

APPENDIX A: TODAY'S FULL RANGE OF NATIONAL WEATHER SERVICE DISSEMINATION OPTIONS

Our 21st-century National Weather Service commands a formidable array of dissemination media, each tailored for direct communication of weather products to various end-users: commercial broadcasters, high-end researchers, private weather-services companies, state and local emergency managers, and the general public.

These data outlets include the following:

- **AWIPS/NOAAPORT**²⁶⁷

This C-band satellite dissemination medium targets NOAA environmental data and information in near-real time to high-end, high-budget users in the research and private-weather services communities. There is no subscription fee, but the cost of satellite receiver and data-handling equipment is reportedly in excess of \$50,000.²⁶⁸

- **Emergency Managers' Weather Information Network (EMWIN)**²⁶⁹

EMWIN was developed to offer the emergency management community access to a set of National Weather Service warnings, watches, forecasts, and other products through multiple outlets without subscription cost. The data stream is available via satellite, Internet (see IWIN below), and, in some areas, over VHF or UHF radio.²⁷⁰ However, because nearly all of the radio transmitters are private, cooperative ventures, unsupported by the Weather Service, and because Internet access can be unreliable

²⁶⁷ National Weather Service. "NOAAPORT User's Page." 20 Mar. 2002. 17 Nov. 2002 <<http://205.156.54.206/noaaport/html/noaaport.shtml>>.

²⁶⁸ *Effective Disaster Warnings*. Appendix E, pg. 49.

²⁶⁹ National Weather Service. "EMWIN: Emergency Managers Weather Information Network." 17 Nov. 2002 <<http://iwin.nws.noaa.gov/emwin/index.htm>>.

²⁷⁰ See <http://iwin.nws.noaa.gov/emwin/winbca.htm> for a list of radio-transmitter locations and frequencies.

during destructive weather, emergency managers are urged to use the EMWIN satellite service as their means of data reception. The cost of needed receiving equipment is relatively modest for a typical emergency-management agency—less than \$1,000.²⁷¹

- **Family of Services (FOS)**²⁷²

Accessible through leased, dedicated telephone lines, FOS connects directly to the National Weather Service Telecommunication Gateway computer systems located at Weather Service Headquarters in Silver Spring, Maryland. FOS offers a rich suite of products and timely delivery. However, the cost of leased lines and Weather Service subscription fees can exceed \$60,000 yearly, so access to this service is limited to high-end users.²⁷³

- **Interactive Weather Information Network (IWIN)**²⁷⁴

IWIN is the Internet portal of the EMWIN network, offering an excellent array of real-time weather data, accessible to the public at <http://iwin.nws.noaa.gov>. IWIN products “include all standard warnings, watches, advisories, and routine data including state forecasts, short term forecasts (nowcasts), zone forecasts, graphical forecasts, select satellite data, and most routine NWS products.”²⁷⁵ IWIN may be the best-kept secret among Internet-savvy weather aficionados. It offers a rich selection of data, unimaginable to home computer users only a few years ago. However, because IWIN depends on

²⁷¹ *Effective Disaster Warnings*. Appendix E: 50.

²⁷² National Weather Service. “Family of Services: FOS.” 15 Mar. 2002. 17 Nov. 2002 <<http://www.nws.noaa.gov/datamgmt/fos/fospace.html>>.

²⁷³ *Effective Disaster Warnings*. Appendix E: 51, 52.

²⁷⁴ National Weather Service. “IWIN.” 17 Nov. 2002 <<http://iwin.nws.noaa.gov/>>.

²⁷⁵ National Weather Service. “Interactive Weather Information Network (IWIN).” 13 Nov. 2002. 17 Nov. 2002 <<http://www.nws.noaa.gov/om/disemsys.shtml#IWIN>>.

Internet connectivity, which can vary in speed and reliability with network conditions (not under the control of the Weather Service), availability and timely delivery of IWIN's suite of products are not guaranteed by the government.²⁷⁶ The author has considerable experience in using this service, and is very satisfied with its reliability. Readers who are interested in Internet access to a full suite of high-quality weather data are urged to explore IWIN, and to bookmark it.

- **National Weather Service Home Page**²⁷⁷

An Internet alternative to IWIN, packaged for ease of use for the less weather-conscious surfer, the National Weather Service Home Page is located at <http://www.weather.gov/>. The same reliability disclaimers apply as with IWIN.

- **NOAA Weather Wire Service (NWWS)**²⁷⁸

Disseminated via Internet as well as C-band and KU-band satellite links, NWWS is offered as a highly reliable and timely warning delivery system, via commercial arrangement. This service requires a yearly subscription fee of \$630 payable to a private vendor (DynCorp). Users requiring maximum reliability must opt for the satellite option, with equipment costs in excess of \$8,000.²⁷⁹ NWWS is therefore primarily targeted to government users and mass news disseminators.²⁸⁰

²⁷⁶ Ibid.

²⁷⁷ National Weather Service. "National Oceanic and Atmospheric Administration: National Weather Service." 14 Nov. 2002. 17 Nov. 2002 <<http://www.weather.gov/>>.

²⁷⁸ National Weather Service. "NOAA Weather Wire Service." 6 May 2002. 17 Nov. 2002 <<http://205.156.54.206/nwws/index.html>>.

²⁷⁹ DynCorp. "DynCorp Systems & Solutions: Weather Wire 2000 Options." 17 Nov. 2002 <<http://dynis.is.dyncorp.com/contracts/nwws/options.html>>.

²⁸⁰ National Weather Service. "NOAA Weather Wire Service." Ibid.

- **NOAA Weather Radio (NWR)**

NOAA Weather Radio is the most reliable means available to the lay public of accessing local weather information directly from the National Weather Service. Its low initial investment cost, which need not exceed \$50, and its distinctive silent-standby alarm capability, distinguish NOAA Weather Radio as a uniquely capable and user-friendly government warning-dissemination service.