

RealEMWIN User FAQ's

For Colorado
North Central Region
Updated September, 2007



Denver RealEMWIN software FAQ's

Q1. What is the latest software version for RealEMWIN?

A1. Version 1.7.7. It is available on the UDFCD EMWIN web page for download . <http://emwin.udfcd.org/RealEMWIN-config.zip>

Q2. How do I install /re-install RealEMWIN software?

A2. See Appendix B for detailed instructions.

NOTE: you may need to have your IT department install the software. If you do not have administrator privileges, the software will not work properly after installation.

CAUTION: in this case, the software does NOT provide any error messages.

Q3. I am already receiving EMWIN data through my receiver. How do I connect to the Internet feed of EMWIN Denver (Adams County)?

A3. Change your RE configuration to “internet feed” and restart RE. On the internet ingest engine, enter one of the following IP addresses:
63.253.71.94 or 63.253.71.95 (see Appendix A for detailed instructions)

NOTE: you need to consult with your IT department to open a port in the firewall to allow you access to this information. Port 1000 TCP is used for the internet feed.



Denver RealEMWIN software FAQ's

Q4. Where can I find more information about EMWIN?

A4. See <http://www.nws.noaa.gov/emwin/index.htm>

Q5. Can I use a network printer with RealEMWIN?

A5. RealEMWIN will print to the default printer set on your computer. Go to “Start”... Settings... Printer to determine which printers are available for printing.

Q6. How do I find the right product identifier for setting an alarm?

A6. Product identifiers are found under “Help” and “FileNames” on the RE menu list. See Appendix C for more details.

Q7. What is VTEC and how is VTEC used in weather products?

A7. VTEC stands for “Valid Time Event Coding”. VTEC is used to provide more specific details about a warning event and improves the ability to electronically filter alarms for your location. See Appendix D for details on how the VTEC string is formatted.



Denver RealEMWIN software FAQ's

Q8. Can I change the button configuration at the top of the RE screen?

A8. Yes, all but the far left (Radar) button can be changed. You can change the names and products in the "RealEMWIN-Button.txt" file. See Appendix E.

Q9. Who can I contact for help with configuring my software?

A9. Contact Kevin Stewart at kstewart@udfcd.org.

Q10. How do I set up RE to send email?

A10. In the Configuration screen, enter your SMTP server name and your email address in the boxes provided. (See Appendix F). If your email server requires a username/password combo to send mail, create a file called blat-output.txt in your RealEMWIN directory with:

`-u name@whatever.com -pw email_password`

NOTE: You should consult with your IT department to ask for an email account that does not require regular changes to the password. This will save you time and effort periodically editing the file.



Denver RealEMWIN software FAQ's

Q11. Where can I find the latest RealEMWIN software documentation?

A11. <http://radioweather.us/RealEMWIN-v17.pdf>

Q12. Where can I get additional information regarding RealEMWIN bug fixes?

A12. <http://sky.radioweather.us/RealEMWIN/faq.txt>. You can also join the emwin-users group on yahoo at <http://groups.yahoo.com/>

Q13. Where can I find more information on Weather Message?

A13. Visit the website at <http://www.wxmesg.com>

Q14. Where can I find information on GOES satellite eclipse schedules?

A14. The fall 2007 schedules are posted [here](#)

Q15. Broomfield County is not listed in the alarms screen. How can I get it added?

A15. You will need an updated copy of the file "Fips63.txt" It is included in the latest configuration update files [here](#).



Denver RealEMWIN software FAQ's

Q16. My computer was turned off. How can I catch up on products sent in the last hour?

A16. From the RE menu select "Add-ins"... "FTP ingestor" and select the products and time period you want.

NOTE: If this feature fails after repeated attempts, contact your IT department and request they open port 21 for "FTP downloads".

Q17. RealEMWIN keeps showing "processing EPHAT6US.txt". How do I fix that?

A17. You need to install version 1.7.7 software. It is included [here](#).

Q18. Can RealEMWIN start the Internet ingest if my receiver fails?

A18. Yes. In the configuration screen, check the "I-Net" box in the Idle Alert section, then restart the program. If serial data is not received, it will start the internet ingest after "Delay" minutes. Also, open the file "Ingest-BACKUP.txt" in the RealEMWIN folder and verify the

'#Check Internet when satellite down? (0 = No, 1 = Yes)' is set to 1



Denver RealEMWIN software FAQ's

Q19. Can I select a group of counties for a single alarm?

A19. No, RE allows only one county selection per alarm. If you need multiple counties, you will need to set one alarm per county per product.

Q20. I see the ingest is running and receiving products, but they don't appear on the input screen (left side). What can I do to fix this?

A20. If you switch between modes, the ingest directory can get changed. Verify the Data-In directory in the configuration screen and the ingest path on the ingest engine match. The default is:

C:\Program Files\Skywatch Services\RealEMWIN\track\transfer\



APPENDIX A

Internet Feed Connection



Before You Start...

You should request your IT organization to:

- i. open port 1000 for your use – allows access to the Adams County internet feeds

IP Addresses:

- i. 63.253.71.94
- ii. 63.253.71.95



1) Set / Verify the following values in the configuration window:

a) Internet Feed mode

b) Click on "SAVE".

c) Restart RealEMWIN.

Configuration

Operational Mode
 Standalone Network Internet Feed

Comm Port: 1 Baud: 9600

Text: c:\Weather\EMWIN\Data\
Images: c:\Weather\EMWIN\Images\
Hourly: c:\Weather\EMWIN\HourlyWX\
Data-In: C:\PROGRA~1\SKYWAT~1\REALEM~1\
Custom: c:\Weather\EMWIN\Archive\
WXPLOT:

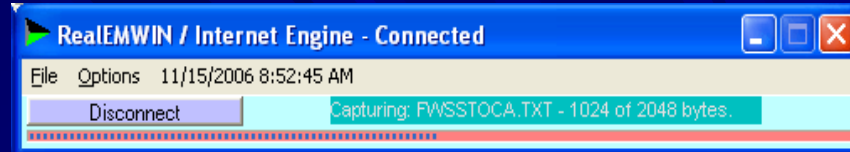
Local WFO's: DEN BOU
Purge Time: 12
Prods: 3

US N. America Pacific
Audio: Unlimited Restrict Once

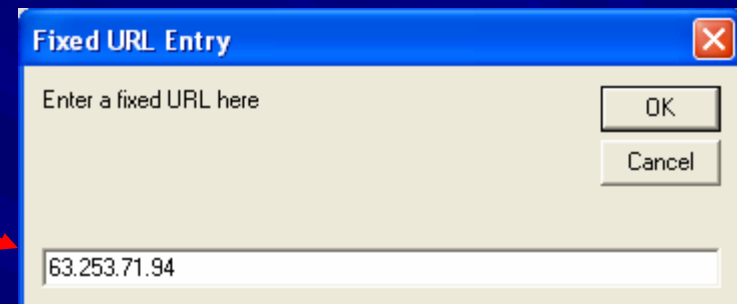
E-Mail: Compress Bulletins Expand Headers
Server:
Personal:
Idle Alert: E-Mail Internet RCM Unzip Bulletin Descriptions
 Pager I-Net
3 Delay METAR Reverse
KDEN

Save Exit

2) The internet engine will appear:



3) Click on “Options” then “enter fixed URL” and type “63.253.71.94” or “63.253.71.95” in the box.

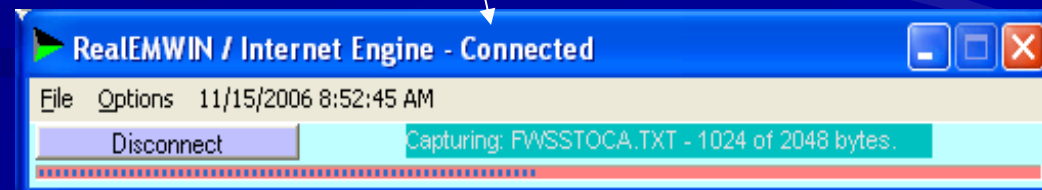


4) Click “OK” .

5) Select “Options” then “use fixed URL” .
It will be checked.

6) Click “Disconnect”. The computer will then reconnect and show activity. The system is now receiving content from the Adams County EMWIN Server.

Shows CONNECTED



APPENDIX B

Installing RealEMWIN software

Updated Sept. 2007



Before You Start...

You should request your IT organization to:

- i. perform this software installation – it requires administrator rights on the computer
- ii. open port 1000 for your use – allows access to the Adams County internet feeds (63.253.71.94, 63.253.71.95)
- iii. open port 21(ftp) - allows access to National Weather Service archive weather information you will need periodically



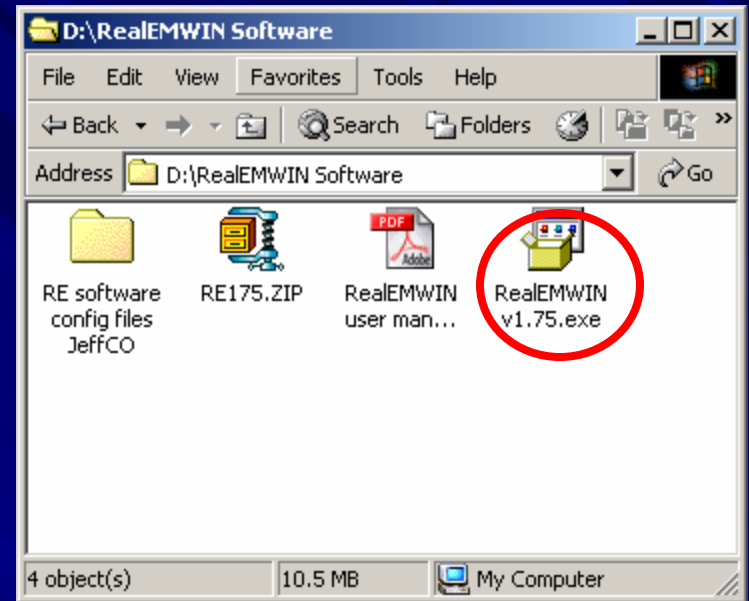
Initial Setup for Radio Reception

- 1) Open CD to see contents.
- 2) Select “RealEMWIN Software” folder



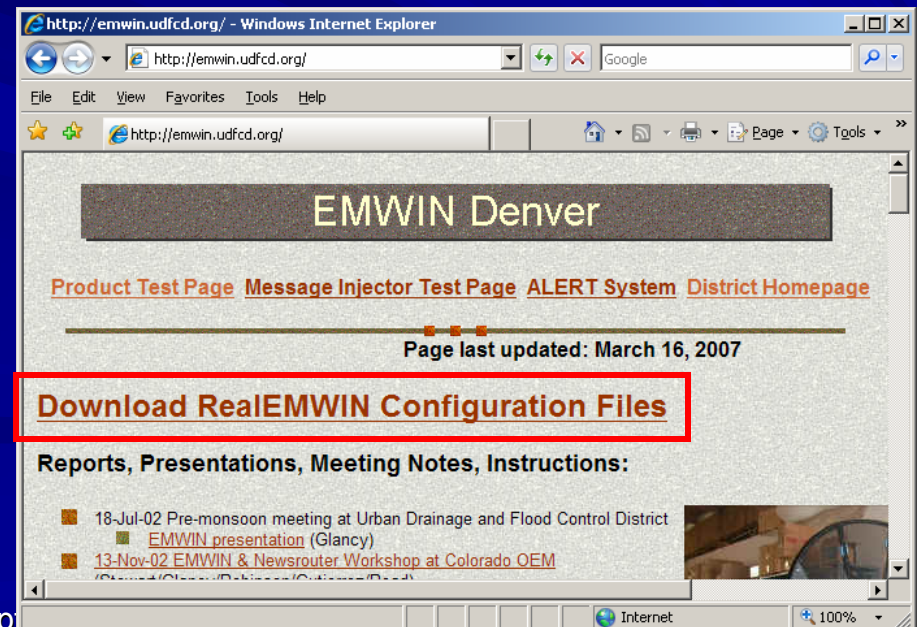
3) Double click RE175.exe, and follow installation instructions....

(Select “Next” or “Yes” to step through the default installation.)

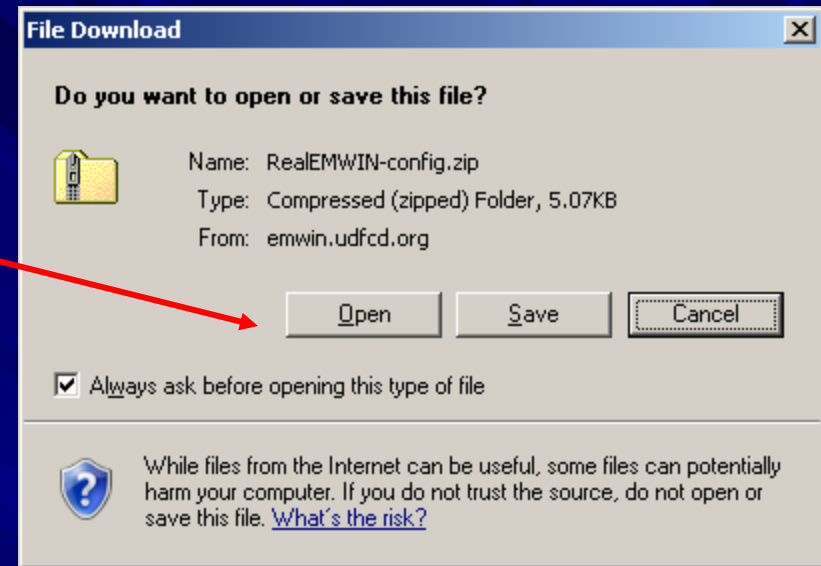


4) When asked to restart the computer, select: “No, I will restart later”

5) Open your web browser to <http://emwin.udfcd.org>, Click on “Download RealEMWIN Configuration Files”

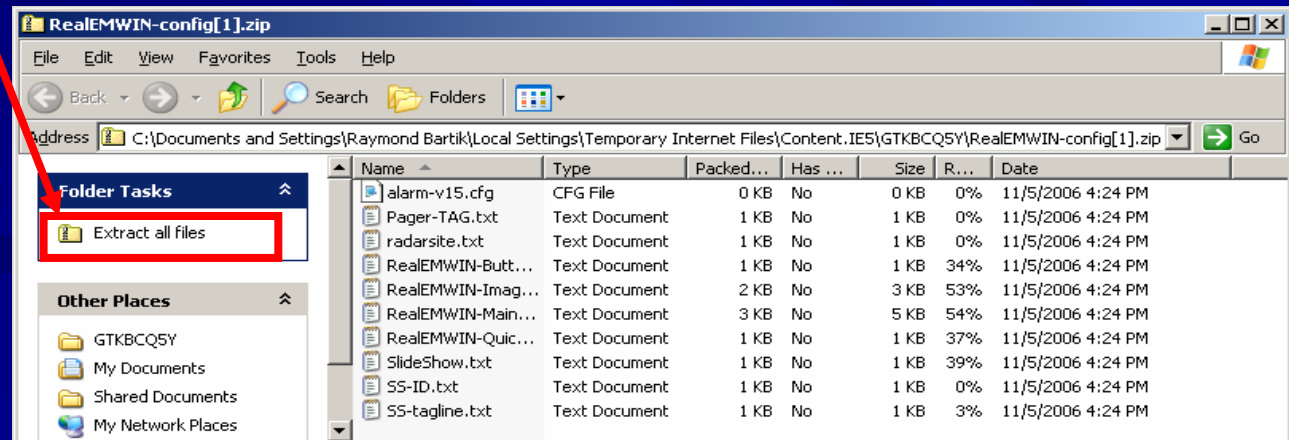


6) Select “Open”



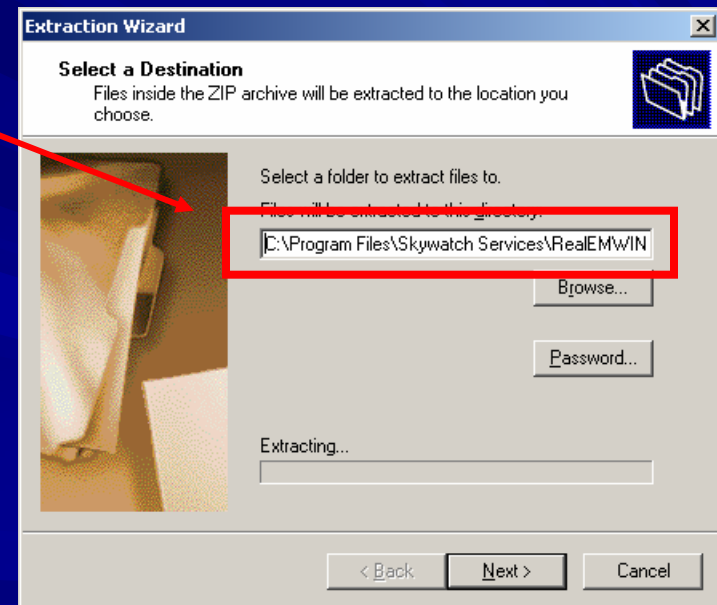
7) Select ‘Extract all Files’

CAUTION: If you are re-installing RE, this will cause your alarm file to be erased. To save your alarms, make a copy of your ‘alarm-v15.cfg’ file prior to extracting these files

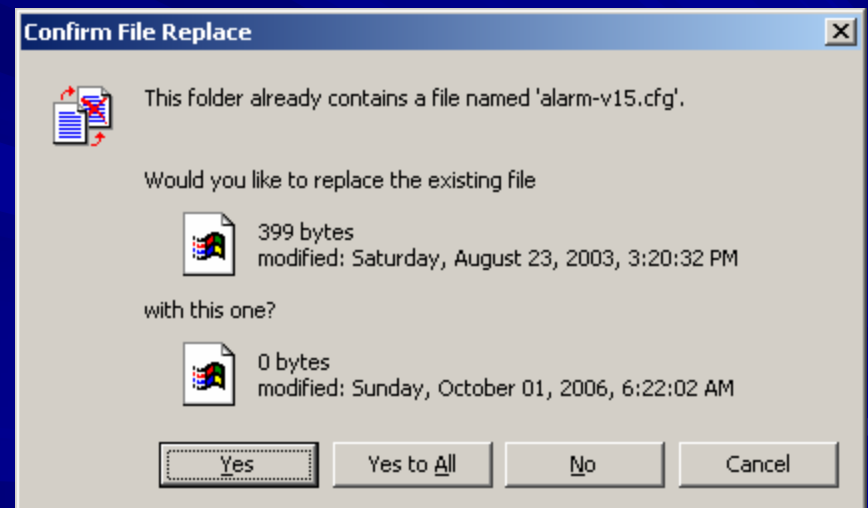


8) Extract them to the following folder:

“C:\ Program Files\Skywatch Services\RealEMWIN”



9) When asked if you would like to replace existing files, select “Yes to All”

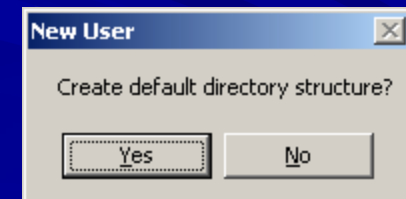


10) Remove CD from drive, and restart computer.

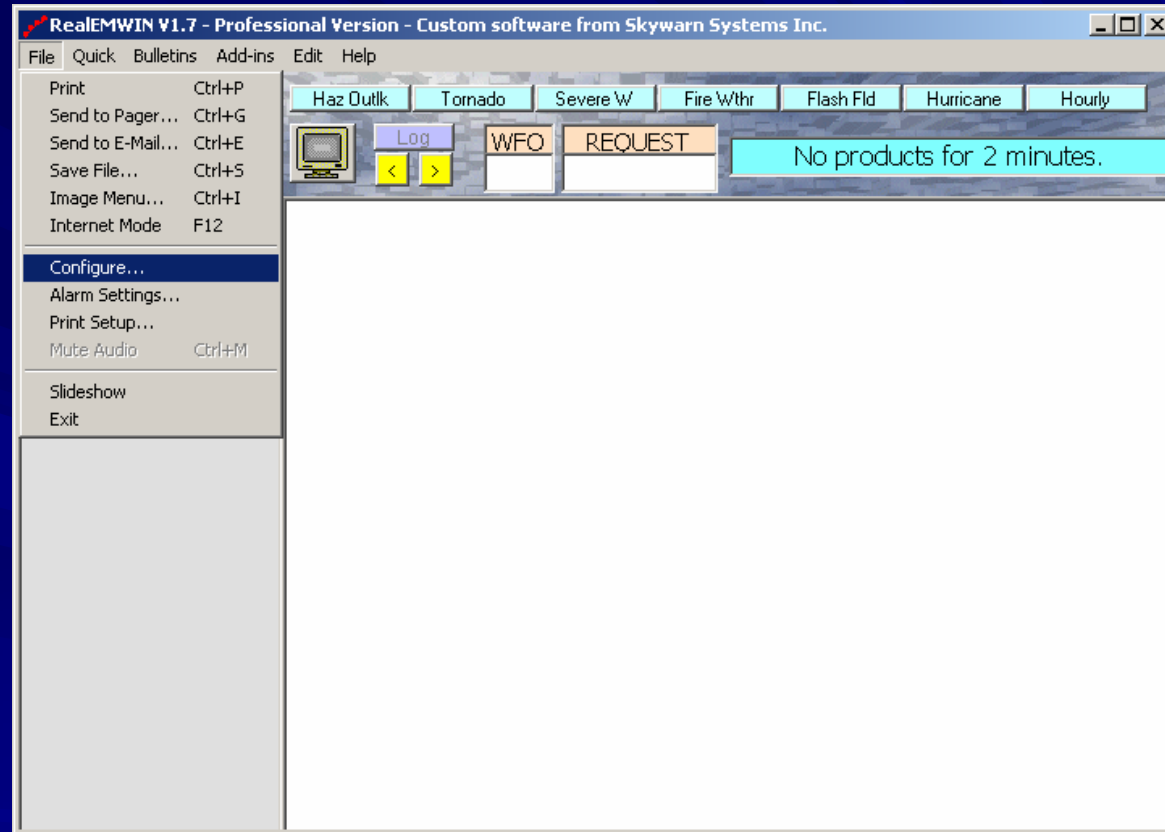


11) When computer is ready, Start RealEMWIN.

12) Select “Yes” when asked to
“create default directory structure”



13) When completed, select “File” then “Configure”



NOTE: for internet only install, go to step #22

14) Set / Verify the following values in the configuration window:

a) Standalone operational mode

b) Comm Port 1 and Baud 9600 (verify Comm Port with IT if unsure)

c) Enter “DEN” and “BOU” in the first Local WFO box, and clear the remaining boxes.

d) Check the I-Net and METAR boxes, and type in “KDEN”

e) Click on “SAVE”.

Configuration

Operational Mode

Standalone Network Internet Feed

Comm Port 1 Baud 9600

Text c:\Weather\EMWIN\Data\

Images c:\Weather\EMWIN\Images\

Hourly c:\Weather\EMWIN\HourlyWX\

Data-In C:\PROGRA~1\SKYWAT~1\REALEM~1\

Custom c:\Weather\EMWIN\Archive\

WXPLOT

Local WFO's

DEN BOU

Purge Time: 12

Prods: 3

Audio

Unlimited Restrict Once

E-Mail

Compress Bulletins

Expand Headers

Server enter.smtp.here.com

Personal from@where

Idle Alert

E-Mail

Pager

I-Net

3 Delay

METAR Reverse

KDEN

Save Exit

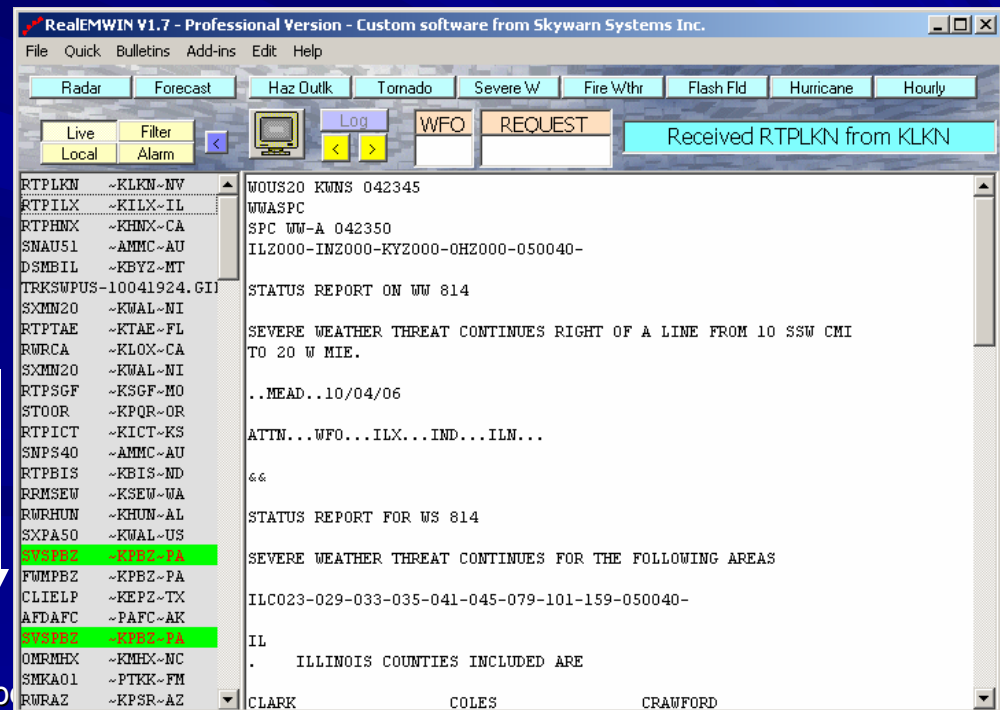


15) Select "OK" when the following dialog box appears:



16) Restart RealEMWIN. File names should begin appearing on the left side.

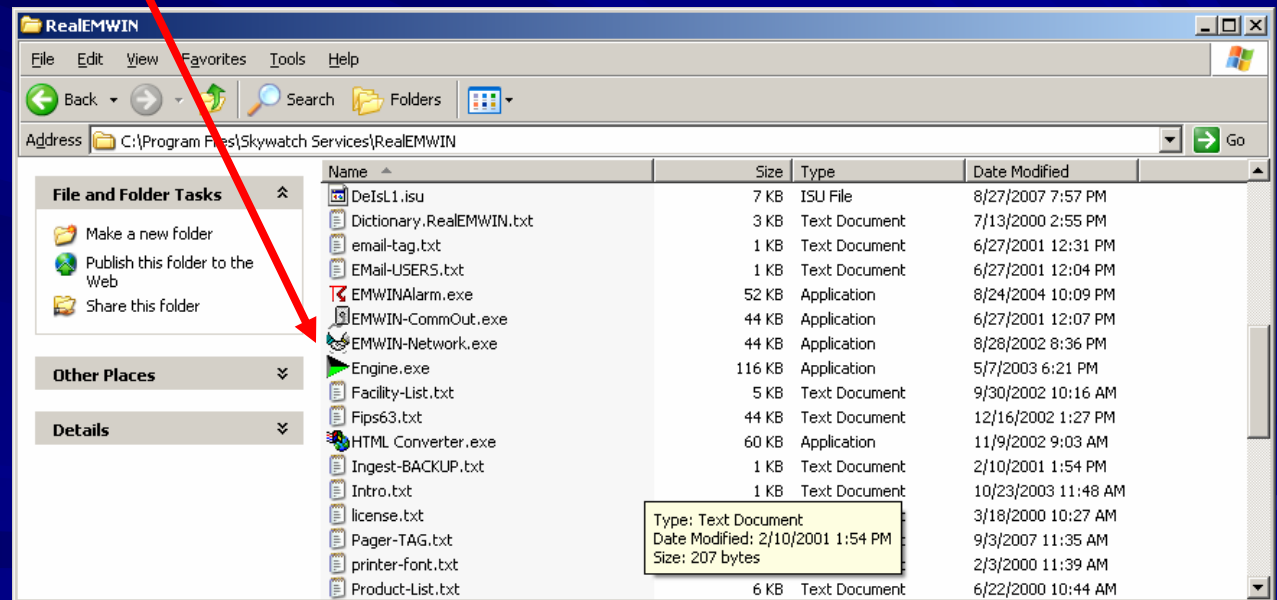
File names appear and fill down



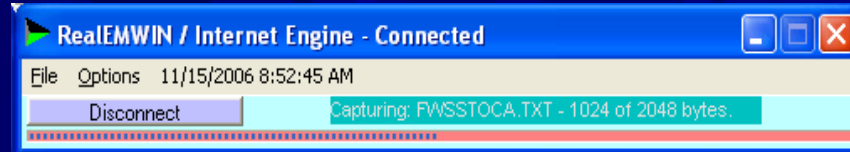
To enable internet backup...

17) Open “C:\ Program Files\Skywatch Services\RealEMWIN”
And open ‘Engine.exe’.

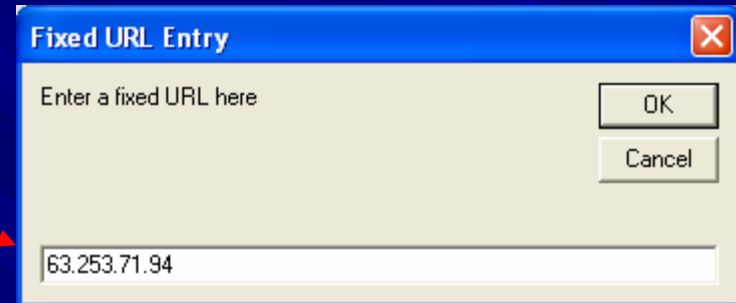
(This is the internet ingest program for RealEMWIN.)



18) The internet engine will appear:



19) Click on “Options” then “enter fixed URL” and type “63.253.71.94” or “63.253.71.95” in the box.



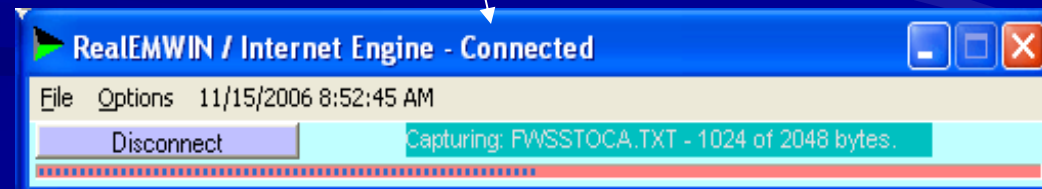
Click “OK”

Select “Options” then “use fixed URL”.

It will be checked.

20) Click “Disconnect”. The computer will then reconnect and show activity. The system is now receiving content from the Adams County EMWIN Server.

Shows CONNECTED



21) Close the internet ingest program.

When the radio data is lost, RealEMWIN will automatically switch to the internet connection at Adams County.

THIS ENDS THE RADIO SYSTEM software installation...



For those outside of radio
coverage...

you can use the internet to access
EMWIN Denver Data



22) Set / Verify the following values in the configuration window:

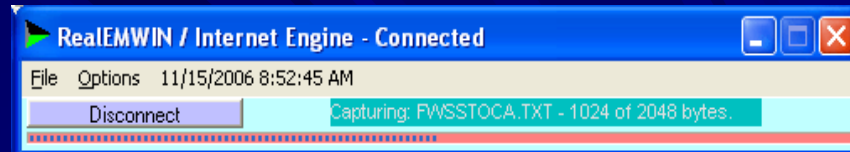
- Internet Feed mode
- Enter “DEN” and “BOU” in the first Local WFO boxes, and clear the remaining box.
- Check the I-Net and METAR boxes, and type in “KDEN”
- Click on “SAVE”.
- Restart RealEMWIN.

The screenshot shows the 'Configuration' window with the following settings:

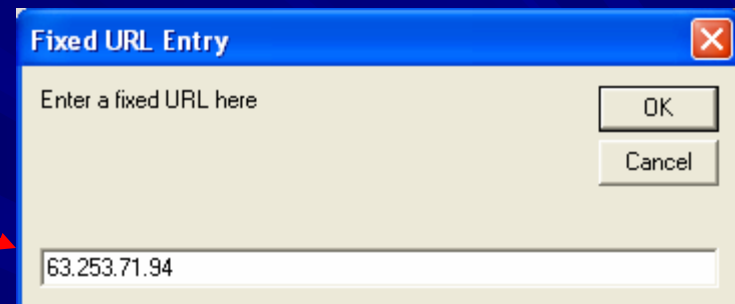
- Operational Mode:** Standalone, Network, Internet Feed (circled in red)
- Comm Port:** 1, **Baud:** 9600
- Text:** c:\Weather\EMWIN\Data\
- Images:** c:\Weather\EMWIN\Images\
- Hourly:** c:\Weather\EMWIN\Hourly\WX\
- Data-In:** C:\PROGRA~1\SKYWAT~1\REALEM~1\
- Custom:** c:\Weather\EMWIN\Archive\
- WXPLOT:** (empty)
- Local WFO's:** DEN, BOU, (empty) (boxed in red)
- Purge Time:** 12
- # Prods:** 3
- US:** **N. America:** **Pacific:**
- Audio:** Unlimited, Restrict, Once
- E-Mail:** Compress Bulletins, Expand Headers
- Server:** enter.smtp.here.com
- Personal:** from@where
- Idle Alert:** E-Mail, Pager, I-Net (boxed in red), Delay: 3
- Internet, RCM Unzip
- Bulletin Descriptions
- METAR, Reverse
- KDEN:** KDEN (boxed in red)
- Buttons:** Save, Exit



23) The internet engine will appear:



24) Click on “Options” then “enter fixed URL” and type “63.253.71.94” or “63.253.71.95” in the box.



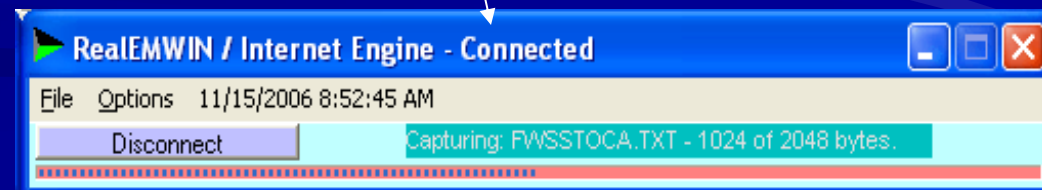
Click “OK”

Select “Options” then “use fixed URL”.

It will be checked.

25) Click “Disconnect”. The computer will then reconnect and show activity. The system is now receiving content from the Adams County EMWIN Server.

Shows CONNECTED



This ends the Internet only System software installation...



APPENDIX C

Weather Product Identifiers and Setting alarms



Weather product terminology

EMWIN products names are structured in a specific way.

The product identifier format is **XXXYYYZZ.AAA**

Where:

XXX	is the product identifier	(TOR)
YYY	is the originating NWS office	(BOU)
ZZ	is the state / marine zone abbreviation	(CO)
AAA	is the format identifier (.txt,.gif, etc.)	

For example, a tornado warning issued from the Boulder WFO would be

TORBOUCO.TXT



Weather product terminology

- You will need the first six characters of the desired product to set an alarm
 - For our purposes, all products are of the form: **XXXBOU**

The screenshot shows the RealEMWIN V1.7 software interface. The window title is "RealEMWIN V1.7 - Professional Version - Custom software from Skywarn Systems Inc.". The interface includes a menu bar (File, Quick, Bulletins, Add-ins, Edit, Help) and a toolbar with buttons for Radar, Forecast, Haz Outlk, Short Tm, Watches, Fire Wthr, Flash fld, Winter, and Hourly. Below the toolbar, there are buttons for Live, Filter, Local, Alarm, Log, WFO, and REQUEST. A status bar at the top right displays "Received RRMDVN from KDVN".

The main display area shows a list of weather products on the left and a detailed forecast for the selected product, NOWBOU, on the right. The product list includes:

- STOCO ~KBOU-CO
- RTPBOU ~KBOU-CO
- RRMBOU ~KBOU-CO
- NOWBOU ~KBOU-CO**
- HWOBOU ~KBOU-CO
- FWFBOU ~KBOU-CO
- CLIDEN ~KBOU-CO
- CLIDEN ~KBOU-CO
- CLICOS ~KBOU-CO

The forecast for NOWBOU is as follows:

```
FPUS75 KBOU 101045
NOWBOU
SHORT TERM FORECAST
NATIONAL WEATHER SERVICE DENVER CO
445 AM MDT MON SEP 10 2007

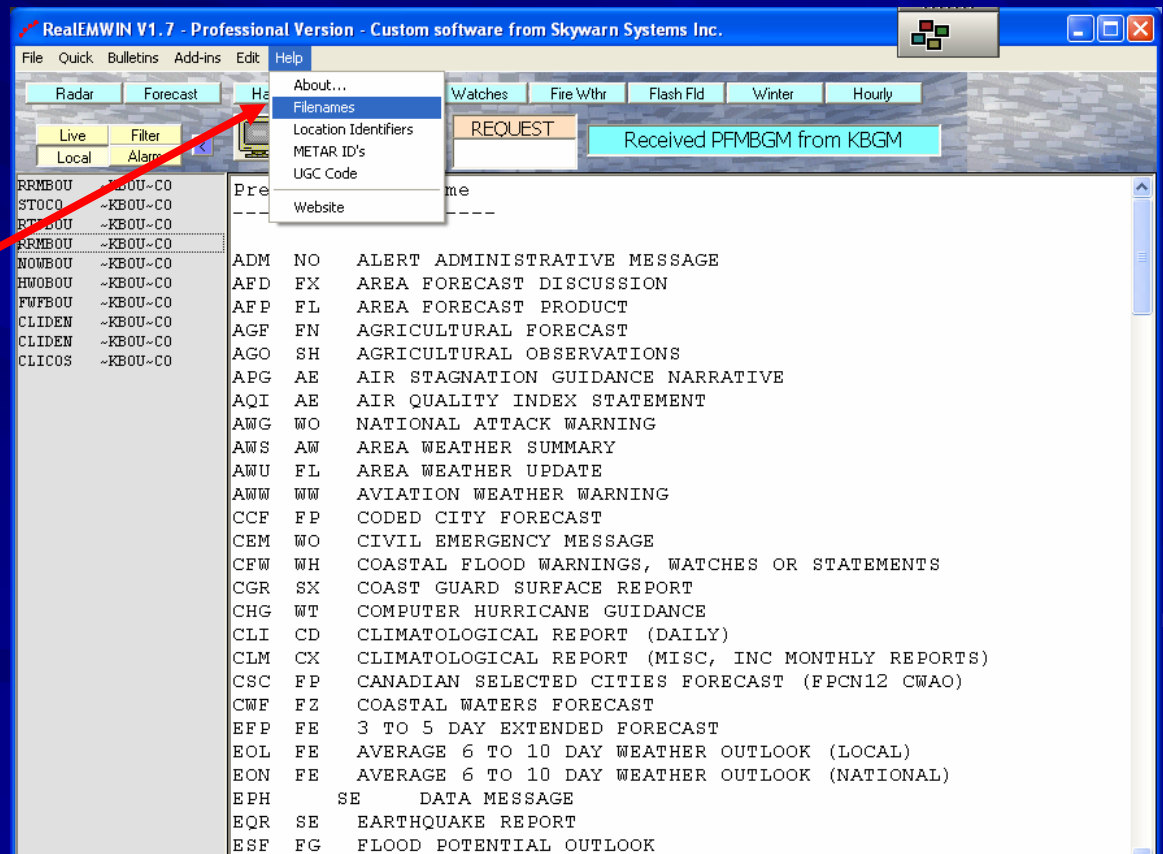
COZ038>041-043-045-101300-
LARIMER COUNTY BELOW 6000 FEET/NORTHWEST WELD COUNTY-BOULDER AND
JEFFERSON COUNTIES BELOW 6000 FEET/WEST BROOMFIELD COUNTY-NORTH
DOUGLAS COUNTY BELOW 6000 FEET/DENVER/WEST ADAMS AND ARAPAHOE
COUNTIES/EAST BROOMFIELD COUNTY-ELBERT/CENTRAL AND EAST DOUGLAS
COUNTIES ABOVE 6000 FEET-CENTRAL AND SOUTH WELD COUNTY-CENTRAL AND
EAST ADAMS AND ARAPAHOE COUNTIES-
INCLUDING FORT COLLINS...HEREFORD...LOVELAND...NUNN...ARVADA...
BOULDER...GOLDEN...LAKEWOOD...LONGMONT...AURORA...BRIGHTON...CITY
OF DENVER...DENVER INTERNATIONAL AIRPORT...HIGHLANDS RANCH...
LITTLETON...PARKER...CASTLE ROCK...ELBERT...FONDIS...KIOWA...
LARKSPUR...EATON...FORT LUPTON...GREELEY...ROGGEN...BENNETT...
BYERS...DEER TRAIL...LEADER
445 AM MDT MON SEP 10 2007

.NOW...
AREAS OF VERY LIGHT RAIN AND SOME FOG WILL BE POSSIBLE ACROSS THE
FRONT RANGE URBAN CORRIDOR THROUGH 7 AM. RAINFALL AMOUNTS WILL BE
VERY LIGHT.

$$
```

Weather product terminology

- A list of products is available through the “Help”...”FileNames” menu...



APPENDIX D

VTEC



P-VTEC String: /k.aaa.cccc.pp.s.####.yymmddThhnnZ_B-yymmddThhnnZ_E/

H-VTEC String: /nwsli.s.ic.yymmddThhnnZ_B.yymmddThhnnZ_C.yymmddThhnnZ_E.fr/

P-VTEC String

Event Group

k - Product Class (O, T, E, X)
 aaa - Action (NEW, CON, EXT, EXA, EXB, UPG, CAN, EXP, COR, ROU)
 cccc - Office ID (e.g., KLWX)
 pp - Phenomena (e.g., BZ, FF - see table)
 s - Significance (W, A, Y, S, F, O, N)
 #### - Event Tracking Number (ETN) - (e.g., 0001, 0002, etc.)
 ETN is coded as 0000 for ROU events.

Date/Time Group

yymmddThhnnZ_B - Event Beginning Date/Time
 yymmddThhnnZ_E - Event Ending Date/Time
 yy - year T - fixed time indicator
 mm - month hh - hour
 dd - day nn - minute
 Z - fixed UTC indicator

Product Class (k)	Actions (aaa)	Phenomena (pp)
O Operational product T Test product E Experimental product X Experimental VTEC in an Operational product	NEW New event CON Event continued EXT Event extended (time) EXA Event extended (area) EXB Event extended (both time and area)	AF Asfall AS Air Stagnation BS Blowing Snow BW Brisk Wind BZ Blizzard CF Coastal Flood DS Dust Storm DU Blowing Dust EC Extreme Cold EH Excessive Heat EW Extreme Wind FA Areal Flood FF Flash Flood FG Dense Fog FL Flood
	UPG Event upgraded CAN Event cancelled EXP Event expired COR Correction ROU Routine	FR Frost FW Fire Weather FZ Freeze GL Gale HF Hurricane Force Wind HI Inland Hurricane HS Heavy Snow HT Heat HU Hurricane HW High Wind HY Hydrologic HZ Hard Freeze IP Sleet IS Ice Storm LB Lake Effect Snow and Blowing Snow
		LE Lake Effect Snow LO Low Water LS Lakeshore Flood LW Lake Wind MA Marine RB Small Craft for Rough Bar SB Snow and Blowing Snow SC Small Craft SE Hazardous Seas SI Small Craft for Winds SM Dense Smoke SN Snow SR Storm SU High Surf SV Severe Thunderstorm
		SW Small Craft for Hazardous Seas TI Inland Tropical Storm TO Tornado TR Tropical Storm TS Tsunami TY Typhoon UP Ice Accretion WC Wind Chill WI Wind WS Winter Storm WW Winter Weather ZF Freezing Fog ZR Freezing Rain

H-VTEC String

Event Group

nwsli - NWS Location Identifier
 s - Flood Severity (0, N, 1, 2, 3, U)
 ic - Immediate Cause (ER, SM, etc.)
 fr - Flood Record (NO, NR, UU, OO)

Date/Time Group

yymmddThhnnZ_B - Flood Begin Date/Time
 yymmddThhnnZ_C - Flood Crest Date/Time
 yymmddThhnnZ_E - Flood End Date/Time

yy - year T - fixed time indicator
 mm - month hh - hour
 dd - day nn - minute
 Z - fixed UTC indicator

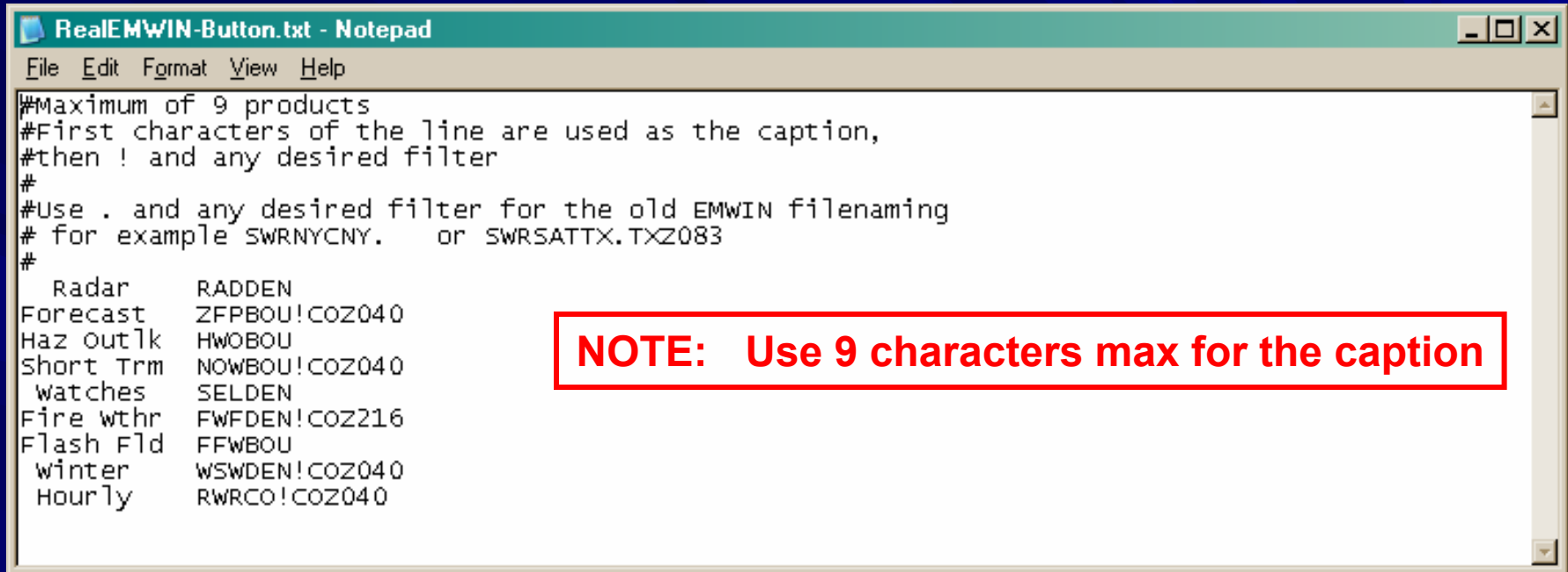
NWS Location Identifier (nwsli)	Flood Timing	Flood Record Status (fr)
FALK2 Sample NWSLI - first three characters unique to a point, last two characters unique to the state/territory 00000 NWSLI is coded as zeros for areal products	yymmddThhnnZ _B - time flood stage/flow is exceeded yymmddThhnnZ _C - time of maximum stage/flow yymmddThhnnZ _E - time for fall below flood stage/flow	NO A record flood is not expected NR Near record or record flood expected UU Flood without a period of record to compare OO For areal flood warnings, areal flash flood products, and flood advisories (point and areal)
Flood Severity (s)	Immediate Cause (ic)	
N None 0 areal flood or flash flood products 1 Minor 2 Moderate 3 Major U Unknown	ER Excessive Rainfall SM Snowmelt RS Rain and Snowmelt DM Dam or Levee Failure IJ Ice Jam GO Glacier-Dammed Lake Outburst IC Rain and/or Snowmelt and/or Ice Jam FS Upstream Flooding plus Storm Surge	FT Upstream Flooding plus Tidal Effects ET Elevated Upstream Flow plus Tidal Effects WT Wind and/or Tidal Effects DR Upstream Dam or Reservoir Release MC Other Multiple Causes OT Other Effects UU Unknown

APPENDIX E

Configuring RE Buttons



Customizing RealEMWIN



```
RealEMWIN-Button.txt - Notepad
File Edit Format View Help
#Maximum of 9 products
#First characters of the line are used as the caption,
#then ! and any desired filter
#
#Use . and any desired filter for the old EMWIN filenaming
# for example SWRNYCNY. or SWRSATTX.TXZ083
#
 Radar      RADDEN
Forecast    ZFPBOU!COZ040
Haz Outlk   HWOBOU
Short Trm   NOWBOU!COZ040
watches     SELDEN
Fire wthr   FWFDEN!COZ216
Flash Fld   FFWBOU
winter      WSWDEN!COZ040
Hourly      RWRCO!COZ040
```

NOTE: Use 9 characters max for the caption

**This file contains the descriptors and product identifiers
for the buttons across the top of the window**

C:\program files\skywatch services\RealEMWIN\RealEMWIN-Button.txt

APPENDIX F

Email Setup



Email setup

- Enter your information for your outbound SMTP server in the “Server” box
- Enter your email address in the “Personal” box

The screenshot shows the 'Configuration' window with the following settings:

- Operational Mode:** Standalone, Network, Internet Feed
- Comm Port:** 1, **Baud:** 9600
- Text:** c:\Weather\EMWIN\Data\
- Images:** c:\Weather\EMWIN\Images\
- Hourly:** c:\Weather\EMWIN\HourlyWX\
- Data-In:** C:\Program Files\Skywatch Services\Real
- Custom:** c:\Weather\EMWIN\Archive\
- WXPLOT:** [Empty]
- Local WFO's:** DEN, BOU, [Empty]
- Purge Time:** 12, **# Prods:** 3
- Audio:** Unlimited, Restrict, Once
- Checkboxes:** US, N. America, Pacific; Compress Bulletins; Expand Headers; Internet; PCM Unzip; METAR; Reverse
- E-Mail:** E-Mail, Pager, I-Net, Delay (3)
- Server:** enter.smtp.here.com
- Personal:** from@where
- Buttons:** Save, Exit