

# disaster preparedness

thogen

8060 13th Street Silver Spring, MD 20910 ATTN: W/OM11x1 - Dick Wood (301) 427-8090

# National Weather Service

September 1984

What's Happening in Disaster Preparedness

The new 24-minute Tornado Film "Terrible Tuesday" is currently being duplicated and should be arriving at all Eastern, Central, and Southern Region stations in October. We will initially send one copy of the film and videotape to each WSFO and one copy of the film to each WSO in these three regions. Twelve copies of the film and five copies of the videotape will be sent to the Western Region Headquarters for distribution in that region. One copy of the film and videotape will be sent to the Pacific and Alaska Regions. More copies of the film will be made available at a later date.

The new 28-minute film "Hurricane" is in its final stage and should also be available for distribution during October or November.

A new "Heat" foldout brochure (similar in size to NOAA Weather Radio NOAA/PA 76015) is in preparation and is scheduled for a spring 1985 release.

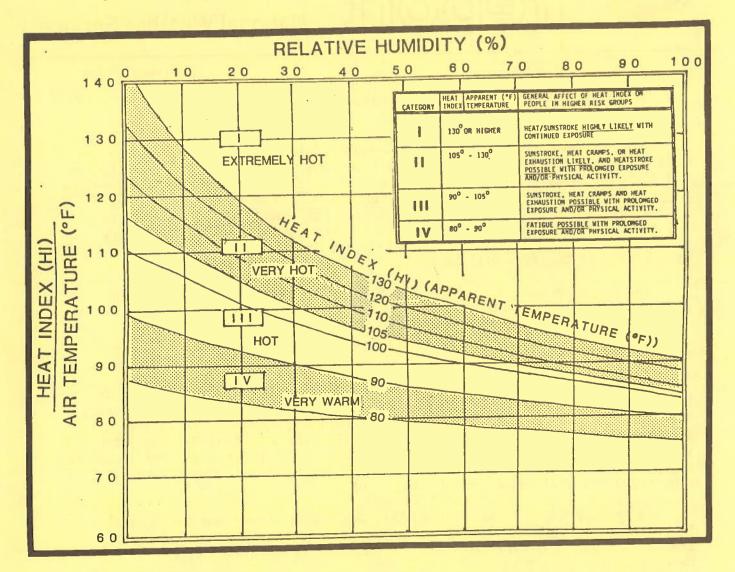
To cut down on paperwork for ordering publications and brochures, each Weather Service field office can order DP materials from NOAA/PA 82003 direct from NLSC, Kansas City. Please use NOAA Form 24-12, Request for Publication. If you need more than 500 copies, you may call Dick Wood (FTS 427-8090) for a verbal authorization, and no formal correspondence is necessary. The procedure outlined in Item 3.3.1 of WSOM C-49, Disaster Preparedness Program, is superseded and will be corrected with an OML.

We are currently working with FEMA, Geological Survey and the Corps of Engineers to possibly produce a Flash Flood/Flood Film which will focus on the Flash Flood/Floods in the Rocky Mountains in general and Utah in particular the past 2 years.

NOAA/NWS announced that a new Heat Index (HI) for alerting local officials and the public to the health hazards of excessive heat and humidity during heat waves would be initiated. The HI is a measure of the contribution humidity makes with high temperatures to reduce the human body's ability to cool itself. The HI is the temperature (in degrees) the body senses, based on normal humidity levels. For example, if the actual temperature is 100 degrees with a 40% RH, the effect of these conditions on the body would be the same as 110 degrees.

Threshold Heat Index values are now being determined by each WSFO MIC/AM. It is suggested that for most areas of the country increased emphasis should begin when a maximum HI of 105 or greater and/or a nighttime minimum of 80 or greater is expected to persist for at least 48 hours. Excessive heat/humidity conditions will be highlighted in local/zone forecasts, Special Weather Statements, the release of appropriate safety rules, and if necessary, in Civil Emergency Messages (CEM) coordinated with state health authorities.

Please remember, our terminology is HEAT INDEX.  $\underline{\text{DO NOT}}$  use the terms "Apparent Temperature" or "Heat Stress" in our public releases on how heat and humidity affects people.



The following results of a survey appeared in the June 1984 issue of the magazine "Hazard Monthly:"

- . Few communities actually seem to be properly prepared for a crisis or disaster.
- . Local governments report over \$16 billion in property losses,
- 2,490 deaths, and 9,161 injuries from disasters since 1970.
- . Most local governments (83% of cities and 90% of counties) have a formal emergency management plan.
- . Only 58% of cities and 72% of counties actually test their plans annually.
- . Communications and coordination problems were reported as the major difficulty during the last disaster.
- . Only 81% of cities and 73% of counties consider their technology to be sufficient when responding to emergencies.

. City and county managers have, in recent years, become more aware of the need to prepare adequately for emergencies.

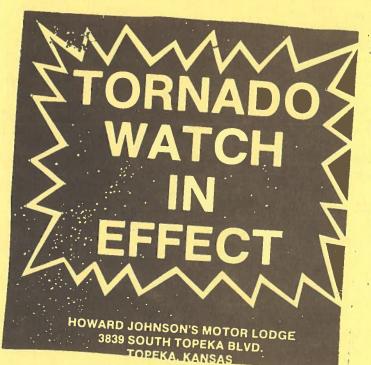
. The threat of a major disaster striking an American city today is greater than ever before in our history.

. Cities and counties with professional administrators had a noticeably higher rate of response than did those with other forms of

o <u>Warning Response</u> The importance of early warning and advance preparedness was well illustrated in a Georgia newspaper article which described a community's response to the May 3rd storms. A hospital administrator stated, "Once the hospital received notice of tornado warnings from the National Weather Service, beds of those patients who could be moved were immediately taken into the halls." Examples of school children taking cover in hallways and bus passengers fleeing to ditches were documented in the

Phil Snideler, AM/MIC WSFO, Topeka, reports that the local Howard Johnson's Motor Lodge coordinated with their office a year or so ago to set up a preparedness plan. While the plan is not totally adequate, Howard Johnson's should be commended for an effort which most motels and hotels ignore. According to local officials, the plan has been well received by travelers and is to be adopted nationwide by Howard Johnson's Motor Lodge. When a tornado watch is in effect, one of the 5" by 5" notices is provided to guests as they check in or is handcarried to their rooms. The management indicated that they have frequent requests from guests for these cards to be kept as souvenirs.

Certainly, more could be done, but this at least calls the attention of guests to the potential for severe weather and directs them to broadcasts where current information is available, and suggests a plan of action. The plan of action leaves a lot to be desired, but here again, better than nothing. Phil had suggested they get guests off of the second floor, but they elected to suggest bathrooms where they were because nothing better



This Lodge is located in the Southern part of Topeka. Topeka is located in the center of Shawnee County.

### Phase 1: Tornado Watch

Tornados are possible in and close to the watch area; atmospheric conditions are right for formation of a tornado. Persons in affected counties for threatening weather conditions should listen for later statements and possible warnings.

Phase 2: Tornado Warning (Take Cover Alert) Tornado has been sighted.

We suggest bathroom area of your room with door closed.

For weather information—local television with cable channels 7 & 12, which are channels 27 & 13.

HOWARD JOHNSON'S MOTOR LODGE 3839 SOUTH TOPEKA BLVD. TOPEKA, KANSAS

- O Davis County (Utah) Emergency Services for Community Emergency Videotape Project focusing on earthquakes, floods, and other hazards facing the region.
- o Valley Women's Club of San Lorenzo Valley, California, for Neighborhood Self-Sufficiency Emergency Information Project in an area where earthquakes, fires, and floods are a constant threat. The proposed project grew out of experiences with disastrous storms and flooding in the area in 1982.
- o Government of Guam for Multi-Hazard Public Information Campaign for Youths 10-18 addressing a range of hazards, including typhoons, tsunamis, flooding, storm surge, landslides, lightning, tornadoes, and windstorms.
- O City of Portland, Oregon, for Portland Regional Emergency Consortium Information Packet -- for Non-English Speaking Audiences to develop a vivid and graphic system of universal symbols, signs, and drawings that clearly convey and depict emergency education and information with a minimum of text for weather-related and man-made hazards.
- o Research Alternatives, Center for Application of Science and Technology to Emergency Management, Rockville, Maryland, for Saving Lives: The Emergency Management Computer Game.

One component of the game will be designed to increase awareness of a number of hazards: tornado, hurricane, flood, winter storm, lightning, earthquake, flash flood, and slow-building flood.

FEMA invites NWS offices support and active involvement in Challenge Grant Projects through participation in coalitions or by offering expertise in an advisory role. For further information contact Stacy Gerard and Chris Rossomando, Office of Public Affairs, FEMA, 500 C Street S.W., Washington, D. C., 20472, phone (202) 287-0300. They will be happy to put you in contact with the project managers.

	DISASTER PREPA	REDNESS ROSTER	SEPTEMBER 19
NWS HEADQUARTERS STAFF	FTS - 427-8090	CENTRAL REGION	FIS
Richard I. Coleman, W/OM11	Chief, Severe Weather Bra	nch Paul Dailey	Regional (WPM) 758-323
Richard A. Wood, W/OM11x1	Program Leader, Disaster	Glenn Audsley	Regional Hydrologist 758-322
	Preparedness	Robert Somrek	Chicago (Focal) 353-468
Lorraine V. Brown, W/OM11x1	Clerk, Disaster Preparedness	Vacant	Ann Arbor (Focal) 378-222 Des Moines (Focal) 862-449
	rre.	Brian Dowd William Gery	Des Moines (Focal) 862-449 Indianapolis (Focal) 331-403
EASTERN REGION	FTS	Glenn Austin	Louisville (Focal) 352-521
	Regional (WPM) 649-5458		St. Louis (Focal) 279-701
Eugene Kilgore Albert Kachic	Reg. Hydrologist 649-5464		Sioux Falls (Focal) 782-424
Vacant	Cleveland (WPM) 942-4949		Topeka (Focal) 752-263
Mary Jo Parker	Columbia, SC (WPM) 677-5501		Denver (Focal) 327-361
Vacant	Philadelphia (WPM) 590-2250		Chausana /Facall 329 227
Vacant	Parkersburg (WPM) 923-1344		Milwaukee (Focal) 362-324
Rich Schwerdt	Washington, D.C. 763-8275		Minneapolis (Focal) 725-340
Ralph Izzo	New York (Focal) 662-5340		Bismarck (Focal) 783-422
Tim Scrom	Albany (Focal) 562-6580	Gary Wiese	Omaha (Focal) 864-420
Tom McGuire	Boston (Focal) 223-1354		
Tom Dunham	Buffalo (Focal) 437-4800		
Tom Bietel	Philadelphia (Focal) 597-084!		
Theresa Rossi	Pittsburgh (Focal) 722-2883	Mark Fair	Regional (WPM) 588-400
Dave Sisk	Pittsburgh (Focal) 722-288		Deputy Reg. Hydrologist 588-513
Joe Ronco	Portland (Focal) 833-355		Boise (Focal) 554-986
Laurence Lee	Raleigh (Focal) 672-443		Los Angeles (Focal) 793-721 Phoenix (Focal) 261-350
		Steve Sipple	
SOUTHERN REGION		Don Northrop	Portland (Focal) 423-434 Reno (Focal) 470-571
	a 1 1 (1mu) and only	Thomas Cylke Bill Alder	
Larry Mooney	Regional (WPM) 334-281		Salt Lake City (Focal) 588-513 San Francisco (Focal) 463-776
Vacant	Atlanta (WPM) 246-7580 Birmingham (WPM) 229-083		Seattle (Focal) 446-608
Jay Shelley David Martin	Fort Worth (WPM) 229-083		Great Falls (Focal) 585-131
Ron Stagno	Houston (WPM) 526-583		Great rails (rocal) 505-131
Dennis Decker	Jackson (WPM) 490-4639		
Nelson DeVilliers	Little Rock (WPM) 740-533		
Alfonso Castaneda	Lubbock (WPM) 738-736		
Brian Peters	Memphis (WPM) 222-383		Regional (WPM) 8-907-271-512
Don DeVore	Oklahoma City (WPM) 749-415		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Bill Hare	San Antonio (WPM) 730-502		
Francisco Torres-Cordero	San Juan (WPM) 8-809-753-489		
Ralph Pike	Albuquerque (Focal) 474-217		
Jim Belville	New Orleans (Focal) 682-689		Regional (WPM) 8-808-546-285
Larry Lahiff	Miami (Focal) 350-554		

# Weather Spotters Fill the Gap

If a tornado were bearing down on your town, would you be able to mobilize a disciplined Weather Alert Net? In the St. Louis area, WARN lives up to its name.

By Michael G. Redman\*

BØHSI from WCØAAF ... report from spotter 18016 of a tornado on the ground north of his location ..." That's a typical message heard on the amateur bands during severe weather in the St. Louis area. Trained weather spotters, many of them hams, are assisting the National Weather Service (NWS) and the St. Louis County Office of Civil Preparedness in providing and relaying vital weather information.

The St. Louis County plan is called WARN, for Weather Alert Radio Net. WARN is operated by the St. Louis County ARES/RACES organization under the leadership of KBØEA (ARRL District Emergency Coordinator), AGØG (ARRL Emergency Coordinator for St. Louis County) and NØBKH (ARRL Emergency Coordinator for the City of St. Louis), with the assistance of WBØPDK and KØDCQ.

Each prospective weather spotter attends one of several three-hour training sessions held each March. Spotters are required to be retrained every two years. Taught by a meteorologist from the NWS office in St. Peters, Missouri, the sessions cover what to report, where to report and how to report. The meteorologist also teaches spotters how to identify tornadoes and tornadoproducing storms through movies and slides of actual storms. There is no charge for any of the training.

An operating committee of five Amateur Radio operators was selected to oversee their portion of the WARN system. They form a pool from which hams are picked for duty at WCØAAF, the Emergency Operations Center (EOC). The primary liaison between the County and the Amateur Radio club carries a pager on the

A Message from the SEC

The accompanying article describes an example of high-quality ARES service and good inferaction between Amateur Radio operators and governmental agencies and personnel. The WARN program covers the Greater St. Louis ARRL District, which is comprised of three counties and the City of St. Louis.

The Missouri Section is in a growth period, now having 10 Districts, each with a District Emergency Coordinator, and ECs as locally appropriate. There is a potential of 35 Districts in Missouri. Some areas now have emergency-communication programs, but in most cases they could easily benefit from access to the statewide program, better contact with local and state emergency management people, and ARRL

guidance, not to mention the needs sud-

deniv presented by a widespread disaster.

Local Amateur Radio ciubs of Missouri, or individuals where there are no clubs, are invited to contact the ARRL Section Manager (Ben Smith, K&PCK, RFD #1, Prairie Home, MO 65068) or the Section Emergency Coordinator (Don Blenden, WB&KUW, 1506 North Circle, Columbia, MO 65201) for information and advice on how to establish (or improve) an effective ARRL-sponsored ARES program.

- WBOKUW

County's paging network so that he can be reached at a moment's notice. Members of this committee must reside in St. Louis County and successfully pass a background investigation. The program is coordinated by the Communications Specialist, St. Louis County Police/Civil Preparedness.

Activation of WARN occurs when a tornado watch is issued or upon NWS request if potentially dangerous thunderstorms are expected. The Communications Specialist and Civil Preparedness Duty Officer report to the EOC (if not already on duty there). The Amateur Radio liaison is contacted to direct at least two amateurs to the EOC. Upon arrival, one operator is assigned to the St. Louis County Net (WØKUJ/R, 34/94), while the other ham relays information to amateurs at the NWS office via WBØHSI/R (07/67), manned by the St. Charles County Amateur Radio Club. At times, a third unit is utilized on 3963 kHz to contact amateurs elsewhere in Missouri (the Missouri Weather Net). A Missouri Weather Wire teleprinter is also available at the EOC.

If a tornado warning is issued, St. Louis County activates its 206 outdoor warning sirens (the largest such system in the country). The radio-controlled sirens can be activated from either the EOC or the County Police Hq. Most of the sirens are electronic and are capable of public address if desired. Specially designed lighted maps at both activation points show each siren location, and give visual indication of siren use and function.

NWS personnel have praised spotters for their activity reports in areas where weather radar is unable to accurately indicate what a storm is doing. Often, WARN members in a particular area assist NWS personnel in evaluating thunderstorm data — a key element in the decision to issue weather warnings. In many instances, spotters identify and track tornadoes never seen on radar. And, of course, all spotting is done by trained, concerned citizens — free of charge.

An added tool used by NWS and other agencies is the NAWAS (National Warning System). This is an open-line, "party type" telephone network designed for immediate notification in the event of nuclear attack. The NAWAS circuits receive heavy use during severe weather and provide an added means of notification. Monitoring the system provides a barometer of conditions to the west of St. Louis in addition to information received via WARN.

Each trained spotter is assigned a number, identifying the spotter's home in

<sup>\*</sup>Communications Specialist, St. Louis County Police Department, 7900 Forsyth, Clayton, MO 63105



WARN volunteer WB0PDK transmits late-breaking weather information over W0KUJ/R.



NØBKH transmits a severe-weather advisory over the Missouri Weather Net on 3963 kHz.

distance and direction from the NWS office. For example, spotter number 18016 would be 180° (south) at 16 miles. This data enables the radar operator to plot this location quickly and check it on the radar screen. No time is lost translating other forms of coded numbers or street locations into something the radar operator can quickly use.

Early each morning, the NWS radio station is monitored. The Severe Weather Outlook is broadcast if there is a chance of bad weather. If bad weather is indicated, other indicators are monitored, information from the Missouri Weather Wire is studied, and hourly condition updates are monitored. When a severe-thunderstorm watch is issued, events might unfold as follows.

#### Severe-Weather Scenario

The Communications Specialist makes contact with the Amateur Radio liaison to advise him of the situation and check on his availability. NWS is also contacted to check on the weather picture. The NAWAS line is monitored for severe weather to the west.

Each afternoon brings a flurry of activity on the NAWAS circuit. A high level of severe thunderstorms is reported in southwest and southern Missouri. Several funnel cloud observations are intercepted. Activity is still some distance from St. Louis. Conditions outside are hot and sticky, with mostly sunny skies.

Late in the afternoon, a tornado watch is issued for the entire St. Louis area. The Amateur Radio liaison is notified to report to the EOC with two additional operators. The Duty Officer for the Office of Civil Preparedness is contacted and will remain at the EOC. NWS advises that storms will enter St. Louis County in one or two hours.

The Communications Specialist then

reports to the EOC. He arrives simultaneously with the amateur operators. The Communications Specialist and the Civil Preparedness Duty Officer check radio equipment that will be used, and begin to plot the path of the storms on a large state map. The Amateur Radio liaison and his staff activate WARN and take check-ins. Available data from the Weather Wire teleprinter is selected for transmission. Amateur Radio contact is made with NWS in St. Peters. The approaching line of storms is about 45 minutes away.

Dark, ominous clouds approach the EOC from the west. The emergency generator is fired up in the event of power failure. Amateurs begin receiving highwind and hail reports from WARN spotters in counties to the southwest. This information is relayed to NWS via WBØHSI/R. Severe thunderstorm warnings are issued for counties to the southwest. The police communications office is advised of the approaching storms as extra telephone and radio positions are manned. The Civil Preparedness Director is advised of the conditions and continues to monitor the situation closely.

Reports are received of golf-ball-sized hail in the county just west of St. Louis. Severe-thunderstorm warnings are issued for St. Louis County. The amateurs continue to relay information from the network of WARN spotters. An amateur at the western edge of St. Louis County reports an ominous green sky and a rotating wall cloud.

NWS activates (via the NAWAS circuit) the Siren Warning System. Tornado warning in effect! The Radio Warning System is also activated, and key personnel are notified. Amateurs transmit the warnings as sirens sound all over the County. Radios are humming with reports of funnel clouds and severe weather.

Phones at the EOC and Police Hq. are ringing with severe-weather information. All the information is relayed to the NWS via Amateur Radio as quickly as possible.

Spotters continue to follow the funnel sightings across St. Louis County. Tornado warnings are issued for counties east of St. Louis. No damage reports or touchdown occurred, yet trained WARN spotters were able to track the storms accurately while weather radar never detected a tornado! Once the threat of further severe weather has passed, the EOC is secured and all volunteers are released. County staff personnel return to normal assignments.

#### WARN: There When It's Needed

It is indeed fortunate that most tornado watches do not result in tornadoes. Nevertheless, St. Louis County's Amateur Radio operators assist in many other ways in addition to weather spotting. For example, they provided communications backup and information on vehicular traffic movement during the heavy snowstorm of February 1982. They will work long hours voluntarily since public service is their primary motivation and concern. No one can prevent the onslaught of severe weather and tornadoes, but with a program like WARN, advance warnings will always be given and countless lives will be saved.

Michael G. Redman has served as the Communications Specialist for the St. Louis County Police Department and Office of Civil Preparedness for the past three years. He has attended state seminars on civil preparedness, and designed the Communications Van and County Emergency Operations Center communications facility — one of the best equipped in the Midwest. Redman also developed the current county Weather Spotter Program utilizing Amateur Radio volunteers, and has designed a new radio system for the County Highway Department. He is a member of APCO (the Associated Public Safety Communications Officers, Inc.) and is a past president of the 2500-member Radio Communications Monitoring Association.



#### U.S. DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL WEATHER SERVICE Silver Spring, Md. 20910

September 25, 1984

W/OM11x1:RAW

T0:

Addressees Listed Below

FROM:

W/OM11x1 - Richard A. Wood D.W.

SUBJECT:

Ordering Copies of the New Tornado and Hurricane Films and

Videotapes

Requests for the 24-minute "Terrible Tuesday" and the 28-minute "Hurricane" films and videotapes from FEMA-related agencies, such as Emergency Services, state, county, local Civil Defense groups, etc., should be referred to Ms. Stacey Gerard, FEMA Public Affairs, 500 C Street, S.W., Washington, D.C., 20472 (202-287-0318). Copies will be made available from FEMA at no cost to FEMA-related agencies.

Requests for the films and videotapes of "Terrible Tuesday" and "Hurricane" from the general public, universities, etc., should be referred to the National Audiovisual Center, General Services Administration, Washington, D.C., 20409 (301-763-1896). Cost for the "Terrible Tuesday" film will be \$245 and \$90 for the videotape. Cost for the "Hurricane" film has not been established but probably will be about the same.

The "Terrible Tuesday" film and videotape have been printed and should arrive at NWS field stations by the first week in October. We will initially send one copy of the film and videotape to each WSFO and one copy of the film to each WSO in the Eastern, Central, and Southern Regions. These three regional offices (W/ERx2, W/CR1x1, W/SR1x4) will receive six copies of the film and videotape. Twelve copies of the film and five copies of the videotape will be sent to the Western Region Headquarters for distribution in that region. One copy of the film and videotape will be sent to the Pacific and Alaska Regions. More copies of the film will be made available at a later date. Copies for FEMA-related agencies and the National Audiovisual Center will not be produced until late October or November.

ADDRESSEES:

W/ERx2

W/ER1x1

W/SR1x4

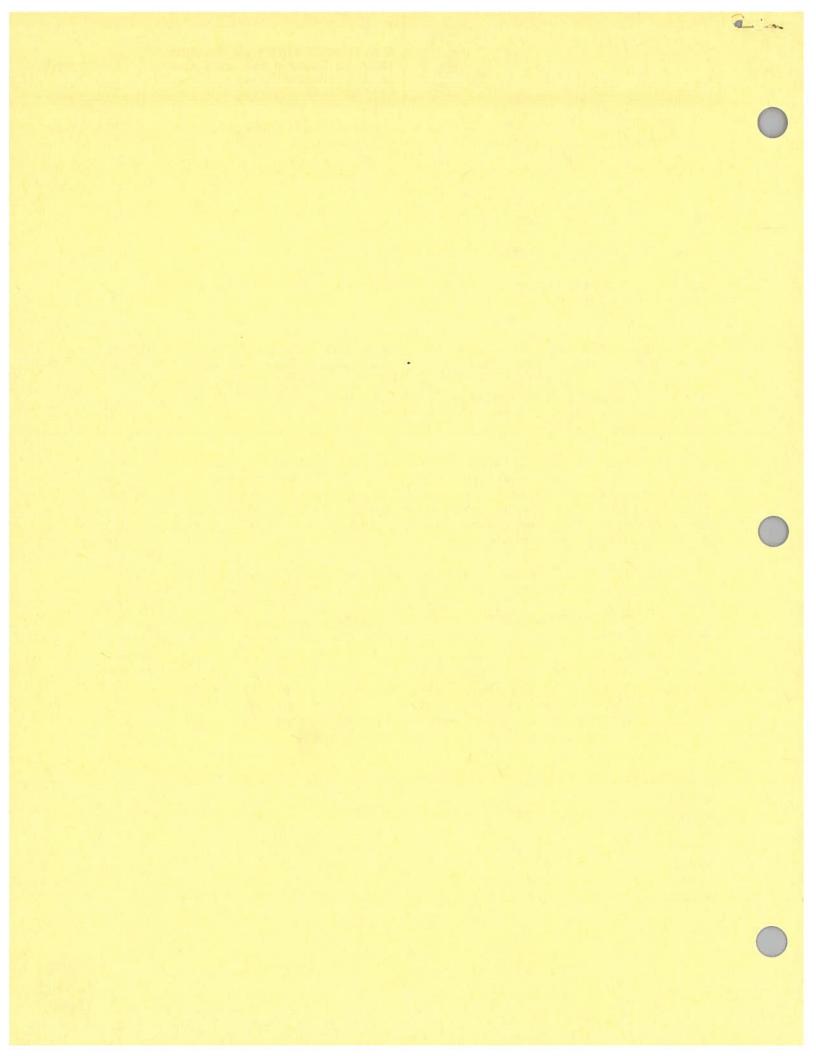
W/CR1x1

W/WR1x1

W/AR1

W/PRx2





Program Director 1024 N. Rampart St. New Orleans, LA 70116

Program Director 17: 2820 E. Saginaw Lansing, MI 48904 Program Director Box 659 Jefferson City, MO 65102

KSLA-TV Program Director Box 4812 Shreveport, LA 71104 KBJR-TV Program Director KBJR Bidg. Duluth, MN 55802 KODE-TV Program Director Box 46 1828 W. 13th St. Joplin, MO 64801

KTAL-TV Program Director 3150 N. Merket St. Shreveport, LA 71007 KDLH-TV Program Director 425 W. Superior St. Duluth, MN 55802 KSNF Program Director Box 1393 Joplin, MO 64802

KTBS-TV
Program Director
312 E. Kings Highway
Box 44227
Shreveport, LA 71104

WDIO-TV Program Director 10 Observation Rd. Duluth, MN 55811 KMBC-TV
Program Director
11th & Central Sts.
Kansas City, MO 64105

WDIV
Program Director
550 W. Lefsyette Blvd.
Detroit, MI 48231

KSTP-TV Program Director 3415 University Ave. St. Paul, MN 55114 WDAF-TV Program Director Signal Hill Kanses City, MO 64108

WEYI-TV Program Director 2225 W. Willard Rd. Clio, MI 48420 WCCO-TV Program Director 90 S. 11th St. Minneapolis, MN 55403 KMOX-TV Program Director 1 Memorial Dr. St. Louis, MO 63102

WJRT-TV Program Director 2302 Lapeer Rd. Flint, MI 48503 WTCN-TV Program Director 441 Boone Avs. N. Minnespolis, MN 55427 KSDK Program Director Television Plaza 1000 Market St. St. Louis, MO 63101

WNEM-TV Program Director Box 531 107 N. Franklin St. Saginaw, MI 48606 WAPT Program Director Box 10297 Jackson, MS 39209 KTVI
Program Director
5915 Berthold Ave.
St. Louis, MO 63110

WOTV
Program Director
Box B
Grand Rapids, MI 49501

WJTV Program Director Box 8887 Jackson, MS 39204 KOLR-TV Program Director Box 1716 SSS Springfield, MO 65805

WZZM-TV Program Director Box Z Grand Rapids, MI 49501 WLBT
Program Director
715 S. Jefferson St.
Jackson, MS 39205

KYTV Program Director 999 W. Sunshine Springfield, MO 65804

WKZO-TV Program Director 590 W. Maple St. Kalamazoo, MI 49008 KCBJ-TV Program Director 501 Business Loop 70 East Columbia, MO 65201 KOLN-TV Program Director Box 30350 Lincoln, NE 68503 RETV Program-Director 27th & Douglas Sts. Omaha, NE 68131 Program Director 18 Box 1511 Releigh, NC 27602

Program Director 3091 Euclid Ava. Cleveland, OH 44115

KMTV Program Director 10714 Mockingbird Dr. Omaha, NE 88127 WRAL-TV Program Director Box 12000 Raleigh, NC 27605 WJKW-TV Program Director 5800 S. Marginal Rd. Cleveland, OH 44103

KRNE-WOWT Program Director 3501 Farnam Street Omaha, NE 68131 WECT
Program Director
322 Shipyard Bivd.
Wilmington, NC 28403

WKYC-TV Program Director 1403 E. 8th St. Cleveland, OH 44114

WBTV -Program Director One Juilian Price Pl. Charlotte, NC 28208 WWAY
Program Director
Box 2068
Wilmington, NC 28402

WBNS-TV Program Director 770 Twin Rivers Dr. Columbus, OH 43216

WPCQ-TV Program Director Box 18665, Hood Rd Charlotte, NC 28218 WXII
Program Director
Box 11847
Winston-Salem, NC 27116

WCMH\_TV Program Director 8ox 4 Columbus, OH 43216

WSOC-TV Program Director Box 34665 Charlotta, NC 28234 KTHI-TV Program Director Sox 1878 Fargo, ND 58107 WTVN-TV Program Director 8ox 718 1261 Dublin Rd. Columbus, OH 43215

WFMY-TV Program Director Box TV2 Greensboro, NC 27420 KX.IB-TV Program Director 4302 13th Ave. S. Fargo, ND 58103 WDTN
Program Director
4595 S. Dixie Ave.
Dayton, OH 45401

WCTI Program Director Sox 2325 New Bern, NC 28560 WDAY-TV Program Director 301 S. 8th St. 8ox 2466 Fargo, ND 58107 WHIO-TV Program Director 1414 Wilmington Ave. Dayton, OH 45401

WITN-TV Program Director Box 468 Washington, NC 27889 WCPO-TV Program Director 500 Central Ave. Cincinnati, OH 45202 WKEF
Program Director
1731 Soldiers Home Rd.
Dayton, OH 45418

WNCT-TV
Program Director
Box 898
Greenville, NC 27835-0898

WKRC-TV
Program Director
1906 Highland Ave.
Cincinnati, OH 45219

WTOV-TV Program Director 320 Market St. Staubenville, OH 43952

WGHP-TV Program Director Box 2688 High Point, NC 27261 WLWT Program Director 140 W. Ninth St. Cincinnati, OH 45202 WDHO-TV Program Director 300 S. Byrne Rd. Toledo, OH 43615 Program Director 780 N. Summit St. Box 715 Toledo, OH 43695 Program Director 19-Box 186 Charleston, SC 29482

Program Director Box WKPT Kinsport, TN 37662

WTVG Program Director 4247 Dorr St. Toledo, OH 43607 WIS-TV Program Director 1111 Bull St. Columbia, SC 29202 WATE-TV Program Director Box 2349 1306 N.E. Broadway Knoxville, TN 37901

WFMJ-TV Program Director 101 W. Boardman St. Youngstown, OH 44503 WLOS-TV Program Director Box 2150 288 Macon Aven. Asheville, NC 28802 WBIR-TV
Program Director
1513 Hutchison Ave.
Knoxville, TN 37917

WKBN-TV Program Director 3930 Sunset Blvd. Youngstown, OH 44501 WYFF-TV
Program Director
505 Rutherford St.
Greenville, SC 29609

WTVK
Program Director
Box 1388
Knoxville, TN 37901

WYTV
Program Director
3800 Shady Run Rd.
Youngstown, OH 44502

KDLT Program Director Box 1200 Mitchell, SD: 57301 WHBQ-TV<sup>'</sup>
Program Director
485 S. Highland Ava.
Memphis, TN 38111

KOCO-TV Program Director Box 14555 Okishoma City, OK 73113 KELO-TV Program Director Phillips at 13th Sioux Falls, SD 57102 WMC-TV Program Director 1960 Union Ave. Memphis, TN 38104

KWTV
Program Director
Box 14159
Oklahoma City, OK 73113

KSFY-TV Program Director 300 N. Dakota Suite 13 Sioux Falis, SD 57102 WREG-TV
Program Director
Chanel 3 Dr.
Memphis, TN 38103

KJRH Program Director \$701 S. Peoria Tulsa, OK 75105 WDEF-TV Program Director 3300 Broad St. Chattanooga, TN 37408 WSMV Program Director Box 4 Nashville, TN 37202

KOTV Program Director 302 S. Frankfort Tulsa, OK 74120 WRC8-TV Program Director 900 Whitehall Rd. Chattanooga, TN 37405 WTVF
Program Director
474 James Robertson Pkwy.
Nashville, TN 37219

KTUL-TV Program Director Box 8 Tulsa, OK 74101 WTVC
Program Director
Box 1150
Chattanooga, TN 37401

WZTV
Program Director
Box 90764
Nashville, TN 37209

WCBD-TV Program Director Box 879 Charleston, SC 29402 WJHL-TV Program Director Box 1130 Johnson City, TN 37601 KAMR-TV Program Director Box 751 Amarillo, TX 79189 Program Director
Sox 1400
Amerillo, TX 79189

Program Director 20 Box 2222 Houston, TX 77001 Program Director 1181 E. Mason St. Box 1128 Green Bay, WI 54305

KVII-TV Program Director Box 13000 Amerillo, TX 79101 KRIV-TV Program Director Box 22810 3935 Westheimer Rd. Houston, TX 77227 WLUK-TV Program Director Box 7711 Green Bay, WI 54303

KTBC-TV Program Director Sox 2223 Austin, TX 78767 KTRK-TV
Program Director
Box 13
Houston, TX 77001

WKBT
Program Director
141 S. 6th St.
La Crosse, WI 54601

KTVV Program Director Box 480 Austin, TX 78767 KAMC Program Director Box 2805 Lubbock, TX 79408 WISC-TV Program Director 7025 Reymond Rd. Medison, WI 53711

KVUE-TV Program Director Box 9927 Austin, TX 78766 KCSD-TV Program Director Box 2190 Lubbook, TX 79408 WKOW-TV Program Director Box 100 Madison, WI 53701

KDFW-TV Program Director 400 N. Griffin Dallas, TX 75202

KENS-TV
Program Director
Box TV5
San Antonio, TX 78299

WMTV Program Director 615 Forward Dr. Madison, WI 53711

WFAA-TV Program Director Communications Ctr. Dalles, TX 75202 KMOL-TV Program Director Box 2641 San Antonio, TX 78299 WISN-TV Program Director Sox 402 Milwaukee, WI 53201

KDBC-TV Program Director Box 1799 El Paso, TX 79999 KSAT-TV
Program Director
Box 2478
San Antonio, TX 78298

WITI-TV Program Director Box 17,500 9001 N. Green Bay Rd. Milwaukee, WI 53217

KVIA-TV Program Director 4140 Rio Bravo El Paso, TX 79902 KAUZ-TV Program Director Box 2130 Wichita Falls, TX 76307 WTMJ-TV
Program Director
720 E. Capitol Dr.
Milwaukee, Wi 53201

KXAS-TV Program Director Box 1780 Fort Worth, TX 76101 KFDX-TV Program Director Box 4000 Wichita Falls, TX 76308 WAOW-TV Program Director 1908 Grand Ave. Wausau, WI 54401

KHOU-TV Program Director 1945 Allen Parkway Houston, TX 77019 WBAY-TV Program Director 115 S. Jefferson Green Bay, Wi 54301 WSAW-TV Program Director 1114 Grand Ave. Wausau, WI 54401

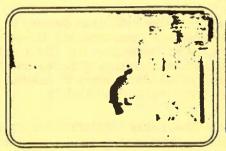
## NATIONAL WEATHER SERVICE

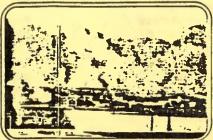
# Catalog of Weather

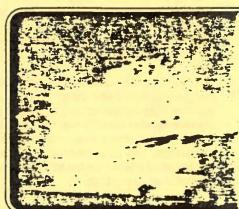
# Flood Hazard

**Awareness** Material

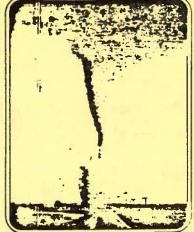
















NOAA/PA 85007

National Oceanic and Atmospheric Administration U.S. DEPARTMENT OF COMMERCE

Hazard awareness to promote disaster preparedness is a major concern of the Commerce Department's National Oceanic and Atmospheric Administration and its largest component, the National Weather Service.

The National Weather Service is well known for its reports of the Nation's weather, its forecasts, and Its warnings against tornadoes, hurricanes, floods, and other atmospheric and hydrologic hazards. But forecasts and warnings are useless if they go unheeded or if those who hear them do not know how to respond to them.

In order to help Americans understand the dangers of flood and storm and what lifesaving actions may be necessary during these hazardous environmental conditions, the National Weather Service conducts a year-round hazard awareness campaign. The publications, films, and other audiovisual materials listed in this catalog are part of that campaign.

#### Contents

	Page
Obtaining Brochures, Films and Slides	1
Thunderstorm/Lightning Publications and Slides	3
Tornado and Severe Local Storm Publications, Films and Slides/Spotter and Skywarn Publications	4
Flash Flood/Flood Publications, Films and Slides	7
Hurricane Publications, Films and Slides	9
Winter Storm Publications, Films and Slides	11
Miscelianeous Publications (Tsunami, Dust Storm, Heat Stress)	13



# HAZARD AWARENESS PUBLICATIONS

#### WHERE TO GET THEM ...

The publications listed here are available at a nominal cost from the U.S. Government Printing Office (GPO). Inquiries as to the availability and price of publications should be directed to Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. (When Inquiring about a particular title, also include the adjacent "NOAA/PA" number, for example, "Winter Storm (NOAA/PA 79018).")

Prices of Government publications are subject to change. Increases in costs make it necessary for the Superintendent of Documents to increase the selling prices of many publications offered. As it is not feasible for the Superintendent of Documents to correct the prices manually in all of the publications stocked, the prices charged on your order may differ from the prices printed in the publications.

#### **FILMS**

The films are available on *loan* without charge (except for return postage) from Modern Taiking Pictures, Film Scheduling Center, 5000 Park Street North, St. Petersburg, Florida, 33709 (telephone: (813) 541-5763). Information regarding long term loan, television use, and cooperation with industry in producing motion pictures may be obtained from the same address. Loan requests should be made from 3 to 6 months before showing date. Loans are limited to 1 week—exclusive of mailing time. No films will be booked in December due to the heavy volume of holiday mail.

A3 REVELSE



Kenerse

Films may be purchased from the Order Section, National Audiovisual Center, General Services Administration, Washington, D.C., 20409 (telephone: (301) 763-1896). Contact the Center for current information on the availability and price of a particular motion picture.

TORNADO, A SPOTTERS GUIDE, and TORNADO AT PLEASANT HILL are available from NOAA Office of Public Affairs, Room H6013, U.S. Department of Commerce, Washington, D.C. 20230 (telephone: (202) 377-8090). A LADY NAMED CAMILE, WINTER STORMS, and DAY OF THE KILLER TORNADOES are available from the Army Training and Audio Visual Support Centers located in each of the United States. SURVIVAL IN THE COLD is available from the American Red Cross Headquarters, Washington, DC, 20016.

#### SLIDE LECTURES

#### WHERE TO GET THEM ...

The slide iectures (except where noted) are for sale by the Order Section, National Audiovisual Center, General Services Administration, Washington, D.C., 20409 (telephone: (301) 763-1896). Contact the Center for current information on the availability and price of a particular slide iecture.

All sildes are 2 by 2 color with written narrative or cassette tape.

Information regarding NOAA/NWS hazard awareness publications and audiovisuals can be obtained from the National Weather Service's Disaster Preparedness Staff (W/OM11x1), Attn: Dick Wood, 8060 13th Street, Silver Spring, Maryland, 20910 (telephone: (301) 427-8090).

# THUNDERSTORM/LIGHTNING PUBLICATIONS

### OWLIE'S TIPS ON LIGHTNING SAFETY (NOAA/PA 76017)

A 10½ by 16-inch poster highlighting safety with cartoons, primarily for children, but can be used anywhere.

#### **LIGHTNING TIPS (NOAA/PA 76018)**

A two-color, wallet size card on lightning safety including dangers to avoid and first aid for those struck by lightning.

### OWLIE SKYWARN'S LIGHTNING BOOK (NOAA/PA 77023)

A two-color, 16-page booklet for boys and girls, detailing what happens during the storm and what precautions to take.

### THUNDERSTORMS AND LIGHTNING (NOAA/PA 83001)

À two-color, 6-page pamphlet explains the causes, life cycles, destructive offspring, and incidence of thunderstorms. Lightning formation and effects are described and safety rules are included along with information on tornadoes, hail, flash floods, and downbursts. Statistics, including lightning deaths by states from 1959 through 1984, are given.

# THUNDERSTORM (LIGHTNING) SLIDE LECTURES

### WHEN LIGHTNING STRIKES: 65 slides.

Commentary

Effective presentation of lightning formation and possible lethal result of lightning strike. Safety measures and victim techniques are suggested.

ALLENGIE

ASCRISE

2

10% Reverse



### TORNADO PUBLICATIONS

TORNADO SAFETY—SURVIVING NATURE'S MOST VIOLENT STORMS (WITH STATISTICS FOR 1955-84) (NOAA/PA 82001)

A two-color, 8-page brochure describing the phenomenon of tornadoes, their destructive effects, NOAA's work of warning, and safety rules for the individual and community.

TIPS FOR TORNADO SAFETY (NOAA/PA 76016)
A two-color, four panel wallet card containing safety rules and describing the watch and warning terms used by the National Weather Service. (Spanish language—NOAA/PA 85005)

TORNADO SAFETY IN RESIDENCES (NOAA/PA 79016)

A unique 4-page brochure depicting, with pictures and captions, proper safety measures which should be taken during threat of tornado. Appropriate for children or adults.

IN YOUR KEEPING (NOAA/PA 70015)
A two-color, 6-panel brochure designed for the administrators of schools, hospitals and other institutions outlining severe storm safety precautions.

TORNADO SAFETY RULES IN SCHOOLS (NOAA/PA 74025)

A two-color, 4-panel folder/poster designed to alert and assist schools develop tornado preparedness plans. The poster provides instructions, signais, and responses during tornado drilis.

TORNADO, DO YOU KNOW WHAT TO DO? (NOAA/PA 75015)

A black and white poster designed for posting on achool bulietin boards with space for instructions on actions to be taken during a tornado drill. Although designed as a school poster, it can be used by other institutions, factories, office buildings, etc.

OWLIE SKYWARN'S TORNADO WARNING (NOAA/PA 75012)

AND REDBURG

A two-color, 16-page booklet for boys and girls. This booklet is designed for use at about the fifth grade level. The cartoon character, "Owlie Skywarn," describes the tornado, its destructive effects, and what safety rules children and others should follow.

SKYWARN, SECONDS SAVE LIVES (NOAA/PA 70010)

A two-color, 3-page promotional leafiet describing the SKYWARN Spotter Program and asking for volunteers.

SPOTTER'S GUIDE FOR IDENTIFYING AND REPORTING SEVERE LOCAL STORMS (NOAA/PA 81011)

A two-coior, 16-page booklet describing sky conditions in various severe storm and tornado situations and how to report severe local storms to the National Weather Service. (For official use only.)

SEVERE LOCAL STORM SPOTTER REPORTING PROCEDURES POSTER (NOAA/PA 70012)
Detailed instructions for storm spotter reporting during severe weather.

SKYWARN POSTER (NOAA/PA 76019)
This two-color poster stresses the importance of immediate, positive action when a tornado threatens.

TORNADO EMERGENCY, EFFECTIVE PROCEDURES FOR ALL BROADCAST STATIONS (NOAA/PA 78021)

A 3-page brochure specifically designating broadcast language for the public during tornado threats.

SKYWARN SPOTTER (NOAA/PA 84001)
A two-color wailet card with space for official spotter's name, code number, emergency telephone numbers, etc. information on what to report and diagrams on severe weather situations are included. (For official use only.)

TORNADO SAFETY RULES POSTER (Poster 923)
A poster co-produced by NOAA, the Federal
Emergency Management Agency, and the American Red Cross, this publication provides short,
easily understood safety rules to follow when a
tornado threatens.

MORRE

#### TORNADO FILMS

DAY OF THE KILLER TORNADOES: 15 minutes
Dramatic footage of tornadoes that hit 11 states,
kliied 307 persons, April 3 and 4, 1974. illustrates
how warnings, preparedness planning, and
coordination of Emergency Operating Centers
helped save lives.

TORNADO AT PLEASANT HILL: 5 minutes
A documentary of the May 4, 1977, tornado that
struck the high school in Pleasant Hill, Missouri,
while classes were in session. Includes actions
taken that resulted from previous tornado drills
and student comments.

TORNADO: A SPOTTER'S GUIDE: 15½ minutes Developed for use in training tornado spotters. Details the many visual facets of tornadoes and their look-alikes.

TERRIBLE TUESDAY: 23 minutes
The scene is Wichita Faiis, Texas, where survivors
of one of history's worst tornado outbreaks tell
their stories. The theme: proper safety precautions can minimize the danger from nature's most
violent storms.

#### TORNADO SLIDE LECTURES

TORNADO PREPAREDNESS: 67 sildes.

Commentary.

Shows the occurrence and effects of tornadoes, the warning and communications systems used, National Weather Service watch and warning terminology, tornado shelters, and safety rules.

TORNADO SAFETY IN RESIDENCE: 130 slides.
33-minute cassette tape. Commentary.
Depicts effects of tornadoes on residences from winds, missile damage, and building depiacement.
Locates safest areas in permanent residences.

THE SAFEST PLACE IN SCHOOLS: 140 slides. Shows the destructive effects of tornadoes and the most dangerous and safest areas in schools. Material applies to other buildings of similar design to schools.

A LOOK AT THE TORNADO AND OTHER LOCAL STORMS: 63 sildes. Commentary.

A non-technical look at the tornado and thunderstorms, designed primarily for schools, service ciubs, and general public.

### FLASH FLOOD/FLOOD PUBLICATIONS

FLASH FLOODS (NOAA/PA 77014)

A two-color, 4-panel wallet card containing safety rules and describing the watch and warning terms used by the National Weather Servics.

PERE

A9 ASE

100% Reverse

6



#### AVENIDAS REPENTINAS (NOAA/PA 77015) Spanish version of 77014

# FLASH FLOOD (NOAA/PA 73018) A two-color, 6-panel leaflet describes flash floods, lists safety rules for flash flood watches and warnings.

#### AVENIDAS REPENTINAS (NOAA/PA 74022) Spanish version of 73018

## FLOODS, FLASH FLOODS AND WARNINGS (NOAA/PA 81010)

A 6-panel pamphlet describing the hydrologic services of the National Weather Service, warning procedures for floods and flash floods, needed community response, and flood safety rules.

### KILLER FROM THE HILLS POSTER (NOAA/PA 73019)

A two-color, 9 by 12-inch poster which gives flash flood safety rules for campers in hilly country.

#### UN ASESINO QUE BAJA DE LOS CERROS (NOAA/PA 74021)

### Spanish version of 73019

## OWLIE SKYWARN ON FLASH FLOODS POSTER (NOAA/PA 77016)

A 9 by 14-inch poster highlighting flash flood safety with cartoons. Primarily for children and display in flash flood prone areas.

#### NWS/AMERICAN RED CROSS/FEMA FLASH FLOOD/FLOODS POSTER 921

A 11 by 14-inch poster of flash flood safety rules on one side and flood safety rules on other side. What to do before, during, and after flash flood and floods. Can be displayed side-by-side for areas with both flash flood and flood problems.

### FLASH FLOOD/FLOOD FILMS

#### FLASH FLOOD: 14 minutes

Stresses safety measures for campers in recreation areas. Shows volunteer spotters reporting procedures.

#### FLOOD: 15 minutes

Describes the manner in which flood precautions are taken, portrays the basic precautions against the dangers and hardships imposed by floods; shows the development and impact of floods caused by seasonal snowmelt, hurricanes, heavy rainstorms, and concludes with a description of the deadly flash flood.

#### FLASH FLOOD/FLOOD SLIDE LECTURES

### FLASH FLOODS: MYTHS OR REALITIES: 79

siides. Taped commentary.

Shows reactions to specific flooding situations.

Explains why certain actions should not be taken.

Uses multiple choice questions and answers.

### FLASH FLOOD PREPAREDNESS: 80 sildes. Not for sale.

Set is accompanied by printed commentary and cassette tape describing the available warning systems and the needs for local preparedness planning.

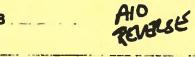
### **HURRICANE PUBLICATIONS**

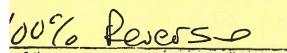
#### **80ME DEVASTATING NORTH ATLANTIC** HURRICANES OF THE 20TH CENTURY (NOAA/PA 77019)

A 14-page booklet listing major North Atlantic hurricanes including information regarding casualties and damage areas affected.

All

ç







## STORM SURGE AND HURRICANE SAFETY WITH TRACKING CHART (NOAA/PA 78019)

Describes all components of hurricane development, defines NWS terms, stresses safety precautions, and has instructions and chart for hurricane tracking in Atlantic, Caribbean, and Gulf of Mexico.

# HAWAIIAN HURRICANES AND SAFETY MEASURES WITH CENTRAL PACIFIC TRACKING CHART (NOAA/PA 85002)

Same as publication above, but tailored for use on the Hawaiian islands and surrounding areas.

### HURRICANE TRACKING CHART (ATLANTIC) (NOAA/PA 77020)

A single page hurricane tracking chart with safety tips to follow during hurricane watches and warnings.

#### HURRICANE TRACKING CHART (PACIFIC) (NOAA/PA 77021)

A single page foldout hurricane tracking chart with safety tips to follow during hurricane watches and warnings.

#### OWLIE SKYWARN'S HURRICANE WARNINGS (NOAA/PA 77001)

A two-color, 16-page booklet for boys and girls. The booklet is designed for use at about the fifth grade. The cartoon character, "Owlie Skywarn," describes the hurricane, its destructive effects, and the safety rules children and others should follow.

#### SURVIVAL IN A HURRICANE (NOAA/PA 70027) A two-color, 4-panei wallet card describing safety rules for hurricane survival. (Spanish language—NOAA/PA 85006)

## HURRICANE/STORM SURGE POSTER (Publication #922)

A poster co-produced by NOAA, the Federal Emergency Management Agency, and the American Red Cross, this publication provides short, easily understood safety rules to follow when a hurricane threatens. Hurricane safety is featured on one side of the poster, storm surge safety on the other.

ALTERSE TELESE

### HURRICANE FILMS

A LADY NAMED CAMILLE: 14 minutes
Depicts how ignoring hurricane warnings can cost
lives. Shows impact devastation. Details civil
defense warning procedures. DCPA film.

HURRICANE DECISION: 14 minutes
Lifesaving information for persons in hurricaneprone areas. Explains dangers of storm surge,
wind, and inland flooding from hurricanes.

#### **HURRICANE: 28½ minutes**

Tracks an actual hurricane from its tame beginnings in the Gulf of Mexico to its violent and deadly landfall. Survivors' stories provide lessons in safety.

### HURRICANE SLIDE LECTURES

HURRICANE ELOISE: 43 sildes. Commentary. Explains ramifications of hurricane awareness/ preparedness or lack of it. Details lessons learned from previous hurricanes.

# HURRICANE PREPAREDNESS: 49 sildes. Commentary.

Shows how hurricanes are tracked. Details importance of community communication during weather threat and aftermath of impact.

HURRICANE ALICIA: 64 slides. Commentary.
Discusses the meteorological ramifications and structural damage from 1983's Hurricane Alicia.

### WINTER STORMS PUBLICATIONS

WINTER STORMS (NOAA/PA 79018)
A two-color, 8-page pamphiet describing the causes and dangers of winter storms, the terms used in the National Weather Service watches and warnings, and winter storm safety rules.

AAB

11

Havierse Xavierse





# RIDING OUT WINTER STORMS (NOAA/PA 80003)

A two-color, 4-panel wallet card listing winter storm safety rules and defining winter weather warning terms used by the Weather Service, Card includes a wind chill chart.

# OWLIE SKYWARN ON WINTER STORMS POSTER (NOAA/PA 77017)

A 10½ by 16-inch poster highlighting winter storm safety with cartoons. Designed primarily for children but can be used by anyone.

WINTER STORMS POSTER (NOAA/PA 78022)
A two-color poster defining winter storm terms and suggesting safety measures.

#### WINTER STORM FILMS

SURVIVAL IN THE COLD: 16 minutes

Describes do's and don't's for severe winter weather conditions.

#### WINTER STORMS: 28 minutes

A documentary film report on the disastrous winter of 1978, ranging from the great New England and Midwestern blizzards to the floods and mudslides of California, plus the unexpected wave of icestorms and floods that swept the South and other sections of the country.

#### WINTER STORM SLIDE LECTURE

### WINTER STORMS, THE DECEPTIVE KILLERS:

80 slides. Cassette tape and commentary.
Gives definitions and impacts of all types of winter storms. Also describes watches and warnings and gives safety tips for a wide variety of circumstances.

ALL ROSE

### TSUNAMI PUBLICATION

# TSUNAMI WATCH AND WARNING (NOAA/PA

A two-color, six-panel folder containing a description of tsunami watches, warnings, and safety rules to foliow. (Updating of the publication is now in progress.)

### **DUST STORM PUBLICATION**

#### DUST STORM (NOAA/PA 82002)

A two-color, 4-panel wailet card listing dust safety rules and defining dust storm warning terms.

#### HEAT STRESS PUBLICATION

#### HEAT WAVE A MAJOR SUMMER KILLER (NOAA/PA 85001)

A two-color brochure describing how too much heat affects the body. Hot weather safety tips are included as well as first aid for those stricken by heat. A temperature-humidity "Heat Index" chart is given.

### **WEATHER SAFETY PUBLICATION**

# WATCH OUT STORMS AHEAD: OWLIE SKYWARN'S WEATHER BOOK (NOAA/PA 82004)

This 28-page brochure, designed for elementary school use, features a cartoon owl who presents simple safety rules for children to follow during hurricanes, tornadoes, lightning, flash floods, and winter storms. (Restricted distribution. School officials only contact Richard A. Wood, W/OM11x1, National Weather Service, Silver Spring, MD, 20910.)



Program Director 201 West Third St Little Rock, AR 73203 Program: Director 15 1611 W. Peachtree St., NE Atlanta, GA 30309 Program Director
180 N. State Street
Chicago, IL 60801

KATV Program Director 401 Main Box 77 Little Rock, AR 72203 WAGT
Program Director
Box 1526
Augusta, GA 30903

WMAQ-TV Program Director Merchandise Mart Chicago, IL 60654

KTHV
Program Director
Box 269
Little Rock, AR 72203

WJBF Program Director 10th & Reynolds St. Box 1404 Augusta, GA 30901 WAND Program Director 804 Southside Dr. Decatur, IL 62521

KBTV
Program Director
1089 Bannock St.
Denver, CO 80204

WRDW-TV Program Director Drawer 1212 Augusta, GA 30903 WQAD-TV Program Director 3003 Park 16th St. Moline, IL 61265

KCNC-TV
Program Director
1044 Lincoln St.
Denver, CO 80203

WRBL
Program Director
Box 270
Columbus, GA 31994-5999

WEEK-TV -Program Director 2907 Springfield Rd. Peori, IL 61611

KMGH-TV Program Director 123 Speer Blvd. Denver, CO 80217 WMAZ-TV Program Director Box 5008 Mecon, GA 31213 WRAU-TV
Program Director
500 N. Stewart St.
Creve Coeur, IL 61611

WJKS-TV Program Director Box 17000 Jacksonville, FL 32216 WJCL Program Director Box 13646 Savannah, GA 31406 WIFR-TV Program Director 2523 N. Meridian Rd. Roekford, IL. 61103

WCTV
Program Director
Box 3048
Tallahessee, FL 32315

WCIA Program Director 509 S. Neil Champaign, 4L 61820 WTVO
Program Director
1917 N. Meridian Rd.
Rockford, IL 61105

WECA Program Director Box 13899 Tallahassee, FL 32317 WICD
Program Director
250 County Fair Dr.
Champaign, IL 61821

WICS
Program Director
2680 E. Cook St.
Springfield, IL<sup>1</sup> 62703

WAGA-TV Program Director Box 4207 Atlanta, GA 30302 WBBM-TV Program Director 630 N. McClung Court Chicago, IL 60611 WEHT
Program Director
Box 25
Evansville, IN 47701

WSB-TV Program Director 1601 W. Peachtree St., NE Atlanta, GA 30309 WFLD-TV Program Director 300 N. State Street Chicago, IL 60610 WFIE-TV Program Director 1115 Mt. Auburn Rd. Evansville, IN 47712 WTVW
Program Director
477 Carpenter St.
Sox 7
Evansville, IN 47701

WKJG-TV Program Director 2633 W. State Bivd. Fort Wayne, IN 46808

WPTA
Program Director
3401 Butler Rd.
Fort Wayne, IN 46801

WISH-TV Program Director 1950 N. Meridian St. Indianapolis, IN 48207

WRTV
Program Director
1330 N. Meridian St.
Indianapolis, IN 46206

WTHR
Program Director
1000 N. Merdian St.
Indianapolis, IN 46204

WNDU-TV Program Director Box 1616 South Bend, IN 46634

WSBT-TV Program Director 300 W. Jefferson Blvd. South Bend, IN 46601

WSJV Program Director Box 1646 Elkhart, IN 46515

WBAK-TV Program Director Box 719 Terre Haute, IN 47808

WTHI-TV
Program Director
918 Ohio St.
Terre Haute, IN 47808

Program Director 16: Box 299 Terre Heute, IN 47808

KCRG-TV Program Director Box 816 Second Ave. at 5th St. S.E. Cedar Rapids, IA 52401

KGAN-TV Program Director Box 3131 Cedar Repids, IA 52406

KWWL Program Director 500 E. 4th Waterloo, IA 50703

WOC-TV Program Director 805 Brady St. Davenport, IA 52808

KCCI-TV Program Director Box 10305 9th & Pleasant Des Moines, IA 50306

WHO-TV Program Director 1801 Grand Ava. Des Moines, IA 50308

KAKE-TV Program Director Box 10 Wichita, KS 67201

KSNW Program Director Box 333 833 N. Main Wichita, KS 67201

KWCH-TV Program Director Box 12 Wichita, KS 67201

WKYT-TV Program Director Box 5037 Lexington, KY 40505 Program Director
Box 1457
Lexington, KY 40591

WTVQ-TV Program Director Box 5590 2940 Bryant Rd. Lexington, KY 40555

WAVE-TV Program Director 725 S. Floyd St. Louisville, KY 40230

WHAS-TV Program Director Box 1084 Louisville, KY 40201

WAFB-TV Program Director Sox 2671 Baton Rouge, LA 70821

WBRZ
Program Director
Box 2906
Baton Rouge, LA 70821

WRBT
Program Director
Essen Lane
Box 14685
Baton Rouge, LA 70808

KATC Program Director Box 3347 Lafayette, LA 70502

KLFY-TV Program Director Box 90665 Lafayette, LA 70509

KNOE-TV Program Director Box 4067 Monros, LA 71201

WDSU-TV
Program Director
520 Royal St.
New Orleans, LA 70130