

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
DL CS 25875	12.98	

**Problem:** Low battery

**Action Taken:** Changed out battery, TB clean and clear on arrival. TB received two tips. TB OK Two point PT test failed. Re-calibrated PT. PT OK Site OK

{Auto Entry: Calibrated sensor 873 by linear regression. Modified calibration data. New calibration [Slope(0.0101), Calibration Offset(0.3804), Std Error(0.1397), Calibration Date(8/20/2013 12:47:13 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora Res Wx	Date:	29-Jan-13
Time:	13:10	Service Type:	OneRain Service Ca
Technician:	PB/ZC	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Changed frequency to 169.500 Mhz

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora Res Wx	Date:	12-Nov-13
Service Type:	End of Season	Technician:	NK/SB
			Time: 10:55
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1209	900

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	4.5
Rev Power:	0.1
SWR:	1.35

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
900	11:15	1		0
900	11:16	2		0
900	11:16	3		0
900	11:18	4		0
900	11:21	6		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1209	13.21	

**Problem:**

**Action Taken:** Changed battery and desiccant. Tested solar. Solar OK. Station readings @ 11:02 AT = 55.1F = raw = 951. RH = 33.1% = raw = 331. WS = 5.10 mph = raw = 51. WD = 268 deg. BP = 831 mbar. Solar Rad = 2.05 MJ/m2. TB clogged on arrival. TB cleaned. TB OK. Site OK.

Digital Pscrometer @ 11:05. AT = 56.4F. RH = 36.1%.

Original Radio 3.2 Watts. Replaced radio with new one 4.5 watts

**Site Notes:** Key: 900

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora Res Wx	Date:	28-Mar-13
Service Type:	Start Up	Technician:	MZ/BL
		Time:	14:08
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1011	900

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
900	14:13	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1011	13.02	

**Problem:**

**Action Taken:** Replaced Desiccant. RF OK. Solar OK. TB funnel partially clogged, cleaned. TB OK. Wind OK.  
@ 14:14 ID 901 raw = 293 => 29.3% RH, ID 902 raw = 996 => 60 deg. F. Psychrometer readings Td = 61 deg.F, Tw = 47 deg.F implying RH = 36% and dp = 34 deg.F. SWR = 1.00

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora Res Wx	Date:	26-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	10:34
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Replaced Desiccant. RF OK. Solar OK. TB OK. Wind OK. @ 14:14 ID 901 raw = 155 => 15.5% RH, ID 902 raw = 1256 => 86 deg. F. Psychrometer readings Td = 87 deg.F, Tw = 59 deg.F implying RH = 19% and dp = 39 deg.F. SWR = 1.00

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora Regional Pond	Date:	08-Mar-13
Time:	10:44		
Service Type:	Start Up	Technician:	SB
Status:	PT Down		

<b>Configuration Changes</b>	
Part #	Location
TX J 25152	940
TB J 10738	940
BY R 1243	940

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0940-00E
Jumpers:	3,5 Off
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.5
Rev Power:	0.1
SWR:	1.35

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
940	11:19	1		0
940	11:20	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1243	12.89	

**Problem:** PT Bad

**Action Taken:** Installed TXR, Battery, and desiccant. PT is bad. Not reading any mv. RF OK. TB OK.

**Site Notes:**

**Follow-Up:** Replace PT

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora Regional Pond	Date:	27-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	11:54
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 13313	940

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
943	0.012	-0.0053	0.0286

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
943	12:20	961	4.95 psi	992	
943	12:21	795	4.01 psi	803	
943	12:22	590	2.99 psi	599	
943	12:23	395	2.01 psi	402	
943	12:24	205	1.07 psi	213	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Replaced Transmitter. Not counting tips. TB sensor OK. PT OK.

{Auto Entry: Calibrated sensor 943 by linear regression. Modified calibration data. New calibration [Slope(0.0118), Calibration Offset(-0.0053), Std Error(0.0286), Calibration Date(6/27/2013 12:24:37 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora Regional Pond	Date:	09-Oct-13
		Time:	10:05
Service Type:	End of Season	Technician:	SB
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0940-00E
Jumpers:	3,5 Off
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
943	10:08	297	1.45 psi	289	
943	10:09	912	4.50 psi	901	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. Removed TXR, Battery, TB, and desiccant for the season. Pulled up PT.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Aurora Regional Pond	Date:	20-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	10:40
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
940	10:41	61			0
940	10:41	62			0
943	10:44	1229	6.19 psi		1240
943	10:45	392	2.00 psi		401

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clogged on arrival. TB cleaned. TB received two tips. TB OK Two point PT test passed. Current cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Aurora Regional Pond**    Date: **21-Mar-13**    Time: **11:14**  
 Service Type: **OneRain Service Ca**    Technician: **SB/FL**    Status: **OK**

**Configuration Changes**

Part #	Location
PT D 2841955	940

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
943	0.012	0.0135	0.0035

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
943	11:41	1769	8.84 psi	1792
943	11:42	1429	7.14 psi	1449
943	11:43	1101	5.51 psi	1117
943	11:44	640	3.20 psi	652
943	11:45	236	1.18 psi	243
943	11:46	1115	5.57 psi	1117

**Battery Tests**

Battery #	V Quiescent	V Load
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**Problem:** Bad PT**Action Taken:** Installed new PT. 40 feet length. RF OK. PT OK.

{Auto Entry: Calibrated sensor 943 by linear regression. Modified calibration data. New calibration [Slope(0.0115), Calibration Offset(0.0135), Std Error(0.0035), Calibration Date(3/21/2013 11:45:11 AM)]}.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Piney Ck @ Liverpool**    Date: **08-Mar-13**    Time: **11:53**  
 Service Type: **Start Up**    Technician: **SB**    Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX J 15781</b>	<b>950</b>
<b>TB J 8374</b>	<b>950</b>
<b>BY R 0849</b>	<b>950</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: **0950-00E**  
 Jumpers: **3,5 off**  
 Eprom: **R 1.8 3206 STD**  
 Tx Freq: **169.525**  
 Rx Freq:   
 Fwd Power: **4.2**  
 Rev Power: **0.1**  
 SWR: **1.36**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>950</b>	<b>12:15</b>	<b>1</b>		<b>0</b>
<b>950</b>	<b>12:16</b>	<b>2</b>		<b>0</b>
<b>953</b>	<b>12:04</b>	<b>1019</b>	<b>5.09 psi</b>	<b>1031</b>
<b>953</b>	<b>12:05</b>	<b>500</b>	<b>2.53 psi</b>	<b>517</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 0849</b>	<b>13.08</b>	

**Problem:**

**Action Taken:** Installed TXR, TB, Battery, and dropped PT. Replaced desiccant in PT Box. RF OK. PT OK.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Piney Ck @ Liverpool	Date:	20-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	11:03
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
950	11:11	139		0	
953	11:08	1385	6.82 psi	1378	
953	11:09	327	1.53 psi	317	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB received two tips. TB clean and clear on arrival. TB OK Two point PT test passed. Current Cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Piney Ck @ Liverpool	Date:	09-Oct-13
Service Type:	End of Season	Technician:	SB
			Time: 10:36
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0950-00E
Jumpers:	3,5 off
Eprom:	R 1.8 3206 STD
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
953	10:39	363	1.85 psi	381	
953	10:40	873	4.38 psi	888	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. Removed TXR, Battery, TB, and desiccant for the season. Pulled up PT.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Piney Ck @ Liverpool	Date:	27-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	12:39
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
953	12:45	985	4.82 psi	976	
953	12:46	439	2.12 psi	435	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** RF OK, PT OK, TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Maple Grove Res	Date:	03-Jun-13
Service Type:	Inspection	Technician:	SB
		Time:	11:45
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Changed program for a 720 min report time.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Maple Grove Res**      Date: **17-May-13**      Time: **10:01**  
 Service Type: **Installation**      Technician: **NK/ICY**      Status: **OK**

**Configuration Changes**

Part #	Location
PT D 3445242	1000
BY R 1310	1000

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 1310	12.91	

**Problem:**

**Action Taken:** Installed Campbell Sci AL200 TXR. Installed new Druck PT (10 psi, 160ft). Changed battery and desiccant.  
 Re-mounted riser to concrete wall. RF good. Hearing data locally and transmitting to base.

**Site Notes:****Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Maple Grove Res	Date:	09-Jul-13
Time:	13:55		
Service Type:	OneRain Service Ca	Technician:	SB
Status:	OK		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Rain accumulation not coming in correctly

**Action Taken:** Changed radio on time from, when there is a message to every frame.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Maple Grove Res	Date:	03-Jan-13
Time:	10:42		
Service Type:	OneRain Service Ca	Technician:	PB
Status:	OK		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** PT drifting heavily, over-reporting.

**Action Taken:** Jumpered J3.

**Site Notes:**

**Follow-Up:** Replace PT at spring startup. Repair conduit run when replacing.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Maple Grove Res	Date:	26-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK
		Time:	11:48
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1320	1000

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1320	13.11	

**Problem:** low battery

**Action Taken:** Replaced battery. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Maple Grove Res	Date:	06-Nov-13
Service Type:	End of Season	Technician:	SB
			Time: 13:57
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX C 1030	1000
BY R 1207	1000

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1207	13.07	

**Problem:**

**Action Taken:** re-installed TXR after firmware upgrade. Replaced battery and desiccant. RF OK. PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Maple Grove Res	Date:	04-Nov-13
Service Type:	End of Season	Technician:	NK
		Time:	12:06
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Updated OS on AL200. After new OS was uploaded, connection through devcfg is no longer possible. Can not connect to AL200 to load cfg file. Will TXR back to shop and bench test there. Site is down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Maple Grove Res	Date:	20-Mar-13
Service Type:	OneRain Service Ca	Technician:	SB/FL
		Time:	12:17
		Status:	PT Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1000	12:19	64		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** New Conduit and PT

**Action Taken:** Riser falling off from wall. Need to move uplake. 150 PT should do it. 160 of we have.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Denver West**      Date: **06-Feb-13**      Time: **13:12**  
Service Type: **Start Up**      Technician: **PB**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX J 18539</b>	<b>1010</b>
<b>TB J 8382</b>	<b>1010</b>
<b>BY R 1234</b>	<b>1010</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches: **1010-3-D**  
Jumpers:  
Eprom:  
Tx Freq: **169.525**  
Rx Freq:  
Fwd Power: **4.0**  
Rev Power: **0.1**  
SWR: **1.38**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>1010</b>	<b>13:30</b>	<b>1</b>		<b>0</b>
<b>1010</b>	<b>13:30</b>	<b>2</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1234</b>	<b>12.84</b>	

**Problem:**

**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Denver West	Date:	30-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	12:50
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1137	1010

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1010	12:54	202		0
1010	12:55	203		0
1010	12:59	204		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1234	13.02	

**Problem:**

**Action Taken:** TB slightly clogged with bees and other bugs stuck in funnel. TB received three tips. TB ok and level. Changed out battery. Site OK Stand pipe has large dent in the side near door.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: <b>Denver West</b>	Date: <b>04-Nov-13</b>	Time: <b>10:58</b>
Service Type: <b>End of Season</b>	Technician: <b>NK</b>	Status: <b>Site Down</b>

**Configuration Changes**

Part #	Location
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**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
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**Battery Tests**

Battery #	V Quiescent	V Load
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**Problem:**

**Action Taken:** TXR out, TB out. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Nolte Pond	Date:	18-Mar-13
Service Type:	Start Up	Technician:	ZC
		Time:	13:03
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 18538	1020
BY R 0611	1020

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1020-E00
Jumpers:	c: JB6,1-2 JB3,5=Off
Eprom:	57EE R1.8
Tx Freq:	169.525
Rx Freq:	171.875
Fwd Power:	3.7
Rev Power:	0.1
SWR:	1.39

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1023	13:14	524	2.24 psi	532	
1023	13:16	1271	5.46 psi	1281	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0611	12.90	

**Problem:**

**Action Taken:** Installed TXR and battery. Lowered PT for season. PT OK RF OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Nolte Pond	Date:	03-Jun-13
Service Type:	Inspection	Technician:	SB
		Time:	12:57
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1023	12:58	1265	5.46 psi	1282	
1023	12:59	410	1.78 psi	423	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Nolte Pond	Date:	04-Nov-13
Service Type:	End of Season	Technician:	NK
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
1023	0.010	-0.0316	0.0803

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1023	11:34	1628	7.07 psi	1656	
1023	11:35	2047	9.37 psi	2191	
1023	11:36	1169	5.09 psi	1194	
1023	11:37	662	2.89 psi	683	
1023	11:39	30	0.17 psi	49	
1023	11:40	1134	4.94 psi	1159	
1023	11:41	1636	7.10 psi	1662	
1023	11:42	2047	9.10 psi	2129	
1023	11:43	709	3.10 psi	731	
1023	11:44	78	0.38 psi	96	
1023	11:45	635	2.78 psi	631	
1023	11:47	1879	8.14 psi	1843	
1030	10:35	418		0	
1030	10:35	419		0	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test failed. PT was re-calibrated. Upper end of new calibration isalomst 20 counts away. Consider replacing PT. Also PT conduit near riser is broken. Stop bolt needs to be larger. PT was sticking out of riser on bottom. TXR out, PT up. Site down.

{Auto Entry: Calibrated sensor 1023 by linear regression. Modified calibration data. New calibration [Slope(0.0102), Calibration Offset(-0.0316), Std Error(0.0803), Calibration Date(11/4/2013 11:45:07 AM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>NREL/SERI</b>	Date: <b>12-Feb-13</b>	Time: <b>11:23</b>	
Service Type: <b>Start UP</b>	Technician: <b>SB</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
<i>Part #</i>	<i>Location</i>
<b>TX J 19662</b>	<b>1030</b>
<b>TB J 13269</b>	<b>1030</b>
<b>BY R 1010</b>	<b>1030</b>

<b>Transducer Calibration</b>			
<i>Sensor ID</i>	<i>Slope</i>	<i>Calib Offset</i>	<i>Std Error</i>

<b>Tx Maintenance</b>				
<i>Part #</i>	<i>Ref V</i>	<i>Freq Err</i>	<i>Deviation</i>	<i>ROM Batt</i>

<b>Settings and Performance</b>	
Switches:	<b>1030-3-D</b>
Jumpers:	
Eprom:	
Tx Freq:	<b>169.500</b>
Rx Freq:	
Fwd Power:	<b>4.0</b>
Rev Power:	<b>1.0</b>
SWR:	<b>3</b>

<b>Test Transmission</b>				
<i>Port</i>	<i>Time</i>	<i>Count</i>	<i>Measure</i>	<i>Predicted</i>
<b>1030</b>	<b>11:34</b>	<b>1</b>		<b>0</b>
<b>1030</b>	<b>11:35</b>	<b>2</b>		<b>0</b>

<b>Battery Tests</b>		
<i>Battery #</i>	<i>V Quiescent</i>	<i>V Load</i>

**Problem:**

**Action Taken:** Installed TXR, Battery, TB, and Desiccant. RF OK. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	NREL/SERI	Date:	30-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	13:38
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1030	13:39	143		0
1030	13:40	144		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: <b>NREL/SERI</b>	Date: <b>04-Nov-13</b>	Time: <b>10:33</b>
Service Type: <b>End of Season</b>	Technician: <b>NK</b>	Status: <b>Site Down</b>

**Configuration Changes**

Part #	Location
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**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
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**Battery Tests**

Battery #	V Quiescent	V Load
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**Problem:**

**Action Taken:** TXR out, TB out. End of season. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Lena @ Hwy 6**      Date: **18-Mar-13**      Time: **13:36**  
Service Type: **Start Up**      Technician: **ZC**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX J 4395</b>	<b>1040</b>
<b>BY R 0502</b>	<b>1040</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches: **1040-3-0**  
Jumpers: **C: JB6,1-2 L:JB9,10,1-2**  
Eprom:  
Tx Freq: **169.500**  
Rx Freq:  
Fwd Power: **3.0**  
Rev Power: **0.1**  
SWR: **1.45**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>1040</b>	<b>13:54</b>	<b>1</b>		<b>0</b>
<b>1040</b>	<b>13:54</b>	<b>2</b>		<b>0</b>
<b>1040</b>	<b>14:04</b>	<b>3</b>		<b>0</b>
<b>1043</b>	<b>13:57</b>	<b>504</b>	<b>2.35 psi</b>	<b>492</b>
<b>1043</b>	<b>13:58</b>	<b>1068</b>	<b>5.01 psi</b>	<b>1055</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 0502</b>	<b>12.90</b>	

**Problem:**

**Action Taken:** Installed TXR, battery and TB. Lowered PT for season. PT OK TB OK RF OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Lena @ Hwy 6**      Date: **26-Sep-13**      Time: **11:26**  
Service Type: **OneRain Service Ca**      Technician: **NK**      Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
1040	11:36	453		0
1040	11:36	454		0
1043	11:31	1531	7.27 psi	1532
1043	11:32	224	1.08 psi	222

**Battery Tests**

Battery #      V Quiescent    V Load

**Problem:**      PT not reporting.

**Action Taken:** PT diaphragm packed with dirt and mud, Cleaned PT. Two point PT test passed. PT OK TB clean and clear. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>Lena @ Hwy 6</b>	Date: <b>15-Oct-13</b>	Time: <b>11:37</b>	
Service Type: <b>End of Season</b>	Technician: <b>SB</b>	Status: <b>Site Down</b>	

<b>Configuration Changes</b>	
<i>Part #</i>	<i>Location</i>

<b>Transducer Calibration</b>			
<i>Sensor ID</i>	<i>Slope</i>	<i>Calib Offset</i>	<i>Std Error</i>

<b>Tx Maintenance</b>				
<i>Part #</i>	<i>Ref V</i>	<i>Freq Err</i>	<i>Deviation</i>	<i>ROM Batt</i>

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
<i>Port</i>	<i>Time</i>	<i>Count</i>	<i>Measure</i>	<i>Predicted</i>	
1043	11:41	476	2.29 psi	478	
1043	11:42	103	0.51 psi	103	

<b>Battery Tests</b>		
<i>Battery #</i>	<i>V Quiescent</i>	<i>V Load</i>

**Problem:**

**Action Taken:** PT tested within acceptable range. Pulled up for winter. Removed txr, tb, battery, and desiccant.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lena @ Hwy 6	Date:	03-Jun-13
Service Type:	Inspection	Technician:	SB
		Time:	13:16
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1040	13:23	98			0
1040	13:23	99			0
1043	13:19	1236	5.88 psi		1238
1043	13:20	300	1.44 psi		299

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. PT OK. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Fairgrounds	Date:	30-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	12:41
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	tx j 18536
Jumpers:	
Eprom:	
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1050	12:42	172		0
1050	12:42	173		0
1050	12:42	174		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received three tips. TB OK site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Fairgrounds	Date:	06-Feb-13
Service Type:	Start Up	Technician:	PB
			Time: 12:39
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 18536	1050
TB J 19496	1050
BY R 1026	1050

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	tx j 18536
Jumpers:	
Eprom:	
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1026	13.01	

**Problem:**

**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Fairgrounds	Date:	15-Oct-13
Service Type:	End of Season	Technician:	SB
			Time: 12:10
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	tx j 18536
Jumpers:	
Eprom:	
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, Desiccant, and TB for winter.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Apex	Date:	30-Jul-13
Time:	12:12	Service Type:	Inspection
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB was clogged on arrival. TB cleaned. TB received three tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**Site Name: **Apex**Date: **12-Feb-13**Time: **11:57**Service Type: **Start UP**Technician: **SB**Status: **OK****Configuration Changes**

Part #	Location
<b>TX J 18537</b>	<b>1060</b>
<b>TB J 19637</b>	<b>1060</b>
<b>BY R 1226</b>	<b>1060</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: **1060-3-d**  
 Jumpers:  
 Eprom:  
 Tx Freq: **169.525**  
 Rx Freq:  
 Fwd Power: **4.3**  
 Rev Power: **0.1**  
 SWR: **1.36**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>1060</b>	<b>12:13</b>	<b>1</b>		<b>0</b>
<b>1060</b>	<b>12:13</b>	<b>2</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1226</b>	<b>12.98</b>	

**Problem:****Action Taken:** Installed TXR, Battery, TB, and Desiccant. RF OK. TB OK.**Site Notes:****Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Apex	Date:	15-Oct-13
Service Type:	End of Season	Technician:	SB
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1060	11:10	484		0
1060	11:10	485		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, TB, Battery, and Desiccant for the season.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	L'ville Dwy "D"	Date:	15-Mar-13
Service Type:	Start Up	Technician:	ZC
			Time: 11:27
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 2806	1100
TB J 17973	1100
BY R 0501	1100

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1100	11:52	1		0
1100	11:52	2		0
1103	11:44	450	2.20 psi	448
1103	11:45	1036	5.08 psi	1031

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0501	12.90	

**Problem:**

**Action Taken:** Installed TXR, battery, and TB. Lowered PT for season. PT tested OK RF OK TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	L'ville Dwy "D"	Date:	30-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 14:28
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1103	14:32	1447	7.05 psi	1431	
1103	14:33	243	1.22 psi	251	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. Current cal good. TXR out, TB out. PT pulled up.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	L'ville Dwy "D"	Date:	22-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	13:33
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1100	13:34	89			0
1100	13:35	90			0
1103	13:40	1485	7.32 psi		1485
1103	13:41	315	1.56 psi		319

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB two tips. TB clean and clear. TB OK Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Gunbarrel	Date:	17-Oct-13
Time:	9:34	Service Type:	End of Season
Technician:	NK	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1110-0012-1112-11011
Jumpers:	W4, W10
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	3.8
Rev Power:	0.1
SWR:	1.39

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1113	9:54	1419	6.87 psi	1418	
1113	9:55	246	1.19 psi	248	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Site take out. TXR and TB taken out. RF OK Adjusted zero on PT, span was fine. Two point PT test passed. Current PT cal good. PT OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>		
Site Name: <b>Gunbarrel</b>	Date: <b>15-Mar-13</b>	Time: <b>10:15</b>
Service Type: <b>Start Up</b>	Technician: <b>ZC</b>	Status: <b>OK</b>

<b>Configuration Changes</b>	
<i>Part #</i>	<i>Location</i>
<b>TX J 25145</b>	<b>1110</b>
<b>TB H 0635</b>	<b>1110</b>
<b>BY R 1240</b>	<b>1110</b>

<b>Transducer Calibration</b>			
<i>Sensor ID</i>	<i>Slope</i>	<i>Calib Offset</i>	<i>Std Error</i>

<b>Tx Maintenance</b>				
<i>Part #</i>	<i>Ref V</i>	<i>Freq Err</i>	<i>Deviation</i>	<i>ROM Batt</i>

<b>Settings and Performance</b>	
<i>Switches:</i>	<b>1110-0012-1112-11011</b>
<i>Jumpers:</i>	<b>W4, W10</b>
<i>Eprom:</i>	
<i>Tx Freq:</i>	<b>169.500</b>
<i>Rx Freq:</i>	
<i>Fwd Power:</i>	<b>3.0</b>
<i>Rev Power:</i>	<b>0.1</b>
<i>SWR:</i>	<b>1.45</b>

<b>Test Transmission</b>				
<i>Port</i>	<i>Time</i>	<i>Count</i>	<i>Measure</i>	<i>Predicted</i>
<b>1110</b>	<b>10:41</b>	<b>2</b>		<b>0</b>
<b>1110</b>	<b>10:42</b>	<b>3</b>		<b>0</b>
<b>1110</b>	<b>10:42</b>	<b>4</b>		<b>0</b>
<b>1110</b>	<b>10:43</b>	<b>5</b>		<b>0</b>
<b>1110</b>	<b>10:44</b>	<b>6</b>		<b>0</b>
<b>1113</b>	<b>10:36</b>	<b>511</b>	<b>2.45 psi</b>	<b>509</b>
<b>1113</b>	<b>10:37</b>	<b>1050</b>	<b>5.07 psi</b>	<b>1047</b>

<b>Battery Tests</b>		
<i>Battery #</i>	<i>V Quiescent</i>	<i>V Load</i>
<b>BY R 1240</b>	<b>12.90</b>	

**Problem:**

**Action Taken:** Installed TXR, battery and TB. Tested PT. PT OK TB OK Cleaned TB funnel.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Gunbarrel	Date:	26-Aug-13
Service Type:	Service Call	Technician:	ZC
		Time:	10:17
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1110	10:56	77			0
1110	10:57	78			0
1113	10:48	1915	9.27	psi	1913
1113	10:48	1471	7.12	psi	1469
1113	10:50	1051	5.08	psi	1049
1113	10:51	635	3.06	psi	633
1113	10:52	228	1.09	psi	228

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** PT sensor not reporting on timed reports

**Action Taken:** PT zero was below the 0 point. Adjusted zero to be at positive 2 counts. 5 point test on PT indicated current calibration was still valid. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Gunbarrel	Date:	22-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	11:30
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1235	1110

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1110	11:40	1		0
1110	11:40	6		0
1110	11:41	7		0
1110	11:42	8		0
1110	11:42	9		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1235	12.89	

**Problem:**

**Action Taken:** Replaced battery. TB clear and clean. TB leveled. TB six tips. Pt two point test passed. PT OK  
Site ok

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Gunbarrel	Date:	16-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	13:08
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1110	13:09	72		0	
1110	13:09	73		0	
1113	13:15	1313	6.38 psi	1318	
1113	13:16	321	1.58 psi	329	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Two point PT test passed. Current PT cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Broomfield #3207	Date:	16-Jul-13
Service Type:	Inspection	Technician:	NK/ZC
		Time:	15:03
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1200	15:09	108		0
1200	15:10	109		0
1203	15:08	942	5.12 psi	941
1203	15:10	391	2.14 psi	391

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Broomfield #3207	Date:	14-Mar-13
Service Type:	Start Up	Technician:	ZC
			Time: 11:16
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 27311	1200
TB J 21358	1200
BY R 1130	1200

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1200-3-0
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1200	11:43	1		0
1200	11:45	2		0
1200	11:45	3		0
1203	11:36	453	2.45 psi	450
1203	11:37	962	5.21 psi	959

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Installed TXR, battery and TB. Lowered PT for season. PT tested OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Broomfield #3207	Date:	06-Nov-13
Time:	11:25	Service Type:	End of Season
Technician:	SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1203	11:39	949	5.14 psi	945	
1203	11:40	387	2.09 psi	382	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, TB, Battery and desiccant. PT OK. Pulled up for winter.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Broomfield #3207	Date:	14-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	14:38
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1021	1200

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1200	14:50	1		0
1200	14:51	2		0
1200	14:51	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1130	13.13	

**Problem:**

**Action Taken:** Changed battery. TB dirty and clogged a little. TB cleaned. TB received three tips. TB OK Two point PT test passed. PT OK current PT cal good. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hidden Lake	Date:	26-Sep-13
Service Type:	Service Call	Technician:	NK
		Time:	12:33
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1300	12:42	170			0
1300	12:42	171			0
1303	12:41	1828	7.14 psi		1839
1303	12:42	306	1.21 psi		304

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Questionable PT calibration

**Action Taken:** Two point PT test passed. PT OK PT riser flushed. TB clean and clear on arrival. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hidden Lake	Date:	14-Mar-13
Service Type:	Start Up	Technician:	ZC
		Time:	10:06
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 11923	1300
TB J 18572	1300
BY R 1140	1300

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1300-00E
Jumpers:	none
Eprom:	5.0S
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1300	10:29	1		0
1300	10:29	2		0
1303	10:21	1312	5.07 psi	1304
1303	10:22	588	2.27 psi	579
1310	9:54	1		0
1310	9:55	2		0
1310	9:56	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1140	12.90	

**Problem:**

**Action Taken:** Installed TXR, battery and TB. RF OK Lowered PT for season. PT tested OK. TB OK Replaced TB screen that was missing.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hidden Lake	Date:	14-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	12:33
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0415	1300

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1300	12:44	1		0
1300	12:44	2		0
1300	12:46	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1140	13.02	

**Problem:**

**Action Taken:** changed battery. TB clogged on arrival. TB cleaned. TB recievedthree tips. TB OK Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hidden Lake	Date:	13-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	13:33
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1303	13:37	1161	4.54 psi	1166	
1303	13:38	734	2.88 psi	736	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK, PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hidden Lake	Date:	04-Nov-13
Service Type:	End of Season	Technician:	NK
		Time:	14:20
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1303	14:28	409	1.58 psi	399	
1303	14:29	1830	7.09 psi	1826	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. Current PT cal good. PT OK. TXR out, TB out. PT up. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Little Dry Creek @ 64t	Date:	14-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	13:08
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1310	13:15	179		0
1310	13:16	180		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Two point PT test passed. Current PT cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Little Dry Creek @ 64t	Date:	26-Jun-13
		Time:	10:11
Service Type:	Inspection	Technician:	ZC
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1310	10:19	80			0
1310	10:19	81			0
1313	10:16	1057	5.15 psi		1048
1313	10:17	432	2.09 psi		423

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Little Dry Creek @ 64t	Date:	06-Nov-13
Service Type:	End of Season	Technician:	SB
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1313	13:26	1293	6.29 psi	1280	
1313	13:27	711	3.45 psi	701	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant. PT tested. Pulled up.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Little Dry Creek @ 64t	Date:	14-Mar-13
		Time:	9:33
Service Type:	Start Up	Technician:	ZC
		Status:	OK

<b>Configuration Changes</b>	
<i>Part #</i>	<i>Location</i>
TX J 11922	1310
TB J 19629	1310
BY R 1120	1310

<b>Transducer Calibration</b>			
<i>Sensor ID</i>	<i>Slope</i>	<i>Calib Offset</i>	<i>Std Error</i>

<b>Tx Maintenance</b>				
<i>Part #</i>	<i>Ref V</i>	<i>Freq Err</i>	<i>Deviation</i>	<i>ROM Batt</i>

<b>Settings and Performance</b>	
Switches:	1310-00E
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>					
<i>Port</i>	<i>Time</i>	<i>Count</i>	<i>Measure</i>	<i>Predicted</i>	
1313	9:50	453	2.17 psi	440	
1313	9:51	1069	5.17 psi	1051	

<b>Battery Tests</b>		
<i>Battery #</i>	<i>V Quiescent</i>	<i>V Load</i>
BY R 1120	13.10	

**Problem:**

**Action Taken:** Installed TXR, battery and TB. RF OK PT lowered for season. PT tested OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SPR @Mausoleum	Date:	11-Nov-13
Service Type:	End of Season	Technician:	NK/SB
			Time: 12:10
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1323	12:13	962	4.72 psi	957	
1323	12:14	734	3.59 psi	729	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant for season. PT tested within acceptable range.

**Site Notes:** BOCO Key

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SPR @Mausoleum	Date:	11-Jul-13
Service Type:	Inspection	Technician:	SB
			Time: 13:57
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1206	1320

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1320	14:06	2		0
1320	14:07	3		0
1323	14:04	1141	5.66 psi	1146
1323	14:05	286	1.42 psi	288

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Low voltage

**Action Taken:** replaced battery. PT tested within acceptable range. PT OK. TB OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **SPR @Mausoleum**      Date: **14-Mar-13**      Time: **13:53**  
 Service Type: **Start Up**      Technician: **SB/GH**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX J 28973</b>	<b>1320</b>
<b>TB S 0206</b>	<b>1320</b>
<b>BY R 1031</b>	<b>1320</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power: **4.1**  
 Rev Power: **0.1**  
 SWR: **1.37**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>1320</b>	<b>14:06</b>	<b>1</b>		<b>0</b>
<b>1320</b>	<b>14:06</b>	<b>2</b>		<b>0</b>
<b>1323</b>	<b>14:00</b>	<b>1064</b>	<b>5.24 psi</b>	<b>1062</b>
<b>1323</b>	<b>14:01</b>	<b>359</b>	<b>1.76 psi</b>	<b>357</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1031</b>	<b>13.12</b>	

**Problem:**

**Action Taken:** Installed TXR, Battery, TB, and Desiccant. Lowered PT. PT OK. RF OK. TB OK.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sanderson Gulch	Date:	18-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	12:02
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1343	12:05	448	4.95 psi	449	
1343	12:06	135	1.67 psi	132	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Didn't show rise in water during flood event.

**Action Taken:** PT is good. Intake is clear. Stream channel does not show much of a stage change. Maybe 6 to 12 inches.

**Site Notes:**

**Follow-Up:** In spring look into replacing hydro tx with HS tx with count of 2047 count.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sanderson Gulch	Date:	06-Nov-13
Service Type:	End of Season	Technician:	NK
			Time: 13:38
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1343	13:42	664	7.16 psi	662	
1343	13:43	166	1.96 psi	160	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. Current PT calibration OK. PT pulled up. TXR out, TB out. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sanderson Gulch	Date:	02-Jul-13
Service Type:	Inspection	Technician:	NK
			Time: 13:27
			Status: OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1340	13:36	1406		0	
1340	13:37	1407		0	
1343	13:30	571	6.19 psi	569	
1343	13:31	28	0.51 psi	20	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** two point PT test passed. Span might need to be adjusted. PT calibration OK TB clean. TB two tips. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Sanderson Gulch**      Date: **14-Mar-13**      Time: **12:18**  
Service Type: **Start Up**      Technician: **SB/GH**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX N 3105</b>	<b>1340</b>
<b>TB S 0203</b>	<b>1340</b>
<b>BY R 1209</b>	<b>1340</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
<b>1343</b>	<b>0.024</b>	<b>0.6957</b>	<b>0.166</b>

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: **1340**  
Jumpers:   
Eprom: **9601-01-90 ver 3.9M**  
Tx Freq: **169.525**  
Rx Freq:   
Fwd Power: **4.1**  
Rev Power: **0.0**  
SWR: **1**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>1340</b>	<b>12:53</b>	<b>1274</b>		<b>0</b>
<b>1340</b>	<b>12:54</b>	<b>1275</b>		<b>0</b>
<b>1343</b>	<b>12:27</b>	<b>815</b>	<b>8.77 psi</b>	<b>839</b>
<b>1343</b>	<b>12:28</b>	<b>633</b>	<b>6.85 psi</b>	<b>656</b>
<b>1343</b>	<b>12:29</b>	<b>437</b>	<b>4.84 psi</b>	<b>463</b>
<b>1343</b>	<b>12:30</b>	<b>260</b>	<b>3.00 psi</b>	<b>287</b>
<b>1343</b>	<b>12:31</b>	<b>78</b>	<b>1.11 psi</b>	<b>107</b>
<b>1343</b>	<b>12:33</b>	<b>541</b>	<b>5.93 psi</b>	<b>543</b>
<b>1343</b>	<b>12:34</b>	<b>190</b>	<b>2.21 psi</b>	<b>184</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1209</b>	<b>13.18</b>	

**Problem:**

**Action Taken:** Installed TXR, Battery, TB, and Desiccant. Re-calibrated PT. Lowered Unit. Replaced top screen. Tightened screws on TB level. RF OK. TB OK. PT OK.

{Auto Entry: Calibrated sensor 1343 by linear regression. Modified calibration data. New calibration [Slope(0.0239), Calibration Offset(0.6957), Std Error(0.1660), Calibration Date(3/14/2013 12:31:36 PM)]}.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Chatfield Dam	Date:	30-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	10:29
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1350	10:30	953		0
1350	10:31	954		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Chatfield Dam	Date:	06-Feb-13
Service Type:	Start Up	Technician:	PB
			Time: 11:29
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX N 3108	1350
TB S 9803	1350
BY R 0828	1350

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1350
Jumpers:	
Eprom:	9601-01-90 Ver. 3.9M
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1350	11:41	816		0
1350	11:41	817		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0828	12.92	

**Problem:**

**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Chatfield Dam	Date:	06-Nov-13
Service Type:	End of Season	Technician:	NK
		Time:	12:00
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TXR out, TB out. Site down, end of season

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>Denver ZOO</b>	Date: <b>11-Nov-13</b>	Time: <b>14:23</b>	
Service Type: <b>End of Season</b>	Technician: <b>NK/SB</b>	Status: <b>Site Down</b>	

<b>Configuration Changes</b>	
<i>Part #</i>	<i>Location</i>

<b>Transducer Calibration</b>			
<i>Sensor ID</i>	<i>Slope</i>	<i>Calib Offset</i>	<i>Std Error</i>

<b>Tx Maintenance</b>				
<i>Part #</i>	<i>Ref V</i>	<i>Freq Err</i>	<i>Deviation</i>	<i>ROM Batt</i>

<b>Settings and Performance</b>	
Switches:	<b>1360</b>
Jumpers:	
Eprom:	<b>9601-01-90 Ver. 3.9M</b>
Tx Freq:	<b>169.525</b>
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
<i>Port</i>	<i>Time</i>	<i>Count</i>	<i>Measure</i>	<i>Predicted</i>

<b>Battery Tests</b>		
<i>Battery #</i>	<i>V Quiescent</i>	<i>V Load</i>

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant for season.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Denver ZOO**      Date: **05-Feb-13**      Time: **14:13**  
Service Type: **Start Up**      Technician: **PB**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX N 3104</b>	<b>1360</b>
<b>TB S 7799</b>	<b>1360</b>
<b>BY R 1136</b>	<b>1360</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches: **1360**  
Jumpers:  
Eprom: **9601-01-90 Ver. 3.9M**  
Tx Freq: **169.525**  
Rx Freq:  
Fwd Power: **4.0**  
Rev Power: **0.1**  
SWR: **1.38**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>1360</b>	<b>14:22</b>	<b>1197</b>		<b>0</b>
<b>1360</b>	<b>14:23</b>	<b>1198</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1136</b>	<b>12.67</b>	

**Problem:**

**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>Fire Station 13</b>	Date: <b>06-Feb-13</b>	Time: <b>11:53</b>	
Service Type: <b>Start Up</b>	Technician: <b>PB</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
<i>Part #</i>	<i>Location</i>
<b>TX J 18530</b>	<b>1370</b>
<b>TB S 0401</b>	<b>1370</b>
<b>BY R 0510</b>	<b>1370</b>

<b>Transducer Calibration</b>			
<i>Sensor ID</i>	<i>Slope</i>	<i>Calib Offset</i>	<i>Std Error</i>

<b>Tx Maintenance</b>				
<i>Part #</i>	<i>Ref V</i>	<i>Freq Err</i>	<i>Deviation</i>	<i>ROM Batt</i>

<b>Settings and Performance</b>	
Switches:	<b>1370</b>
Jumpers:	
Eprom:	<b>9601-01-90 v. 3.9M</b>
Tx Freq:	<b>169.525</b>
Rx Freq:	
Fwd Power:	<b>4.0</b>
Rev Power:	<b>0.1</b>
SWR:	<b>1.38</b>

<b>Test Transmission</b>				
<i>Port</i>	<i>Time</i>	<i>Count</i>	<i>Measure</i>	<i>Predicted</i>
<b>1370</b>	<b>12:06</b>	<b>1</b>		<b>0</b>
<b>1370</b>	<b>12:06</b>	<b>3</b>		<b>0</b>
<b>1370</b>	<b>12:08</b>	<b>4</b>		<b>0</b>
<b>1370</b>	<b>12:08</b>	<b>5</b>		<b>0</b>

<b>Battery Tests</b>		
<i>Battery #</i>	<i>V Quiescent</i>	<i>V Load</i>
<b>BY R 0510</b>	<b>13.20</b>	

**Problem:**

**Action Taken:** Installed txr, battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Fire Station 13	Date:	06-Nov-13
Service Type:	End of Season	Technician:	NK
		Time:	11:40
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TXR out, TB out, Site down, end of season.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Fire Station 13	Date:	30-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	10:43
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1370	10:44	139		0
1370	10:44	140		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Ferril Lake	Date:	11-Nov-13
Service Type:	End of Season	Technician:	NK/SB
		Time:	14:05
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	
Rx Freq:	
Fwd Power:	<b>4.3</b>
Rev Power:	<b>0.1</b>
SWR:	<b>1.36</b>

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1232	12.98	

**Problem:**

**Action Taken:** Replaced battery and desiccant, Tested TXR with watt meter. TXR OK. Purged bubbler. Bubbler OK. Solar OK. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Ferril Lake	Date:	17-Sep-13
Service Type:	OneRain Service Ca	Technician:	GH
		Time:	14:15
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Locked up bubbler.

**Action Taken:** Power cycled bubbler. Verified readings updated. Note LB at base for bubbler line conduit broken (apparent vandalism; lock tab on box had been bent also). LB needs repair.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Ferril Lake	Date:	09-Jul-13
Service Type:	Inspection	Technician:	MZ
		Time:	12:23
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Solar OK. RF OK Purged bubbler. Bubbler OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Ferril Lake	Date:	22-Feb-13
Service Type:	OneRain Service Ca	Technician:	ZC
		Time:	11:27
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Site stopped reporting on 2/12/2013

**Action Taken:** Radio determined to be bad. Replaced battery. Solar OK. RF OK Replaced desiccant. Purged bubbler. Bubbler OK.

**Site Notes:**

**Follow-Up:** Install new test button for data logger.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Ferril Lake	Date:	30-Jan-13
Time:	13:46	Status:	OK
Service Type:	OneRain Service Ca	Technician:	PB/ZC

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**  
**Action Taken:** Changed frequency to 169.500  
**Site Notes:**  
**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Upper Sloan	Date:	04-Nov-13
Time:	13:06	Service Type:	End of Season
Technician:	NK	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1403	13:11	1558	7.10 psi	1561	
1403	13:12	430	1.94 psi	427	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT OK. TXR out. TB out. PT up. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Upper Sloan	Date:	26-Jun-13
Service Type:	Inspection	Technician:	ZC
		Time:	10:43
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
1403	0.011	-0.0001	0.0017

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1400	10:59	88		0
1400	11:00	89		0
1403	10:48	1181	5.38 psi	1193
1403	10:49	490	2.23 psi	494
1403	10:50	1597	7.27 psi	1611
1403	10:51	1998	9.09 psi	2015
1403	10:52	1573	7.15 psi	1587
1403	10:53	1123	5.11 psi	1133
1403	10:54	688	3.13 psi	694
1403	10:55	257	1.17 psi	259
1403	10:56	1142	5.20 psi	1141
1403	10:57	466	2.12 psi	465

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** PT appears to be over reporting

**Action Taken:** TB OK. PT tested outside of calibration range. PT calibrated.  
 PT monitored while onsite.

PT appears to be OK Over reporting appears to be caused by wave action at sensor location.  
 Changed event reporting from a change of .25% to 1%. Continue to monitor.

{Auto Entry: Calibrated sensor 1403 by linear regression. Modified calibration data. New calibration [Slope(0.0105), Calibration Offset(-0.0001), Std Error(0.0017), Calibration Date(6/26/2013 10:55:18 AM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Upper Sloan	Date:	18-Mar-13
Service Type:	Start Up	Technician:	ZC
		Time:	11:45
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 15782	1400
TB J 21344	1400
BY R 0405	1400

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1400-3-0
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	3.5
Rev Power:	0.1
SWR:	1.41

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1400	12:08	1		0
1400	12:08	2		0
1403	12:02	1203	5.33 psi	1181
1403	12:03	475	2.10 psi	467

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0405	13.10	

**Problem:**

**Action Taken:** Installed TXR, battery and TB. Lowered PT for season. PT OK RF OK TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Upper Sloan	Date:	14-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	11:42
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1040	1400

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1400	11:54	1		0
1400	11:54	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0405	13.22	

**Problem:**

**Action Taken:** changed battery. TB clogged. TB cleaned. TB received three tips. TB OK Two point PT test passed. Current cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Diamond Hill	Date:	16-Jul-13
Service Type:	Inspection	Technician:	NK/ZC
		Time:	14:01
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1420	14:12	2012		0
1420	14:12	2013		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** @ 14:00 ID 1421 raw = 27 => 27% RH, ID 1422 raw = 122 => 82 deg.F , psychrometer readings Td = 86 deg.F, Tw = 65 deg.F implying RH = 34% and dp = 54 deg.F. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Diamond Hill	Date:	28-Aug-13
Time:	14:19	Status:	OK
Service Type:	OneRain Service Ca	Technician:	SB

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Wind not working

**Action Taken:** Wind sensor has freedom of movement. Not bearings as suspected. Need to follow up with larger ladder and proper tools. Spare 5386

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Diamond Hill	Date:	04-Feb-13
Time:	14:43		
Service Type:	Start Up	Technician:	SB
Status:			

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1420
Jumpers:	
Eprom:	9601-01-81 Ver 3.5
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Changed radio to freq 169.500

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Diamond Hill**      Date: **11-Nov-13**      Time: **9:35**  
 Service Type: **End of Season**      Technician: **NK/SB**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX N 4011</b>	<b>1420</b>
<b>BY R 1130</b>	<b>1420</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: **1420**  
 Jumpers:  
 Eprom: **9601-01-81 Ver 3.5**  
 Tx Freq: **169.500**  
 Rx Freq:  
 Fwd Power: **4.2**  
 Rev Power: **0.1**  
 SWR: **1.36**

**Test Transmission**

Port	Time	Count	Measure	Predicted

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1130</b>	<b>13.32</b>	

**Problem:**

**Action Taken:** Replaced TXR. Suspect bad TXR, wind run was not working properly. Replaced battery and desiccant. Station readings @ 10:39 AT = 65F raw = 105. RH = 16% raw = 16. Anemometer free of movement. TB clean and clear on arrival. TB OK. Digital Psychrometer readings @ 10:54 AT = 64.9 RH = 17.2%. Station readings all seem good. Station OK.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Diamond Hill	Date:	20-Nov-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	13:47
		Status:	Wind down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1420	14:18	1		0
1420	14:20	2		0
1420	14:20	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** WS not working

**Action Taken:** Reloaded program. Still no wind speed. Copied TXR outputs on terminal window. Will diagnose outputs at shop. WS down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Elbert Wx	Date:	25-Nov-13
Service Type:	End of Season	Technician:	NK/SB
		Time:	10:37
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	W4, W10 2-3
Eprom:	555 4.01
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.2
Rev Power:	0.1
SWR:	1.36

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1440	10:47	865		0
1440	10:48	866		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Changed battery and replaced desiccant. Tested TXR with Watt meter. TXR OK.

Station readings @ 10:44 AT = 26F. RH = 84%, WS = 7.67 mph, WD = 59.27 deg. TB OK.  
Readings and sensors good.

Digital Psychrometer @ 10:47 AT = 32.7F, RH = 70.2%.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Urban Farm	Date:	05-Sep-13
Service Type:	Inspection	Technician:	ZC
		Time:	12:39
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK. Wind OK. @ 12:37 ID 1461 raw = 238 => 23.8% RH, ID 1462 raw = 12274 => 87.4 deg.F. Digital Phycrometer reads 91 deg and 25.9% RH. Battery at 13.7V, solar OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Urban Farm	Date:	28-Mar-13
Service Type:	Start Up	Technician:	MZ/BL
		Time:	10:18
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1004	1460

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1460	10:32	980		0
1460	10:33	981		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1004	12.94	

**Problem:**

**Action Taken:** TB OK. Wind OK. @ 10:26 ID 1461 raw = 62 => 60.2% RH, ID 1462 raw = 852 => 72.9 deg.F, psychrometer readings Td = 49 deg.F, Tw = 43 deg.F implying RH = 64% and dp = 37 deg.F. Solar OK. RF OK SWR = 1.04. Replaced battery and desiccant.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Urban Farm	Date:	20-Nov-13
Service Type:	End of Season	Technician:	NK/SB
		Time:	13:07
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1032	1460

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	3.0
Rev Power:	0.1
SWR:	1.45

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1460	13:14	1562		0
1460	13:15	1563		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1032	13.31	

**Problem:**

**Action Taken:** Replaced desiccant and battery. Tested TXR. TXR on edge of needing replacement. Power fwd = 3 watts. Pretty low. TB clean and clear on arrival. TB OK. Station readings seem reasonable. AT = 57F = raw = 970. RH = 22.10 = raw = 219. Anemometer free of movement. Tested solar. Solar OK. Site and sensors OK.

Digital Psychrometer @ 13:18 AT = 59.7. RH = 16.4%

**Site Notes:** Use 1460 Key

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Urban Farm	Date:	20-Jun-13
Service Type:	Inspection	Technician:	
			Time: 11:26
			Status: OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK. Wind OK. @ 11:15 ID 1461 raw = 110 => 11% RH, ID 1462 raw = 1203 => 80 deg.F.  
Solar OK. RF OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	DIA @ Third Creek	Date:	24-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	13:24
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
1484	0.012	-0.4414	0.1094

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1480	14:01	291		0
1480	14:01	293		0
1483	13:54	1594	7.80 psi	1594
1483	13:55	252	1.23 psi	251
1484	13:27	1753	8.21 psi	1641
1484	13:28	1505	6.97 psi	1393
1484	13:29	1060	4.74 psi	952
1484	13:30	670	2.80 psi	564
1484	13:31	111	0.00 psi	8
1484	13:32	1511	6.98 psi	1397
1484	13:33	1943	9.13 psi	1824
1484	13:34	1143	5.13 psi	1028
1484	13:35	710	2.96 psi	597
1484	13:36	310	0.96 psi	199

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Stream PT dropping and rising by a significant amount

**Action Taken:** Stream PT failed two point test. Re-cal stream PT. Stream PT has drifted significantly. However was able to re-calibrate drift out of PT. Stream PT will need replacement.

Well PT OK Two point test passed.

TB clean and clear on arrival. TB OK

{Auto Entry: Calibrated sensor 1484 by linear regression. Modified calibration data. New calibration [Slope(0.0115), Calibration Offset(-0.4414), Std Error(0.1094), Calibration Date(9/24/2013 1:47:54 PM)]}.

**Site Notes:** Craig Shlinger is contact for gate operation.

**Follow-Up:** Replace stream PT.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	DIA @ Third Creek	Date:	20-Nov-13
Service Type:	End of Season	Technician:	NK/SB
			Time: 12:22
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1483	12:33	717	3.50 psi	715	
1483	12:34	273	1.32 psi	270	
1484	12:27	754	4.02 psi	844	
1484	12:28	415	2.33 psi	506	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Well PT passed two point Test. Stream PT needs re-calibration in spring. TXR out. TB still at site. Site down. PT's pulled up.

**Site Notes:**

**Follow-Up:** Re-calibrate stream PT in Spring. Might need replaced. TB still in.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **DIA @ Third Creek**      Date: **08-Aug-13**      Time: **13:04**  
Service Type: **Repair**      Technician: **NK/SB**      Status: **OK**

**Configuration Changes**

Part #	Location
TX J 2183	1480
PT D 3892266	1480
BY R 1312	1480

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
1483	0.011	-0.0131	0.0063
1484	0.012	-0.0949	0.0232

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
1480	13:50	1		0
1480	13:50	2		0
1483	13:23	1897	9.26 psi	1827
1483	13:24	1455	7.11 psi	1403
1483	13:25	1014	4.94 psi	976
1483	13:26	401	1.95 psi	386
1483	13:27	24	0.12 psi	24
1484	13:31	1866	9.25 psi	1905
1484	13:32	1484	7.09 psi	1463
1484	13:33	1120	5.16 psi	1069
1484	13:34	710	2.99 psi	626
1484	13:36	21	0.00 psi	17
1484	13:38	1824	9.13 psi	1879
1484	13:39	1420	7.03 psi	1451

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 1312	12.80	

**Problem:** Site destroyed by vandals

**Action Taken:** Installed new TX, new solar, replaced battery, and desiccant. TB tested and leveled. TB OK  
Found stream PT to be bad. Replaced stream PT. Calibrated both PT's. Site is fully operational.

{Auto Entry: Calibrated sensor 1483 by linear regression. Modified calibration data. New calibration [Slope(0.0113), Calibration Offset(-0.0131), Std Error(0.0063), Calibration Date(8/8/2013 1:28:03 PM)]}.

{Auto Entry: Calibrated sensor 1484 by linear regression. Modified calibration data. New calibration [Slope(0.0120), Calibration Offset(-0.8820), Std Error(0.2048), Calibration Date(8/8/2013 1:44:33 PM)]}.

{Auto Entry: Calibrated sensor 1484 by linear regression. Modified calibration data. New calibration [Slope(0.0116), Calibration Offset(-0.0949), Std Error(0.0232), Calibration

#: 205713

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 1480

Date(8/8/2013 2:24:02 PM)}].

**Site Notes:** +3 is stilling well stage, +4 is stream stage.

**Follow-Up:**

<b>Service Log</b>			
Site Name:	DIA @ Third Creek	Date:	09-Jul-13
Service Type:	Inspection	Technician:	MZ
		Time:	14:37
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Vandalism. Solar needs replaced. PT wiring disconnected, needs tested, possible replaced. TXR board disconnected, needs tested.

**Site Notes:** Total rehab required. Someone broke into the building.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	DIA @ Third Creek	Date:	29-Mar-13
Time:	14:40		
Service Type:	Installation	Technician:	SB/FL
Status:	OK		

<b>Configuration Changes</b>	
Part #	Location
TX J 23967	1480

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1483	14:43	1252	6.25 psi	1234	
1483	14:44	410	2.05 psi	406	
1484	14:51	1332	6.41 psi	1324	
1484	14:52	462	2.19 psi	463	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Installed TXR, Battery, Desiccant and Lowered PTs. RF OK. PT OK. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: Powers Park

Date: 07-Mar-13

Time: 12:12

Service Type: Start Up

Technician: SB

Status: OK

**Configuration Changes**

Part #	Location
TX J 28971	1500
TB J 8366	1500
BY R 0502	1500

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: 1500-00E  
Jumpers: C:J6,1-2,J3,5off;L:J8,9,1-2  
Eprom: R1.8 57FE  
Tx Freq: 169.525  
Rx Freq:  
Fwd Power: 4.5  
Rev Power: 0.1  
SWR: 1.35

**Test Transmission**

Port	Time	Count	Measure	Predicted
1500	12:34	1		0
1500	12:34	4		0
1500	12:35	5		0
1500	12:35	7		0
1503	12:25	1191	6.23 psi	1194
1503	12:26	424	2.24 psi	433

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 0502	13.20	

**Problem:****Action Taken:** Installed TXR, Battery, TB, and desiccant. TB OK. RF OK. PT OK.**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Powers Park	Date:	09-Sep-13
Service Type:	Inspection	Technician:	NK
		Time:	13:31
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0634	1500

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1500	13:38	1		0
1500	13:38	2		0
1500	13:41	3		0
1500	13:41	4		0
1503	13:49	1087	5.61 psi	1076
1503	13:50	230	1.23 psi	239

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0634	13.12	

**Problem:** low battery

**Action Taken:** changed out battery. TB clean and clear. TB OK Two point PT test passed. Current PT cal good. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Powers Park	Date:	04-Nov-13
Service Type:	End of Season	Time:	13:07
		Technician:	SB
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, and desiccant for winter.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Powers Park	Date:	02-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	14:39
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1500	14:50	186		0
1500	14:51	187		0
1500	14:51	188		0
1503	14:43	1171	6.12 psi	1173
1503	14:44	147	0.80 psi	159

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT OK TB clogged. TB now clean. TB three tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Marston Lake	Date:	02-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	13:02
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1520	13:11	313		0
1520	13:12	315		0
1520	13:12	316		0
1520	13:13	317		0
1520	13:14	318		0
1523	13:06	1582	6.84 psi	1562
1523	13:07	340	1.58 psi	349

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT OK TB dirty and clogged. TB cleaned and tipped 5 times. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Marston Lake	Date:	06-Nov-13
Service Type:	End of Season	Technician:	NK
		Time:	12:25
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1116	1520

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
SW C354		120	2	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1520	12:55	494			0
1520	12:56	495			0
1520	12:56	496			0
1523	12:42	1609	6.95 psi		1589
1523	12:46	1265	5.54 psi		1263
1523	12:47	494	2.23 psi		500
1523	12:47	1801	7.82 psi		1790

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1116	13.20	

**Problem:**

**Action Taken:** TXR tested with IFR, TXR is within specs. TXR OK. snwr = 1.31. RF OK. Two point PT test passed. Current PT cal good. PT OK. Pt is pulled up for winter

Station readings at 12:47 AT = 55.2 F raw = 952. RH = 11.9% raw = 238. WS = 8mph. WD = 307. Digital Pycrometer readings @ 12:53 AT= 58.8 F RH = 18.6%. All readings seem reasonable and within spec.

TB clean and clear on arrival. TB OK. Site is OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Marston Lake	Date:	27-Mar-13
Service Type:	Start Up	Technician:	GH
			Time: 13:34
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1210	1520
BY R 1124	1520

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1520-0012-1112-11011
Jumpers:	J4 J10
Eprom:	AB-SP09
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	3.0
Rev Power:	0.1
SWR:	1.45

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1520	14:05	222			0
1520	14:09	223			0
1523	14:27	1124	4.96 psi		1128
1523	14:29	181	0.92 psi		197

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1124	13.35	
BY R 1020	13.10	

**Problem:**

**Action Taken:** Checked cal then dropped PT. Cleaned and leveled TB, no large screen. Replaced Bats and desiccant. Tested transmissions.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Marston Lake	Date:	09-Sep-13
Service Type:	Inspection	Technician:	NK
		Time:	14:21
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1520	14:26	376		0
1520	14:26	377		0
1523	14:31	1640	7.21 psi	1649
1523	14:32	238	1.19 psi	259

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** sensor values from station @ 14:21 AT raw = 1264 = 86.4 F... RH raw = 356 = 17.8%.... WS = 5 mph... WD = 111 deg. Digital Psychrometer values @ 14:24.... AT = 89.0....RH = 27.9%. Solar panel clean. TB clean and clear on arrival. Two point PT test passed. Current PT cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Bear Creek @ Lowell	Date:	13-Aug-13
Time:	12:54		
Service Type:	Inspection	Technician:	NK
Status:	OK		

<b>Configuration Changes</b>	
Part #	Location
BY R 1227	1530

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0948	13.04	

**Problem:**

**Action Taken:** Changed battery. TB clean and clear on arrival. TB received two tips. TB OK Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Bear Creek @ Lowell**      Date: **14-Mar-13**      Time: **11:28**  
Service Type: **Start Up**      Technician: **SB/GH**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX J 147</b>	<b>1530</b>
<b>TB S 0205</b>	<b>1530</b>
<b>BY R 0948</b>	<b>1530</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: **1530**  
 Jumpers:   
 Eprom: **9601-01-N Ver 3.9M**  
 Tx Freq: **169.525**  
 Rx Freq:   
 Fwd Power: **4.0**  
 Rev Power: **0.1**  
 SWR: **1.38**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>1530</b>	<b>11:55</b>	<b>1</b>		<b>0</b>
<b>1530</b>	<b>11:55</b>	<b>2</b>		<b>0</b>
<b>1533</b>	<b>11:41</b>	<b>1090</b>	<b>4.72 psi</b>	<b>1106</b>
<b>1533</b>	<b>11:43</b>	<b>448</b>	<b>1.94 psi</b>	<b>458</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 0948</b>	<b>12.85</b>	

**Problem:**

**Action Taken:** Installed TXR, TB, BAT, desiccant. Lowered PT, calibrated within range. TB springs missing, replaced. RF ok, TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Bear Creek @ Lowell	Date:	06-Nov-13
Time:	13:08		
Service Type:	End of Season	Technician:	NK
Status:	Site Down		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1533	13:13	1691	7.29 psi	1682	
1533	13:14	391	1.67 psi	386	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. Current PT cal good. PT pulled up. TXR taken out. TB is still at site. Can't set ladder up. Might consider re-locating TB to a more accessible location. Site down

**Site Notes:**

**Follow-Up:** TB is still installed at site.



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Bear Creek @ Lowell	Date:	02-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	13:51
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
1533	0.01	0.0039	0.0089

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure		Predicted
1533	13:55	1409	6.12 psi		1431
1533	13:56	2047	9.22 psi		2153
1533	13:57	1563	6.78 psi		1584
1533	13:58	875	3.81 psi		892
1533	13:59	297	1.28 psi		305
1533	14:01	1973	8.56 psi		2000
1533	14:02	1481	6.41 psi		1500
1533	14:03	943	4.10 psi		961
1533	14:04	510	2.21 psi		521
1533	14:05	169	0.73 psi		176

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**  
**Action Taken:** Two point PT test failed. New PT calibration. PT OK

{Auto Entry: Calibrated sensor 1533 by linear regression. Modified calibration data. New calibration [Slope(0.0100), Calibration Offset(0.0039), Std Error(0.0089), Calibration Date(7/2/2013 2:05:27 PM)]}.

**Site Notes:**  
**Follow-Up:**

#: 205667

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 1550

**Service Log**

Site Name: Lakewood CC

Date: 29-Jul-13

Time: 15:27

Service Type: Inspection

Technician: NK/SB

Status: OK

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
1550	15:30	229		0
1550	15:30	230		0

**Battery Tests**

Battery #            V Quiescent    V Load

**Problem:**

**Action Taken:** TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: Lakewood CC

Date: 12-Feb-13

Time: 10:23

Service Type: Start UP

Technician: SB

Status: OK

**Configuration Changes**

Part #	Location
TX J 18535	1550
TB J 11492	1550
BY R 1002	1550

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq: 169.500  
 Rx Freq:  
 Fwd Power: 4.3  
 Rev Power: 0.1  
 SWR: 1.36

**Test Transmission**

Port	Time	Count	Measure	Predicted
1550	10:37	1		0
1550	10:37	2		0

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 1002	13.02	

**Problem:****Action Taken:** Installed TXR, TB, Battery, and Desiccant. RF OK. TB OK.**Site Notes:****Follow-Up:**

#: 205841

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 1550

<b>Service Log</b>			
Site Name:	Lakewood CC	Date:	04-Nov-13
Service Type:	End of Season	Technician:	NK
			Time: 13:47
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TXR out, TB out. Site down.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lakewood Gulch	Date:	18-Mar-13
Service Type:	Start Up	Technician:	ZC
			Time: 11:14
			Status: OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1560-00E
Jumpers:	C:J6,1-2,J3+5off
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1563	11:22	1031	5.13 psi	1030	
1563	11:23	428	2.13 psi	429	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Installed Battery. PT lowered for start of season. PT OK Changed radio frequency to 169.500.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: Lakewood Gulch

Date: 11-Nov-13

Time: 11:49

Service Type: End of Season

Technician: NK/SB

Status: Site Down

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
1563	0.012	0.0438	0.0219

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches: 1560-00E

Jumpers: C:J6,1-2,J3+5off

Eprom:

Tx Freq: 169.500

Rx Freq:

Fwd Power: 4.0

Rev Power: 0.1

SWR: 1.38

**Test Transmission**

Port	Time	Count	Measure	Predicted
1563	11:52	1382	6.99 psi	1403
1563	11:53	1806	9.12 psi	1830
1563	11:54	1005	5.09 psi	1022
1563	11:54	593	3.03 psi	610
1563	11:55	0	0.00 psi	1
1563	11:56	1329	6.72 psi	1333

**Battery Tests**

Battery #            V Quiescent    V Load

**Problem:**

**Action Taken:** Two point PT test failed. Re-calibrated PT. PT OK. PT pulled up for winter. Tested TXR with watt meter. TXR OK. Site down for winter.

{Auto Entry: Calibrated sensor 1563 by linear regression. Modified calibration data. New calibration [Slope(0.0116), Calibration Offset(0.0438), Std Error(0.0219), Calibration Date(11/11/2013 11:55:32 AM)]}.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lakewood Gulch	Date:	16-Jul-13
Time:	12:34	Service Type:	OneRain Service Ca
Status:	OK	Technician:	NK/ZC

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1563	13:01	1459	7.32 psi	1468	
1563	13:02	1007	5.10 psi	1025	
1563	13:03	619	3.18 psi	638	
1563	13:04	244	1.28 psi	257	
1563	13:05	0	0.00 psi	1	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Intermittent data coming through on conrail.

**Action Taken:** SNR good 1.2. Original radio dead, no readings on WATT meter. Replaced radio. 5 point PT test for troubling shooting comm issues. PT OK Site OK Data getting to conrail.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lakewood Gulch	Date:	11-Jul-13
Time:	14:23	Service Type:	Inspection
Technician:	SB	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Not reporting

**Action Taken:** Suspect bad CE. DO not have one in the truck.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Englewood Dam	Date:	21-Mar-13
Time:	10:05	Service Type:	OneRain Service Ca
Technician:	SB/FL	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1600	10:36	8		0
1600	10:36	9		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** PT Over reporting

**Action Taken:** Changed cable from desiccant box to to TXR. Changed delta transmit to 20 counts. PT tested OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Englewood Dam	Date:	07-Mar-13
Service Type:	Start Up	Technician:	SB
			Time: 10:10
			Status: OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
1603	0.014	-0.4485	0.0998

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>		
Switches:	1610-3-0	00E
Jumpers:	JB 3-5 off	
Eprom:	R 1.8	9CA1
Tx Freq:	169.525	
Rx Freq:		
Fwd Power:	3.9	
Rev Power:	0.1	
SWR:	1.38	

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1613	10:30	1581	9.14 psi	1889	
1613	10:31	1224	7.04 psi	1462	
1613	10:32	902	5.13 psi	1070	
1613	10:33	562	3.12 psi	661	
1613	10:34	221	1.11 psi	251	
1613	10:35	788	4.45 psi	788	
1613	10:36	392	2.13 psi	394	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0913	12.94	

**Problem:**

**Action Taken:** Installed TXR, TB, and lowered PT. Calibrated PT. PT OK. RF OK. TB OK. Replaced TB Screen. Replaced desiccant in PT box.

{Auto Entry: Calibrated sensor 1603 by linear regression. Modified calibration data. New calibration [Slope(0.0136), Calibration Offset(-0.4485), Std Error(0.0998), Calibration Date(3/7/2013 10:34:55 AM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Englewood Dam	Date:	04-Nov-13
Time:	11:07	Service Type:	End of Season
Technician:	SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1603	11:11	1247	6.10 psi	1235	
1603	11:12	496	2.42 psi	490	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, TB, and desiccant. Pulled up PT for winter.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Englewood Dam	Date:	16-Jul-13
Service Type:	OneRain Service Ca	Technician:	NK/ZC
		Time:	10:38
		Status:	PT Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Intermittent data. PT and voltage spiked 5 days ago.

**Action Taken:** Tested site with spare TX. Spare TX behaves as original one. Sending 16 V and PT topping out on alert count. Tested PT with volt meter and PT cal. No voltage reading on PT when pumped up. Bad PT

**Site Notes:**

**Follow-Up:** Replace PT

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: Englewood Dam      Date: 18-Jul-13      Time: 13:58  
 Service Type: Inspection      Technician: NK/IGH      Status: OK

**Configuration Changes**

Part #	Location
PT D 3597530	1600
BY R 1310	1600

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
1603	0.012	-0.1068	0.0367

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
1600	14:49	4		0
1600	14:49	4		0
1600	14:49	5		0
1600	14:49	5		0
1603	14:23	1793	9.10 psi	1577
1603	14:24	1402	7.11 psi	1238
1603	14:25	1047	5.30 psi	931
1603	14:26	618	3.11 psi	560
1603	14:27	238	1.17 psi	231
1603	14:28	31	0.11 psi	52
1603	14:29	1196	6.06 psi	1193
1603	14:30	234	1.15 psi	233

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 1310	12.94	

**Problem:** Down PT

**Action Taken:** Replaced PT and fixed broken conduit. Calibrated new PT. Replaced Battery. TB two tips. Site operational.

{Auto Entry: Calibrated sensor 1603 by linear regression. Modified calibration data. New calibration [Slope(0.0118), Calibration Offset(-0.1068), Std Error(0.0367), Calibration Date(7/18/2013 2:29:10 PM)]}.

**Site Notes:** lower PT pull box is 10ft N from the NW corner of the inlet structure.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Englewood Dam	Date:	09-Sep-13
Service Type:	Inspection	Technician:	NK
		Time:	12:00
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
1603	0.011	0.0003	0.0041

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1600	12:01	65		0
1600	12:03	66		0
1600	12:06	67		0
1603	12:15	1570	7.74 psi	1522
1603	12:16	1890	9.32 psi	1831
1603	12:17	1115	5.50 psi	1085
1603	12:18	489	2.41 psi	481
1603	12:19	51	0.25 psi	58
1603	12:20	1181	5.83 psi	1179
1603	12:21	220	1.09 psi	220

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clogged on arrival. TB cleaned and tipped. TB OK Installed upper screen on TB. Two point PT test failed. Re-calibrated PT. PT OK Site OK

{Auto Entry: Calibrated sensor 1603 by linear regression. Modified calibration data. New calibration [Slope(0.0114), Calibration Offset(0.0003), Std Error(0.0041), Calibration Date(9/9/2013 12:19:33 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Englewood Dam	Date:	09-Jul-13
Service Type:	Inspection	Technician:	ZC
		Time:	10:13
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
1603	0.015	-2.5263	0.3414

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1603	10:30	993	5.12 psi	901	
1603	10:31	800	3.92 psi	698	
1603	10:32	612	2.76 psi	501	
1603	10:33	417	1.53 psi	293	
1603	10:34	325	0.95 psi	194	
1603	10:35	1006	5.22 psi	919	
1603	10:36	779	3.80 psi	678	
1603	10:37	624	2.83 psi	512	
1603	10:38	466	1.83 psi	343	
1603	10:39	350	1.11 psi	220	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB partially clogged, cleared, and OK. Recalibrated PT, may need replaced.

{Auto Entry: Calibrated sensor 1603 by linear regression. Modified calibration data. New calibration [Slope(0.0145), Calibration Offset(-2.5263), Std Error(0.3414), Calibration Date(7/9/2013 10:39:49 AM)]}.

**Site Notes:** Verify PT. Std Error is too high.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Holly Dam	Date:	07-Mar-13
Service Type:	Start Up	Technician:	SB
			Time: 11:06
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 27313	1610
BY R 1028	1610

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>		
Switches:	1610-3-0	00E
Jumpers:	JB 3-5 off	
Eprom:	R 1.8	9CA1
Tx Freq:	169.525	
Rx Freq:		
Fwd Power:	2.5	
Rev Power:	0.1	
SWR:	1.5	

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1613	11:22	1132	5.37 psi	1119	
1613	11:23	441	2.01 psi	434	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1028	13.08	

**Problem:**

**Action Taken:** Installed TXR, and desiccant. Replaced desiccant in PT box. RF is marginal continue to monitor. Applied anti-seize to PT riser.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Holly Dam	Date:	09-Sep-13
Service Type:	Inspection	Technician:	NK
		Time:	11:24
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
1613	0.011	-0.4272	0.1296

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1613	11:38	1543	7.31 psi	1516	
1613	11:39	1937	9.25 psi	1911	
1613	11:40	1055	4.95 psi	1033	
1613	11:41	483	2.16 psi	465	
1613	11:42	101	0.31 psi	87	
1613	11:43	1298	6.14 psi	1303	
1613	11:44	291	1.24 psi	294	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** changed out battery, Two point PT test failed. Re-calibrated PT. PT OK Site OK

{Auto Entry: Calibrated sensor 1613 by linear regression. Modified calibration data. New calibration [Slope(0.0112), Calibration Offset(-0.4272), Std Error(0.1296), Calibration Date(9/9/2013 11:43:02 AM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Holly Dam	Date:	09-Jul-13
Service Type:	Inspection	Technician:	ZC
		Time:	10:56
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1613	11:00	535	2.55 psi	544	
1613	11:01	193	0.88 psi	203	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Holly Dam	Date:	04-Nov-13
Service Type:	End of Season	Technician:	SB
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1613	11:45	1057	4.95 psi	1057	
1613	11:46	406	1.77 psi	402	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** poor hydraulic contact.

**Action Taken:** Pulled TXR, Battery, and desiccant for the season. Pulled up PT. Poor hydraulic contact. During sep event debris has settled on the east side of outlet structure (where riser is). Need to dig out and flush intake.

**Site Notes:**

**Follow-Up:** Bring pump to flush riser.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Slaughterhouse	Date:	02-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	15:02
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
1623	0.011	0.1389	0.0473

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1620	15:08	98			0
1620	15:11	99			0
1620	15:16	100			0
1623	15:06	1846	9.14 psi		1865
1623	15:07	1279	6.36 psi		1299
1623	15:09	641	3.21 psi		656
1623	15:10	408	2.07 psi		422
1623	15:11	112	0.61 psi		125

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test failed. New calibration. PT OK TB logged. TB cleaned. TB three tips. TB OK Site OK

{Auto Entry: Calibrated sensor 1623 by linear regression. Modified calibration data. New calibration [Slope(0.0113), Calibration Offset(0.1389), Std Error(0.0473), Calibration Date(7/2/2013 3:12:09 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Slaughterhouse	Date:	09-Sep-13
Service Type:	Inspection	Technician:	NK
		Time:	12:51
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1140	1620

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1620	13:05	1		0
1620	13:05	2		0
1623	13:14	1285	6.36 psi	1287
1623	13:15	226	1.16 psi	225

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0404	12.96	

**Problem:** low battery

**Action Taken:** Replaced battery. TB clean and clear on arrival. TB OK Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Slaughterhouse	Date:	04-Nov-13
Time:	12:32	Service Type:	End of Season
Technician:	SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** TEE broke at riser.

**Action Taken:** Pulled TXR, Battery, TB, and desiccant for season. Could not test PT due to cars blocking path to standpipe. Conduit is broken at riser.

**Site Notes:**

**Follow-Up:** Fix conduit at Tee

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Slaughterhouse	Date:	14-Mar-13
Service Type:	Start Up	Technician:	SB/IGH
			Time: 10:34
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 11033	1620
TB J 23084	1620
BY R 0404	1620

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1620-00E
Jumpers:	C:J6,1-2,J3,5off;L:J8,9,1-2
Eprom:	R1.8 57FE
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.5
Rev Power:	0.1
SWR:	1.35

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1620	11:00	1		0	
1620	11:00	2		0	
1623	10:47	1363	6.74 psi	1376	
1623	10:48	304	1.54 psi	315	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0404	12.94	

**Problem:**

**Action Taken:** Installed TXR, Battery, TB, and Desiccant. Lowered PT. Flushed intake. RF OK. PT OK. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>S Platte @ Dart</b>	Date: <b>11-Jul-13</b>	Time: <b>13:21</b>	
Service Type: <b>Inspection</b>	Technician: <b>SB</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
Part #	Location
<b>BY R 1317</b>	<b>1630</b>

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Battery Low

**Action Taken:** Replaced battery. Staff gauge is within .1 feet of USGS. Precision does not allow to get any closer.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	S Platte @ Dart	Date:	12-Nov-13
Service Type:	End of Season	Technician:	ZC
			Time: 10:01
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1124	1630

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1124	13.24	

**Problem:**

**Action Taken:** Replaced battery. USGS sensor reading - 1.54'. UDFCD sensor reading - 1.45'. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SPR at Union Ave.	Date:	24-Apr-13
Service Type:	Start Up	Technician:	NK/SB
			Time: 13:09
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1313	1640

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.525
Rx Freq:	171.875
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1313	12.98	

**Problem:**

**Action Taken:** Battery changed, desiccant changed. TB ok, RF OK Did not receive tips locally computer went asleep. verified by contrail mobile.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: <b>SPR at Union Ave.</b>	Date: <b>04-Nov-13</b>	Time: <b>13:35</b>
Service Type: <b>End of Season</b>	Technician: <b>SB</b>	Status: <b>OK</b>

**Configuration Changes**

Part #	Location
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**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq: **169.525**  
Rx Freq: **171.875**  
Fwd Power: **4.1**  
Rev Power: **0.1**  
SWR: **1.37**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>1640</b>	<b>13:37</b>	<b>162</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
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**Problem:**

**Action Taken:** TB OK. RF OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SPR at Union Ave.	Date:	02-Jul-13
Time:	14:14		
Service Type:	Inspection	Technician:	NK
Status:	OK		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1640	14:19	49		0
1640	14:20	51		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean. two tips on TB, TB OK No PT. Taking stage data from USGS logger. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **SPR at 19th Street**      Date: **11-Nov-13**      Time: **11:01**  
 Service Type: **End of Season**      Technician: **NK/SB**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 1243</b>	<b>1650</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
<b>TX J 251</b>	<b>5.00</b>	<b>86</b>	<b>2.4</b>	<b>0.00</b>

**Settings and Performance**

Switches: **JB 9&10 @1&2,EvT-E,WL**  
 Jumpers: **JB1off,JB2on,JB3on,Jb4o**  
 Eprom:  
 Tx Freq: **169.525**  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1304</b>	<b>13.50</b>	

**Problem:**

**Action Taken:** Tested TXR with IFR. TXR within specs. TXR OK. Changed battery and desiccant. Solar tested. Solar OK. State of CO reading 2.82 ft. UDD reading 2.76 ft. Site OK.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SPR at 19th Street	Date:	24-Apr-13
Time:	13:48	Service Type:	Start Up
Technician:	NK/SB	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1304	1650

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	JB 9&10 @1&2,EvT-E,WL
Jumpers:	JB1off,JB2on,JB3on,Jb4o
Eprom:	
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	4.5
Rev Power:	0.1
SWR:	1.35

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1304	12.89	

**Problem:**

**Action Taken:** changed out battery, and desiccant. RF ok, shaft encoder OK state of CO reads 3.23, one rain reads 3.21 at 1356.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **SPR at 19th Street**      Date: **29-Jan-13**      Time: **11:09**  
Service Type: **OneRain Service Ca**      Technician: **PB/ZC**      Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port    Time    Count    Measure    Predicted

**Battery Tests**

Battery #    V Quiescent    V Load

**Problem:**

**Action Taken:** Changed frequency to 169.500 Mhz

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SPR at 19th Street	Date:	16-Jul-13
Time:	14:26	Service Type:	Inspection
Technician:	NK/ZC	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** State of CO reading 3.27 ft, OR reading 3.24 ft @ 14:30

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SPR at Henderson	Date:	20-Nov-13
Time:	10:53	Service Type:	OneRain Service Ca
Status:	Site Down	Technician:	NK/SB

<b>Configuration Changes</b>	
Part #	Location
BY R 1249	1660

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	JB1&4 off, JB2&3 on
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1660	11:13	259		0
1660	11:13	261		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1303	13.13	

**Problem:** No longer reading stage

**Action Taken:** DNRW replaced bubbler. SDI 12 wire was disconnected. Re-connected SDI12 sniffer wire. Changed battery and desiccant. TB clean and clear on arrival. TB OK. Can not talk to the SDI12 sniffer. We are bringing sniffer back to the shop.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SPR at Henderson	Date:	25-Nov-13
Time:	13:18	Status:	OK
Service Type:	OneRain Service Ca	Technician:	NK/SB

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Stage not working.

**Action Taken:** Re-programmed SDI12 sniffer to SDI address1. Site and stage now working. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SPR at Henderson	Date:	06-Aug-13
Time:	14:05		
Service Type:	Inspection	Technician:	NK
Status:	OK		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1660	14:06	29		0
1660	14:07	30		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **SPR at Henderson**      Date: **24-Apr-13**      Time: **14:25**  
Service Type: **Start Up**      Technician: **NK/SB**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 1303</b>	<b>1660</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
Jumpers: **JB1&4 off, JB2&3 on**  
Eprom:  
Tx Freq: **169.500**  
Rx Freq:  
Fwd Power: **4.5**  
Rev Power: **0.0**  
SWR: **1.1**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>1660</b>	<b>14:29</b>	<b>0</b>		<b>0</b>
<b>1660</b>	<b>14:30</b>	<b>1</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1303</b>	<b>12.98</b>	

**Problem:**

**Action Taken:** changed out battery and desiccant. TB ok, RF ok, solar OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SPR at Henderson	Date:	21-Jun-13
Time:	14:09	Status:	OK
Service Type:	OneRain Service Ca	Technician:	SB

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Installed 4015 SDI12 sniffer. 0-10 feet range. Address 0 parameter 0

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Cherry Ck @ Champa**      Date: **11-Nov-13**      Time: **11:30**  
Service Type: **End of Season**      Technician: **NK/SB**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 0905</b>	<b>1700</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq: **169.525**  
Rx Freq: **171.875**  
Fwd Power: **4.0**  
Rev Power: **0.1**  
SWR: **1.38**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>1700</b>	<b>11:35</b>	<b>1111</b>		<b>0</b>
<b>1700</b>	<b>11:36</b>	<b>1112</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 0905</b>	<b>13.01</b>	

**Problem:**

**Action Taken:** Test TXR with watt meter. TXR OK. TB clean and clear on arrival. TB OK. Stage OK. Replaced battery and desiccant. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cherry Ck @ Champa	Date:	15-May-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	14:39
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Site down. Not reporting for a few weeks

**Action Taken:** TXR set to wrong freq. Set freq to 169.500. Tested locally, OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cherry Ck @ Champa	Date:	16-Jul-13
Service Type:	Inspection	Technician:	NK/ZC
		Time:	13:32
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1700	13:43	1009		0
1700	13:48	1011		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TXR OK Replaced battery. TB clogged, TB cleaned. TB tipped three times. TB OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Shop Creek	Date:	25-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	11:12
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1710	11:15	100		0
1710	11:16	101		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Shop Creek	Date:	05-Feb-13
Time:	11:31	Service Type:	Start Up
Technician:	PB	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TB J 16624	1710
BY R 1022	1710

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1710-0012-0112-11011
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1710	11:45	1		0
1710	11:45	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1022	12.86	

**Problem:**

**Action Taken:** Installed battery, TB, desiccant. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Shop Creek	Date:	09-Oct-13
Service Type:	End of Season	Technician:	SB
			Time: 13:08
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1710-0012-0112-11011
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	5.0
Rev Power:	0.1
SWR:	1.33

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed Battery, TB, and desiccant for the season. Pulled up PT.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cherry Ck/Steele	Date:	18-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	13:07
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0502	1720

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1119	13.01	

**Problem:** low battery

**Action Taken:** replaced battery. TB clogged on arrival. TB cleaned. PT intake flushed. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cherry Ck/Steele	Date:	08-Mar-13
Service Type:	Start Up	Technician:	MZ
		Time:	15:15
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 21423	1720
TB H 561	1720
BY R 1119	1720

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1720-0012-1112-11011
Jumpers:	W4,W10
Eprom:	B
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	2.9
Rev Power:	0.0
SWR:	1

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1720	15:47	1		0
1720	15:48	2		0
1723	15:41	645	3.16 psi	636
1723	15:42	292	1.42 psi	282

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
TB S 0202	12.92	
BY R 1119	12.90	

**Problem:**

**Action Taken:** Start Up. RF OK, PT OK, TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cherry Ck/Steele	Date:	11-Nov-13
Service Type:	End of Season	Technician:	NK/SB
			Time: 12:38
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1723	12:51	1484	7.21 psi	1464	
1723	12:52	400	1.93 psi	385	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two Point PT test passed. PT good. PT pulled up for winter. TXR out, TB out. Site down. Found intake pipe. Pipe is broken. In spring need to replace intake.

**Site Notes:**

**Follow-Up:** Replace intake pipe.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cherry Ck/Steele	Date:	09-Jul-13
Service Type:	Inspection	Technician:	MZ
		Time:	11:44
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1723	12:00	956	4.66 psi	943	
1723	12:01	431	2.08 psi	416	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK, PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sand Creek Park	Date:	05-Sep-13
Service Type:	Inspection	Technician:	ZC
		Time:	12:16
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1800	12:36	163			0
1800	12:37	164			0
1803	12:31	1046	5.15 psi		1042
1803	12:32	426	2.15 psi		425

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sand Creek Park	Date:	13-Nov-13
Time:	12:21	Service Type:	End of Season
Technician:	SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1803	12:21	1103	5.41 psi	1097	
1803	12:22	216	1.12 psi	213	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, TB, Battery, and desiccant for season. PT tested within acceptable range. Damage to 90 in conduit. Needs replaced

**Site Notes:**

**Follow-Up:** Replace 90 in conduit.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: Sand Creek Park      Date: 28-Mar-13      Time: 10:48  
 Service Type: Start Up      Technician: MZ/BL      Status: OK

**Configuration Changes**

Part #	Location
TX J 08745	1800
TB J 18576	1800
PT D 3643168	1800
BY R 1029	1800

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
1803	0.011	0.6291	0.0995

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
1800	12:07	2		0
1803	11:51	870	4.38 psi	878
1803	11:51	547	2.89 psi	581
1803	11:53	733	3.77 psi	755
1803	11:56	1486	7.47 psi	1491
1803	11:57	975	4.99 psi	998
1803	11:57	642	3.38 psi	677
1803	11:57	404	2.23 psi	449
1803	11:58	177	1.13 psi	230
1803	11:59	954	4.90 psi	980
1803	11:59	772	4.03 psi	807
1803	12:00	614	3.25 psi	651
1803	12:00	372	2.08 psi	419
1803	12:00	167	1.09 psi	222

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 1029	13.21	

**Problem:**

**Action Taken:** Start Up. RF OK. TB OK. Installed new PT.

{Auto Entry: Calibrated sensor 1803 by linear regression. Modified calibration data. New calibration [Slope(0.0112), Calibration Offset(0.6291), Std Error(0.0995), Calibration Date(3/28/2013 12:01:01 PM)]}.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sand Creek Park	Date:	20-Jun-13
Service Type:	Inspection	Technician:	
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
1803	0.011	0.1956	0.0303

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1803	12:04	1053	5.19 psi	1013	
1803	12:05	828	4.10 psi	788	
1803	12:06	635	3.17 psi	596	
1803	12:07	438	2.21 psi	399	
1803	12:08	214	1.12 psi	175	
1803	12:10	801	3.97 psi	799	
1803	12:11	400	2.02 psi	399	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK. PT Recalibrated.

{Auto Entry: Calibrated sensor 1803 by linear regression. Modified calibration data. New calibration [Slope(0.0112), Calibration Offset(0.1956), Std Error(0.0303), Calibration Date(6/20/2013 12:10:04 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sand Creek Mouth	Date:	29-Jan-13
Service Type:	OneRain Service Ca	Technician:	PB/ZC
		Time:	10:19
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0432	1810

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1813	10:39	740	3.48 psi	711	
1813	10:40	1004	4.86 psi	993	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0432	12.85	

**Problem:** Arrived on site to switch over to 169.500 for A2 thru Smoky Hill Rptr. Site found with USGS shack off moorings, GOES antenna pulled down, large hole in side of shack.

**Action Taken:** Switched frequency. Checked PT conduit, OK. Photographed damage. Notified USGS.

Tested PT. PT OK. Poor hydraulic contact. Replaced battery.

**Site Notes:**

**Follow-Up:** Dig out hydraulic contact.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sand Creek Mouth	Date:	13-Nov-13
Time:	10:46	Service Type:	OneRain Service Ca
Technician:	NK/SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed complete site from current location. Will relocate site in spring. Site down. TXR out, TB out. Solar out.

**Site Notes:** No longer at water treatment plant in old USGS shack.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sand Creek Mouth	Date:	25-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	10:01
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1810	10:14	353		0
1810	10:14	354		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** PT stopped reporting during flood event.

**Action Taken:** PT conduit destroyed. Was able to find PT cable, however PT end sensor is missing. Removed PT. Removed desiccant and sig conditional box. Something cut the cable near the end. Turned JP3 on TX. Building structure is fine. TX is good. Site is rain only now. TB clean and clear on arrival. TB OK Consider relocating across river with USGS site.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Niver Detention	Date:	06-Nov-13
Service Type:	End of Season	Technician:	SB
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1903	12:18	1052	5.34 psi	1080	
1903	12:21	298	1.50 psi	303	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant for season. Top end of PT did not calibrate in range. Re-calibrate when conduit is fixed. Replaced top screen.

**Site Notes:**

**Follow-Up:** Fix conduit and calibrate PT.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Niver Detention	Date:	15-Mar-13
Service Type:	Start Up	Technician:	GH
			Time: 11:24
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 25153	1900
TB J 10764	1900
BY R 1006	1900

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1900-00E
Jumpers:	C:J6,1-2,J3,J5 off; L:J9,10
Eprom:	R 1.8-3min. 57FE
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	5.0
Rev Power:	0.3
SWR:	1.65

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1900	11:48	1		0
1900	11:59	2		0
1900	11:59	3		0
1903	12:21	1027	4.98 psi	1007
1903	12:24	402	1.94 psi	392

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
TX J 25153	13.08	

**Problem:**

**Action Taken:** Installed TXR, TB, PT,dessicant. Leveled TB. Cleaned TB funnel, large screen missing. PT pipe separated from conduit.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Niver Detention	Date:	13-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	14:05
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1900-00E
Jumpers:	C:J6,1-2,J3,J5 off; L:J9,10
Eprom:	R 1.8-3min. 57FE
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
1903	14:12	962	4.80 psi	970	
1903	14:15	450	2.24 psi	452	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**  
**Action Taken:** TB OK, PT OK.  
**Site Notes:**  
**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Niver Detention	Date:	14-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	13:36
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1900	13:37	123		0
1900	13:37	124		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clogged on arrival. TB cleaned. TB received two tips. TB OK Two point PT test passed. PT OK

Conduit near riser is broken and riser has dropped about 6 inches. Need to re-strap riser to wall, and fix broken union.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Brighton	Date:	26-Jun-13
Service Type:	Inspection	Technician:	MZ
		Time:	13:07
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** @ 13:13 ID 1921 raw = 38 => 15% RH, ID 1922 raw = 174 => 94 deg.F, psychrometer readings Td = 93 deg.F, Tw = 63 deg.F implying RH = 19% and dp = 45 deg.F. TB OK. Solar OK, Wind OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Brighton	Date:	21-Aug-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	14:35
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0509	1920

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	1920
Jumpers:	
Eprom:	9601-01-N Ver 3.5R
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
1920	14:48	1832		0
1920	14:48	1833		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0509	13.06	

**Problem:** Battery Dead

**Action Taken:** Replaced battery. Checked solar. 19.8 volts @ 5ma. Solar is failing will need replaced in the future. TB clean and clear on arrival. TB received two tips. TB OK Anemometer free of movement. WS and WD values seem reasonable. Station values @ 14:43 AT 92 raw = 172. RH 23.92% raw = 61.... Pycrometer AT 94 F RH 20% @ 14:54.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Brighton	Date:	06-Sep-13
Time:	10:41	Status:	OK
Service Type:	OneRain Service Ca	Technician:	NK

<b>Configuration Changes</b>	
Part #	Location
BY R 9735	1920

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0509	13.17	

**Problem:** low battery, bad solar panel

**Action Taken:** replaced solar panel and changed out battery. TB clear and clean on arrival. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Brighton**                      Date: **20-Nov-13**                      Time: **10:25**  
Service Type: **End of Season**                      Technician: **NK/SB**                      Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 1316</b>	<b>1920</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
<b>TX N 231</b>		<b>167</b>	<b>2.2</b>	<b>0.00</b>

**Settings and Performance**

Switches: **1920**  
Jumpers:  
Eprom: **9601-01-N Ver 3.5R**  
Tx Freq: **169.525**  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>1920</b>	<b>10:39</b>	<b>2027</b>		<b>0</b>
<b>1920</b>	<b>10:39</b>	<b>2028</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1316</b>	<b>12.99</b>	

**Problem:**

**Action Taken:** Changed out battery and desiccant. Tested TXR with IFR. TXR is within specs. TXR OK. Tested solar. Solar OK. Anemometer free of movement. WS and WD OK. TB clean and clear on arrival. TB OK. Site OK.

Digital Psychrometer readings @ 10:39 AT = 59.4F RH= 26.3%

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hiwan	Date:	22-Oct-13
Time:	10:45	Service Type:	End of Season
Technician:	SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location
BY R 1301	2210

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	3.5
Rev Power:	0.1
SWR:	1.41

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1301	12.99	

**Problem:**

**Action Taken:** Wind OK. Good freedom of movement. TB OK. AT reading 55 actual 54. RH Reading 32, actual 30. Replaced battery and desiccant. Solar OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hiwan	Date:	02-Jul-13
Service Type:	OneRain Service Ca	Technician:	NK
		Time:	12:24
		Status:	Wind down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2210	10:01	1033		0
2210	10:01	1049		0
2210	10:01	1034		0
2210	10:02	1034		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean. TB tipped two times. TB OK Replaced Wind Speed sensor. New sensor is not working. Reading 0 mph with wind present. Taking back wind speed sensor to OR to troubleshoot.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>Hiwan</b>	Date: <b>09-Jul-13</b>	Time: <b>12:21</b>	
Service Type: <b>Inspection</b>	Technician: <b>SB</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2210	12:18	1050		0
2210	12:19	1051		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Installed new bearing for wind sensor. Updated FW in data logger to 26 (previously 14).

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hiwan	Date:	18-Feb-13
Service Type:	Start Up	Technician:	ZC/SB
		Time:	13:19
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1208	2210

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	3.5
Rev Power:	0.2
SWR:	1.63

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2210	13:26	904		0
2210	13:27	905		0
2212	13:28	72		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1208	13.41	

**Problem:**

**Action Taken:** Replaced battery and desiccant. RF OK. TB OK. RHAT OK. Could not use psychromter due to cold conditions. Wind sensor appears to not be operating effectively. May need replacement.

**Site Notes:**

**Follow-Up:** Replace wind sensor

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hiwan	Date:	26-Sep-13
Service Type:	Service Call	Technician:	NK
		Time:	10:44
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2210	10:48	1204		0
2210	10:51	1205		0
2210	10:51	1206		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** customer believes TB is plugged.

**Action Taken:** TB was partially clogged. TB cleaned. TB was level on arrival. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hiwan	Date:	30-Jan-13
Service Type:	OneRain Service Ca	Technician:	PB/ZC
		Time:	10:54
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Changed frequency to 169.500.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Evergreen Lake	Date:	29-Oct-13
Service Type:	End of Season	Technician:	SB
			Time: 11:11
			Status: OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Cant access site

**Action Taken:** A new lock has been placed on the chain. This lock is a larger diameter and will not allow ours to be removed. Can not access site.

**Site Notes:** Evergreen Metro District 303-674-4112

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Evergreen Lake	Date:	27-Mar-13
Time:	14:20	Service Type:	Start Up
Technician:	MZ	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0440	2220

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
2223	14:30	1006	4.45 psi	1006	
2223	14:31	349	1.55 psi	350	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0440	12.99	

**Problem:**

**Action Taken:** Start Up. RF OK, PT OK. Change battery and desiccant.

**Site Notes:**

**Follow-Up:**

#: 205748

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 2220

**Service Log**

Site Name: **Evergreen Lake**      Date: **19-Aug-13**      Time: **12:24**  
Service Type: **Inspection**      Technician: **NK/SB**      Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
2223	12:25	1386	6.19 psi	1400
2223	12:26	424	1.90 psi	429

**Battery Tests**

Battery #      V Quiescent    V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: <b>Evergreen Lake</b>	Date: <b>02-Jul-13</b>	Time: <b>11:39</b>
Service Type: <b>Inspection</b>	Technician: <b>NK</b>	Status: <b>OK</b>

**Configuration Changes**

Part #	Location
<b>BY R 1309</b>	<b>2220</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
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**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1309</b>	<b>12.90</b>	

**Problem:**

**Action Taken:** Replaced battery. Site ok

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Evergreen Lake	Date:	01-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	13:32
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
2223	13:34	1690	7.43 psi	1681	
2223	13:35	390	1.76 psi	397	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Evergreen Lake	Date:	02-Dec-13
Service Type:	End of Season	Technician:	NK/SB
			Time: 10:07
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1112	2220

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 289	5.00	218	2.4	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
2223	10:13	1567	7.00 psi	1583	
2223	10:14	397	1.78 psi	402	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1309	13.05	

**Problem:**

**Action Taken:** Changed out battery and desiccant. Tested TXR with IFR. TXR is within specs. TXR OK. Two point PT test passed. PT OK. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Bear Creek @ Cub**      Date: **27-Mar-13**      Time: **13:43**  
 Service Type: **Start Up**      Technician: **MZ**      Status: **OK**

**Configuration Changes**

Part #	Location
TX J 25158	2230
TB H 1175	2230
BY R 9733	2230

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
2230	13:57	2		0
2230	13:57	2		0
2230	13:57	3		0
2230	13:57	3		0
2230	13:58	5		0
2230	13:58	5		0
2230	13:58	6		0
2230	13:58	6		0
2233	13:54	877	3.74 psi	866
2233	13:55	367	1.38 psi	376

**Battery Tests**

Battery #	V Quiescent	V Load

**Problem:****Action Taken:** Start Up. RF OK, PT OK, TB OK.**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Bear Creek @ Cub	Date:	22-Oct-13
Service Type:	End of Season	Technician:	SB
			Time: 12:11
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Standpipe had 1 foot of water in it. Pulled PT up for winter. Removed TXR, Battery, Desiccant, and TB. Area was heavily flooded. May need to reconstruct conduit after construction. Good hydraulic contact.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Bear Creek @ Cub	Date:	28-Aug-13
Time:	12:26	Service Type:	OneRain Service Ca
Status:	OK	Technician:	SB

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2230	12:24	1		0
2230	12:25	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Site not reporting

**Action Taken:** Found battery to be dead. Bad battery. Replaced. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Bear Creek @ Cub	Date:	28-Jun-13
Service Type:	Inspection	Technician:	ZC
		Time:	12:50
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
2230	12:57	112			0
2230	12:59	113			0
2230	12:59	114			0
2233	12:53	1174	5.26 psi		1180
2233	12:54	537	2.19 psi		544

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Bear Creek @ Cub	Date:	19-Aug-13
Service Type:	Inspection	Technician:	NK/SB
		Time:	12:38
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1140	2230

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
2233	12:38	1250	5.61 psi	1255	
2233	12:39	633	2.65 psi	639	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 9733	13.04	

**Problem:** Low Battery

**Action Taken:** PT Tested OK. Changed battery. TB clogged. Cleaned.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cold Spring Glch	Date:	28-Jun-13
Service Type:	Inspection	Technician:	ZC
		Time:	11:53
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2240	12:02	106		0
2240	12:02	107		0
2243	11:56	1056	5.14 psi	1061
2243	11:57	431	2.11 psi	437

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cold Spring Glch	Date:	19-Aug-13
Service Type:	Inspection	Technician:	NK/SB
		Time:	13:06
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2240	13:15	239		0
2243	13:13	921	4.48 psi	925
2243	13:14	455	2.22 psi	459

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB received three tips. TB clean and clear on arrival. TB OK Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cold Spring Glch	Date:	27-Mar-13
Service Type:	Start Up	Technician:	MZ
			Time: 12:42
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 25150	2240
TB H 616	2240
BY R 0401	2240

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2240	12:54	1		0
2240	12:54	3		0
2240	12:54	3		0
2240	12:54	5		0
2240	12:54	5		0
2240	12:56	6		0
2243	12:51	768	3.70 psi	764
2243	12:53	289	1.39 psi	289

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0401	13.10	

**Problem:**

**Action Taken:** Start Up. RF OK, TB OK, PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cold Spring Glch	Date:	29-Oct-13
Service Type:	End of Season	Technician:	SB
			Time: 12:50
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** PT Riser destroyed. PT stuck in earth.

**Action Taken:** Removed TXR, Battery, TB, and Desiccant for season. PT Riser was destroyed and PT is stuck in the ground. Need to come back with proper tools.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Rosedale**                      Date: **26-Sep-13**                      Time: **9:48**  
Service Type: **Service Call**                      Technician: **NK**                      Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
2250	10:00	465		0
2250	10:02	466		0
2250	10:02	467		0
2253	9:55	1560	7.35 psi	1534
2253	9:57	295	1.22 psi	272
2253	9:59	705	3.22 psi	682

**Battery Tests**

Battery #                      V Quiescent    V Load

**Problem:**    PT showing little stage change

**Action Taken:** Three point PT test passed. Flushed PT intake pipe. Can not find end of intake. Conduit seems to be intact. Water pretty high, probably 8 inches below bridge. Talked to local near site. Said during flood water was 2 to 3 ft. above the road. Road was completely wiped out after flood. TB clean and clear on arrival. Site seems OK Will check PT data again.

**Site Notes:**

**Follow-Up:**

#: 400489

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 2250

**Service Log**

Site Name: **Rosedale**                      Date: **04-Apr-13**                      Time: **12:35**  
Service Type: **Start Up**                      Technician: **SB/NK**                      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX J 21421</b>	<b>2250</b>
<b>TB H 467</b>	<b>2250</b>
<b>BY R 1132</b>	<b>2250</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches: **2250-0012-1112-11011**  
Jumpers:  
Eprom: **B**  
Tx Freq: **169.525**  
Rx Freq:  
Fwd Power: **4.0**  
Rev Power: **0.1**  
SWR: **1.38**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>2250</b>	<b>13:01</b>	<b>1</b>		<b>0</b>
<b>2250</b>	<b>13:01</b>	<b>2</b>		<b>0</b>
<b>2253</b>	<b>12:48</b>	<b>1287</b>	<b>6.15 psi</b>	<b>1287</b>
<b>2253</b>	<b>12:50</b>	<b>529</b>	<b>2.48 psi</b>	<b>531</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1132</b>	<b>13.32</b>	

**Problem:**

**Action Taken:** Installed TXR, Battery, TB, Desiccant, and lowered PT. PT tested OK. Good hydraulic contact. RF OK. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Rosedale	Date:	28-Jun-13
Service Type:	Inspection	Technician:	ZC
		Time:	13:10
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2250	13:17	98		0
2250	13:17	99		0
2250	13:18	100		0
2253	13:15	519	2.43 psi	521
2253	13:16	1071	5.10 psi	1070

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**

#: 400518

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 2250

**Service Log**

Site Name: **Rosedale**                      Date: **28-Aug-13**                      Time: **11:50**  
Service Type: **Inspection**                      Technician: **SB**                      Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
2250	12:00	271		0
2250	12:01	272		0
2253	11:56	1100	5.24 psi	1099
2253	11:57	450	2.10 psi	451

**Battery Tests**

Battery #                      V Quiescent    V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. PT OK. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Rosedale	Date:	22-Oct-13
Time:	11:21		
Service Type:	End of Season	Technician:	SB
Status:	Site Down		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2253	11:26	828	3.78 psi	797

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Water in standpipe

**Action Taken:** Found TXR submerged in water in standpipe. Approx. 1 foot of water in pipe. Did not have proper pump attachment to remove water. Removed TXR, Battery, TB, and desiccant. Zip tied cables out of water. Flushed intake.

**Site Notes:**

**Follow-Up:** Water in standpipe.



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Brook Forest	Date:	22-Oct-13
Time:	13:20	Service Type:	End of Season
Technician:	SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	2260-0012-0112-11011
Jumpers:	
Eprom:	B
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant for season.

**Site Notes:**

**Follow-Up:**

#: 101791

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 2260

**Service Log**

Site Name: **Brook Forest**      Date: **18-Feb-13**      Time: **14:00**  
Service Type: **Start Up**      Technician: **ZC/SB**      Status: **OK**

**Configuration Changes**

Part #	Location
TX J 25149	2260
TB H 553	2260
BY R 1122	2260

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: **2260-0012-0112-11011**  
 Jumpers:  
 Eprom: **B**  
 Tx Freq: **169.525**  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
2260	14:08	1		0
2260	14:09	20		0
2260	14:09	21		0

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 1122	13.40	

**Problem:**

**Action Taken:** Installed TXR, battery, TB. RF OK TB OK

**Site Notes:**

**Follow-Up:**

#: 205668

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 2260

**Service Log**

Site Name: **Brook Forest**      Date: **30-Jul-13**      Time: **8:07**  
Service Type: **Inspection**      Technician: **NK**      Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches: **2260-0012-0112-11011**  
Jumpers:  
Eprom: **B**  
Tx Freq: **169.525**  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
2260	8:07	258		0
2260	8:08	259		0

**Battery Tests**

Battery #      V Quiescent    V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cub Ck below Blue	Date:	28-Aug-13
Service Type:	Inspection	Technician:	SB
			Time: 12:35
			Status: OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
2270	12:51	280		0	
2270	12:51	281		0	
2273	12:41	1148	5.63 psi	1155	
2273	12:42	383	1.79 psi	384	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. Intake was clogged. Remove cap, cleaned, flushed intake. PT OK with good hydraulic contact. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cub Ck below Blue	Date:	28-Jun-13
Time:	12:28		
Service Type:	Inspection	Technician:	ZC
Status:	OK		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
2270	12:38	106		0	
2270	12:38	107		0	
2273	12:32	1079	5.29 psi	1086	
2273	12:33	442	2.10 psi	446	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: Cub Ck below Blue

Date: 04-Apr-13

Time: 13:22

Service Type: Start Up

Technician: SB/NK

Status: OK

**Configuration Changes**

Part #	Location
TX J 15786	2270
TB H 551	2270
BY R 0413	2270

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: 2270-0012-1112-11011  
 Jumpers: W10,W4  
 Eprom: B  
 Tx Freq: 169.525  
 Rx Freq:  
 Fwd Power: 4.0  
 Rev Power: 0.1  
 SWR: 1.38

**Test Transmission**

Port	Time	Count	Measure	Predicted
2273	13:33	1125	5.53 psi	1135
2273	13:34	507	2.42 psi	511

**Battery Tests**

Battery #	V Quiescent	V Load
TB H 551	0.10	4.00
BY R 0413	13.60	

**Problem:****Action Taken:** Installed TXR, BAT, TB. Tested PT. PT calibrated within acceptable range. TX ok, TB ok**Site Notes:****Follow-Up:** Consider replacing stand pipe mast. Bent and obstructs top section

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cub Ck below Blue	Date:	22-Oct-13
Service Type:	End of Season	Technician:	SB
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
2273	12:59	871	4.24 psi	875	
2273	13:00	444	2.09 psi	445	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant for season. Pulled up PT.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Kinney Peak	Date:	18-Feb-13
Service Type:	Start Up	Technician:	ZC/SB
		Time:	14:43
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 25157	2280
TB H 9401	2280
BY R 1134	2280

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2280	14:51	1		0
2280	14:51	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1134	13.10	

**Problem:**

**Action Taken:** Installed TXR, battery and TB. RF OK TB OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Kinney Peak	Date:	29-Oct-13
Time:	11:40	Service Type:	End of Season
Technician:	SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TB, TXR, Battery and desiccant for season.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Kinney Peak	Date:	30-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	8:41
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1102	2280

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2280	8:54	0		0
2280	8:57	1		0
2280	8:57	2		0
2280	8:58	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1134	13.14	

**Problem:**

**Action Taken:** Replaced battery. TB clean and clear on arrival. TB received three tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Genesee Village	Date:	26-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK
		Time:	11:10
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	2310-0012-0112-11011
Jumpers:	
Eprom:	B
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** suspecting clogged TB

**Action Taken:** TB clean and clear on arrival. TB received four tips. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Genesee Village	Date:	30-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	11:29
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	2310-0012-0112-11011
Jumpers:	
Eprom:	B
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Genesee Village	Date:	18-Feb-13
Service Type:	Start Up	Technician:	ZC/SB
			Time: 11:11
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 25156	2310
TB H 570	2310
BY R 1002	2310

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	2310-0012-0112-11011
Jumpers:	
Eprom:	B
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2310	11:21	1		0
2310	11:21	2		0
2310	11:22	4		0
2310	11:22	5		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1002	13.02	

**Problem:**

**Action Taken:** Installed TXR, battery, and TB. RF OK TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Genesee Village	Date:	22-Oct-13
Time:	9:55	Service Type:	End of Season
Technician:	SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	2310-0012-0112-11011
Jumpers:	
Eprom:	B
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant for season.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Choke Cherry Res	Date:	01-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	10:58
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2320	11:57	136		0
2320	11:59	137		0
2320	11:59	138		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clear. TB tipped twice. TB OK RPT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Choke Cherry Res	Date:	28-Aug-13
Service Type:	Inspection	Technician:	SB
		Time:	10:26
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	2320 J
Tx Freq:	169.525
Rx Freq:	169.525
Fwd Power:	3.0
Rev Power:	0.1
SWR:	1.45

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2320	10:40	258		0
2320	10:43	259		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** RF OK. Could not get long enough transmission to complete watt test. Radio appears OK. Possible low side of output.

**Site Notes:**

**Follow-Up:** Monitor Radio Output



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Choke Cherry Res**      Date: **04-Apr-13**      Time: **10:43**  
 Service Type: **OneRain Service Ca**      Technician: **SB/NK**      Status: **OK**

**Configuration Changes**

Part #	Location
RP N 2066	2320
BY R 1233	2320
BY R 1027	2320

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
2320	11:29	6		0
2320	11:30	7		0

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 1027	13.06	

**Problem:** TB sensor on repeater not working

**Action Taken:** Replaced repeater. Replaced cavity filter with crystal filter. TB OK. RF OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Choke Cherry Res	Date:	30-Jan-13
Service Type:	OneRain Service Ca	Technician:	PB/ZC
		Time:	11:49
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed rptr for change to 169.500

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Choke Cherry Res	Date:	18-Feb-13
Service Type:	Start Up	Technician:	ZC/SB
		Time:	11:31
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
RP N 2071	2320
BY R 1233	2320
BY R 1225	2320

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1233	12.60	
BY R 1225	13.20	

**Problem:**

**Action Taken:** Installed new Rptr with radios programmed for 169.500. Installed cavity filter tuned for 169.500

**Site Notes:** Red-Transmit (Yagi)  
Blue - Receive (ombi)

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Morrison	Date:	04-Apr-13
Service Type:	Service Call	Technician:	SB/NK
		Time:	14:22
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
2333	0.011	-0.0043	0.0019

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
2333	14:50	1879	8.94 psi	2089	
2333	14:51	1480	7.04 psi	1648	
2333	14:52	1051	5.00 psi	1172	
2333	14:53	618	2.94 psi	693	
2333	14:54	221	1.05 psi	252	
2333	14:55	1033	4.92 psi	1032	
2333	14:56	445	2.12 psi	444	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** PT not reporting

**Action Taken:** JB3 was on, not allowing for PT to TX. Removed JB3. PT good. TX good. PT calibrated.

{Auto Entry: Calibrated sensor 2333 by linear regression. Modified calibration data. New calibration [Slope(0.0110), Calibration Offset(-0.0043), Std Error(0.0019), Calibration Date(4/4/2013 2:54:37 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Morrison	Date:	30-Jan-13
Time:	10:03	Status:	OK
Service Type:	OneRain Service Ca	Technician:	PB/ZC

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Changed frequency to 169.500.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Morrison	Date:	03-Jan-13
Time:	11:27	Status:	OK
Service Type:	OneRain Service Ca	Technician:	PB

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** PT over-reporting.

**Action Taken:** Could not access PT, frozen solid. Jumpered J3.

**Site Notes:**

**Follow-Up:** Replace PT on spring startup.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Morrison**                      Date: **06-Nov-13**                      Time: **10:10**  
Service Type: **End of Season**                      Technician: **NK**                      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX J 2177</b>	<b>2330</b>
<b>BY R 1002</b>	<b>2330</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
<b>2333</b>	<b>0.011</b>	<b>-0.0234</b>	<b>0.0078</b>

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
<b>TX J 217</b>	<b>5.00</b>	<b>288.5</b>	<b>2.5</b>	<b>0.00</b>

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>2330</b>	<b>11:20</b>	<b>1</b>		<b>0</b>
<b>2330</b>	<b>11:20</b>	<b>2</b>		<b>0</b>
<b>2333</b>	<b>11:07</b>	<b>1255</b>	<b>7.26 psi</b>	<b>1524</b>
<b>2333</b>	<b>11:17</b>	<b>2006</b>	<b>9.49 psi</b>	<b>1990</b>
<b>2333</b>	<b>11:18</b>	<b>1533</b>	<b>7.25 psi</b>	<b>1521</b>
<b>2333</b>	<b>11:19</b>	<b>1075</b>	<b>5.08 psi</b>	<b>1067</b>
<b>2333</b>	<b>11:21</b>	<b>557</b>	<b>2.63 psi</b>	<b>552</b>
<b>2333</b>	<b>11:21</b>	<b>2</b>	<b>0.00 psi</b>	<b>0</b>
<b>2333</b>	<b>11:22</b>	<b>1646</b>	<b>7.79 psi</b>	<b>1650</b>
<b>2333</b>	<b>11:23</b>	<b>410</b>	<b>1.93 psi</b>	<b>411</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1002</b>	<b>13.01</b>	

**Problem:**

**Action Taken:** Changed battery and desiccant. Tested TX with IFR field procedures. TXR is within specs. TXR OK. RF OK. Had to adjust zero and span on sig board for PT. Re-calibrated PT. PT OK. TB OK. Solar OK. Site OK.

{Auto Entry: Calibrated sensor 2333 by linear regression. Modified calibration data. New calibration [Slope(0.0109), Calibration Offset(-0.0234), Std Error(0.0078), Calibration Date(11/6/2013 11:22:19 AM)]}.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Morrison	Date:	28-Aug-13
Time:	13:23	Service Type:	Inspection
Technician:	SB	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
2330	13:26	263		0	
2330	13:26	264		0	
2333	13:25	1237	5.85 psi	1226	
2333	13:26	486	2.27 psi	477	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. State gauge reading 6.31 feet. Our site is reading 6.35.

TB OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Morrison	Date:	28-Jun-13
Time:	11:25	Service Type:	Inspection
Technician:	ZC	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2330	11:31	183		0
2330	11:31	184		0
2333	11:27	462	2.21 psi	464
2333	11:28	1066	5.09 psi	1068
2370	11:04	1		0
2370	11:04	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. TB OK Stage gauge reporting 5.76' at time of test. PT reporting 5.86' at time of test.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Morrison	Date:	27-Mar-13
Service Type:	Start Up	Technician:	MZ
		Time:	11:39
		Status:	PT Down

<b>Configuration Changes</b>	
Part #	Location
BY R 1003	2330

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2330	11:52	75		0
2330	11:53	76		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1003	13.10	

**Problem:**  
**Action Taken:** Start Up. RF OK, TB OK. Changed battery.

PT needs replaced (15-20')

**Site Notes:**  
**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	El Rancho	Date:	30-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	11:07
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2340	11:08	116		0
2340	11:08	116		0
2340	11:08	117		0
2340	11:08	117		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	El Rancho	Date:	22-Oct-13
Time:	10:25	Service Type:	End of Season
Technician:	SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and Desiccant for season.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: El Rancho

Date: 18-Feb-13

Time: 12:56

Service Type: Start Up

Technician: ZC/SB

Status: OK

**Configuration Changes**

Part #	Location
TX J 23326	2340
TB J 8373	2340
BY R 0347	2340

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: 2340-3-D  
 Jumpers: C:J6,1-2,J5off;L:J9,10,1-2,  
 Eprom: R 1.8 9CA1  
 Tx Freq: 169.525  
 Rx Freq:  
 Fwd Power: 4.5  
 Rev Power: 0.1  
 SWR: 1.35

**Test Transmission**

Port	Time	Count	Measure	Predicted
2340	13:06	1		0
2340	13:06	2		0

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 0347	13.10	

**Problem:****Action Taken:** Installed TXR, battery and TB. RF OK TB OK**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	El Rancho	Date:	04-Apr-13
Service Type:	OneRain Service Ca	Technician:	SB/NK
		Time:	11:48
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1004	2340

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2340	11:56	1		0
2340	11:57	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Low Battery  
**Action Taken:** Replaced Battery  
**Site Notes:**  
**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Idledale**                      Date: **18-Feb-13**                      Time: **15:31**  
Service Type: **Start Up**                      Technician: **ZC/SB**                      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX J 25147</b>	<b>2350</b>
<b>TB H 514</b>	<b>2350</b>
<b>BY R 1229</b>	<b>2350</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>2350</b>	<b>15:36</b>	<b>1</b>		<b>0</b>
<b>2350</b>	<b>15:37</b>	<b>2</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1229</b>	<b>13.00</b>	

**Problem:**

**Action Taken:** Installed TXR, battery, TB. RF ok, TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Idledale	Date:	29-Oct-13
Service Type:	End of Season	Technician:	SB
			Time: 13:23
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** poor rain catch.

**Action Taken:** Removed TXR, Battery, TB, and desiccant for the season.

**Site Notes:**

**Follow-Up:** Need to trim tree in the spring.



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Idledale	Date:	30-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	9:43
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2350	9:44	148		0
2350	9:46	149		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Tree is starting to over grow around stand pipe. Should consider removing some limbs on the tree.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Indian Hills	Date:	29-Oct-13
Time:	12:31	Service Type:	End of Season
Technician:	SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	2360-0012-0112-11011
Jumpers:	
Eprom:	B
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, TB, and desiccant for season.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Indian Hills	Date:	30-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	9:26
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	2360-0012-0112-11011
Jumpers:	
Eprom:	B
Tx Freq:	169.525
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
2360	9:27	175		0
2360	9:27	175		0
2360	9:28	176		0
2360	9:28	176		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: Indian Hills

Date: 27-Mar-13

Time: 13:15

Service Type: Start Up

Technician: MZ

Status: OK

**Configuration Changes**

Part #	Location
TX J 25146	2360
TB H 566	2360
BY R 0403	2360

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: 2360-0012-0112-11011  
Jumpers:  
Eprom: B  
Tx Freq: 169.525  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
2360	13:25	1		0
2360	13:25	2		0

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 0403	12.83	

**Problem:****Action Taken:** Start Up. RF OK, TB OK.**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Red Rocks	Date:	28-Jun-13
Service Type:	Inspection	Technician:	ZC
		Time:	10:37
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1301	2370

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
2373	10:58	1086	5.13 psi	1093	
2373	10:59	456	2.09 psi	462	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1301	12.84	

**Problem:** Low battery

**Action Taken:** Replaced battery. PT tested within acceptable range. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>Red Rocks</b>	Date: <b>27-Mar-13</b>	Time: <b>10:56</b>	
Service Type: <b>Start Up</b>	Technician: <b>MZ</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
Part #	Location
<b>TX J 25148</b>	<b>2370</b>
<b>TB H 555</b>	<b>2370</b>
<b>BY R 0349</b>	<b>2370</b>

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
<b>2370</b>	<b>11:19</b>	<b>1</b>		<b>0</b>
<b>2370</b>	<b>11:20</b>	<b>2</b>		<b>0</b>
<b>2370</b>	<b>11:21</b>	<b>4</b>		<b>0</b>
<b>2370</b>	<b>11:21</b>	<b>5</b>		<b>0</b>
<b>2373</b>	<b>11:13</b>	<b>933</b>	<b>4.32 psi</b>	<b>926</b>
<b>2373</b>	<b>11:14</b>	<b>694</b>	<b>3.21 psi</b>	<b>695</b>
<b>2373</b>	<b>11:15</b>	<b>415</b>	<b>1.86 psi</b>	<b>415</b>

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
<b>BY R 0349</b>	<b>13.30</b>	

**Problem:**

**Action Taken:** Start Up. RF OK, PT OK, TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Red Rocks	Date:	06-Nov-13
Time:	9:35	Service Type:	End of Season
Technician:	NK	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
2373	9:51	1539	7.30 psi	1545	
2373	9:52	370	1.67 psi	374	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. Current PT cal good. PT up, TXR out, TB out, Site Down

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Red Rocks	Date:	28-Aug-13
Service Type:	Inspection	Technician:	SB
		Time:	13:38
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
2370	13:47	93			0
2373	13:44	1107	5.21 psi		1111
2373	13:45	431	1.96 psi		435

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within range. Intake clogged with mud. Removed cap and flushed. TB OK>

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Crescent Rain	Date:	19-Feb-13
Service Type:	Start Up	Technician:	ZC
		Time:	13:19
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0803	4010

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4010
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	2.5
Rev Power:	0.1
SWR:	1.5

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0803	13.00	

**Problem:**

**Action Taken:** Replaced battery and desiccant. RF ok TB OK No change in power of radio over winter. Continue to monitor performance.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Crescent Rain	Date:	29-Oct-13
Service Type:	End of Season	Technician:	NK
		Time:	11:44
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0422	4010

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 869	5.01	278	2.4	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4010	11:56	1		0
4010	11:57	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0803	13.28	

**Problem:**

**Action Taken:** Tested TXR with IFR. All IFR measurements are within spec. TXR OK. vwsr = 1.32. RF OK TB clean and clear on arrival. TB OK Battery and desiccant were changed. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Crescent Rain	Date:	01-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	14:16
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4010	14:17	223		0
4010	14:17	224		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear. TB received two tips. TB ok

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Rio Grande Rain**      Date: **19-Feb-13**      Time: **13:57**  
 Service Type: **Start Up**      Technician: **ZC**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 0946</b>	<b>4020</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches: **4020-00E**  
 Jumpers: **C:J5 off**  
 Eprom: **R 1.8 57FE**  
 Tx Freq: **169.500**  
 Rx Freq:  
 Fwd Power: **25.0**  
 Rev Power: **0.2**  
 SWR: **1.2**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>4020</b>	<b>14:12</b>	<b>1</b>		<b>0</b>
<b>4020</b>	<b>14:12</b>	<b>2</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 0946</b>	<b>13.20</b>	

**Problem:**

**Action Taken:** Replaced battery and desiccant. RF ok TB OK Solar shaded.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: Rio Grande Rain      Date: 29-Oct-13      Time: 10:58  
Service Type: End of Season      Technician: NK      Status: OK

**Configuration Changes**

Part #	Location
BY R 1208	4020

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches: 4020-00E  
Jumpers: C:J5 off  
Eprom: R 1.8 57FE  
Tx Freq: 169.500  
Rx Freq:  
Fwd Power: 20.0  
Rev Power: 0.1  
SWR: 1.15

**Test Transmission**

Port	Time	Count	Measure	Predicted
4020	11:07	0		0
4020	11:08	0		0
4020	11:13	1		0
4020	11:13	2		0

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 0946	13.31	

**Problem:**

**Action Taken:** TXR tested with Watt meter. TXR OK RF OK TB clean and clear on arrival. TB OK Battery and desiccant were changed. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Rio Grande Rain	Date:	06-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	11:12
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4020	11:17	202		0
4020	11:18	203		0
4020	11:18	204		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received three tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Red Garden Rain	Date:	19-Feb-13
Time:	11:23	Service Type:	Start Up
Status:	OK	Technician:	ZC/SB

<b>Configuration Changes</b>	
Part #	Location
BY R 0601	4030

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4030	11:44	1		0
4030	11:50	2		0
4030	11:50	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0601	13.20	

**Problem:**

**Action Taken:** Replaced battery and desiccant. RF ok, TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Red Garden Rain**      Date: **18-Nov-13**      Time: **11:33**  
 Service Type: **End of Season**      Technician: **SB**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 1252</b>	<b>4030</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches: **4030-00e**  
 Jumpers: **C: J5 off**  
 Eprom: **585B**  
 Tx Freq: **169.500**  
 Rx Freq:  
 Fwd Power: **4.5**  
 Rev Power: **0.1**  
 SWR: **1.35**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>4030</b>	<b>11:51</b>	<b>1</b>		<b>0</b>
<b>4030</b>	<b>11:51</b>	<b>3</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1252</b>	<b>12.90</b>	

**Problem:**

**Action Taken:** Replaced battery and desiccant. TB OK. RF OK.

**Site Notes:****Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Red Garden Rain	Date:	06-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	10:17
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4030	10:24	194		0
4030	10:24	195		0
4030	10:24	195		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Martin Gulch	Date:	28-Oct-13
Service Type:	End of Season	Technician:	NK
		Time:	11:20
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1122	4040

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 876	5.01	56.3	2.4	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4040	11:24	0		0
4040	11:33	1		0
4040	11:33	1		0
4040	11:33	2		0
4040	11:33	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1030	13.20	

**Problem:**

**Action Taken:** TXR tested with IFR field procedures. TXR is within specs. TXR OK vswr = 1.24. RF OK TB was cleaned. TB OK Battery and desiccant were replaced. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Martin Gulch	Date:	06-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	12:26
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4040	12:27	330		0
4040	12:28	331		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:** Once on dirt escape route continue on road until you come to a gate/a sign that says walker ranch boundary. Rain gage is just beyond the gate.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Walker Ranch	Date:	01-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	15:25
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4050	15:28	171		0
4050	15:28	171		0
4050	15:28	172		0
4050	15:28	172		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Walker Ranch	Date:	28-Oct-13
Service Type:	End of Season	Technician:	NK
		Time:	11:54
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0511	4050

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 876	5.00	133.2	2.4	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4050	12:13	1		0
4050	12:13	1		0
4050	12:13	2		0
4050	12:13	30		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1117	13.31	

**Problem:**

**Action Taken:** Tested TXR with IFR field procedures. TXR is within specs. TXR OK vswr = 1.40. RF OK Tb was clean and clear on arrival. TB OK Battery and desiccant were replaced. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lakeshore	Date:	01-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	14:51
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4060	15:04	233		0
4060	15:04	234		0
4060	15:04	236		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received three tips. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lakeshore	Date:	28-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 12:26
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1004	4060

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 975	5.00	63.4	2.4	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4060	12:44	1		0
4060	12:47	2		0
4060	12:48	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0230	13.37	

**Problem:**

**Action Taken:** Battery and desiccant were replaced. TXR was tested with IFR. TXR is within specs. TXR OK.  
 vwsr = 1.00  
 RF OK TB was clean and clear on arrival. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Bear Peak	Date:	28-Oct-13
Time:	10:25	Service Type:	End of Season
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0813	4070

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	07
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	20.0
Rev Power:	0.0
SWR:	1.07

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4070	10:36	679		0
4070	10:39	680		0
4070	10:39	680		0
4070	10:46	682		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0805	13.37	

**Problem:**

**Action Taken:** TX tested with watt meter. TX OK TB clean and clear on arrival. TB OK Replaced battery and desiccant. Solar OK Site OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Bear Peak	Date:	06-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	13:13
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Twin Sisters	Date:	07-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	11:18
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4080	11:23	189		0
4080	11:23	190		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Twin Sisters	Date:	01-Apr-13
Service Type:	Start Up	Technician:	ZC
		Time:	11:22
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4080-00E
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	30.0
Rev Power:	8.0
SWR:	3.14

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4080	11:27	44		0
4080	11:37	1		0
4080	11:38	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK RF OK Solar OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Twin Sisters	Date:	16-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 11:03
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1022	4080

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 876	5.00	53	2.4	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4080	11:37	1		0
4080	11:37	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0901	13.18	

**Problem:**

**Action Taken:** Replaced battery and desiccant. TX tested with IFR. TX within specs. TX OK TB clean and clear on arrival. TB OK Solar OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Magnolia	Date:	16-Oct-13
Time:	10:09	Service Type:	End of Season
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1138	4090

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 875	5.07	102	2.2	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1228	13.13	

**Problem:**

**Action Taken:** TX tested using IFR procedure. TX falls into specs. TX OK Solar is believed to be bad. Replaced battery and desiccant. TB clean and clear on arrival. TB OK Site OK

**Site Notes:**

**Follow-Up:** Replace solar panel

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Magnolia	Date:	07-Aug-13
Service Type:	Inspection	Technician:	NK
			Time: 10:24
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1228	4090

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4090	10:31	0		0
4090	10:43	1		0
4090	10:43	5		0
4090	10:46	6		0
4090	10:46	7		0
4090	10:59	8		0
4090	10:59	9		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1037	13.02	

**Problem:**

**Action Taken:** Replaced battery. Solar was disconnected. Re-connected solar. Putting out low voltage. 0.14 volts. Cloudy day. TB was tipped nine times during service. Site OK TB OK

**Site Notes:** Should consider replacing stand pipe. Nuts are all gone, pretty beat up and dented.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Magnolia	Date:	01-Apr-13
Service Type:	Start Up	Time:	10:45
		Technician:	ZC
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	09
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4090	11:01	68		0
4090	11:04	69		0
4090	11:04	70		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Power OK TB OK RF OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Filter Plant	Date:	07-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	14:57
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0336	4100

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4100	15:02	0		0
4100	15:02	0		0
4100	15:05	1		0
4100	15:05	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1109	12.96	

**Problem:**

**Action Taken:** Replaced battery. Cleaned TB, some debris on screen. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Filter Plant	Date:	29-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 13:35
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0339	4100

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 218	5.01	269	2.2	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4100	13:44	1		0
4100	13:44	3		0
4100	13:48	5		0
4100	13:48	6		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0336	13.35	

**Problem:**

**Action Taken:** changed out battery and desiccant. Tested TXR with IFR. All IFR measurements are within spec. TXR OK. vwsr = 1.76. RF OK. TB clean and clearon arrival. TB OK. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Betasso	Date:	07-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	14:28
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1134	4110

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4110	14:34	0		0
4110	14:34	0		0
4110	14:37	1		0
4110	14:38	5		0
4110	14:39	6		0
4110	14:39	7		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1134	13.10	

**Problem:**

**Action Taken:** Battery changed out. TB tipped. TB OK Site OK

**Site Notes:** Top section of TB is hard to get on and move around. Should consider replacing it.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Betasso	Date:	16-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 15:17
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1305	4110

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 218	5.00	52	2.2	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4110	15:28	0		0
4110	15:34	2		0
4110	15:36	3		0
4110	15:37	4		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1134	12.98	12.79

**Problem:**

**Action Taken:** Replaced battery and desiccant. Tested TXR with IRR field procedures. TXR is within limits. TXR OK TB clean and clear on arrival. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Swiss Peaks	Date:	16-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 13:28
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1314	4130

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4130
Jumpers:	JB5 off,JB7 on
Eprom:	585B
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	3.8
Rev Power:	0.1
SWR:	1.39

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4130	13:52	1		0
4130	13:52	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0422	12.96	

**Problem:**

**Action Taken:** Replaced battery and desiccant. Tested TX with watt meter. RF power little low. Good SNR. TX OK TB clean and clear on arrival. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Swiss Peaks	Date:	07-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	13:15
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4130	13:21	291		0
4130	13:21	292		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clear and clean on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Logan Mill	Date:	07-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	13:53
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4140	13:54	279		0
4140	13:55	280		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Logan Mill	Date:	15-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 13:45
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1201	4140

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 975	5.00	264	2.4	0.00

<b>Settings and Performance</b>	
Switches:	4140-00E
Jumpers:	C:J5 off; L:J7,11 on
Eprom:	R 1.8 57FE
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4140	14:06	1		0
4140	14:06	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1201	13.15	

**Problem:**

**Action Taken:** TX passed maintenance procedure. Battery and desiccant replaced. Solar good. TB clean and clear. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Gold Hill	Date:	07-May-13
Service Type:	Start Up	Technician:	NK/ZC
		Time:	13:23
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1127	4150

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4150	13:30	1		0
4784	13:31	6		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1102	13.03	

**Problem:**

**Action Taken:** changed battery and descant. tested RF locally, RF ok, TB ok, vwsr 1.04. didn't have watt meter in truck.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Gold Hill	Date:	23-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	14:58
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4150	14:59	186		0
4150	14:59	187		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Gold Hill	Date:	15-Oct-13
Time:	12:47	Service Type:	End of Season
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1247	4150

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 976	4.99	234	2.4	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4150	13:04	1		0
4150	13:04	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1127	13.08	

**Problem:**

**Action Taken:** changed out battery and desiccant. Ran TX through maintenance procedure on IFR. TX passed. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Gold Hill	Date:	04-Oct-13
Time:	12:54	Service Type:	End of Season
Technician:	ZC	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1116	4150

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 976	5.00	215	2.25	

<b>Settings and Performance</b>	
Switches:	15
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	14.0
Rev Power:	0.1
SWR:	1.18

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4150	13:15	1		0
4150	13:15	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1116	13.11	

**Problem:**

**Action Taken:** Tested TXR on IFR. TXR OK Replaced battery. RF OK TB ok

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sunshine	Date:	31-Jul-13
Service Type:	Inspection	Technician:	NK/SB
		Time:	15:18
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4160	15:22	145		0
4160	15:22	146		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sunshine	Date:	07-May-13
Service Type:	Start Up	Technician:	NK/ZC
		Time:	11:43
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1106	4160

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4160	12:06	1		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1106	13.17	

**Problem:**

**Action Taken:** battery and desiccant changed. RF tested locally, RF ok, TB ok, vswr 1.04, didn't have watt meter in truck.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sunshine	Date:	23-Jul-13
Time:	14:04	Service Type:	Inspection
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4160	14:10	122		0
4160	14:11	123		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear. TB received two tips. TB ok, Site ok

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sunshine	Date:	04-Oct-13
Time:	13:37	Service Type:	End of Season
Technician:	ZC	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0631	4160

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 876	5.01	300	2.25	0.00

<b>Settings and Performance</b>	
Switches:	4160
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	3.0
Rev Power:	0.1
SWR:	1.45

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4160	14:07	1		0
4160	14:07	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0631	13.01	

**Problem:**

**Action Taken:** Tested TXR on IFR. TXR OK Replaced battery. RF OK TB ok

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Pinebrook	Date:	15-Oct-13
Service Type:	End of Season	Technician:	NK
		Time:	10:42
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 23967	4170
BY R 1225	4170

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 217		343	2.6	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4170	11:49	1		0
4170	11:50	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1319	13.06	

**Problem:**

**Action Taken:** TX J 2177 didn't pass Freq error, or deviation. Freq error = 343. deviation = 2.6. Changed out TX. Changed out battery and desiccant. New TX is a spare and was tested at shop. TB clean and clear. TB OK Site OK

**Site Notes:** Cant drive road to turn around spot anymore. Rock slide, boulders to large to move. Have to hike up to site. Can either park at little house or back down road.

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Pinebrook	Date:	07-May-13
Service Type:	Start Up	Technician:	NK/ZC
		Time:	10:21
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1319	4170

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4170	10:34	1		0
4170	10:37	2		0
4170	10:37	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1319	12.94	

**Problem:**

**Action Taken:** Battery and desiccant changed. RF tested locally, TB ok, RF OK VWSR 1.63.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Pinebrook	Date:	23-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	13:10
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4170	13:13	49		0
4170	13:14	50		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear. TB received two tips. TB OK site OK

**Site Notes:**

**Follow-Up:**

#: 205738

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 4180

<b>Service Log</b>			
Site Name:	Gold Lake	Date:	15-Aug-13
Service Type:	Inspection	Technician:	NK/ZC
		Time:	13:01
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4180	13:03	336		0
4180	13:03	336		0
4180	13:03	337		0
4180	13:03	337		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Gold Lake	Date:	20-Nov-13
Service Type:	End of Season	Technician:	ZC
			Time: 11:43
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0416	4180

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 273	4.99	50	2.5	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4180	12:00	1		0
4180	12:01	2		0
4180	12:02	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Tested TXR on IFR. TXR OK. Replaced battery. RF OK. TB OK. Solar OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Slaughterhouse	Date:	07-Nov-13
Service Type:	End of Season	Technician:	NK/SB
			Time: 14:28
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1130	4190

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0F19
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	20.0
Rev Power:	0.1
SWR:	1.15

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4190	14:40	1		0
4190	14:41	2		0
4190	14:41	4		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1130	13.21	

**Problem:**

**Action Taken:** Changed battery and desiccant. Tested TXR with watt meter. TXR OK. Solar OK, low sun. TB clean and clear on arrival. TB OK. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Slaughterhouse	Date:	23-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	11:39
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4190	11:42	258		0
4190	11:42	259		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Slaughterhouse	Date:	08-Apr-13
Service Type:	Start Up	Technician:	MZ/INK
			Time: 13:23
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1316	4190

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1316	13.00	

**Problem:**

**Action Taken:** Start Up. TB OK, RF OK. SWR=1.28. Changed Battery and Desiccant.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lazy Acres	Date:	08-Apr-13
Service Type:	Start Up	Technician:	MZ/INK
			Time: 11:57
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 2808	4200
BY R 1306	4200

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1306	13.01	

**Problem:**

**Action Taken:** Spring Start Up. Replaced TXR due to radio power issues, battery, desiccant. RF OK, TB OK. SWR = 1.37

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lazy Acres	Date:	23-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	12:22
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4200	12:24	143		0
4200	12:24	144		0
4200	12:24	145		0
4752	12:25	160		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clear and clean. TB received three tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lee Hill Repeater	Date:	08-Apr-13
Service Type:	OneRain Service Ca	Technician:	MZ/INK
		Time:	10:42
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
RP N 2071	4210

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Replaced 50386 Repeater due to intermittent functionality.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lee Hill Repeater	Date:	03-Apr-13
Service Type:	OneRain Service Ca	Technician:	SB
		Time:	12:00
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1213	4210

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	LeeHill Translate
Tx Freq:	171.875
Rx Freq:	169.500
Fwd Power:	15.0
Rev Power:	1.0
SWR:	1.7

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** AEA on receive antenna 1.53 VSWR. Poweramp output is 15 watts. Found significant condensation inside repeater canister. Swapped receive radio. Same intermittent response. Need to bring spare repeater.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lee Hill Repeater	Date:	02-Apr-13
Service Type:	OneRain Service Ca	Technician:	SB/MZ
		Time:	11:17
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** 169.525 cavity filter was placed on the intake side of the splitter. Moved cavity filter to side 2 (ALERT2). Most likely a mistake made when ALERT2 was installed.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Flings	Date:	04-Oct-13
Service Type:	End of Season	Technician:	ZC
			Time: 11:44
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0404	4220

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 875	5.01	150	2.25	0.00

<b>Settings and Performance</b>	
Switches:	0A22
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	18.0
Rev Power:	0.2
SWR:	1.24

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4220	12:02	1		0
4220	12:03	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0404	13.16	

**Problem:**

**Action Taken:** Tested TXR on IFR. TXR OK Replaced battery. RF OK TB ok

**Site Notes:**

**Follow-Up:**

#: 205737

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 4220

**Service Log**

Site Name: **Flings**                      Date: **15-Aug-13**                      Time: **12:26**  
Service Type: **Inspection**                      Technician: **NK/ZC**                      Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4220	12:27	326		0
4220	12:28	327		0

**Battery Tests**

Battery #                      V Quiescent    V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Flings	Date:	29-Mar-13
Service Type:	Start Up	Technician:	MZ
			Time: 13:11
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1301	4220

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1301	12.65	

**Problem:**

**Action Taken:** Start Up. RF OK, TB OK, Solar OK. Replaced battery and desiccant.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**Site Name: **Golden Age**Date: **08-Apr-13**Time: **14:08**Service Type: **Start Up**Technician: **MZ/INK**Status: **OK****Configuration Changes**

Part #	Location
<b>BY R 1315</b>	<b>4230</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>4230</b>	<b>14:18</b>	<b>3</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1315</b>	<b>12.93</b>	

**Problem:****Action Taken:** Spring start up. TB OK TX OK Solar OK Changed battery and desiccant. SWR 1.18.**Site Notes:****Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Golden Age	Date:	07-Nov-13
Service Type:	End of Season	Technician:	NK/SB
			Time: 12:01
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1040	4230

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 185		102	2.4	0.00

<b>Settings and Performance</b>	
Switches:	4230-00E
Jumpers:	
Eprom:	R1.8 57FE
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4230	12:05	0		0
4230	12:05	0		0
4230	12:12	1		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1315	13.12	

**Problem:**

**Action Taken:** Replaced battery and desiccant. Tested TXR with IFR field procedures. TXR is with in specs. TXR OK. Solar OK. TB clean and clear on arrival. TB OK. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Golden Age	Date:	31-Jul-13
Service Type:	Inspection	Technician:	NK/SB
		Time:	13:20
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4230	13:21	128		0
4230	13:21	129		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**  
**Action Taken:** TB OK.  
**Site Notes:**  
**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sunset	Date:	23-Jul-13
Time:	14:39	Service Type:	Inspection
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4240	14:41	153		0
4240	14:41	154		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sunset	Date:	07-May-13
Service Type:	Start Up	Technician:	NK/ZC
			Time: 12:51
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1225	4240

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4240	12:57	0		0
4240	12:57	1		0
4240	13:01	2		0
4240	13:01	3		0
4240	13:02	4		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1201	12.91	

**Problem:**

**Action Taken:** battery and desiccant changed. rf tested locally, rf ok, tb ok, vswr 1.51. didn't have watt meter in truck.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Sunset**                      Date: **04-Oct-13**                      Time: **10:55**  
Service Type: **End of Season**                      Technician: **ZC**                      Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 1202</b>	<b>4240</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
<b>TX J 976</b>	<b>5.00</b>	<b>50</b>	<b>2</b>	

**Settings and Performance**

Switches: **4240-00E**  
Jumpers: **C:J5 off L:J7,11**  
Eprom: **R 1.8 57FE**  
Tx Freq: **169.500**  
Rx Freq:  
Fwd Power: **18.0**  
Rev Power: **0.1**  
SWR: **1.16**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>4240</b>	<b>11:12</b>	<b>1</b>		<b>0</b>
<b>4240</b>	<b>11:12</b>	<b>2</b>		<b>0</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1202</b>	<b>13.02</b>	

**Problem:**

**Action Taken:** Tested TXR on IFR. TXR OK Replaced battery. RF OK TB OK

**Site Notes:**

**Follow-Up:**

#: 205647

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 4250

**Service Log**

Site Name: **Geer Canyon**

Date: **24-Jul-13**

Time: **10:38**

Service Type: **Inspection**

Technician: **NK**

Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4250	10:42	230		0

**Battery Tests**

Battery #            V Quiescent    V Load

**Problem:**

**Action Taken:** TB clean and clear. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Geer Canyon	Date:	14-Jun-13
Service Type:	Inspection	Technician:	NK
		Time:	13:49
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4250	13:53	201		0
4250	13:53	201		0
4250	13:53	202		0
4250	13:53	202		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB tipped twice. TB clean, TB OK site OK heard TX locally.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Taylor Mountain	Date:	29-Mar-13
Service Type:	Start Up	Technician:	MZ
		Time:	12:40
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0511	4260

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0511	13.31	

**Problem:**

**Action Taken:** Start Up. RF OK, TB OK, Solar OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Taylor Mountain	Date:	02-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	11:17
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4260	11:18	297		0
4260	11:18	298		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB tested OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: Taylor Mountain

Date: 11-Oct-13

Time: 12:59

Service Type: End of Season

Technician: ZC

Status: OK

**Configuration Changes**

Part #	Location
BY R 1139	4260

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 152	5.01	50	2.25	0.00

**Settings and Performance**

Switches: 4260-00E  
 Jumpers: C: J5 off  
 Eprom: R 1.8 9CA1  
 Tx Freq: 169.500  
 Rx Freq:  
 Fwd Power: 15.0  
 Rev Power: 0.1  
 SWR: 1.18

**Test Transmission**

Port	Time	Count	Measure	Predicted
4260	13:17	1		0
4260	13:19	2		0
4260	13:19	3		0

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 1139	13.35	

**Problem:****Action Taken:** Tested TXR on IFR. TXR and radio OK. TB OK Solar Ok. Replaced battery.**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cannon Mountain	Date:	12-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	11:58
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Cannon Mountain	Date:	30-Oct-13
Time:	12:44	Service Type:	End of Season
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1134	4270

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 152	5.01	63.2	2.4	0.00

<b>Settings and Performance</b>	
Switches:	.8
Jumpers:	
Eprom:	R1.8 9CA1
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1015	13.17	

**Problem:**

**Action Taken:** changed battery and desiccant. Tested TXR with IFR. All IFR measurements are within spec. TXR OK. vswr = 1.00. RF OK. TB clean and clear on arrival. TB OK. Solar OK. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Red Hill	Date:	24-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	11:44
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Big Elk Park	Date:	02-Aug-13
Service Type:	Inspection	Technician:	NK/SB
		Time:	12:29
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival TB received two tips. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Big Elk Park	Date:	30-Oct-13
Service Type:	End of Season	Technician:	NK
		Time:	11:12
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1228	4300

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0F30
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	30.0
Rev Power:	0.0
SWR:	1.05

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4300	11:30	712		0
4300	11:30	712		0
4300	11:30	712		0
4300	11:30	712		0
4300	11:30	712		0
4300	11:30	712		0
4300	11:30	712		0
4300	11:36	713		0
4300	11:36	713		0
4300	11:37	714		0
4300	11:37	714		0
4300	11:38	715		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1256	12.95	

**Problem:**

**Action Taken:** changed battery and desiccant. Tested TXR with watt meter. TXR OK. RF OK. TB clean and clear on arrival. TB OK. Site OK.

**Site Notes:**

**Follow-Up:**

#: 205734

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 4310

**Service Log**

Site Name: **Johnny Park**      Date: **15-Aug-13**      Time: **10:06**  
Service Type: **Inspection**      Technician: **NK/ZC**      Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4310	10:07	325		0
4310	10:07	325		0
4310	10:08	326		0
4310	10:08	326		0

**Battery Tests**

Battery #      V Quiescent    V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lee Hill Rain	Date:	02-Apr-13
Service Type:	Start Up	Technician:	SB/MZ
		Time:	11:18
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1003	4320

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4320	11:26	8		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1003	13.21	

**Problem:**

**Action Taken:** Replaced battery and desiccant. RF OK. TB OK.

**Site Notes:**

**Follow-Up:**

#: 205684

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 4320

**Service Log**

Site Name: Lee Hill Rain

Date: 31-Jul-13

Time: 14:38

Service Type: Inspection

Technician: NK/SB

Status: OK

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4320	14:39	201		0
4320	14:39	202		0

**Battery Tests**

Battery #            V Quiescent    V Load

**Problem:**

**Action Taken:** TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hansen	Date:	24-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	11:13
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4330-00E
Jumpers:	C: J5 off
Eprom:	R 1.8 9CA1
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4330	11:15	244		0
4330	11:15	245		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hansen	Date:	14-Jun-13
Service Type:	Inspection	Technician:	NK
		Time:	13:01
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4330-00E
Jumpers:	C: J5 off
Eprom:	R 1.8 9CA1
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB was tipped twice. TB OK TB clean. Heard TX locally. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Riverside	Date:	02-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	10:47
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4340	10:47	256		0
4340	10:48	257		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB Tested OK.

**Site Notes:** Turn left at first Y. Go up switch backs past nice cabin to 2nd gate. Pass old cabin and go up hard 4x4 road. Gauge is at roads end.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>Riverside</b>	Date: <b>20-Nov-13</b>	Time: <b>12:45</b>	
Service Type: <b>End of Season</b>	Technician: <b>ZC</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
Part #	Location
<b>BY R 0946</b>	<b>4340</b>

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
<b>TX J 101</b>	<b>4.99</b>	<b>320</b>	<b>2.5</b>	<b>0.00</b>

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Texted TXR on IFR. TXR OK. Replaced battery. RF OK. TB OK. Solar OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Conifer Hill	Date:	13-Jun-13
Service Type:	OneRain Service Ca	Technician:	NK
		Time:	12:13
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	0935
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	12.0
Rev Power:	0.1
SWR:	1.2

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4350	12:50	2		0
4350	12:50	2		0
4350	12:51	4		0
4350	12:51	5		0
4350	12:51	5		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1020	12.98	

**Problem:** Site down. Not Transmitting

**Action Taken:** On arrival battery cables were loose. Cables were tightened and test TX button was pressed. Still not TX. Battery V 13.04. Decided to installed new battery. TX OK. Solar OK. TB OK. Old battery appears to not have enough current to TX data. Site Ok. Heard transmissions locally.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Conifer Hill	Date:	20-Nov-13
Service Type:	End of Season	Technician:	ZC
			Time: 14:10
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1256	4350

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 101	4.99	50	2.25	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4350	14:22	1		0
4350	14:22	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Tested TXR on IFR. TXR OK. Replaced battery. RF OK. TB OK. Solar OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Conifer Hill	Date:	29-Mar-13
Service Type:	Start Up	Technician:	MZ
		Time:	11:38
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1020	4350

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1020	13.20	

**Problem:**

**Action Taken:** Start Up. RF OK, TB OK. Changed battery and desiccant

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Conifer Hill	Date:	02-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	10:00
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4350	10:01	91		0
4350	10:01	92		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB tested OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Justice Center	Date:	08-Oct-13
Service Type:	End of Season	Technician:	SB
			Time: 13:51
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1009	4360

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 152	5.00	215	2.2	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Bench tested TXR. TXR OK. RF OK. TB OK. Replaced battery and desiccant.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Justice Center	Date:	22-Jan-13
Service Type:	Installation	Technician:	PB/SB
			Time: 11:21
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TB J 24776	4360
BY R 1139	4360

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	.01
Jumpers:	14.2
Eprom:	32
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1139	13.04	

**Problem:**

**Action Taken:** Installed new site outside justice center. Moved existing txr, installed new TB, solar.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Justice Center	Date:	07-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	10:04
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4360	10:05	249		0
4360	10:05	251		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received three tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>Gross</b>	Date: <b>20-Jun-13</b>	Time: <b>10:28</b>	
Service Type: <b>Inspection</b>	Technician: <b>NK</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
<i>Part #</i>	<i>Location</i>

<b>Transducer Calibration</b>			
<i>Sensor ID</i>	<i>Slope</i>	<i>Calib Offset</i>	<i>Std Error</i>

<b>Tx Maintenance</b>				
<i>Part #</i>	<i>Ref V</i>	<i>Freq Err</i>	<i>Deviation</i>	<i>ROM Batt</i>

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
<i>Port</i>	<i>Time</i>	<i>Count</i>	<i>Measure</i>	<i>Predicted</i>	
4373	10:50	1506	7.25 psi	1511	
4373	10:51	370	1.77 psi	371	

<b>Battery Tests</b>		
<i>Battery #</i>	<i>V Quiescent</i>	<i>V Load</i>

**Problem:**

**Action Taken:** Two point PT test passed. PT OK site OK TX came through locally.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>Gross</b>	Date: <b>19-Feb-13</b>	Time: <b>14:35</b>	
Service Type: <b>Start Up</b>	Technician: <b>ZC</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
Part #	Location
<b>BY R 1111</b>	<b>4370</b>

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	<b>4370-</b>
Jumpers:	<b>C:JB6,2-3,JB3,4,5 off;L:J</b>
Eprom:	<b>585B</b>
Tx Freq:	<b>169.500</b>
Rx Freq:	<b>171.875</b>
Fwd Power:	<b>4.0</b>
Rev Power:	<b>0.1</b>
SWR:	<b>1.38</b>

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
<b>4373</b>	<b>14:50</b>	<b>1081</b>	<b>5.16 psi</b>	<b>1077</b>	
<b>4373</b>	<b>14:51</b>	<b>439</b>	<b>2.09 psi</b>	<b>438</b>	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
<b>BY R 1111</b>	<b>12.90</b>	

**Problem:**

**Action Taken:** Replaced battery and desiccant. RF OK AC power OK. Tested PT, PT within acceptable range. USGS gauge reading 1.07ft. PT reading 1.06ft.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Gross	Date:	29-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 10:15
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0413	4370

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 268	4.99	289	2.4	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4373	10:33	1524	7.30 psi	1520	
4373	10:34	318	1.51 psi	317	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1111	13.37	

**Problem:**

**Action Taken:** Changed out battery and desiccant. Tested TXR with IFR. All TXR measurements are within spec. TXR OK vswr = 1.16. RF OK Two point PT test passed. PT OK Current PT cal good. Site OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Gross	Date:	22-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	13:42
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4373	13:47	1284	6.17 psi	1287	
4373	13:48	284	1.35 psi	285	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. Current PT cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: Eldorado Spring      Date: 19-Feb-13      Time: 11:02  
Service Type: Start Up      Technician: ZC/SB      Status: OK

**Configuration Changes**

Part #	Location
TX J 32078	4380
BY R 0616	4380

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches: 4380-E00  
Jumpers: C:JB6 2-3,JB3,4,5 off;L:J  
Eprom: 57EE  
Tx Freq: 169.500  
Rx Freq: 171.875  
Fwd Power: 4.0  
Rev Power: 0.1  
SWR: 1.38

**Test Transmission**

Port	Time	Count	Measure	Predicted
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**Battery Tests**

Battery #	V Quiescent	V Load
BY R 0616	13.40	

**Problem:**

**Action Taken:** Replaced battery and desiccant. Solar OK. RF OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Eldorado Spring	Date:	20-Jun-13
Time:	16:21	Status:	OK
Service Type:	OneRain Service Ca	Technician:	SB

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Installed 4015 signal converter. This unit will sniff the SDI-12 and convert it to a 0-5 volt output. Sensor address (sniff) is 0 parameter is 0. 4015 address is H.

0-10 feet range.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Eldorado Spring**      Date: **18-Nov-13**      Time: **11:06**  
 Service Type: **End of Season**      Technician: **SB**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 0810</b>	<b>4380</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
<b>TX J 320</b>		<b>80</b>	<b>2.1</b>	<b>0.00</b>

**Settings and Performance**

Switches: **4380-E00**  
 Jumpers: **C:JB6 2-3,JB3,4,5 off;L:J**  
 Eprom: **57EE**  
 Tx Freq: **169.500**  
 Rx Freq: **171.875**  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 0810</b>	<b>12.99</b>	

**Problem:**

**Action Taken:** Replaced battery and desiccant. Benched TXR. Site OK.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Boulder Falls	Date:	22-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	12:42
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4393	12:45	1305	6.20 psi	1302	
4393	12:46	278	1.31 psi	277	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. Current PT cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Boulder Falls	Date:	18-Jun-13
Service Type:	Inspection	Technician:	NK
		Time:	11:56
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4393	12:10	1647	7.83 psi	1644	
4393	12:11	303	1.45 psi	307	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT OK Site OK TX came in locally.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Boulder Falls**      Date: **29-Apr-13**      Time: **14:39**  
 Service Type: **OneRain Service Ca**      Technician: **NK/SB**      Status: **OK**

**Configuration Changes**

Part #	Location
PT D 3533098	4390

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
4393	0.011	-0.0207	0.0053

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4393	15:43	1870	8.89 psi	1798
4393	15:44	1480	7.04 psi	1422
4393	15:44	967	4.60 psi	928
4393	15:45	671	3.19 psi	643
4393	15:45	160	0.75 psi	150
4393	15:46	1023	4.87 psi	1022

**Battery Tests**

Battery #	V Quiescent	V Load
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**Problem:** Bad PT**Action Taken:** Installed new PT, PT calibrated. Did not need 130 ft for PT 100 ft would work.

{Auto Entry: Calibrated sensor 4393 by linear regression. Modified calibration data. New calibration [Slope(0.0110), Calibration Offset(-0.0207), Std Error(0.0053), Calibration Date(4/29/2013 3:45:40 PM)]}.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Boulder Falls	Date:	26-Apr-13
Service Type:	OneRain Service Ca	Technician:	SB
			Time: 10:09
			Status: PT Down

<b>Configuration Changes</b>	
Part #	Location
BY R 1314	4390

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Site not TXR

**Action Taken:** PT unresponsive. Needs replaced. VSWR = 1.2. Radio Good. Battery good.

**Site Notes:**

**Follow-Up:** Replace PT.



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: <b>Boulder Falls</b>	Date: <b>26-Mar-13</b>	Time: <b>10:36</b>
Service Type: <b>Start Up</b>	Technician: <b>MZ</b>	Status: <b>OK</b>

**Configuration Changes**

Part #	Location
<b>TX J 12094</b>	<b>4390</b>
<b>BY R 1131</b>	<b>4390</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>4393</b>	<b>10:49</b>	<b>1091</b>	<b>5.32 psi</b>	<b>1074</b>
<b>4393</b>	<b>10:50</b>	<b>428</b>	<b>2.09 psi</b>	<b>421</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1131</b>	<b>13.05</b>	

**Problem:**

**Action Taken:** Start Up. RF OK, PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Boulder Falls	Date:	08-Oct-13
Time:	11:50	Service Type:	End of Season
Technician:	SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4393	11:54	961	4.56 psi	959	
4393	11:55	381	1.80 psi	379	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, and Desiccant. Pulled PT up for winter. PT tested within acceptable limits.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Orodell	Date:	18-Jun-13
Service Type:	Inspection	Time:	12:23
		Technician:	NK
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1205	4400

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4403	12:33	1341	6.65 psi	1349	
4403	12:34	250	1.24 psi	255	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1038	13.03	

**Problem:**

**Action Taken:** Two point PT test passed. PT OK Changed out battery. Batt Ok. Site OK TX came through locally.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Orodell	Date:	01-Apr-13
Service Type:	Start Up	Technician:	ZC
		Time:	10:19
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4400-00E
Jumpers:	C:J6,2-3 L:J8,1-2;J9,10,2-
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4403	10:25	1018	5.00 psi	1017	
4403	10:26	439	2.17 psi	443	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. RF OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Orodell	Date:	08-Oct-13
Time:	12:23	Service Type:	End of Season
Technician:	SB	Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4403	12:26	940	4.65 psi	945	
4403	12:27	435	2.15 psi	440	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Removed TXR, Battery, and Desiccant for the season. Pulled up PT. PT tested within acceptable range.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Orodell	Date:	22-Aug-13
Time:	10:32	Service Type:	Inspection
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4403	10:37	1237	6.13 psi	1245	
4403	10:38	228	1.12 psi	232	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. Current PT cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Fourmile	Date:	16-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	12:17
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1007	4410

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4413	12:26	1279	6.14 psi	1281	
4413	12:27	256	1.22 psi	259	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1252	12.90	

**Problem:**

**Action Taken:** changed battery. Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Fourmile	Date:	03-Apr-13
Service Type:	OneRain Service Ca	Technician:	SB
		Time:	14:25
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1252	4410

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
4413	0.011	-0.065	0.0231

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4413	14:47	1957	9.42 psi	1897	
4413	14:48	1454	7.00 psi	1412	
4413	14:49	1049	5.05 psi	1020	
4413	14:50	633	3.00 psi	610	
4413	14:51	219	1.04 psi	217	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Replaced signal conditioning module. Calibrated PT.

{Auto Entry: Calibrated sensor 4413 by linear regression. Modified calibration data. New calibration [Slope(0.0111), Calibration Offset(-0.0650), Std Error(0.0231), Calibration Date(4/3/2013 2:51:57 PM)]}.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Fourmile	Date:	18-Jun-13
Service Type:	Inspection	Technician:	NK
		Time:	10:43
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4413	10:50	1353	6.50 psi	1356	
4413	10:51	234	1.12 psi	238	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT calibration OK PT OK Site OK TX came through locally.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Fourmile	Date:	02-Apr-13
Service Type:	OneRain Service Ca	Technician:	SB/MZ
		Time:	17:02
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Over reporting

**Action Taken:** Site started to over report. PT tested fine. Changed TXR and problem persisted. Heavy snow limited troubleshooting. Suspect bad signal conditioning board.

**Site Notes:**

**Follow-Up:** Bring Signal Conditioning.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Fourmile	Date:	08-Oct-13
Service Type:	End of Season	Technician:	SB
			Time: 13:14
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4413	13:20	1056	5.03 psi	1052	
4413	13:21	483	2.28 psi	480	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Bad PT readings

**Action Taken:** Found riser completely full of sand. PT stuck at bottom. Pumped water from stream into riser releasing PT. PT tested OK. The stream channel has changed. The intake has been torn off and is about 2 feet above where the water level is. New conduit, riser, and intake will need to be installed.

**Site Notes:**

**Follow-Up:** Replace Riser, Intake,.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Fourmile**                      Date: **02-Apr-13**                      Time: **12:15**  
Service Type: **OneRain Service Ca**                      Technician: **SB/MZ**                      Status: **OK**

**Configuration Changes**

Part #	Location
TX J 2182	4410
PT D 3574322	4410
BY R 1027	4410

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
4413	0.012	-0.091	0.038

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: **4410-00E**  
Jumpers: **L:JB8,1-2;JB9,10,2-3,JB7**  
Eprom: **585B**  
Tx Freq: **169.500**  
Rx Freq: **171.875**  
Fwd Power: **4.2**  
Rev Power: **0.1**  
SWR: **1.36**

**Test Transmission**

Port	Time	Count	Measure	Predicted
4413	12:35	1855	9.22 psi	1933
4413	12:35	1435	7.05 psi	1492
4413	12:36	969	4.75 psi	1023
4413	12:36	533	2.62 psi	587
4413	12:36	248	1.21 psi	299
4413	12:37	1015	4.98 psi	1006
4413	12:37	313	1.53 psi	314

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 1027	13.05	

**Problem:** PT Dead**Action Taken:** Installed new PT (75 ft). Installed TXR, Battery, and desiccant. Flushed intake. RF OK. PT OK.

{Auto Entry: Calibrated sensor 4413 by linear regression. Modified calibration data. New calibration [Slope(0.0115), Calibration Offset(-0.0910), Std Error(0.0380), Calibration Date(4/2/2013 12:36:50 PM)]}.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Bridge	Date:	26-Aug-13
Service Type:	OneRain Service Ca	Technician:	SB
			Time: 13:26
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 19661	4420
BY R 0511	4420

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Site has not reported in 4 days

**Action Taken:** Replaced transmitter. Heard site locally. RF OK. PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Bridge**                      Date: **18-Jun-13**                      Time: **12:43**  
Service Type: **Inspection**                      Technician: **NK**                      Status: **OK**

**Configuration Changes**

Part #	Location

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
4423	0.012	-0.0168	0.0049

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4423	12:49	1852	9.21 psi	1899
4423	12:50	1435	7.14 psi	1471
4423	12:51	951	4.72 psi	974
4423	12:52	588	2.92 psi	603
4423	12:53	175	0.87 psi	180

**Battery Tests**

Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test failed. New PT calibration. PT OK Site OK TX came in locally.

{Auto Entry: Calibrated sensor 4423 by linear regression. Modified calibration data. New calibration [Slope(0.0115), Calibration Offset(-0.0168), Std Error(0.0049), Calibration Date(6/18/2013 12:53:47 PM)]}.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Bridge**                      Date: **29-Oct-13**                      Time: **14:05**  
Service Type: **End of Season**                      Technician: **NK**                      Status: **Site Down**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
4423	0.011	-0.0551	0.0168

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4423	14:13	1602	7.76 psi	1559
4423	14:15	1551	7.52 psi	1511
4423	14:16	1921	9.32 psi	1871
4423	14:17	1027	4.98 psi	999
4423	14:18	623	3.01 psi	606
4423	14:19	5	0.00 psi	1
4423	14:20	587	2.83 psi	588
4423	14:21	1606	7.79 psi	1610

**Battery Tests**

Battery #	V Quiescent	V Load
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**Problem:**

**Action Taken:** Two point PT test failed. PT re-calibrated. PT OK. PT conduit to riser is broken needs fixed. vswr = 1.00. Pulled up PT and took TXR out of site.

{Auto Entry: Calibrated sensor 4423 by linear regression. Modified calibration data. New calibration [Slope(0.0112), Calibration Offset(-0.0551), Std Error(0.0168), Calibration Date(10/29/2013 2:20:01 PM)]}.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Bridge	Date:	19-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	8:23
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** In mid June PT values jumped 1 ft up after maintenance trip.

**Action Taken:** Found PT riser slid down a little. I could see the shiny spots on the riser where the straps use to be. Pulled PT riser up to where the mounts matched the shiny spots on the riser. Riser is probably within a 0.1 or two of reference before June inspection.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Bridge**                      Date: **26-Mar-13**                      Time: **11:17**  
Service Type: **Start Up**                      Technician: **MZ**                      Status: **OK**

**Configuration Changes**

Part #	Location
<b>TX J 2176</b>	<b>4420</b>
<b>BY R 9735</b>	<b>4420</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>4423</b>	<b>11:35</b>	<b>1160</b>	<b>5.58 psi</b>	<b>1151</b>
<b>4423</b>	<b>11:36</b>	<b>453</b>	<b>2.17 psi</b>	<b>448</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 9735</b>	<b>12.92</b>	

**Problem:**

**Action Taken:** Start Up. RF OK, PT OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Bridge	Date:	22-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	10:05
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1252	4420

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4423	10:12	1119	5.52 psi	1108	
4423	10:13	240	1.20 psi	242	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 9735	13.01	

**Problem:** Low battery

**Action Taken:** Changed out battery. Two point PT test passed. PT cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Bridge	Date:	19-Sep-13
		Time:	9:17
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** First INSP since sep. flood. Water still running at 4ft or top of riser. Conduit and riser all appear to be intact. Site is operational but over reporting. Over reporting possible due to intense wave action over riser. Too dangerous to access PT or electronics. Will test PT once water lowers. No immediate insfructure needed

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Rowena	Date:	29-Mar-13
Service Type:	Start Up	Time:	13:49
		Technician:	MZ
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 2687	4430
BY R 1138	4430

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4433	14:01	1108	5.55 psi	1114	
4433	14:02	319	1.59 psi	321	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1138	13.36	

**Problem:**

**Action Taken:** Start Up. RF OK (SWR = 1.08), PT Ok.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Rowena	Date:	15-Aug-13
Service Type:	Inspection	Technician:	NK/ZC
		Time:	14:49
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4433	14:57	442	2.26 psi	454	
4433	14:58	1016	5.13 psi	1031	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Rowena	Date:	13-Jun-13
Service Type:	Inspection	Technician:	NK
		Time:	15:18
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4433	15:23	998	5.05 psi	1014	
4433	15:24	201	1.04 psi	210	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** 2 point PT test passes. PT OK Site OK Heard TX locally.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Rowena	Date:	10-Oct-13
Service Type:	End of Season	Technician:	SB
			Time: 12:41
			Status: Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4433	12:48	951	4.74 psi	953	
4433	12:49	494	2.46 psi	495	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Site not reading accurately

**Action Taken:** Removed TXR, Battery for winter. Pulled up PT. Site is operational after flooding. PT tested OK. PT Intake was destroyed in the flood. Needs replaced. Could not find or flush out.

**Site Notes:**

**Follow-Up:** Replace conduit and PT intake.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>James Creek</b>	Date: <b>26-Mar-13</b>	Time: <b>12:46</b>	
Service Type: <b>Start Up</b>	Technician: <b>MZ</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
Part #	Location
<b>TX J 2689</b>	<b>4440</b>
<b>BY R 0303</b>	<b>4440</b>

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
<b>4443</b>	<b>13:04</b>	<b>966</b>	<b>4.17 psi</b>	<b>983</b>	
<b>4443</b>	<b>13:05</b>	<b>270</b>	<b>1.22 psi</b>	<b>288</b>	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
<b>BY R 0303</b>	<b>13.15</b>	

**Problem:**

**Action Taken:** Start Up. RF OK, PT OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **James Creek**      Date: **29-Apr-13**      Time: **12:54**  
Service Type: **OneRain Service Ca**      Technician: **NK/SB**      Status: **OK**

**Configuration Changes**

Part #	Location

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
4443	0.011	-0.3731	0.0806

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4443	13:34	1854	8.62 psi	2030
4443	13:35	1454	6.76 psi	1593
4443	13:36	1057	4.92 psi	1160
4443	13:37	632	2.97 psi	701
4443	13:38	230	1.10 psi	259
4443	13:43	1966	9.55 psi	2249
4443	13:44	1407	6.96 psi	1639
4443	13:48	1919	8.74 psi	2058
4443	13:49	1502	6.80 psi	1602
4443	13:49	1120	5.03 psi	1186
4443	13:49	680	2.99 psi	705
4443	13:50	285	1.16 psi	274
4443	13:50	1128	5.07 psi	1129
4443	13:51	405	1.71 psi	404

**Battery Tests**

Battery #	V Quiescent	V Load

**Problem:** intermittent transmissions

**Action Taken:** Replaced TXR with unit that has PA. Suspected precious PA failure. Calibrated PT. RF OK.

{Auto Entry: Calibrated sensor 4443 by linear regression. Modified calibration data. New calibration [Slope(0.0107), Calibration Offset(-0.3731), Std Error(0.0806), Calibration Date(4/29/2013 1:50:37 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	James Creek	Date:	13-Jun-13
Service Type:	Inspection	Technician:	NK
		Time:	14:32
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4443	14:38	1075	4.89 psi	1090	
4443	14:39	248	1.02 psi	254	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** 2 point PT test passed. PT OK Site OK Heard TX locally.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: James Creek

Date: 12-Jul-13

Time: 9:41

Service Type: Inspection

Technician: SB

Status: OK

**Configuration Changes**

Part #	Location
TX J 25144	4440
BY R 1108	4440

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
4443	0.011	-0.0149	0.0035

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4443	10:01	1485	6.90 psi	1521
4443	10:12	1912	8.87 psi	1948
4443	10:13	1156	5.36 psi	1191
4443	10:14	706	3.27 psi	740
4443	10:15	306	1.42 psi	340
4443	10:16	1072	4.97 psi	1073
4443	10:17	180	0.83 psi	180

**Battery Tests**

Battery #	V Quiescent	V Load
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**Problem:** Site not reporting.**Action Taken:** Pressure transducer shorts when in water. Works fine on calibrator. Needs replaced.

{Auto Entry: Calibrated sensor 4443 by linear regression. Modified calibration data. New calibration [Slope(0.0107), Calibration Offset(-0.0149), Std Error(0.0035), Calibration Date(7/12/2013 10:15:25 AM)]}.

**Site Notes:****Follow-Up:** Replace PT.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	James Creek	Date:	26-Jul-13
Service Type:	OneRain Service Ca	Technician:	NK/LP
		Time:	10:52
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
PT D 3892272	4440

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
4443	0.011	0.0034	0.003

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4443	11:08	1974	9.27 psi	2034	
4443	11:09	1503	7.07 psi	1559	
4443	11:10	1073	5.04 psi	1122	
4443	11:11	697	3.28 psi	741	
4443	11:12	22	0.10 psi	57	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Bad PT

**Action Taken:** Replaced PT. Adjusted zero and span on sig board. Calibrated new PT. Site operational

{Auto Entry: Calibrated sensor 4443 by linear regression. Modified calibration data. New calibration [Slope(0.0108), Calibration Offset(0.0034), Std Error(0.0030), Calibration Date(7/26/2013 11:12:59 AM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	James Creek	Date:	19-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	14:42
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** River channel over took road at site location. Road is demolished. Flood took all site equipment. Not possible to re-install site at this location.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	James Creek	Date:	26-Apr-13
Service Type:	OneRain Service Ca	Technician:	SB
		Time:	11:50
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	57EE
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	12.0
Rev Power:	1.0
SWR:	1.81

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4443	11:52	1262	5.31 psi	1250	
4443	11:53	627	2.63 psi	620	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Site not responding

**Action Taken:** PT tested OK. Site reports fine locally. Power Amp may be failing... pushing 12 watts. May need to replace.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lower Lefthand	Date:	19-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	14:48
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Flood over took road and site structure. Electronics, etc. completely gone. Site demolished. New location required to install gage.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lower Lefthand	Date:	15-Aug-13
Service Type:	Inspection	Technician:	NK/ZC
		Time:	15:15
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1135	4450

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4453	15:26	1056	5.19 psi	1053	
4453	15:27	444	2.17 psi	430	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0637	13.00	

**Problem:**

**Action Taken:** Replaced battery. PT tested within acceptable range.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lower Lefthand	Date:	26-Mar-13
Service Type:	Start Up	Technician:	MZ
		Time:	13:20
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 21422	4450
BY R 0637	4450

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4453	13:37	1038	4.94 psi	1003	
4453	13:38	788	3.80 psi	768	
4453	13:39	525	2.51 psi	501	
4453	13:40	422	2.02 psi	400	
4453	13:41	161	0.73 psi	135	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0637	12.89	

**Problem:**

**Action Taken:** Start Up. RF OK. Recalibrated PT

Slope: 0.0112  
Offset: 0.1749

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lower Lefthand	Date:	24-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	10:08
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** moved PT back to stop bolt. @ 10:15 inside staff reads 0.92. Outside staff reads 0.89. Will adjust reference in contrail. PT reads 1.97 ft after adjustment. Need a -1.05 reference in contrail.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lower Lefthand	Date:	23-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	15:35
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4453	15:36	1271	6.25 psi	1271	
4453	15:37	281	1.35 psi	263	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** PT believed to be reading a foot higher than actual stage.

**Action Taken:** Conducted two point PT test again to verify calibration. Current PT calibration good. PT reading 2.04 ft @ 15:30. outside staff plate reading 0.98 ft. Adjusted PT in riser to match outside staff plate. @ 15:47 PT reading 0.98 ft. Site believed to be ok now.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lower Lefthand	Date:	19-Jul-13
Time:	9:28	Service Type:	Inspection
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Same problem as site bridge. In mid June PT value jumped 1ft after site maintenance.

**Action Taken:** PT riser it bolted well and very tight. PT is definley at the bottom of the riser. Not sure of problem. Two point PT test passed

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lower Lefthand	Date:	14-Jun-13
Service Type:	Inspection	Technician:	NK
		Time:	11:32
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4453	11:38	1047	5.14 psi	1043	
4453	11:39	271	1.31 psi	254	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** 2 point PT test passed. current calibration good. PTOK Site OK Heard TX locally.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	S. St. Vrain at Berry R	Date:	26-Apr-13
Service Type:	OneRain Service Ca	Technician:	SB
		Time:	13:13
		Status:	PT Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** PT erratic

**Action Taken:** tested PT. Shorted putting out 12 Volts. Needs replaced. Disconnected battery.

**Site Notes:**

**Follow-Up:** Replace PT.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **S. St. Vrain at Berry R** Date: **06-Jun-13** Time: **11:23**  
 Service Type: **OneRain Service Ca** Technician: **SB** Status: **OK**

**Configuration Changes**

Part #	Location
PT D 3892268	4460

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
4463	0.011	0.1593	0.0364

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4463	11:44	1871	9.29 psi	2209
4463	11:45	1468	7.29 psi	1735
4463	11:46	1012	5.05 psi	1201
4463	11:47	650	3.27 psi	778
4463	11:48	231	1.21 psi	288
4463	11:48	540	2.76 psi	544

**Battery Tests**

Battery #	V Quiescent	V Load
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**Problem:** PT Down

**Action Taken:** Installed new PT. Adjusted zero and span. Calibrated PT. PT OK.

{Auto Entry: Calibrated sensor 4463 by linear regression. Modified calibration data. New calibration [Slope(0.0114), Calibration Offset(0.1593), Std Error(0.0364), Calibration Date(6/6/2013 11:48:21 AM)]}.

**Site Notes:** PT Length 75 feet.

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	S. St. Vrain at Berry R	Date:	29-Mar-13
Service Type:	Start Up	Technician:	MZ
			Time: 10:39
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
TX J 2174	4460
BY R 1105	4460

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4463	10:52	1293	5.44 psi	1293	
4463	10:53	529	2.21 psi	527	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1105	13.16	

**Problem:**

**Action Taken:** Start Up. RF OK (SWR = 1.00), PT OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	S. St. Vrain at Berry R	Date:	16-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	10:09
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
4463	0.011	-1.0201	0.2999

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4463	10:17	1313	6.00 psi	1238	
4463	10:18	1998	9.40 psi	1925	
4463	10:19	1530	7.08 psi	1456	
4463	10:20	1142	5.16 psi	1068	
4463	10:21	665	2.79 psi	588	
4463	10:22	148	0.23 psi	71	
4463	10:23	1964	9.25 psi	1894	
4463	10:24	1514	7.03 psi	1445	
4463	10:25	1074	4.85 psi	1004	
4463	10:26	641	2.70 psi	570	
4463	10:27	161	0.33 psi	89	
4463	10:28	1957	9.24 psi	1893	
4463	10:29	1508	7.02 psi	1444	
4463	10:30	1081	4.91 psi	1016	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test failed. PT was re-calibrated. Std Error is petty high. PT was calibrated three times with same std error all three times. After calibration, two point test passed.

{Auto Entry: Calibrated sensor 4463 by linear regression. Modified calibration data. New calibration [Slope(0.0114), Calibration Offset(-1.0201), Std Error(0.2999), Calibration Date(8/16/2013 10:32:56 AM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	S. St. Vrain at Berry R	Date:	13-Jun-13
Service Type:	Inspection	Technician:	NK
		Time:	11:15
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
4463	0.011	-0.3552	0.0747
4463	0.011	-0.2674	0.0663

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4463	11:20	1802	8.78 psi	2089	
4463	11:21	1454	7.06 psi	1680	
4463	11:22	1007	4.84 psi	1151	
4463	11:23	650	3.07 psi	730	
4463	11:24	300	1.34 psi	318	
4463	11:26	1655	8.08 psi	1667	
4463	11:27	1413	6.89 psi	1424	
4463	11:28	1029	4.99 psi	1040	
4463	11:29	470	2.21 psi	479	
4463	11:30	199	0.87 psi	207	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** 2 point PT test failed, out of calibration. Recalibrated PT. PT OK Site OK Heard transmissions locally.

{Auto Entry: Calibrated sensor 4463 by linear regression. Modified calibration data. New calibration [Slope(0.0114), Calibration Offset(-0.2674), Std Error(0.0663), Calibration Date(6/13/2013 11:30:48 AM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Little Narrows	Date:	02-Jan-13
Service Type:	OneRain Service Ca	Technician:	PB
		Time:	11:05
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 19006	4470
BY R 1232	4470

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4470	11:46	5		0
4470	11:46	6		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1232	13.17	

**Problem:** PT over-reporting, quit.

**Action Taken:** Test button not functional. Changed battery. Transmitter test still did not work. Transmitting fluctuating PT values on tailgate. Replaced txr. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Little Narrows	Date:	29-Apr-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	11:03
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
PT D 3723934	4470

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
4473	0.011	0.0503	0.0115

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4470	12:20	2			0
4473	12:00	1924	9.23 psi		1925
4473	12:01	1485	7.13 psi		1489
4473	12:03	1087	5.23 psi		1092
4473	12:05	663	3.20 psi		671
4473	12:06	240	1.17 psi		249
4473	12:07	1090	5.25 psi		1096
4473	12:08	403	1.95 psi		405

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** PT Down

**Action Taken:** Installed new PT, 160 feet. Installed sprinkler box at conduit access location. Removed power amp from TXR. PT OK. RF OK. TB OK.

{Auto Entry: Calibrated sensor 4473 by linear regression. Modified calibration data. New calibration [Slope(0.0110), Calibration Offset(0.0503), Std Error(0.0115), Calibration Date(4/29/2013 12:06:57 PM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Little Narrows	Date:	16-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	9:29
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1109	4470

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error
4473	0.011	0.278	0.0802

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4470	9:40	1			0
4470	9:40	1			0
4470	9:41	2			0
4470	9:41	2			0
4473	9:49	1881	9.20	psi	1924
4473	9:50	1423	6.99	psi	1461
4473	9:51	1036	5.12	psi	1070
4473	9:52	578	2.91	psi	605
4473	9:54	24	0.24	psi	45
4473	9:55	1277	6.28	psi	1280
4473	9:56	360	1.86	psi	361

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0615	13.19	

**Problem:**

**Action Taken:** Replaced battery. TB was clean and clear on arrival. TB received two tips. TB OK Two point PT test failed. PT was re-calibrated. PT OK Site OK

{Auto Entry: Calibrated sensor 4473 by linear regression. Modified calibration data. New calibration [Slope(0.0111), Calibration Offset(0.2780), Std Error(0.0802), Calibration Date(8/16/2013 9:55:10 AM)]}.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Little Narrows	Date:	12-Apr-13
Service Type:	OneRain Service Ca	Technician:	MZ/INK
		Time:	9:39
		Status:	PT Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Verified PT is bad. Configured J3 to not send PT.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Little Narrows	Date:	29-Mar-13
		Time:	9:52
Service Type:	Start Up	Technician:	MZ
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
TX J 19006	4470
BY R 0615	4470

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4470	10:06	1		0
4470	10:06	1		0
4470	10:10	2		0
4470	10:10	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0615	13.15	

**Problem:**

**Action Taken:** Start Up. RF OK, TB OK. SWR = 1.00. Replaced battery and desiccant.

PT tested unsuccessfully. Replacement required.

**Site Notes:**

**Follow-Up:**

#: 205590

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 4470

**Service Log**

Site Name: **Little Narrows**      Date: **13-Jun-13**      Time: **10:55**  
Service Type: **Inspection**      Technician: **NK**      Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:

Jumpers:

Eprom:

Tx Freq:

Rx Freq:

Fwd Power:

Rev Power:

SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4470	11:02	91		0
4470	11:02	91		0
4470	11:02	93		0
4470	11:02	93		0
4473	10:59	1152	5.52 psi	1153
4473	11:00	327	1.65 psi	342

**Battery Tests**

Battery #      V Quiescent    V Load

**Problem:**

**Action Taken:** 2 point PT test passed. PT OK 4 tips on TB. TB clear and OK TX heard locally. Site OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name: <b>Apple Valley</b>	Date: <b>19-Nov-13</b>	Time: <b>12:23</b>	
Service Type: <b>End of Season</b>	Technician: <b>NK</b>	Status: <b>OK</b>	

<b>Configuration Changes</b>	
Part #	Location
<b>BY R 1308</b>	<b>4490</b>

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
<b>TX J 876</b>		<b>139.5</b>	<b>2</b>	<b>0.00</b>

<b>Settings and Performance</b>	
Switches:	<b>4490-00E</b>
Jumpers:	
Eprom:	<b>R 1.8 57FE</b>
Tx Freq:	<b>169.500</b>
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
<b>4490</b>	<b>12:42</b>	<b>1</b>		<b>0</b>
<b>4490</b>	<b>12:42</b>	<b>1</b>		<b>0</b>
<b>4490</b>	<b>12:42</b>	<b>2</b>		<b>0</b>
<b>4490</b>	<b>12:42</b>	<b>2</b>		<b>0</b>
<b>4784</b>	<b>12:45</b>	<b>12</b>		<b>0</b>

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
<b>BY R 1308</b>	<b>13.08</b>	

**Problem:**

**Action Taken:** Changed battery and desiccant. Tested TXR with IFR. TXR is within specs. TXR OK. swr = 1.18. RF OK. Tested solar. Solar OK. TB clean and clear on arrival. TB OK. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Apple Valley	Date:	24-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	13:34
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4490	13:36	156		0
4490	13:37	157		0
4490	13:37	157		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear upon arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Pinewood Spring	Date:	24-Jul-13
Service Type:	Inspection	Technician:	NK
			Time: 12:39
			Status: OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4510	12:55	251		0
4510	12:55	251		0
4510	12:55	252		0
4510	12:55	252		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear upon arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Pinewood Spring	Date:	19-Nov-13
Service Type:	End of Season	Technician:	NK
			Time: 10:37
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1231	4510

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 101		49.2	2.4	0.00

<b>Settings and Performance</b>	
Switches:	4510
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4510	11:03	1		0
4510	11:03	1		0
4510	11:04	2		0
4510	11:04	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0838	13.34	

**Problem:**

**Action Taken:** Changed battery and desiccant. Tested TXR with IFR. TXR is within specs. TXR OK. swr = 1.07. RF OK. Tested solar. Solar OK. TB clean and clear on arrival. TB OK. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Eagle Ridge	Date:	24-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	14:10
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4520	14:12	285		0
4520	14:12	286		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear upon arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Eagle Ridge	Date:	12-Apr-13
Service Type:	Start Up	Technician:	MZ/INK
		Time:	11:56
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1320	4520

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	4520E
Tx Freq:	169.500
Rx Freq:	169.500
Fwd Power:	4.0
Rev Power:	0.0
SWR:	1

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1320	12.98	

**Problem:**

**Action Taken:** changed one battery and desiccant. TB ok, TX ok, solar OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Winiger Ridge	Date:	29-Oct-13
Time:	12:32	Service Type:	End of Season
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1255	4530

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 976	5.01	244.3	2.4	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4530	12:41	0		0
4530	12:48	1		0
4530	12:48	2		0
4530	12:49	3		0
4535	12:41	1510		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1255	12.83	

**Problem:**

**Action Taken:** Changed out battery and desiccant. Tested TXR with IFR. All IFR measurements are within spec. TXR OK. wwsr = 1.06. RF OK. TB clean and clear on arrival. TB OK. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Winiger Ridge	Date:	01-Apr-13
Service Type:	Start Up	Technician:	ZC
		Time:	12:00
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4530-00E
Jumpers:	C:J5 off; L:J7,11 on
Eprom:	R 1.8 57FE
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	25.0
Rev Power:	1.0
SWR:	1.5

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4530	12:12	1		0
4530	12:15	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**  
**Action Taken:** TB OK RF OK Solar OK (cloudy)  
**Site Notes:**  
**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Winiger Ridge	Date:	01-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	13:45
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4530	13:47	248		0
4530	13:48	249		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Louisville Rptr	Date:	13-Feb-13
Service Type:	Start Up	Technician:	SB/ZC
		Time:	13:25
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1133	4540
BY R 1101	4540

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	4540 C
Tx Freq:	169.500
Rx Freq:	169.500
Fwd Power:	5.0
Rev Power:	0.1
SWR:	1.33

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Replaced battery and desiccant. RF OK. AC charge OK.

**Site Notes:** Key has changed to SC1

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Boulder Jail	Date:	22-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	12:22
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4550	12:28	161		0
4550	12:28	162		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB dirty and clogged. TB cleaned. TB two tips. Site ok,

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Boulder Jail	Date:	17-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 10:29
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1239	4550

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 251	5.00	68	2.4	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4550	10:44	1		0
4550	10:47	2		0
4550	10:47	4		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1036	12.76	12.72

**Problem:**

**Action Taken:** Changed battery and desiccant. Tested TXR with IFR field procedures. TXR is within limits. TXR good. TB was clean and clear on arrival. TB OK Site OK

**Site Notes:**

**Follow-Up:**

#: 101781

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 4550

**Service Log**

Site Name: **Boulder Jail**      Date: **12-Feb-13**      Time: **10:43**  
Service Type: **Start Up**      Technician: **ZC**      Status: **OK**

**Configuration Changes**

Part #	Location
TX J 25185	4550
TB J 3976	4550
BY R 1036	4550

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches: **4550-00E**  
 Jumpers:  
 Eprom: **R1.8 585B**  
 Tx Freq: **169.500**  
 Rx Freq:  
 Fwd Power: **2.0**  
 Rev Power: **0.2**  
 SWR: **1.92**

**Test Transmission**

Port	Time	Count	Measure	Predicted
4550	11:07	1		0
4550	11:07	2		0
4550	11:08	3		0
4550	11:09	4		0
4550	11:11	5		0
4550	11:11	6		0

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 1036	13.00	

**Problem:**

**Action Taken:** Install TXR, TB and battery. RF OK TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lyons Diversion	Date:	19-Sep-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	16:32
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Concrete structure still standing. Flood eroded all earth material around gage. Access road to gage no longer exists. Antenna gone. Lock on door structure must of been change. Use to be USGS key. This key no longer fits. Could not check out TX or PT. Site down, new location might be required.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lyons Diversion	Date:	15-Aug-13
Service Type:	Inspection	Technician:	NK/ZC
		Time:	11:44
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. Current cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Lyons Diversion**      Date: **12-Apr-13**      Time: **10:24**  
 Service Type: **Start Up**      Technician: **MZ/INK**      Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 1318</b>	<b>4560</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches: **4560-E00**  
 Jumpers: **JB3,4,5 off**  
 Eprom: **57EE**  
 Tx Freq: **169.500**  
 Rx Freq:  
 Fwd Power: **4.0**  
 Rev Power: **0.0**  
 SWR: **1**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>4563</b>	<b>10:35</b>	<b>588</b>	<b>2.45 psi</b>	<b>579</b>
<b>4563</b>	<b>10:36</b>	<b>204</b>	<b>0.82 psi</b>	<b>196</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1318</b>	<b>12.89</b>	

**Problem:**

**Action Taken:** Start Up. Replaced Battery and Desiccant. PT OK, RF OK.

**Site Notes:****Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Lyons Diversion	Date:	13-Jun-13
Time:	10:25	Service Type:	Inspection
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4563	10:32	1351	5.69 psi	1341	
4563	10:33	372	1.53 psi	363	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** 2 point PT test passed. TX came in locally. PT ok

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **St. Antons**      Date: **08-Oct-13**      Time: **10:55**  
 Service Type: **End of Season**      Technician: **SB**      Status: **OK**

**Configuration Changes**

Part #	Location
BY R 1301	4570

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 268	4.99	150	2	

**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power:  
 Rev Power:  
 SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4570	11:18	1		0
4570	11:18	2		0

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 1301	12.97	

**Problem:**

**Action Taken:** Bench tested TXR. TXR OK. RF OK. TB OK. Replaced battery and desiccant.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	St. Antons	Date:	16-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 12:26
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1205	4570

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 268	4.99	114	2.2	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4570	12:38	1		0
4570	12:39	2		0
4570	12:40	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1234	13.24	13.15

**Problem:**

**Action Taken:** Test TX with IFR field procedure. TX within specs. TX OK TB clean and clear on arrival. TB OK Replaced battery and desiccant. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	St. Antons	Date:	07-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	12:08
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1234	4570

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4570	12:21	1		0
4570	12:22	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1040	13.12	

**Problem:**

**Action Taken:** Replaced battery. Some debris stuck in TB. TB cleaned. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	St. Antons	Date:	01-Apr-13
Service Type:	Start Up	Technician:	ZC
		Time:	13:06
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4570-3-0
Jumpers:	C:J6,2-3,J5 off;L:J1,4,7,11
Eprom:	R 1.8 585B
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	3.5
Rev Power:	0.1
SWR:	1.41

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4570	13:16	1		0
4570	13:18	2		0
4570	13:18	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK RF OK Power OKt

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Broadway**      Date: **18-Jun-13**      Time: **13:41**  
Service Type: **Inspection**      Technician: **NK**      Status: **OK**

**Configuration Changes**

Part #	Location

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
4583	0.006	-0.097	0.0229

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4583	13:47	1765	4.40 psi	1803
4583	13:48	1354	3.37 psi	1386
4583	13:49	952	2.35 psi	976
4583	13:50	556	1.36 psi	573
4583	13:51	165	0.37 psi	174

**Battery Tests**

Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test failed. New calibration. PT OK Site OK

{Auto Entry: Calibrated sensor 4583 by linear regression. Modified calibration data. New calibration [Slope(0.0058), Calibration Offset(-0.0970), Std Error(0.0229), Calibration Date(6/18/2013 1:51:50 PM)]}.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Broadway	Date:	22-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	9:47
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4583	9:51	648	1.59 psi	648	
4583	9:52	1925	4.80 psi	1927	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. Current cal good. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Broadway	Date:	13-Feb-13
Time:	10:53	Service Type:	Start Up
Technician:	SB/ZC	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4580-
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	3.0
Rev Power:	0.1
SWR:	1.45

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4583	10:58	1215	2.95 psi	1216	
4583	10:59	492	1.15 psi	488	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Replaced battery and desiccant. Tested PT. PT OK. RF OK. Changed program to HI Flow.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Broadway	Date:	08-Nov-13
Time:	12:26	Service Type:	End of Season
Technician:	NK/SB	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4580-
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	3.5
Rev Power:	0.1
SWR:	1.41

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Can't access PT

**Action Taken:** Could not access PT. The city/county has moved rocks into the channel completely covering our PT riser. We would need heavy equipment to gain access. The PT is still working. Did not load low flow program in fear that we would have to re-calibrate the PT which we can not do now without access. Replaced battery and desiccant. Solar OK. RF OK.

**Site Notes:**

**Follow-Up:** Contact city of boulder.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: **Green Ditch**      Date: **08-Nov-13**      Time: **11:19**  
 Service Type: **End of Season**      Technician: **NK/SB**      Status: **OK**

**Configuration Changes**

Part #	Location
BY R 1037	4590

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
4593	0.01	-0.0893	0.0247

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
 Jumpers:  
 Eprom:  
 Tx Freq:  
 Rx Freq:  
 Fwd Power: **4.0**  
 Rev Power: **0.1**  
 SWR: **1.38**

**Test Transmission**

Port	Time	Count	Measure	Predicted
4593	11:33	1651	7.07 psi	1628
4593	11:34	2047	9.14 psi	2106
4593	11:35	1197	5.11 psi	1176
4593	11:36	721	3.06 psi	704
4593	11:37	9	0.00 psi	-3
4593	11:39	1959	8.39 psi	1932
4593	11:40	1599	6.84 psi	1603
4593	11:41	352	1.47 psi	352

**Battery Tests**

Battery #	V Quiescent	V Load
BY R 1112	13.11	

**Problem:**

**Action Taken:** Replaced battery and desiccant. Updated firmware on CR200. Changed CR200 program for winter settings. Solar OK. Flushed PT intake pipe. Cleaned debris around riser. Two point PT test failed. Re-calibrated PT. PT OK. Tested TXR with watt meter. TXR OK. Site OK

{Auto Entry: Calibrated sensor 4593 by linear regression. Modified calibration data. New calibration [Slope(0.0099), Calibration Offset(-0.0893), Std Error(0.0247), Calibration Date(11/8/2013 11:39:56 AM)]}.

**Site Notes:****Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: <b>Green Ditch</b>	Date: <b>12-Feb-13</b>	Time: <b>10:04</b>
Service Type: <b>Start Up</b>	Technician: <b>ZC</b>	Status: <b>OK</b>

**Configuration Changes**

Part #	Location
<b>BY R 1112</b>	<b>4590</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power: **4.5**  
Rev Power: **0.1**  
SWR: **1.35**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>4593</b>	<b>10:23</b>	<b>1166</b>	<b>5.01 psi</b>	<b>1153</b>
<b>4593</b>	<b>10:24</b>	<b>499</b>	<b>2.11 psi</b>	<b>483</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1112</b>	<b>12.83</b>	

**Problem:**

**Action Taken:** Replaced battery and desiccant. Tested PT. PT OK RF OK Solar OK. Changed program for Hi Flow season.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Green Ditch	Date:	22-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	9:15
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4593	9:20	306	1.29 psi	294	
4593	9:21	1480	6.34 psi	1459	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. Current cal good. Upper end is close to being out of count. PT OK  
Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Green Ditch	Date:	18-Jun-13
Service Type:	Inspection	Technician:	NK
		Time:	14:33
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4593	14:37	2047	8.17 psi	1882	
4593	14:39	1603	6.87 psi	1581	
4593	14:42	1144	4.89 psi	1125	
4593	14:46	476	2.02 psi	463	
4593	14:48	168	0.70 psi	158	
4593	14:59	1642	7.04 psi	1620	
4593	15:00	287	1.20 psi	275	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hills Mills	Date:	14-Jun-13
Service Type:	Inspection	Technician:	NK
		Time:	15:24
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB tipped twice. TB clean. FS 796N key did not fit lock. Had to walk up. Couldn't do a full inspection.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hills Mills	Date:	11-Oct-13
Service Type:	End of Season	Time:	11:45
		Technician:	ZC
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1119	4710

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX N 207	5.10	155	2.25	

<b>Settings and Performance</b>	
Switches:	4710
Jumpers:	
Eprom:	Ver 3.4
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	2.5
Rev Power:	0.1
SWR:	1.5

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4710	12:07	1355		0
4710	12:08	1356		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1119	12.90	

**Problem:**

**Action Taken:** Changed battery, desiccant. Tested radio on IFR, OK, installed at site. TXR OK. TB OK. Solar OK.

@ 12:12 ID 4711 raw = 191 => 74.9% RH, ID 4712 raw = 110 => 30 deg.F, Temperatures too cold for psychrometer. Wind sensors rotating freely.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Hills Mills	Date:	15-Aug-13
Service Type:	Inspection	Technician:	NK/ZC
		Time:	13:57
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4710	13:59	1056		0
4710	13:59	1057		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Station readings @ 13:57 AT raw = 145 = 65 F. RH raw = 74 = 29.02% Digital Pscrometer @ 14:00 AT = 78.2 RH = 15.4%. WS raw = 1380 = 3.35 mph 202 degrees. Anemometer moving freely and appears to be working correctly. TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sugarloaf	Date:	18-Jun-13
Service Type:	Inspection	Technician:	NK
		Time:	11:20
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4730	11:23	1397		0
4730	11:24	1398		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clear and clean. TB two tips. Used RH chart for 7,800 elevation. Charts shows RH at 75% at 11:28. Sensor at 77% at 11:19. thermometer AT at 74 F at 11:28. sensor reads 64 F at 11:19. All OK TX came through locally.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sugarloaf	Date:	16-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 14:16
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0849	4730

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TH S 570		54	2.4	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4730	14:48	1814		0
4730	14:50	1816		0
4730	14:51	1816		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1212	13.38	

**Problem:**

**Action Taken:** Changed battery and desiccant. Tested TXR with IFR field procedure. TXR is within specs. TXR OK. @ 1450 station reads AT = 46 = raw 126. RH = 40.7% = raw = 104. Digital pycrometer reads @ 1455 AT = 46.2 RH = 29.7%. WS/WD is free of movement. Sensors look good. TB clean and clear on arrival. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Sugarloaf	Date:	22-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	12:16
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4730	12:15	1481		0
4730	12:15	1482		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Station readings @ 12:19 AT raw = 152 = 72 F --- RH raw = 152 = 72.94% --- WS raw = 6 = 6 mph. TB clean and clear on arrival. TB received two tips. TB OK Anemometer free of movement. Pycrometer readings @ 12:17 AT = 85.1 F --- RH = 40.1%

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Louisville WTP	Date:	13-Feb-13
Service Type:	Inspection	Technician:	SB/ZC
			Time: 13:42
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0406	4750

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	v. 3.4R
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	1.0
Rev Power:	0.1
SWR:	1.92

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4750	13:55	1356		0
4750	13:55	1357		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0406	12.90	

**Problem:**

**Action Taken:** Replaced batteries and desiccant. Radio is only outputting 1 watt. Left in due to close proximity to repeater. Will continue to monitor. AT 45 RH 25 psychrometer reading AT 47 RH 26. AT OK, BP OK. Wind OK. TB OK. RF monitor.

**Site Notes:**

**Follow-Up:** Monitor radio performance

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Louisville WTP	Date:	22-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	13:05
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4750	13:15	1475		0
4750	13:16	1477		0
4750	13:16	1477		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Solar OK. TB three tips. TB OK. Wind OK. @ 12:56 ID 4751 raw = 99 => 38.62% RH, ID 4752 raw = 167 => 87 deg. @ 13:07 Digital Psychrometer readings Temp 91.2. RH 31.8. Tw 69.8 Dew Point 56.1

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Louisville WTP	Date:	30-Oct-13
Service Type:	End of Season	Technician:	NK
		Time:	14:57
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1127	4750

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX N 213		299	2.4	0.00

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	v. 3.4R
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4750	15:11	1794		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1127	13.00	

**Problem:**

**Action Taken:** changed battery and desiccant. Sensor readings @ 15:01. AT = 35 raw = 115....RH = 91.7% raw = 234....BP = 1008 mbar. Digital pscrometer AT = 46, RH = 58.2%. TB OK. Wind Monitor is free of movement. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	CalWood Ranch	Date:	13-Jun-13
Service Type:	Inspection	Technician:	NK
		Time:	14:01
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4770	14:05	1485		0
4770	14:06	1486		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** RH with humidity calculator 56% Station reading 59.61%. TB Ok. AT reading 81. Sensor on station reading 71. Wind sensor moving freely. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	CalWood Ranch	Date:	16-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	11:24
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4770	11:32	1599		0
4770	11:33	1600		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** @ 11:20 station readings - - - AT raw = 157 = 77 F - - RH raw = 77 = 30.20% - - WS raw = 1939 = 2.09 mph - - BP raw = 117 = 1014.89 mbar. Digital Pscrometer reading @11:28 AT = 82.5 F - - RH = 12.9 % - - Dew Point = 26.3 - - Wet Bulb = 54.5.

TB clean and clear on arrival. TB received two tips. TB OK Anemometer is moving freely. Readings all seem good. Site OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	CalWood Ranch	Date:	07-Nov-13
Service Type:	End of Season	Technician:	NK/SB
			Time: 12:32
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0324	4770

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX N 212		269	2.4	0.00

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4770	12:44	2024		0
4770	12:51	2022		0
4770	12:54	2023		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1302	13.01	

**Problem:**

**Action Taken:** Replaced battery and desiccant. Tested TXR with IFR field procedures. TXR is within specs. TXR OK. vswr = 2.34. Should replace Yagi antenna. swr is high. Solar OK. Anetomer is free of movement. Bearings good. TB clean and clear on arrival. TB OK. Site OK.

Station readings @ 12:51 AH = 32.55% raw = 83. WS = 8 mph. BP = 1012. Digital Psychrometer @ 1255 AT = 61F, RH = 16.4%

**Site Notes:**

**Follow-Up:** Replace Yagi antenna.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	CalWood Ranch	Date:	08-Apr-13
Service Type:	Start Up	Technician:	MZ/INK
		Time:	14:36
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1302	4770

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1302	12.98	

**Problem:**

**Action Taken:** spring start up. TB ok, TX ok, Solar OK Changed battery and desiccant. SWR 2.08. wind sensor moving freely, didn't have time to test. 1447 AT = 49 RH = 60.

**Site Notes:**

**Follow-Up:**

#: 205735

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 4790

**Service Log**

Site Name: **Button Rock**      Date: **15-Aug-13**      Time: **11:02**  
Service Type: **Inspection**      Technician: **NK/ZC**      Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port    Time    Count    Measure    Predicted

**Battery Tests**

Battery #    V Quiescent    V Load

**Problem:**

**Action Taken:** Digital psychrometer @ 11:02 AT = 79.7 degrees RH = 27.2% DP = 41.0. Station data @ 11:07 RAW RH = 98 = 38.4%. RAW AT 151 = 71 degrees. TB clean and clear on arrival. TB received two tips. TB OK Wind is spinning freely. Reading seem reasonable. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Button Rock	Date:	14-Jun-13
Service Type:	Inspection	Technician:	NK
		Time:	10:35
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB two tips. TB clear, and OK. RH table showing a value of 46%. RH from sensor reading 9.8% Using table for 6,000 to 8,000 ft range. AT on thermometer reading 81 F. Site sensor reading 88 F. Site OK Might be a problem with RH sensor or RH calculator.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Button Rock	Date:	19-Nov-13
Service Type:	Inspection	Technician:	NK
		Time:	11:42
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Road out. Cannot access site.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Shanahan Ridge	Date:	17-Oct-13
Service Type:	End of Season	Technician:	NK
		Time:	13:37
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1033	4810

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 135	4.98	172	2.4	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4810	13:52	1		0
4810	13:52	1		0
4810	13:53	2		0
4810	13:53	2		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1033	13.26	13.17

**Problem:**

**Action Taken:** Changed battery and desiccant. Tested TXR with IFR field procedures. TXR is within limits. VSWR = 1.28. TXR OK RF OK TB clean and clear on arrival. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	<b>Shanahan Ridge</b>	Date:	<b>12-Feb-13</b>
Service Type:	<b>Start Up</b>	Technician:	<b>ZC</b>
		Time:	<b>12:19</b>
		Status:	<b>OK</b>

<b>Configuration Changes</b>	
Part #	Location
<b>BY R 0813</b>	<b>4810</b>

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	<b>4810-00E</b>
Jumpers:	<b>C: J5 off</b>
Eprom:	<b>R 1.8 9CA1</b>
Tx Freq:	<b>169.500</b>
Rx Freq:	
Fwd Power:	<b>3.0</b>
Rev Power:	<b>0.1</b>
SWR:	<b>1.45</b>

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
<b>4810</b>	<b>12:31</b>	<b>1</b>		<b>0</b>

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
<b>BY R 0813</b>	<b>13.06</b>	

**Problem:**

**Action Taken:** Replaced battery and desiccant. RF OK TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Shanahan Ridge	Date:	06-Aug-13
Time:	9:33		
Service Type:	Inspection	Technician:	NK
Status:	OK		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4810	9:35	256		0
4810	9:35	257		0
4810	9:35	257		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Dowdy Draw	Date:	18-Nov-13
Time:	12:17	Service Type:	End of Season
Technician:	SB	Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0303	4820

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4820-00E
Jumpers:	C: J5 off
Eprom:	R 1.8 9CA1
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.0
Rev Power:	0.1
SWR:	1.38

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4820	12:24	0		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0303	13.15	

**Problem:**

**Action Taken:** Replaced battery and desiccant. RF OK. TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Dowdy Draw	Date:	06-Aug-13
Time:	9:56	Service Type:	Inspection
Technician:	NK	Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4820-00E
Jumpers:	C: J5 off
Eprom:	R 1.8 9CA1
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	
Rev Power:	
SWR:	

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4820	9:57	216		0
4820	9:57	216		0
4820	9:57	217		0
4820	9:57	217		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

**Service Log**

Site Name: <b>Dowdy Draw</b>	Date: <b>19-Feb-13</b>	Time: <b>12:21</b>
Service Type: <b>Start Up</b>	Technician: <b>ZC</b>	Status: <b>OK</b>

**Configuration Changes**

Part #	Location
<b>BY R 1218</b>	<b>4820</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches: **4820-00E**  
 Jumpers: **C: J5 off**  
 Eprom: **R 1.8 9CA1**  
 Tx Freq: **169.500**  
 Rx Freq:  
 Fwd Power: **3.0**  
 Rev Power: **0.1**  
 SWR: **1.45**

**Test Transmission**

Port	Time	Count	Measure	Predicted
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**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1218</b>	<b>12.90</b>	

**Problem:**

**Action Taken:** Replaced battery and desiccant. RF OK TB OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	S. Boulder Cr.@ Sans	Date:	08-Nov-13
Service Type:	OneRain Service Ca	Technician:	NK/SB
		Time:	13:41
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4833	13:46	1641	7.35 psi	1649	
4833	13:47	432	1.93 psi	437	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** Cant find PT riser

**Action Taken:** PT riser buried under transported sand during flood. Found riser and dug around drit out from around riser. Flushed PT intake. Two point PT test passed. Current PT calibration good. PT OK. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	S. Boulder Cr.@ Sans	Date:	20-Jun-13
Service Type:	Inspection	Technician:	NK
			Time: 12:10
			Status: OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4830	12:16	186		0
4830	12:16	186		0
4830	12:17	187		0
4833	12:15	1431	6.40 psi	1436
4833	12:16	338	1.48 psi	336

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT OK TB clear and clean. Two tips on TB. TB OK site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	S. Boulder Cr.@ Sans	Date:	12-Feb-13
Service Type:	Start Up	Technician:	ZC
			Time: 12:54
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 0339	4830

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4830	12:58	16		0
4830	12:58	17		0
4830	12:58	18		0
4830	13:19	19		0
4830	13:20	20		0
4833	13:13	1089	4.87 psi	1094
4833	13:14	430	1.93 psi	435

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0339	12.89	

**Problem:**

**Action Taken:** Replaced battery and desiccant. Tested PT. PT OK RF OK Solar OK.

**Site Notes:**

**Follow-Up:** Flush hydraulic contact when ice melts.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	S. Boulder Cr.@ Sans	Date:	17-Oct-13
Service Type:	End of Season	Technician:	NK
			Time: 12:30
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1024	4830

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 135	5.00	79	2.4	0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1204	13.11	11.64
BY R 1024	13.09	12.78

**Problem:**

**Action Taken:** Replaced battery and desiccant. Tested TXR with IFR field procedures. All TXR tests within limits. TXR OK VWSR = 1.39. RF OK TB clean and clear on arrival. TB OK Could not find PT riser or intake pipe. Looks like river transported a bunch of sand. PT riser is most likely buried. Not that familiar with site to know where to dig for riser. PT seems to be giving accurate values. Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SBC @ SB Canon Dite	Date:	02-Jul-13
		Time:	14:50
Service Type:	Inspection	Technician:	SB
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4840	14:55	218			0
4843	14:52	1269	5.23 psi		1271
4843	14:53	675	2.78 psi		676
4843	14:54	1			0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** PT tested within acceptable range. PT OK. RF OK. Flushed intake. TB OK.

**Site Notes:**

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SBC @ SB Canon Dite	Date:	12-Feb-13
		Time:	13:42
Service Type:	Start Up	Technician:	ZC
		Status:	PT Down

<b>Configuration Changes</b>	
Part #	Location
BY R 0431	4840

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4840-00E
Jumpers:	C:J6,1-2,J3,5 off
Eprom:	R1.8 9CA1
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.5
Rev Power:	0.4
SWR:	1.85

<b>Test Transmission</b>					
Port	Time	Count	Measure	Predicted	
4843	13:57	1224	5.04 psi	1225	
4843	13:58	486	2.01 psi	491	

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0431	12.80	

**Problem:**

**Action Taken:** Replaced battery and desiccant. PT tested. PT OK Cleaned TB funnel. TB OK RF OK Solar OK

**Site Notes:**

**Follow-Up:** Hydraulic contact for PT is no good. Needs to be dug up and re-installed. There is currently no contact.

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SBC @ SB Canon Dite	Date:	08-Nov-13
Service Type:	End of Season	Technician:	NK/SB
			Time: 14:18
			Status: PT Down

<b>Configuration Changes</b>	
Part #	Location
BY R 1203	4840

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	4840-00E
Jumpers:	C:J6,1-2,J3,5 off
Eprom:	R1.8 9CA1
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	5.0
Rev Power:	0.5
SWR:	1.92

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4840	14:27	0		0
4840	14:28	1		0
4840	14:28	1		0
4843	14:20	1768	7.30 psi	1773
4843	14:21	504	2.08 psi	508

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 0431	13.20	

**Problem:** PT conduit is destroyed.

**Action Taken:** Changed battery and desiccant. Tested TXR with Watt meter. TXR is with in specs. TXR OK. Solar OK. TB clogged on arrival. TB cleaned. TB OK. PT passed two point test. PT OK. Turned PT off. JP3 off. Need to relocate site and re-do conduit. As of now rain only site.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SBC @ SB Canon Dite	Date:	13-Feb-13
Time:	13:35		
Service Type:	OneRain Service Ca	Technician:	SB/ZC
Status:	OK		

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** intake clogged and bent/rusted.

**Action Taken:** Replaced PT intake with 20 feet of 1/2" conduit. Good hydraulic contact.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Porphyry Mtn	Date:	31-Jul-13
Service Type:	Inspection	Technician:	NK/SB
		Time:	13:50
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4850	14:01	747		0
4850	14:02	748		0
4850	14:02	749		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Porphyry Mtn	Date:	07-Nov-13
Service Type:	End of Season	Technician:	NK/SB
		Time:	13:15
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1010	4850

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	4.4
Rev Power:	0.1
SWR:	1.36

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1010	12.99	

**Problem:**

**Action Taken:** Changed battery and desiccant. Tested TXR with watt meter. TXR OK. TB clean and clear on arrival. TB OK. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Fairview Peak	Date:	31-Jul-13
Service Type:	Inspection	Technician:	NK/SB
		Time:	12:55
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received five tips. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Fairview Peak	Date:	07-Nov-13
Service Type:	End of Season	Technician:	NK/SB
			Time: 11:02
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1238	4860

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	
Rx Freq:	
Fwd Power:	4.6
Rev Power:	0.1
SWR:	1.35

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4860	11:32	662		0
4860	11:32	663		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1238	13.26	

**Problem:**

**Action Taken:** Replaced battery and desiccant. TB clean and clear on arrival. TB OK. Tested TXR with watt meter. TXR OK. Site OK.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	SBC @ South Boulder	Date:	17-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	13:55
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4870	14:08	199		0
4870	14:08	199		0
4870	14:09	200		0
4873	14:05	2016	7.77 psi	2015
4873	14:06	467	1.80 psi	469

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two point PT test passed. PT calibration good. TB two tips. TB clear and clean. Site OK

**Site Notes:**

**Follow-Up:**



#: 101782

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 4870

**Service Log**

Site Name: **SBC @ South Boulder**    Date: **12-Feb-13**    Time: **11:31**  
Service Type: **Start Up**    Technician: **ZC**    Status: **OK**

**Configuration Changes**

Part #	Location
<b>TB J 32334</b>	<b>4870</b>
<b>BY R 1207</b>	<b>4870</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
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**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq: **169.500**  
Rx Freq:  
Fwd Power: **4.0**  
Rev Power: **0.1**  
SWR: **1.38**

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>4870</b>	<b>11:52</b>	<b>17</b>		<b>0</b>
<b>4870</b>	<b>11:53</b>	<b>18</b>		<b>0</b>
<b>4873</b>	<b>11:45</b>	<b>1144</b>	<b>4.35 psi</b>	<b>1130</b>
<b>4873</b>	<b>11:46</b>	<b>515</b>	<b>1.96 psi</b>	<b>511</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1207</b>	<b>13.05</b>	

**Problem:**

**Action Taken:** Replaced battery and desiccant. Tested PT. PT OK RF OK Solar OK.

**Site Notes:**

**Follow-Up:**

#: 205810

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 4870

**Service Log**

Site Name: **SBC @ South Boulder**    Date: **17-Oct-13**    Time: **11:08**  
Service Type: **End of Season**    Technician: **NK**    Status: **OK**

**Configuration Changes**

Part #	Location
<b>BY R 1106</b>	<b>4870</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error
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**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt
<b>TX J 322</b>		<b>6.4</b>	<b>2.4</b>	<b>0.00</b>

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
<b>4870</b>	<b>11:46</b>	<b>1</b>		<b>0</b>
<b>4870</b>	<b>11:46</b>	<b>1</b>		<b>0</b>
<b>4873</b>	<b>11:37</b>	<b>1867</b>	<b>7.18 psi</b>	<b>1864</b>
<b>4873</b>	<b>11:38</b>	<b>343</b>	<b>1.31 psi</b>	<b>342</b>

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1207</b>	<b>13.08</b>	<b>12.94</b>

**Problem:**

**Action Taken:** Changed battery and desiccant. Tested TXR with IFR field procedures. TXR is within limits. TXR OK VSWR 1.03. RF OK Two point PT test passed. PT OK TB clean and clear on arrival. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Whispering Pines	Date:	07-May-13
Service Type:	Start Up	Technician:	NK/ZC
			Time: 11:14
			Status: OK

<b>Configuration Changes</b>	
Part #	Location
BY R 1305	4880

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4880	11:30	1		0
4880	11:31	2		0
4880	11:31	3		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1305	12.92	

**Problem:**

**Action Taken:** battery and desiccant changed. TB ok, RF OK VWSR 3.19

**Site Notes:**

**Follow-Up:** high vwsr 3.19, continue to monitor receptions

#: 205641

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 4880

**Service Log**

Site Name: **Whispering Pines**      Date: **23-Jul-13**      Time: **13:49**  
Service Type: **Inspection**      Technician: **NK**      Status: **OK**

**Configuration Changes**

Part #                      Location

**Transducer Calibration**

Sensor ID    Slope    Calib Offset    Std Error

**Tx Maintenance**

Part #    Ref V    Freq Err    Deviation    ROM Batt

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted
4880	13:51	117		0
4880	13:51	118		0
4880	13:56	119		0
4880	13:57	120		0

**Battery Tests**

Battery #      V Quiescent    V Load

**Problem:**

**Action Taken:** TB clean and clear. TB tipped four times. TB OK Site OK

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Whispering Pines	Date:	04-Oct-13
Service Type:	End of Season	Technician:	ZC
			Time: 14:38
			Status: OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 196	5.00	275	2	0.00

<b>Settings and Performance</b>	
Switches:	
Jumpers:	
Eprom:	
Tx Freq:	169.500
Rx Freq:	
Fwd Power:	2.0
Rev Power:	0.2
SWR:	1.92

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted
4880	14:56	1		0
4880	14:57	2		0
4880	14:59	3		0
4880	14:59	4		0

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Tested replacement TXR on IFR. TXR OK Replaced battery. RF OK TB ok

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	Whispering Pines	Date:	04-Oct-13
Time:	14:20	Status:	OK
Service Type:	End of Season	Technician:	ZC

<b>Configuration Changes</b>	
Part #	Location
TX J 19665	4880
BY R 1038	4880

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt
TX J 196	5.00			0.00

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load
BY R 1038	12.93	

**Problem:** TXR appears to have power issues. Check in shop

**Action Taken:** Replaced TXR with spare TXR. See other maintenance record for TXR testing.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	West Repeater	Date:	17-Jul-13
Service Type:	Inspection	Technician:	NK
		Time:	12:38
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Batteries 13.03 V. Alert 171.875 TX (5 watts). Alert2 TX 2 watts (short burst no way to hold tx button. Overall site and tower look in good condition. No problems.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	ETG @ Hampden	Date:	15-May-13
Service Type:	OneRain Service Ca	Technician:	NK/MZ
		Time:	12:37
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location
PT D 2270870	10011

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:** PT down

**Action Taken:** Out of Box Failure. Changed out PT. PT calibrated, all OK

**Site Notes:** PT survey notes. Stop bolt to top of riser 8'. Stop bolt to top of concrete (north of riser) 7'6"

**Follow-Up:**



**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	ETG @ Hampden	Date:	12-Nov-13
Service Type:	End of Season	Technician:	NK/SB
		Time:	12:28
		Status:	Site Down

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** Two pint PT test passed. PT OK. TXR out, TB out. Flushed PT riser. Site down.

**Site Notes:**

**Follow-Up:**

#: 205585

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

Site ID: 10011

**Service Log**

Site Name: **ETG @ Hampden**      Date: **03-May-13**      Time: **11:44**  
Service Type: **Installation**      Technician: **NK/MZ**      Status: **PT Down**

**Configuration Changes**

Part #	Location
<b>TX J 36525</b>	<b>10011</b>
<b>TB J 34996</b>	<b>10011</b>
<b>PT D 3643169</b>	<b>10011</b>
<b>BY R 1307</b>	<b>10011</b>

**Transducer Calibration**

Sensor ID	Slope	Calib Offset	Std Error

**Tx Maintenance**

Part #	Ref V	Freq Err	Deviation	ROM Batt

**Settings and Performance**

Switches:  
Jumpers:  
Eprom:  
Tx Freq:  
Rx Freq:  
Fwd Power:  
Rev Power:  
SWR:

**Test Transmission**

Port	Time	Count	Measure	Predicted

**Battery Tests**

Battery #	V Quiescent	V Load
<b>BY R 1307</b>	<b>12.98</b>	

**Problem:**

**Action Taken:** Installed today. Having problems calibrating PT. TB ok and RF OK ALERT 2 TXR. Can't decode at truck, but verified data is coming through Contrail.

**Site Notes:**

**Follow-Up:**

**MAINTENANCE RECORD**  
**URBAN DRAINAGE AND FLOOD CONTROL DISTRICT**  
**ONERAIN INCORPORATED**

<b>Service Log</b>			
Site Name:	ETG @ Hampden	Date:	20-Aug-13
Service Type:	Inspection	Technician:	NK
		Time:	11:32
		Status:	OK

<b>Configuration Changes</b>	
Part #	Location

<b>Transducer Calibration</b>			
Sensor ID	Slope	Calib Offset	Std Error

<b>Tx Maintenance</b>				
Part #	Ref V	Freq Err	Deviation	ROM Batt

<b>Settings and Performance</b>
Switches:
Jumpers:
Eprom:
Tx Freq:
Rx Freq:
Fwd Power:
Rev Power:
SWR:

<b>Test Transmission</b>				
Port	Time	Count	Measure	Predicted

<b>Battery Tests</b>		
Battery #	V Quiescent	V Load

**Problem:**

**Action Taken:** TB clean and clear on arrival. TB received two tips. TB OK Two point PT test passed. PT OK Site OK

**Site Notes:**

**Follow-Up:**