EMWIN Phase 2 Proposal

Prepared in conjunction with the

Colorado's North Central Region Emergency Management Community

Prepared by

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I.   Overview and Status

The Urban Drainage and Flood Control District (UDFCD) commissioned a study to develop an Emergency Managers Weather Information Network rebroadcast service for the District in 2003. The study proposed a network to provide weather forecasts, watch and warning products for emergency managers in the Denver area. Homeland Security Grant monies were granted and managed through Jefferson County for the construction and implementation of the Phase 1 EMWIN rebroadcast service. Reception equipment has been delivered to 31 governmental agencies in the Front Range.   Additional Homeland Security funding was requested, and granted, for the EMWIN rebroadcast Phase 2 effort – to provide expanded radio rebroadcast coverage to Douglas County users.

Subsequent to the grant for the Phase 2 funding, several factors indicate the user community has not been able to make effective use of the tools provided. To date, less than half the receiver systems are in operation – suggesting the original implementation plans may have been too aggressive.

II.   Recommendation

Rather than continue the system expansion, the leadership team feels the Front Range communities would be better served by refocusing efforts on maximizing the utilization of the Phase 1 system. Discussions with the Emergency Management user community highlight the need for additional training and support. Further, the users have identified additional capabilities to make the system more effective. Based on this feedback, the following changes to the grant expenditure plan are requested:

1) Provide training to a small group of leading users ASAP
2) Conduct a System "walk-through" to validate network installation
3) Provide a second training session for the entire user community
4) Conduct site visits to assist in installation and debug of equipment (May require additional materials)
5) Implement an Internet feed for those users outside radio coverage
6) Implementation of a web site to provide EMWIN data to the public
7) Allow Emergency Managers to add messages to the EMWIN rebroadcast for local emergencies and events
8) Text Message delivery of select EMWIN content to cell phones and pagers (warnings and watches)
9) Deliver Training to maintenance personnel
10) Equipment spares

III. Additional Details of Recommendation

1) Provide training to a small group of leading users.   Deliver installation and operation training to a small group. This allows key users to use and learn about the system, ask questions, and identify issues.
    Estimated effort: one day of training

2) Conduct a System "walk-through" to validate network installation. Equipment was installed by local contractors based on documentation from Skywarn Systems Inc.   Installation needs to be validated before formal release of system to the emergency management community.
    Estimated effort: one day

3) Provide a second training session for the <u>entire</u> user community. Once the system is validated, and key users have tested system operation, a broader training session will explain system installation and operation, provide live demonstrations, and highlight any software updates since initial shipment of equipment.
    Estimated effort: one day of training

4) Conduct site visits to assist in installation and debug of equipment. While not particularly complicated, equipment installation and operation can require support and answers to questions. Some sites may require additional materials to properly complete installations.
    Estimated effort: 5 days

5) Implement an Internet feed for those users outside radio coverage. An interim solution will be implemented by providing information via an Internet connection.   While Internet connectivity may have lower reliability, it does provide access to information.
    Estimated cost: $2000

6) Implementation of a web site to provide EMWIN data to the public. The real time EMWIN information can be valuable to governmental agencies and communities for a wide range of needs.   A limited number of products will be available
    Estimated cost: $3500

7) Establish a method for Emergency Managers add messages to the EMWIN rebroadcast for local emergencies and events. A secure web site using user ID and password credentials for remote access allows emergency managers the ability to easily construct and send local messages.
    Estimated cost: $3900

8) Text Message delivery of select EMWIN content to cell phones and pagers (warnings and watches). Cost based on providing six alert message types to each of the 31 emergency manager users.
   Estimated cost: $1300

9) Deliver Training to maintenance personnel. Once the system is operational and stable, on-going maintenance of hardware and software is necessary.   Local personnel will be identified to provide this service.
   Estimated effort: one day of training

10) Equipment spares. The Rebroadcast transmitter at Cherokee Power Plant will, in time, require replacement of a limited number of items. Carrying spares allows the system to return to service more quickly in the event of a failure of any of those supported items.

Cost Summary:

1 & 2) Initial training and system checkout $3000

3) Second training session $2200

4) Conduct site visits $6500
(Does not include material costs) *

5) Implement an Internet feed** $2000

6) Implementation web site** $3500

7) Local Message insertion** $3900

8) Text Message delivery** $1300

9) Training to maintenance personnel $2200

10) Equipment spares - not to exceed $1900

* Materials to complete user installations
      Not to exceed $1400

TOTAL: $27900

** Based on Adams County IT organization support of all security and access requirements to properly implement. Additional costs may apply dependent on requirements established by Adams County IT organization. Additional costs necessary to comply with IT requirements for line items will be paid using funds allocated for "equipment spares" and "materials to complete user installations".