



# disaster preparedness report

U.S. DEPARTMENT OF COMMERCE  
National Oceanic and  
Atmospheric Administration  
National Weather Service  
Warnings Coordination Staff, Wx5  
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Silver Spring, Maryland 20910

JANUARY 1981

Monday, November 17, 1980, Disaster Preparedness Meteorologists from NWS field offices and Regional offices, MIC's, and the Disaster Preparedness Staff, WSH, began to assemble at the Antioch Inn, Kansas City, Missouri, for a Disaster Preparedness Conference.

Chairman, Lawrence (Bud) Shaffer, Assistant Chief, MSD, CR, heaved a sigh of relief Tuesday morning when all 45 attendees converged on the Federal Building. Allen Pearson, Director, Central Region, opened the first session and later discussed "Storm Data/SELS Verification".



Attendees, Disaster Preparedness Conference - First Row, L to R

Karl Silverman DPM-Bismark	Charles Stwertnick DPM-Chicago	Jim Lebda Milwaukee	Charna Lester Writer/Editor Disaster Pre- paredness	Burt Goldenberg Chief, MSD, Anchorage
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Robert L. Carnahan, Chief, Weather and Flood Warnings Coordination Staff, gave an overview of the Disaster Preparedness Program and discussed the new Memo of Understanding the NWS now has with FEMA (Federal Emergency Management Agency).

Items comprising the Agenda were well received. Most interesting was a section conducted by Brian Peters, DPM, Memphis, and Larry Mooney, Southern Region DPM. They explained many facets of how the Ham Radio operators work with NWS. A lively discussion followed concerning recruitment and training of volunteer observers.

One of the bottlenecks in emergency procedures is the difficulty in getting residents to react appropriately in an area experiencing severe weather. The sociological reasoning for this apathy was presented by Jim Campbell, WSH Warnings Branch.

The need for close cooperation with the media and NWS was the subject of a discussion on "Preparedness and Warning Operations." Panelists were Phil Sheidler, MIC, Topeka; Mark Russell, TV weathercaster, Little Rock; Chuck Seel, former radio broadcaster, Des Moines; and Don Rectenwald, Civil Defense Director, Saline County, Kansas. Shaffer presided as moderator.



Phil Sheidler  
MIC-Topeka

Mark Russell  
Weathercaster-  
Channel 7-TV  
Little Rock

Chuck Seel  
Radio-Des  
Moines

Don Rectenwald  
Chief, Saline  
County, Kansas,  
Civil Defense

Standing: Lawrence Shaffer  
Assistant Chief, MSD, Central Region

Two NWS Training Center instructors participated in the meeting. Jack Hollis presented a proposal for a weather-related training course for school teachers. Glenn Audsley's topic was Flash Flood Preparedness.

Bill McKee, Executive Officer, Eastern Region, introduced Lynn Maximuk, DPM, Cleveland, whose topic "Statewide Drills" elicited a great deal of enthusiasm. Maximuk has been recognized by the State of Ohio for his endeavors in making Ohio's Tornado Preparedness Week outstanding among the 23 States now participating annually. He encouraged others to participate in training law enforcement groups and others to recognize and report severe weather. Their input to weather service offices during inclement weather is beneficial and their efforts have undoubtedly saved lives.

Les Lemmon, NSSFC, conducted an interesting session on the assessment of tornado damage. Carnahan succeeded Lemon and explained the ramifications of the Flash Flood Initiative.

Charna Lester, Writer/Editor, introduced new Disaster Preparedness audio-visuals and pamphlets which will be used in training volunteer groups. She also showed mock-ups of panel designs which will be used for displays at boat shows and for other NWS programs.

Dick Wood, Program Leader, DP, discussed the current DP Program and forecast future program implementation.

Richard Hutcheon, Public Service Meteorologist, WR, gave an overview of Disaster Surveys. He reviewed team makeup of NWS, NOAA, and private sector meteorologists.

Two sessions were entitled "What's New?" The first session, chaired by Burt Goldenburg, Chief, MSD-Anchorage, and the other by Bill McKee, allowed an informal exchange of happenings in the various weather service offices.

Of the many items discussed, two seemed to elicit the most concern. The first related to whether or not windows should be opened prior to the impact of a tornado. When seconds count, the householder should seek shelter. There is enough natural ventilation in a home to equalize pressure. Standing in front of a window during strong wind activity might mean being struck by broken glass or other flying debris. The second item concerned whether or not NWS should adopt uniform severe weather symbols for use on television screens during severe weather. This would help both the hearing impaired and the growing non-English-speaking populace.

Weather service offices have TV stations cooperating in using these visual weather symbols. They report that local residents are enthusiastic about this long-needed innovation.

Your Editor concluded from the input during the meeting that postal couriers are not the only ones who work in rain, sleet, and snow to keep appointed rounds. NWS personnel contribute so much in the interest of public safety. Their never-ending enthusiasm generates the same in others.

NWS employees have made the NOAA News recently. MIC Phyllis Polland, Pensacola, received a Silver Medal for her outstanding work during Hurricane Frederic.

George M. Kush, San Antonio, was presented his medal for outstanding management of the hydrologic program implemented in south Texas.

Gold Medals were received by Ray Barnes, MIC-Mobile, for his dedication to the development of an effective community preparedness plan. His community preparedness plans saved many lives when hurricanes struck the coast during 1979.

Robert J. C. Burnash, HIC-Sacramento River Forecast Center, was awarded a Gold Medal to reflect a decade of innovative developments in both flood and flash-flood forecasting.

At the annual NOAA awards ceremony held December 5, 1980, 24 offices received unit citations for commendable performances and outstanding contributions during the past year.

. NWS - WSO Pensacola - For its exemplary performance in the face of the severe threat of Hurricane Frederic in September 1979.

. NWS - WSO Mobile - For its exemplary performance in the face of the severe threat of Hurricane Frederic in September 1979.

. NWS - WSO Evansville - For its superb performance during the disastrous July 26 flash flooding in southern Indiana.

. NWS - WSO Klamath Falls - For its general weather services and specialized agricultural services to southcentral Oregon and northeastern California.

. NWS - WSO Bethel - For its outstanding performance and accomplishments in observations, which have given it an excellent rating in the Alaska region.

. NWS - Pacific Region, Regional Substation Management Section - For outstanding contribution and achievement in three NOAA/NWS programs.

. NWS - Jacksonville Center, Weather Service Unit - For outstanding support provided to the FAA's Jacksonville, Florida, Air Route Traffic Control Center during 1978 and 1979.

OIC - Dave Horner, Larry Blanchard, Dave Larm, and Del Porter were presented awards for their performance during the May 12th tornado at Sedalia, Missouri. It was the second time in three years the Columbia, Missouri, NWS staff has issued timely tornado warnings for the Sedalia area. The warnings have saved lives and reduced the number of people injured in those tornadoes.



TORNADO AWARENESS WEEK PREPARATIONS are already underway in many States, MIC-Ray Waldman, Chicago, reports. Plans are progressing for statewide drills to be held in March. The target drill date and time are tentatively set for March 3. WSFO-CHI is working with all WSO's in the State as well as adjoining States. Perry Baker-WSFO, Des Moines and MIC-John Graff, Minneapolis, are targeting a drill date of April 2, falling during the Tornado Awareness Week March 29-April 4, with WSFO-Milwaukee MIC-Elroy Jagler, MIC-Omaha-Jim Zoller, and Mannie Rollin-MIC-Sioux City. Tornado drills are scheduled for March 25 in Kansas City, Columbia, Monett, and Springfield, Missouri.

ALTHOUGH THE ELGIN, NORTH DAKOTA, TORNADO occurred on July 4, 1978, it's not been forgotten. North Dakota's Governor Link recently cited WSFO-Bismark's Community Preparedness program as an outstanding example of providing excellent service to its citizens. Don Stoltz-MIC-Bismark, was presiding at the meeting where Governor Link gave his speech.

THANKS ALSO GO TO KARL SILVERMAN-DPM-Bismark, for his extensive work with health administrators. In a recent speech, Silverman recommended moving patients away from window areas. The San Haven State Hospital Administrator implemented this new idea and gave thanks that he had heeded Silverman's advice when severe weather occurred a few weeks later. He attributes patient safety to Silverman's suggestion. In addition to speechmaking, Silverman worked with State officials to produce a new publication on "Tornado Formation and Resident Safety." This comprehensive book has been widely distributed and has received favorable comment.

EVANSVILLE, INDIANA, experiences all weather extremes. The County Emergency Management Team is working with Norman Carroll-MIC, in the promotion of their Winter Awareness Week. An excellent program including films and slide presentations kicked off the planning session. Carroll also worked with MARS (Military Affiliate Radio System) in training severe weather spotters. The enthusiasm expressed by the Henderson Amateur Radio Club has sparked increased spotter recruitment.

Although Hurricane Season is over, MIC-Jay Hull-WSO; Cape Hatteras, is working with the State of North Carolina to promote awareness campaigns for the next hurricane season.

THE DPM POSITION in Boston has been moved to the RFC-Hartford. This means the RFC in Harrisburg will have another DPM position. These two moves are being made to expand the role of the DPM in multi-State/multi-area management zones. The roles will be the same; however, responsibilities will now include coordination of flash flood activities geared toward community preparedness.

DAVE CURTIS, Flash Flood Hydrologist, Northeast River Forecast Center, and Albert Kachic, ER, Flash Flood Hydrologist, oriented the Flood Insurance and Mitigation Division of FEMA on NWS Flood and Flash Flood Programs. The seminar was for Region II FEMA.

WSFO-MEMPHIS MIC-NORM PROSSER AND STAFF, worked with the promoters of the Mid-South Regional Fair and set up an interesting sales pitch for NWS. The telephone company furnished a teletype on a NOAA Weather Wire circuit. The NWS and the NWR displays were used as well as a special version of "Day of the Killer Tornadoes." A new tape produced by Memphis, in conjunction with one of the television stations, shows the Memphis-WSFO in operation.

Eleven staff members spent more than 200 hours preparing for and working the show. Attendees came from at least 6 surrounding States.

CHARLES STWERTNICK, DPM-CHICAGO, has been working closely with the Red Cross Mid-America Chapter since their recent establishment of a licensed emergency communications network. Mr. Stwertnick feels that their support in recruiting volunteer spotters for the densely populated Chicago area will be helpful during Chicago's inevitable winter weather. Coordination with this type of agency would not infringe or compromise emergency networks established to help pass traffic or evacuate stranded persons.

WINTER AWARENESS WEEK. MIC-John Purvis and Jerry Harrison, DPM, WSFO-Columbia, South Carolina, worked with the South Carolina Emergency Preparedness Division to plan a Winter Awareness Week. Lynn Maximuk, DPM-Cleveland, is also working on a Statewide Winter Weather Week.

A NEW SOURCE FOR DISASTER INFORMATION specifically for state and local officials: C. B. Rubin, Academy for Contemporary Problems, 400 N. Capitol Street, N. W., Suite 390, Washington, D. C. 20001. Telephone: (202) 638-1445. This agency, funded by FEMA, "... supplies information on the effects of natural hazards on people and structures..."

THE SAN FRANCISCO WSFO is working with FEMA to relay earthquake advisories and emergency information on the NWR and other communications systems. They are contemplating moving mobile weather stations into affected areas to provide emergency river and flood warning services.

CONGRATULATIONS ARE IN ORDER FOR SAUL PRICE, HONOLULU ON HIS NEW POSITION AT PRH. As former DPM, Saul's efforts in getting Statewide publicity for NWR by promoting car cards advertising this 24-hour weather service caused quite a stir in Hawaii. His continued promotion of public safety awareness is appreciated.

CHARLES SMITH-HIC, Northeast River Forecast Center, has made an interesting proposal which would help improve the RFC support of the flash flood program. Mr. Smith states that more than 3000 locations in New England and New York State are flood prone, and subject to flash floods. He is working toward a coordinated team effort by placing focal points to report to the Flash Flood Hydrologist. This would mean continual review of river conditions and hopefully ample warning lead time to reduce property loss and injury from flooding.

NWR CONTINUES TO GROW. The Pennsylvania Highway Department now has 37 rest stops equipped with NWR operating on a 24-hour-a-day basis. All 67 counties in Pennsylvania have NWR's in their maintenance departments and the new Pennsylvania official State highway maps will inform readers that all rest stops have weather information available.

NWR also is being installed in Mississippi. To date there are 11 in tourist centers and rest stops along Interstate 20. Kentucky's 28 NWR's range all along their highways. Michigan plans to install 72 units and Montana is progressing in its plans to introduce 72 units along winter-snow highways. With continued NWR installations such as these the public will become increasingly aware of a simple safety feature which could save their lives.

THE STATE OF KANSAS, usually a forerunner in tornado safety programs, again has produced a first. They have prepared a Tornado Awareness poster which they place in all rest stops. (See Attachment).<sup>1</sup> The next publication of this fine poster will include all locations and frequencies of NWR.

PRIOR TO THE SEVERE WEATHER SEASON IN YOUR AREAS we suggest that you prepare a letter to media and local officials in your area, reminding them that the "next severe weather season" is approaching. Suggest that they review spotter networks, public awareness response programs, safety rules, and other related severe weather preparations. NWR is a natural for putting on messages of this type. During good weather, insertion of a tape containing safety rules or a simple message for spotter recruiting does produce results.

LEONARD PETERSON, OIC, DULUTH, prepares separate letters which are sent to civil defense directors, radio and television stations, and newspapers asking for assistance in spreading the word prior to tornado and winter seasons. These public awareness campaigns are well received by those contacted. Mr. Peterson reports that these simple reminders are picked up and used.

THE GOODLAND KANSAS NEWSPAPER RECENTLY published an article describing a fictitious tornado hitting the area. It included what "did" happen and what might have been done to prevent such widespread loss and injury. The article included safety rules should such an event happen "again." Good thinking on the part of newspaper personnel in such a tornado-prone area.

THE CINCINNATI ENQUIRER recently ran a lengthy article explaining the use of the newly installed Ham radio in the WSO. MIC-John Robinson is quoted, "Now we can collect information live from Ham operators who are right where the weather changes are taking place." The antenna was donated by the Greater Cincinnati Amateur Radio Association. The radio was purchased by General Electric employee's Evendale Amateur Radio Society (EARS). They work together with the NWS network Weather Amateur Radio Net (WARN). These large groups of volunteer spotters are producing effective reports.

LIGHTNING IS A PROBLEM especially for those who golf. Jack Schnable-MIC, WSO, Jacksonville, attended a meeting of the National Golf Foundation in Las Vegas. Approximately 300 golf supply company representatives attended the meeting having an agenda item on the topic of lightning safety.

WSFO-SAN ANTONIO staff has been assisting the Texas Parks and Wildlife Department in producing specific flash flood information on the back of NOAA Publication "Killer From the Hills." These pamphlets will be placed in parks having flash flood potential.

MEMORIAL HOSPITAL, COLORADO SPRINGS, COLORADO, placed an article prepared by OIC-WSO, Colorado Springs, Herb Moore entitled, 'An Alert About Dangerous Weather.' This concise piece is excellent. It covers the dos and don'ts for most severe weather conditions. (See Attachment).<sup>2</sup>

ELROY JAGLER-MIC, MILWAUKEE, recently met with Milwaukee City Division of Emergency Government officials to help revise current school tornado plans. Mr. Jagler made specific recommendations for changes in the present system. Fortunately these plans were heeded and immediately implemented, for 3 days later a tornado warning was issued and all 180 Milwaukee county schools followed the new recommendations. Results were ~~some~~ some damage, but no injury.

REPORTS FROM ALL REGIONS and, in particular, tornado season in the Central Region, reflect the intensive work NWS personnel do in public awareness training. We wish we could mention each of you and your special activities, but since this is not possible, please be assured we are aware of the many services you perform.

WSO STAFF-LOS ANGELES played an important role during the recent lengthy southern California fires. Work during such hazardous conditions meant no Thanksgiving turkeys for the mobile weather forecasting unit team of meteorologists Sylvia Graff, Larry Greiss and J. Henderson. Sylvia Graff has been working with the American Automobile Association to produce safety information for automobile drivers. Graff spoke at Kaiser Hospital on the subject of Disaster Preparedness. Her talk was so well received that the hospital now displays NWS DP materials for patients and visitors.

MET TECHS LEONARD CLAVERT AND JOHN HOEHN, SOUTH BEND, are credited with issuing a tornado warning July 5, before the funnel touchdown. They received letters commending them for "exemplary performance of duties under severe weather conditions." Their quick action saved lives and prevented injury. Death and injury toll-0. Dollar damage-in the millions.

JOHN CURRAN-MIC, INDIANAPOLIS, reports that the Blossomland Ham Operators Club is now a fully trained spotter network. This gives 60 more observers reports to forecasters at IND.

IOWA LAW ENFORCEMENT ACADEMY and IOWA POLICE ACADEMY now have continual severe weather training courses, reports Carl Weinbrecht, former DPM-Des Moines. Mr. Weinbrecht avidly relates that the State of Iowa, Department of Safety Consultants for the Department of Public Instruction, has recognized the need for safety drills in schools and now has 100% participation Statewide.

PHIL SHEIDLER-MIC, TOPEKA, forwarded a copy of the Kansas Division of Emergency Preparedness Newsletter containing a lengthy article on the importance of emergency preparedness. It cited the close cooperation between their group and WSFO-Wichita and WSFO-Topeka.

MAYOR COLEMAN A. YOUNG, DETROIT, recently gave the Detroit Police Department official permission to activate the Air Raid Warning sirens should a tornado warning or actual sighting threaten that city.

OIC-MORGAN BALLARD, FORT WAYNE, and staff members have been busy promoting NWR in the area. He appeared on 3 television shows and 2 radio programs. His staff also has helped give preparedness training to CD and law enforcement groups.



WHEN WARM, MOIST AIR COLLIDES WITH COLD AIR MASSES, **TORNADOES** CAN OCCUR IN ANY STATE IN THE NATION.

IN **KANSAS** TORNADOES ARE MOST PREVALENT IN **APRIL, MAY** AND **JUNE**

WHEN WEATHER CONDITIONS WARRANT, THE NATIONAL WEATHER SERVICE ISSUES A **TORNADO WATCH**: THIS MEANS YOU SHOULD...  
BE ALERT TO ALL WEATHER POSSIBILITIES...  
STAY TUNED TO A LOCAL RADIO STATION.

WHEN A TORNADO IS SIGHTED OR INDICATED ON RADAR, THE NATIONAL WEATHER SERVICE ISSUES A **TORNADO WARNING**

SHOULD YOU SIGHT A TORNADO - MOVE AT RIGHT ANGLES TO THE TORNADO'S PATH

IF THERE IS NOT TIME TO ESCAPE

...LIE FLAT IN THE HIGHWAY DITCH OR RAVINE

...GET IN A CULVERT OR UNDER A BRIDGE

...SHIELD YOUR HEAD WITH YOUR ARMS

**DO NOT STAY IN YOUR VEHICLE**

**TORNADO  
AWARENESS**



PREPARED BY: KANSAS DEPARTMENT OF TRANSPORTATION

MEMORIAL HOSPITAL  
Colorado Springs, Colorado

by Herb Moore, OIC-WSO-Colorado Springs

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## An Alert About Dangerous Weather

The threat of unusually bad weather, such as tornadoes, can strike almost without notice. When a tornado strikes, your immediate action can save your life.

In an effort to alert and prepare Memorial's staff about dangerous weather, the Safety Committee conducted several sessions featuring Herb Moore, head of the National Weather Service in this area.

In regards to tornadoes, stay away from windows, doors and outside walls. Always protect your head.

In the hospital, go to pre-designated shelter areas. Interior hallways on the lowest floor are usually best.

Listen to radio, television, or NOAA Weather Radio for the latest National Weather Service bulletins. A tornado watch means tornadoes and severe thunderstorms are possible. A tornado warning means tornado detected; take shelter immediately.

When it comes to lightning, many people apparently "killed" can be revived if quick action is taken. When a group is affected, the apparently dead should be treated first; those unconscious but breathing will probably recover spontaneously.

First aid should be rendered to those not breathing within four to six minutes or less to prevent irrevocable damage to the brain. Mouth-to-mouth resuscitation should be administered once every five seconds to adults and once every three seconds to infants and small children.

If the victim is not breathing and has no pulse, cardiopulmonary resuscitation is necessary. This is a combination of mouth-to-mouth and external cardiac compression. It should be administered by people with the proper training.

Medical attention also should be given to victims who appear only temporarily stunned or otherwise unhurt, since there may be hidden effects.

In mountainous regions, flash floods can strike with little or no warning. Distant rain may be channeled into gullies and ravines, turning a quiet streamside campsite into a rampaging torrent in minutes.

Keep alert for signs of rain (thunder and lightning), both where you are and upstream. Know where high ground is and how to get there quickly.

Don't try to outrace a flood on foot. If you see or hear it coming move to higher ground immediately.

Don't try to drive through flooded areas. Abandon your vehicle if water begins to rise over the road, and head for higher ground quickly.

A weather report which warns of flash flood watch means it is possible that rains will cause flash flooding in the specified area. A flash flood warning means flash flooding is occurring or is imminent in the specified area. Move to safe ground immediately.

Dangerous weather in this area is a fact of life. Be prepared.

DISASTER PREPAREDNESS ROSTER

JANUARY 1981

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All numbers listed are FTS unless otherwise indicated  
\*Dial Washington FTS Operator to get overseas FTS operator (809-791-3490)

