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1971

STORM DATA AND UNUSUAL WEATHER PHENOMENA

AUGUST 1971

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS				ESTIMATED ¹ DAMAGE	CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS		
Alabama Osark, Dale County	23	8 a.m.			0	0	4	0	Electrical	Lightning set fire which destroyed large commercial building.
Alaska		None	Reported							
Arizona Lake Havasu City	1	Evening			0	1	5	0	Wind	Strong winds sank about a dozen small boats and damaged the marina. Several homes and mobile homes were damaged. One man was injured when strong winds caused him to lose control of his motorcycle.
Coolidge	3	7:00 p.			0	0	5	0	Wind	Strong winds accompanied by heavy rain damaged homes, mobile homes, businesses and utilities. A number of automobiles were also damaged by flying debris.
Mesa	3	8:00 p.			0	0	4	0	Wind	Strong winds damaged roofs of homes, stores and schools. A large storage shed in a lumber yard was unroofed and rain damaged materials stored inside.
Safford	5	Morning			0	0	4	5	Rain	Heavy rainfall in the mountains to the south of the Safford area produced heavy runoff between Safford and Solom. Water damaged homes, irrigation ditches, canals, roads and fences. Also damaged were a number of acres of cotton and alfalfa.
Sabino Canyon	10	Afternoon			1	0	0	0	Rain	Locally heavy rains produced a flash flood which swept a 15-year-old girl off a bridge. The girl's body was recovered the next day.
Sacaton	10	Evening			1	0	3	0	Wind	Strong winds blew down a tree. It fell on a house, killing an Indian woman inside.
Apache Junction	10	7:30 p.			0	0	0	0	Funnel cloud	Funnel cloud aloft sighted. Cloud dissipated after a few minutes.
Casa Grande	12	Evening			0	0	5	0	Rain	Unusually heavy rains caused flooding of the downtown and residential sections. Property in stores and homes suffered water damage. Two women were rescued by boat from their homes.
Bullhead City	12	11:00 p.			0	0	5	0	Rain and wind	Heavy rains washed out roads and highways. Strong winds damaged mobile homes and utilities.
Mesa	15	1:00 a.			0	0	4	0	Rain	Heavy runoff from thunderstorm rainfall damaged streets and homes. A number of mobile homes were also damaged. Most of the reported damage was in the eastern part of the city with some damage also in Apache Junction.
Tucson	17	6:00 p.			0	0	5	0	Rain	Runoff from thunderstorm rainfall caused water damage to county roads and city streets and bridges.
Tucson	19	Evening			0	2	4	0	Lightning and rain	Two 18-year-old boys were hospitalized after the umbrellas they were carrying during a thunderstorm was struck by lightning. Heavy rainfall caused damage to roads and highways.
Lake Havasu City	19	Evening			0	0	5	0	Rain	Heavy runoff from thunderstorm rainfall caused considerable damage to streets and to the drainage system.
Mariopoa County	21	Morning			0	0	5	5	Rain	Heavy rainfall caused local flooding of highways, streets and homes. A considerable acreage of agricultural lands was also flooded and additional damage was caused to canals and drainage ditches. Damage was heaviest in western Mariopoa County.
Safford	21	8:00 p.			0	0	4	4	Rain	Flooding caused by thunderstorm rainfall damaged homes and businesses. Roads and irrigation ditches and canals were also damaged. Cotton fields in the area were flooded causing crop damage.
Tempe	30	5:45 p.	5	400	0	41	6	4	Tornado	A tornado touched ground for about 10 minutes in an unpopulated section of south Tempe. It then moved toward the northeast into a populated area and caused considerable property damage to homes, utilities and trees. Several houses were completely demolished and a number of others suffered extensive roof damage. Most of the injured were not hurt badly; many were struck by flying glass. The tornado touched down briefly in west Mesa before dissipating. The storm was accompanied by heavy hail.
Arkansas Lepanto Poinsett County	2	2:00 p.								Funnel aloft Funnel cloud witnessed by "hundreds of persons" as it moved over Lepanto heading northeastward without touching ground.
Helena, West Helena Phillips County	11	5:30 p.	3	1,500				4		Windstorm Damage to trees, power lines, roof material and windows. Several trees fell on homes and power lines. Helena hit somewhat harder than West Helena. 80 mph winds estimated by radio station KPFA wind equipment.
California San Bernardino Co.	13				0	0	4	0		Thunderstorms Thunderstorms washed out bridge on Interstate 40, downed trees and utility lines, and overturned mobile homes.
Needles-Blythe area	20				0	0	4	0		Thunderstorms Highway U. S. 95 was washed out. A car was washed off the road, but the occupants escaped injury. Trucks were blown off Interstate 10. Power and telephone lines were down.
Colorado Montezuma County	6	Afternoon			0	0	0	4		Heavy rain Heavy rains caused flash flooding along McElmo Creek, west of Cortez, damaging roads and bridges, and fruit and melon crops.
Lincoln, Crowley, and Otero Counties	6	5:30 - 7:30 p.			0	0	-	4		Hail Severe hail extended over a path about 70 miles long, from the Boyero - Aroya area in Lincoln County southwestward to the Fowler area in Otero County. Hail stones up to one inch diameter and accumulations up to 4 inches depth were reported in several areas. Width of the storm path varied from 1 to 5 miles. Crops were damaged in the Crowley, Crowley, and Fowler areas.
Connecticut Shelton, Fairfield Co.; Woodbridge, Hamden, New Haven, Wallingford, New Haven Co.	11	p.m.			0	0	4	0		Lightning, wind, rain Heavy cold frontal thunderstorms produced strong winds, heavy rain and intense lightning. Some trees and power lines were downed, local flash flooding occurred and several fires were set.
Statewide	27-28	a.m.-a.m.			0	2	6	5		Rain, wind, tide Tropical storm Doris, moving on a northeasterly course, passed rapidly through western Connecticut between 8 and 9 AM on the 28th. The storm produced gale force winds and gusts which reached 75 mph at Bridgeport. Heavy showers and thunderstorms ended abruptly with the storm's passage but precipitation totals, including antecedent moderate to heavy rains on the 27th, increased gradually from 1-3 inches in the east to 5-8 inches in the west, causing numerous instances of flash flooding on both days. The wind downed many trees and utility lines. Power to 150,000 customers was cut off. In some instances power was out for 48 hours or more so that some food spoilage occurred. Dairy farmers were hard hit by the electric power failures. Falling trees and limbs crushed some automobiles and damaged homes and other buildings. The wind was responsible for a quarter-million dollar structural loss to a new high school roof in New Haven. Signs, plate glass and chimneys were damaged. Some corn and tobacco crops were flattened and many orchard trees were damaged or blown down. Tides ran up to 5 feet above normal although the storm surge came near astronomical low tide. Shore installations were battered and a number of small boats were damaged when they were torn from their moorings or swamped. Falling trees injured one woman in Hartford, another in Ledyard. Estimated total storm damage in Connecticut is 2.5 million dollars.
Delaware State	26-28	Evening-Morning			0	0	5	0		Wind, rain and high tide Tropical storm Doris, whose center moved up Maryland's southern Eastern Shore through Delaware and into New Jersey, on the 27th-28th, brought heavy rainfall, 30 to 45 knot winds with a maximum gust of 58 knots at Wilmington National Weather Service Office and tides 2 to 3 feet above normal along the Atlantic Coastal areas. Damage was generally light mostly from flooding in low-lying or poorly drained areas and from winds which downed trees and transmission poles, causing electric power interruptions and some damage to buildings. Erosion along coastal areas was light. In the northern portion, in particular, heavy rainfall was reported by National Weather Service cooperative observers as having occurred by their observation time on the 27th and included such totals, in inches, as: Talleyville, 4.77; Newark (University Farm) 4.75; Middletown, 4.75; and Wilmington (Porter Reservoir) 4.48 inches. Some wind damage to corn crop was also noted.
Florida 7 ESE Pensacola	01	8:15a								Waterspout
St. Petersburg	01	3:15p								Funnel aloft
Indian Rocks Beach Pinellas Co.	01	evening			0	0	4	0		Lightning

See reference notes for all pages at end of table.

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Florida (continued)									
									Two homes received extensive damage when in both cases, a bolt of lightning followed the power line into the homes burning out television set & other household items and causing excessive smoke damage. Damage was estimated at \$14,000. No injuries were reported.
Holiday W Pasco Co.	01	night			0	1	2	0	Lightning
									A bolt of lightning punched a hole in the sanctuary roof of the Community United Methodist Church showering 26 members of the church's Junior Choir with splinters. Only one 12 year old girl was injured. She suffered what doctors believe to be a temporary deafness. No one was seriously injured. Rain poured in the hole afterward soaking carpets and pews below but was stopped with a temporary repair job. No estimate of the damage is available yet. Possible \$50-\$500 damages done.
Tampa	02	6:45p	1/4	20	0	0	1	0	Tornado
									A small tornado touched down behind Good Samaritan Hospital doing minor damage to a section of the roof and dislodging a trailer behind the hospital from its base. No injuries reported.
7 SE Ft. Lauderdale	03	8:38a							Waterspout
4 E Miami Beach	03	8:40a							Waterspout
Bustis	04	5:00p			1	3	0	0	Lightning
									Lightning struck and killed an employee of an Orlando citrus firm and slightly injured three others while they were working in an Orange Grove.
Venty Cocoa Patrick AFB	04	5:45p	3	75	0	0	4	0	Waterspout-Tornado
									A waterspout churned out of the Banana River to rake Patrick AFB and the nearby base country club boat dock before skipping out to sea. Damage estimated at \$25,000 mostly to 20 privately owned boats.
		5:57p	3	25	0	0	3	0	Waterspout-Tornado
									Another waterspout-tornado followed out of the Banana River 12 minutes later following the same path. Most of the damage was attributed to the first tornado. Several other waterspouts were also described as heading upriver at 30 miles per hour between 5:55p and 6:10p.
30 E Palm Beach	04	7:11p							Waterspouts (3)
									Pilot reported numerous waterspouts.
25 E Miami	05	2:12p							Waterspout
Orlando Mc Coy AFB	05	2:45p							Funnel aloft
10 E Ft. Lauderdale	08	6:10a							Funnel aloft
7 SE Miami	08	6:45a							Funnel aloft
13 SSE Pensacola	08	8:00a							Waterspouts (2)
									Two small waterspouts observed a few hundred yards offshore.
10 WSW Palm Beach	08	1:59p							Funnel aloft
20 NW Palm Beach	08	4:27p							Funnel aloft
Jacksonville	08	afternoon			0	0	4	0	Lightning
									A giant fuel storage tank was struck by lightning at the peak of a heavy thunderstorm. Damage to the tank was set at \$20,000 and an estimated \$100,000 fuel was lost.
7 NW Pensacola NAS 11 SW Pensacola	09	11:01a							Funnel aloft
3 WNW Ft. Lauderdale	09	12:43p							Funnel aloft
5 S Key West	09	5:45p							Waterspout
Riverview 13 SSE Tampa	09	6:54p							Funnel aloft
15 S Tampa	10	5:30p							Funnel aloft-Waterspout
									A waterspout was first reported then a funnel cloud, but did not touch down.
Florida (continued)									
Lakeland Polk Co.	10	late afternoon			1	0	0	0	Lightning
									A seven year old boy was struck by lightning and killed while he was crunched under a truck near his home during an evening storm when the lightning hit.
Crestview Okaloosa Co.	11	daytime			0	1	0	0	Lightning
									An 82 year old woman was attempting to take clothes from a metal clothes line when a lightning bolt struck. She has been paralyzed but is reported in fair condition.
20 ENE Ft. Lauderdale	11	5:27p							Funnel aloft
7 SW Key West	12	2:22p							Waterspout
Coastal Sections Tampa to Steinhatchee	14-17				0	0	5	0	Heavy Rains & Flooding
									A tropical depression moved northward along the west coast of Florida during the period of August 14-17th causing heavy rain, high tides and flooding before moving inland near Steinhatchee. Seven inches of rain fell on Pinellas Park (near Tampa) in fifteen hours on the 15th and heavy flooding with water up to 6ft. deep caused over \$250,000 damage in this area. Another \$100,000 damage was done in the Cedar Key area when several boats were sunk and waterfront streets were washed out.
6 SW Palm Beach	16	11:10a							Funnel aloft
Lakeland Polk Co. 29 E Tampa	17	4:30p							Funnel aloft
Sanford	18	about 5:00p			0	0	5	0	Lightning
									A lightning bolt touched off a fire that destroyed a major portion of a \$250,000 Sanford garment plant. Owner of the company said a large inventory of cotton and flannel materials damaged by the fire caused the total loss to vault near \$500,000.
6 ESE Key West	19	9:38p							Waterspout
Ft. Myers	22	afternoon			0	3	0	0	Lightning
									Three Ft. Myers women were knocked unconscious when a bolt of lightning apparently hit them or near them while they were boating on the Call-cosahatchee River at Ft. Myers Shores.
14 S Tampa	23	12:00noon							Waterspout
Tampa	23	afternoon			0	1	0	0	Lightning
									A 24 year old Tampa woman is in good condition after being stunned by a bolt of lightning that struck a clothesline in her yard as she was taking in her wash.
6 NNE Ft. Lauderdale	24	8:12a							Funnel aloft (3)
									Several funnels aloft were sighted.
34 NW Tampa Jacksonville	24	1:45p							Funnel aloft
	24	4:19p			0	3	0	0	Lightning
									One Jacksonville youngster was admitted to a hospital and two others received emergency medical attention after lightning struck a metal sliding board on which the 3 were playing.
Orlando	24	5:15p			0	0	5	0	Heavy Rain
									During locally heavy rains, the roof of Chrysler's new parts depot caved in causing \$200,000 damage to building. Additional water damage to spare parts is not yet known.
Kissimmee Osceola Co.	24	about 5:30p	1/4	50	0	0	1	0	Tornado
									Five mobile homes were damaged when a small tornado touched down in two trailer parks. No injuries were reported.
Tampa near Mc Dill AFB 9 S Tampa	24	6:43p							Funnel aloft
	24	6:45p							Waterspout
Punta Gorda 22 NNW Ft. Myers	25	4:10p							Funnel aloft
15 E Jupiter 20 NE Palm Beach	25	4:23p							Waterspout

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Florida (continued)									
Abt. 10 SSW Miami	26	9:15a							Funnel aloft
25 W Miami	26	3:00p							Funnel aloft
Miami	27	afternoon			0	0	4	0	Lightning
									Fire set by lightning did \$22,000 damage to a home and collection of paintings, sculpture and ceramics in it. Art collection \$17,000 damage and house damage \$5,000. No injuries reported.
Sarasota 12 S Daytona Bch	27	1:15p	1/4	50	0	1	3	0	Tornado
									A small tornado touched down causing an estimated \$10,000 damages and injuring one woman. The tornado destroyed the trailer she was in when it was lifted about 60 feet off the ground and carried it about 20 yards before it dropped it upside down.
Titusville	27	late afternoon	1/4	50	0	0	1	0	Tornado
									A small tornado touched down and destroyed a showhouse, took the roof off a dog pen, scattered tiles off the roof of a house, uprooted a small pine tree and a 10-50 ft. tall Eucalyptus tree was snapped off at the ground and ripped the aluminum top off a boothouse. Only slight damage was done. No injuries were reported.
5 SW Tampa	28	12:11p							Funnel aloft
5 SSE Key West	29	11:49a							Waterspout
3 E Palm Beach	29	12:27p							Funnel aloft
5 SE Key West	29	1:26p-1:43p							Waterspout
									Two sightings of waterspout in same vicinity.
7 ESE Key West	29	2:20p							Waterspout
9 NE Pensacola	29	3:30p							Funnel aloft
Sarasota 40 S Tampa	29	5:50p	1/4	20	0	0	2	0	Tornado & Funnel aloft
									At first 2 funnels aloft were sighted but slight damage was reported when one touched down. Power lines were knocked down and tiles were ripped off roofs but no injuries were reported.
4 ENE Palm Beach	31	11:30a							Waterspout
Georgia									
Fort Stewart	2	?			1	7	?	0	Lightning
									Soldiers were inside a tent that was struck by lightning.
Savannah	4	11:45 a							Funnel Cloud
									Sighted over Savannah from aircraft.
Albany	4	p.m.			0	0	4	0	Heavy Rains
									Several homes were flooded and yards, streets and other property were damaged.
Early County	6	3:27 p							Funnel Cloud
									Sighted from aircraft about 20 miles northeast of Dothan, Alabama.
La Grange	8	10:14 p			0	0	?	?	Hail
									Hail one inch in diameter reported at La Grange Airport.
Atlanta Airport	9	4:45 p			0	0	?	?	Hail
									Three-fourths inch hail reported by pilot one mile west of the Atlanta Airport.
Putnam County	16	a.m.			0	0	4	4	Heavy Rains
									Very heavy local rains in parts of Putnam County caused extensive damage to roads, bridges, fences and farm land. Two State highway bridges were washed out as unofficial measurements indicated more than 7 inches of rain fell over a small area.
Savannah	16	Night			0	0	5	0	Heavy Rains
									Heavy rains fell over southeast Georgia as a tropical depression moved through the coastal area. The Savannah area was hard hit with flooding in several sections. Streets were flooded and many homes and businesses had water damage. At least 300 people were evacuated from their homes. The Savannah Airport had 7.04 inches of rain in 24 hours, with 3.70 inches falling in one hour. Flash flooding was also reported in Jesup.
Douglas	23	1:30 p			0	0	4	0	Windstorm
									Several homes suffered mostly minor damage and numerous trees were blown down.
Georgia (continued)									
Doerun, Colquitt County	26	3:00 p			1	0	0	0	Lightning
									Thirteen year old boy killed while leaning against a gas heater in his home.
Savannah	30	3:45 p			0	1	0	0	Lightning
									A woman was stunned while talking on the telephone. She reported: "All around me was a flash, and then I heard a loud sound that made my head feel like it was going to blow off." She reported a "burning sensation" on the left side of her face and said she felt "very weak".
Hawaii			None	Reported					
Idaho									
North of Clearwater River, Northern Idaho	2	8:00 p - 8:30 p	gen.	--	0	0	3	2	Thunderstorm
									Lightning and scattered showers were wide-spread north of the Clearwater River. At least 39 fires were set in forested areas.
Melba, SE Canyon County	3	2:30 a.	5	100	0	0	4	2	Wind
									Strong winds toppled trees that damaged cars, cut utility lines.
Moscow, Latah County	3	1:30 a.- 5:00 a.	area	--	0	0	4	--	Thunderstorm
									An accompanying electrical storm struck two homes and started at least three spot fires on nearby Moscow Mountain. 15 power company transformers were damaged interrupting power.
St. Joe National Forest, Shoshone Co.	3	Evening	area	--	0	0	3	--	Thunderstorm
									Scattered showers and extensive lightning caused 17 fires in forest areas.
Coeur d'Alene and Kanikau National Forests, N. Shoshone and S. Bonner Cos.	5	Afternoon	area	--	0	0	3	--	Thunderstorms
									Lightning strikes started at least 5 forest fires in the forests that took 200 men, 6 dozers and retardant drops to control.
Owyhee County, 25 mi. SE Jordan Valley, Ore.	7	evening	5	NA	0	0	4	--	Flash flood
									A torrential downpour of one and a half inches of rain in 30 minutes damaged and in some sections obliterated six miles of access road.
Prairie, N. Elmore County	13	night	3	100	0	0	3	--	Wind
									A strong wind hit Prairie and ripped the roof off a hay barn. No other significant damage was reported.
Salmon, Lemhi to Gibbonsville, Lemhi County	22	night	area	--	0	0	4	--	Wind
									An intense storm accompanied by wind 40 to 60 m.p.h. toppled trees, damaged building roofs, blew down signs that resulted in wide-spread power and telephone outages.
Boise to Mountain Home, Ada and Elmore Counties	22	5:15 p.	area	--	0	0	3	--	Wind
									Winds 40 to 60 MPH toppled trees, damaged some building roofs, blew down signs and disrupted utility services in some areas.
Idaho Falls, Bonneville County	29	afternoon & evening	area	--	0	0	3	--	Heavy rain
									A heavy downpour caused greatest damage in east Idaho Falls and adjoining Ammon. Drainage channels were unable to handle rapid runoff. Some dozen home basements were flooded in lower area. Precipitation measured for the storm ranged 1.19 to 1.45 inches at the two weather stations.
Southwest Idaho, Ada, Boise, Gooding and Elmore Counties	30	afternoon	area	--	0	0	3	--	Thunderstorms
									Widespread lightning was associated with thunderstorms in Ada, Gooding, Elmore and Boise Counties setting numerous fires. 38 range and forest fires were set. Two range fires in Gooding County consumed about 9000 and 2000 acres. About 30 small fires were reported in the Boise National Forest, most of which were on the east slopes just north of Mountain Home westward. Some jumper crews were able to bring them under control. One burned about 60 acres before controlled.
Rupert, Minidoka County	30	8:00 p.	Local	--	0	0	6	--	Lightning
									During an extensive electrical storm, lightning set fire to the Big 50' Tire recycling plant that spread to the adjacent Magic Valley Food Storage and completely destroyed them. Loss given as \$1,250,000.
Illinois			None	Reported					

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Indiana Michigan City	10	e.s.t. 5:30p.							Funnel
									Funnel cloud, moving northeastward, seen over NE section of city.
Dunlap (Elkhart County)	22	Night			0	0	5	0	Lightning
									Rubber products plant destroyed by lightning caused fire.
Michigan City, north	26	2:22p.							Waterspout
									Location reported to be north of Michigan City and about 25 miles WNW of South Bend.
Iowa Marengo, Iowa County	10	1:00 p			0	0	4	4	Hailstorm
									1-1/2 inch diameter hail.
Van Buren County	10	3:30 p	3	2000	0	0	4	4	Windstorm
									Extensive damage at Roberts Park, 2N of Keosauqua. Moved southeast.
Kansas Decatur, Smith Counties	2-3	eve of 2; nite of 2-3	?	?	0	0	3	4	Hail
									Largest hail was about 2 inches diameter northwest of Jennings.
Graham, Sheridan Counties	4	7:30- 8:20 p.	?	?	0	0	4	5	Hail
									Stones up to about 1 1/2 inches diameter fell in the Hoxie area at 8:15 p. Northwest Graham County and northeast Sheridan County had the most damage.
Smith County	5	about 6:15 a.	?	?	0	0	4	4	Hail, lightning
									Hail up to 1 inch diameter fell in the Smith Center area. Lightning damage occurred at Lebanon.
Scott County	5	3:45 p.	?	?	0	0	3	3	Hail
									Hail up to about 1 1/4 inches diameter fell near Scott City.
Butler County	5	about 4:00 p.			0	0	3	4	Rain
									Heavy, local rains caused flash flooding south of Burns.
Scott County	19	6:32 p.	1 1/2	100	0	0	0	0	Tornado
									Tornado touched down 1 1/2 mi. SE of Scott City; it moved west 300 yards, then north for 150 yards, and finally eastward for 1 1/2 miles.
Lane County	19	about 7:10 p.							Funnel aloft
									Location was just south of Amy.
Gowley County	21	9:20 p.			0	0	5	0	Lightning
									A lightning-caused fire destroyed a gasoline tank at Arkansas City; damage was estimated at \$450,000.
Pawnee County	24	about 5:15 p.	?	?	0	0	4	3	Rain, wind
									In the Larned area, heavy rains caused local flash flooding and strong winds knocked out most telephone service.
Phillips County	31	Eve			0	0	4	3	Rain, wind
									Locally heavy thundershowers produced strong winds and flash flooding. Unofficial reports indicated about 7 inches of rain fell in the Glade area.
Kentucky Magoffin County	4	4:30 p.			0	0	6 ⁰	C	Flash Flooding
									In the Salyersville area of Magoffin County heavy rain associated with a thunderstorm totaled 4.85 inches in about 2 hours; 3 inches of this total in about 1 hour. Flash flooding along the tributaries of the Licking River caused damage in the Salyersville area (preliminary estimate \$1 million). Burning Fork Creek, which feeds into the Licking River, was moving so swiftly at one time that it caused the river to flow in the opposite direction. The flooding was reported to be the worst since February 1962. 60 families were evacuated from their homes on State Road and in the Broadway section of Salyersville. The small community of Stringtown, which lies just outside of Salyersville, was inundated and the rural area of Mash Fork was hard hit. In Salyersville water from the Licking River climbed to 3 feet deep in some sections. From 6 to 8 p.m. the Salyersville fire truck was the only vehicle able to move in the city. In-roads to Salyersville were cut off for more than 4 hours and State Police and Civil Defense workers were still driving through water at 1 a.m. on the 5th.
Owsley County	4	p.m.			0	0	?	?	Flash flooding
									About two inches of rain and flash flooding of low-lying areas in the vicinity of Booneville were responsible for damage estimated at "tens of thousands", chiefly to damaged and destroyed tobacco and other crops and gardens. Several bridges were washed out.

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Kentucky (continued) McCreary County	4	6:00 p.			0	0	?	?	Flash Flooding
									Heavy rains (about 4 inches in a 24-hour period) were partially responsible for flash flooding from Coffey Hollow near Stearns which washed out about 100 feet of Kentucky and Tennessee Railroad track (temporarily halting movement of coal from a mine) and the destruction of a 34-foot trailer. The section of track was said to have been in place for 70 years, the washout according to observers occurring when a 60-inch culvert became clogged causing water to back up into the hollow and eventually break through the landfill.
Harlan County	5	p.m.					?	?	Flash flooding
									The low-lying community of Wallins near Harlan experienced flash flooding during heavy rains, the source of the water being the various tributaries to the Cumberland River in the area. No significant damage was reported, although some streets and roads and some lawns and gardens were flooded. Wallins Creek crested 9 1/2 feet higher than normal in the late afternoon, and most of the roads were reopened by evening.
Southern Bluegrass	18	Afternoon			1	1			Lightning
									About 3 p.m. a man was killed by lightning while standing under a tree near Lancaster, Garrard County. About 4 p.m. a man was injured by lightning while riding a tractor near Darville, in adjacent Boyle County.
Southwest	21				0	0	?	?	Rain, wind, funnel cloud aloft, hail
									High winds, heavy rain and hail began about 11 a.m. in the area from south of Bardwell to about 10 miles north of Bardwell in Ballard and Carlisle Counties. A funnel cloud was reported near US 51 between Bardwell and Arlington. Utility lines and trees were damaged. Some wind damage was reported on US 51 10 miles north of Bardwell. Heavy rains in portions of the southeast on the 21st-22nd, totaled from 5 to 6 1/2 inches at several locations: 5.82 at Hickman, Fulton County; 6.53 at Columbus, Hickman County; 5.12 inches at Fulton, Fulton County.
Bourbon County	25	Night			0	0	4	0	Lightning, wind
									Several fires were reported following an electrical storm. One 8-bent barn and possibly a silo were destroyed, and a second 5-bent barn was partially damaged. Several roads were blocked by fallen trees.
Maede County	25	10:00 p.			0	0	?	?	Hail
									A hail storm struck the Buck Grove, Rock Haven and Weldon communities, causing considerable damage to tobacco in that area.
Trimble County	25	Night			0	0	?	?	Lightning, wind
									There was considerable hail and wind damage in portions of the county.
Owen County	25	Night			0	0	?	?	Hail, lightning, wind
									Wind and hail damaged a number of tobacco crops. A house and 2 barns burned, apparently set afire by lightning, and a barn was unroofed by wind. Trees and tree limbs blocked several roads.
Northeast	25				0	0	6 ⁰	C	Hail, rain, lightning, wind
									Hail, wind, rain and lightning were responsible for considerable damage to crops and property, estimates totaling in excess of \$2 million in Hamilton County. Heavy rains totaled 4.16 inches at Falmouth on the 25th-26th, and unofficial totals in the County ranged from 5 to 7 inches. The Licking River rose 17 feet, to 9 feet below flood stage. Wind and hail damaged corn and tobacco crops. Flooding creaked destroyed bottom crops. Harrison County. The storm which began about 7 p.m. was mostly confined to an area to the east and west of Cynthiana, rainfall totaling to 4 to 5 inches. Wind and hail damage to crops, mostly tobacco, was estimated at \$500,000. Many fences and roads were damaged or destroyed due to the heavy rain. It was reported from ground observation that the hail fell in "fingers" with spaces between each damaged crop where an undamaged crop might be found. Harrison County. Heavy rains, unofficial measurements up to 7 inches in some sections, wind and hail caused extensive crop and property damage estimated at about \$1.5 million, \$1 million of this to crops. Flash floods washed out at least 6 bridges and forced families to move from a number of homes. Rain, hail (two heavy storms) and high winds caused damage to crops particularly heavy in low-lying parts of the county. The storm began about 7 p.m. on the 25th and lasted until about 2 a.m. on the 26th. Fallen trees blocked Ky. 19. It was estimated that about 400,000 pounds of tobacco were washed out or knocked flat and that another 300,000 pounds were hit by hail and high winds. Insurance companies reported that their payments would total as much as \$300,000 for only a portion (the insured) of the crops. The storm damaged seeded fields, farm ponds, stream channels and fences. Water damaged several houses. Lightning was responsible for damage to several buildings. Mason County. A storm began about 6 p.m. Considerable damage to tobacco crops. At least three barns destroyed by fire set by lightning. A number of trees down, utility lines down. Fleming County. The storm hit about 7:30 p.m. There was considerable damage to tobacco and corn crops, and to utility lines. Lewis County. Four inches of rain (unofficial total) were reported in just over an hour. Water was

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PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
Kentucky (continued)									
									across Ky. 10 in a number of places. Several families evacuated their homes along Cabin Creek because of rising water. At one location hail fell for 40 minutes; there was loss of tobacco and corn crops.
State	26				0	0	5	0	Lightning
									There was lightning at widely scattered locations over the State, most of it due to lightning strikes in the morning hours, but at least one case of damage due to a lightning strike in the afternoon. There was \$50,000 damage to a warehouse in Warren County, an 8-bent tobacco barn burned in Bourbon County. Some of the other reports included buildings damaged by lightning in Meade, Boyle, Hardin, and Carter Counties.
Louisiana									
Washington Parish	3	3:03p							Funnel cloud
									Near Thomastown.
East Baton Rouge Parish	3	3:30p							Funnel cloud
									Public report near intersection of I-12 and Airline Highway.
St. Mary Parish	10	11:10a							Funnel cloud
									Over Wax Lake southwest of Morgan City
Cameron Parish	11	11:45a							Funnel cloud
									Near Croele.
Vermilion Parish	11	12:32p							Funnel cloud
									Near Schooner Bayou.
Cameron Parish	11	12:35p							Funnel cloud
									Near Grand Lake.
Acadia Parish	11	12:35p							Funnel cloud
									Near Lyons Point.
Caddo Parish	11	12:45p			1	0			Lightning
									Shreveport man struck and killed by lightning while sweeping sidewalk.
Bossier Parish	12	2:00p							Funnel cloud
									West of Minden.
Jefferson Davis Parish	23	12:40p							Funnel cloud
									5 miles west of Jennings.
DeSoto Parish	24	1:45p							Funnel cloud
									Between Stonewall and Gloster.
St. James Parish	24	6:35p							Funnel cloud
									Near Convent.
Plaquemines Parish	27	5:50p							Funnel cloud
									7 to 8 miles southwest of Callender Field.
Iberia Parish	30	9:55p							Funnel cloud
									Near New Iberia.
West Baton Rouge Parish	31	1:26p							Funnel cloud
									8 miles southwest of Ryan Airport, Baton Rouge.
Lake Pontchartrain	31	6:00p							Waterspout
									5 miles northeast of Lakefront Airport, New Orleans.
Maine									
Southwest	2	early p.m.			0	0	4	0	Lightning, rain
									Lightning damage included loss of a small building in Chelsea. Some washing and flooding from heavy rain. In Portland a department store was damaged when rain overtaxed the drains. Some washouts occurred. Portland reported over one inch of rain in less than one hour.
Fort Kent	3	5:25 a.m.			0	0	4	0	Lightning
									A dairy barn and contents were destroyed by fire from lightning.
Fryeburg	11	12:30 p.m.			0	1	3	0	Funnel cloud, wind, lightning
									Pilot reported funnel cloud. Wind felled trees and limbs. Lightning damaged a church steeple and stunned one man.
Bridgton	11	12:45 p.m.	2	narrow	0	0	3	0	Tornado-waterspout
									Funnel seen as narrow waterspout crossing Highland Lake, moving eastward. Damage on land on both sides of lake in clearcut path about 1000 ft. wide, with trees and limbs felled. This storm was probably from same cell as earlier hit Fryeburg, with storm moving about 48 mph. Some hail in vicinity.

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
Maine (continued)									
Bingham	11	1:00 p.m.	1/4	narrow	0	0	4	0	Tornado
									Town littered by falling trees and limbs in path. One home hit by tree. Windows blown out by sudden drop in air pressure.
Sebago Lake	11	1:00 p.m.			0	0	2	0	Waterspouts
									Small twin waterspouts on the lake, with wind overturning a fleet of sailboats. Articles lost from boats but no one hurt. No damage noted on shore. Heavy thunderstorm.
Central and southwest	11	p.m.			0	0	5	0	Lightning, wind
									Locally severe thundersqualls hit many communities. Lightning losses included a home in Rumford, a barn in Cambridge, and a cow in Brunswick. Wind felled numerous trees and limbs and crushed cars. Extensively damaged at Turner was a new mobile home which had just replaced one demolished on the same site by a tornado on July 31. The Lewiston-Auburn area was heavily damaged by wind estimated up to 70 mph at about 1:15 PM, probably by the eastward moving cell which had produced the Bridgton tornado. Similarly, the Dexter area was hit at about 1:40 p.m. by the system which produced the Bingham tornado. In Dexter a portion of suspended ceiling fell due to a sudden drop in air pressure. At Waterford a barn was blown from its foundation and a trailer also was moved. At Skowhegan a trailer turned over. Considerable damage occurred at Kingfield, where plywood sheets sailed into the air.
State	27-28				0	1	5	3	Hurricane Doria
									The track of the diffuse center of the remnants of Doria passed rapidly northeastward near the border between northwestern Maine and Canada, during the afternoon of September 28. Strong winds were produced throughout western Maine with gusts up to around 50 mph. Many trees and limbs toppled, causing utility service failure to thousands. Some toppled onto homes and autos. Boats and waterfront facilities on many inland lakes were damaged, as well as along the Atlantic coast. One was injured on Bailey's Island when swept from a rock by high surf. Coastal damage was minimized because the storm surge came near the time of regular low tide. A tall transmitter tower in Brunswick toppled. Crop damage was mostly minor, with some corn flattened and some fruit blown from trees. Total storm rainfall, including that falling on September 27 prior to Doria's passing, varied from none at Eastport to mostly one to two inches over the western half, with a few areas exceeding two inches. The rain was generally beneficial.
Maryland									
Baltimore Metropolitan area including Harford County	1-2	6:00 p.m.-4:00 a.m.			14	0	7	3	Heavy rain, flooding, lightning
									Severe thunderstorm activity, associated with a frontal system stalled along the East Coast for several days, brought extremely heavy rainfall to this area, resulting in widespread severe flooding. Many rainfalls over 7 inches in less than 12 hours were reported in East Baltimore City and southeast Baltimore County where the most severe flooding occurred. The 12.6 inches at White Marsh was the maximum reported total. Although this was an unofficial measurement, it was considered reliable. That only four other rainfalls greater than 11 inches in one day had been reported in Maryland since the 1890's, indicated the rarity of such an event. Principal streams affected were Herring Run, White Marsh Creek, Stemmer Run and tributaries of Gunpowder Falls; record discharges were reported by the U.S. Geological Survey.
									Eight of fourteen deaths were involved in a single incident. A car with four occupants traveling along Route 7, had slid into Bean Run, a tributary of Gunpowder Falls. Four volunteer firemen and a tow-truck operator who were attempting to attach a tow-line to the car were all washed downstream by suddenly rising water, together with the car and its occupants. Only one person, a woman in the car, saved herself by grabbing and clinging to a tree. The other six deaths occurred in isolated incidents. Five were drowned when they were swept along in the rapidly moving water or fell into a sewer; one man was found dead in two feet of water in the basement of his home. At least six of the fourteen who died were involved in rescue operations. News accounts noted many people rescued from flood waters. Lightning was reported as unusually severe during these storms. Several buildings were damaged or destroyed by fires set by lightning strikes. Lightning and falling limbs were responsible for much of the interruptions to power and telephone service. Total storm damage was estimated at 6.5 million dollars, consisting mainly of damaged buildings, particularly through flooding of basements, damaged vehicles, erosion and bridge and roadway washouts. This storm will rank along with the other major storms of the last forty years in this area: Hurricane of August 1933, the Hurricanes Connie and Diane of August 1955, and Hurricane Hazel of October 1954.
Poolsville, Montgomery County	1	10 p.m.			0	4	0	0	Lightning
									Lightning was blamed for a fire that destroyed a barn, damage was estimated at \$20,000.
Scaggsville, Howard County	3	Evening			0	0	4	0	Lightning
									Lightning was believed to have caused a fire which destroyed the upper part of a large barn. A volunteer fireman was taken to a hospital where he was treated for smoke inhalation.
Central and north-central Maryland	3-4	Evening-Morning			0	0	5	0	Rain, flooding
									Six days of rain culminating with very heavy local thunderstorm rainfall during the night of 3rd-4th caused streams and rivers

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PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED ¹ DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
Maryland (continued)									
									to overflow their banks in scattered areas of Prince Georges, Montgomery, Carroll, Frederick, and western Anne Arundel Counties. Roads were closed temporarily in low-lying areas; some roads and bridges were damaged. There were also scattered reports of damage to buildings and automobiles caught by the raging waters. In Baltimore metropolitan area more than 17,000 customers were without electricity, most of the interruption was caused by lightning or falling trees.
Sharpeburg, Washington County	11	1:30 p.m.			0	0	3	0	Wind, rain, hail
									A thunderstorm accompanied by high wind, heavy rain and hail, knocked down trees and caused minor property damage. Property damage was limited to TV antennas, windows and parked automobiles.
Eastern portion	26-28	Evening-Morning			0	0	5	C	Wind, rain, high tides
									Tropical storm Doris, moving up Maryland's southern Eastern shore through Delaware into New Jersey brought heavy rainfall 30 to 45 knot winds with brief gusts to 35 knots and tides, 1 to 2 feet above normal in Chesapeake and 2 to 3 feet above normal on the Atlantic Coastal areas. Damage was generally light, mostly from flooding in low-lying or poorly drained areas and winds overturning trailers, unroofing several buildings, snapping limbs and TV antennas, and downing trees. Erosion along coastal areas was also reported as light. Some unusually heavy 24-hour rainfalls were reported by cooperative observers as having occurred by their observation time on 27th and included such totals in inches as: LaPlata 1W, 9.80; Annapolis, 7.45; Millington, 6.40; Cambridge 4W, 6.05; Aberdeen, 5.17; and Conowingo Dam, 5.03. Some wind damage to corn crop was also noted.
Massachusetts									
Cape Cod	7	4-5 p.m.			0	0	4	0	Lightning
									Numerous strikes caused mostly minor damage to buildings and a number of utility outages, with the Bourne-Sandwich area hardest hit. Some small hail but no damage reported.
Worcester County	11	p.m.			0	0	4	0	Lightning, wind, rain
									A number of utility outages from wind and lightning. Lightning damaged buildings, and in Northboro destroyed a hay-filled barn. In Millbury a home was extensively damaged. In Worcester, at about 2 PM swirling winds lifted leaves and lawn furniture into the air and toppled four large trees, though no tornado funnel was visible. Locally heavy rain caused minor washouts and flooding of parking lots and cellars. Hail up to 1/2 inch size was noted, with no damage.
Essex County	20	3-4 AM			0	0	4	0	Lightning, rain
									Lightning felled a giant pine in Hamilton, crushing a car and damaging a home. In Rockport a home was set ablaze by lightning while heavy rain caused washouts.
Hyannis and vicinity	20	a.m.			0	0	4	0	Lightning, rain
									Lightning set several fires with mostly light damage and also caused power failures. Very heavy local rain, with 4 to 5 inches at Hyannis, washed out roads and flooded several areas. A major loss was at a store in Hyannis, when the basement flooded with 8 ft. of water, damaging merchandise.
State	27-28				1	2	6	4	Hurricane Doris
									The track of the diffuse center of the remnants of Doris crossed Massachusetts in a north-northeastward direction, mostly west of the Connecticut River but crossing the Connecticut near northern border. The center moved at about 40 mph, spanning the state between 9 and 11 AM, EST. Strong, gusty wind lashed the state east of the center. The peak gust reported, from the top of Blue Hill in Milton, was 87 mph. Nearer sea level, a peak gust of 56 mph, from the southeast was recorded at nearby Boston, where this was the strongest peak gust in August since 1958. Trees and limbs fell in practically every community east of the center, damaging buildings, autos, and causing utility outages. Power failures ranged from little or none in some areas to total in others, with over 50% loss in quite a few. Some direct structural damage to buildings, but these were mostly limited to signs, chimneys, aerials, windows, etc. However, in Newburyport, walls of two buildings under construction were blown over. Spotty damage occurred to crops, with apple and peach orchards hardest hit. Some apple trees blew over, many lost limbs, and fruit drop ranged up to 15%. Corn was flattened in some areas. One death occurred when a boy was swept away by high surf at Marblehead after he had rescued two others. Two were injured in Holliston when a limb fell on their car. Many additional injuries resulted from accidents associated with streets made slippery by rain and a litter of wet leaves. Many roads were blocked by fallen trees and some by flooding. Total storm rainfall, including that on September 27, while Doris approached, varied from very little on outer Cape Cod to 1 to 2 inches over most areas east of the central track and to mostly 3 to 6 inches west of the track. The rain was generally beneficial, but there was considerable damage from washing and flooding in the west. Many washouts occurred and many cellars flooded. While high surf caused some damage to boats and coastal installations, this was minimized as the storm's peak surge came when the regular tide was low. Some damage to boats and docks on inland waters.
Michigan									
Southern Upper Peninsula and Lower Peninsula	10	11 am-7 pm			0	4	6	0	Thunderstorms, Wind, Lightning
									A series of destructive storms moved across Michigan causing power failures, localized flooding, blown out windows, toppled trees, and downed TV antennas. Injuries due to the storms include: Chelsea, youth cut by flying glass while trying to close windows; Niles, youth injured when tree limb broke off on road in front of him; Grand Rapids, youth knocked unconscious when lightning struck a nearby tree; Royal Oak, woman treated for shock after storm hit area. Some of the larger losses include: \$125,000 damage to Warren Post Office roof and loading dock; Midland, \$12,500 loss of new trailer and contents, \$17,000 loss for barn and contents; Gladwin, lightning exploded two oil tanks, \$5,000 loss; Hope, barn and contents \$30,000. Many smaller losses were reported throughout Michigan.
Grayling, Crawford County	10	2:15 pm			0	9	3	0	Thunderstorm, Wind, Lightning
									Strong gusty winds, up to 72 mph, toppled 90 tents and injured 9 guardsmen. Two of the injured received burns when lightning struck nearby. One was using the telephone at the time.
Big Rapids, 21SW Newaygo County	10	3:10 pm	1/16	50	0	0	3	0	Tornado
									Funnel observed aloft over water, dipped down briefly over land as it moved northeastward. Damage confined to trees with minor damage to cottages near Croton Dam.
Big Rapids, 10SSW Mecosta County	10	3:20 pm			0	3	4	0	Thunderstorm, Wind
									Strong gusty winds toppled a barn onto a mother and two sons as they tried to fasten things down. The mother suffered a broken leg while the boys escaped with cuts and bruises. This storm may be remains of confirmed tornado at Croton Dam.
Flint, 12NE Genesee County	10	4:15 pm	1/4	300	0	1	5	0	Tornado
									Tornado funnel, moving eastward, dipped briefly into a new trailer park area, destroyed about 20 trailers, a building under construction, and a nearby barn. One lady suffered minor cuts. Damage was estimated to exceed \$150,000.
Flint, Genesee County	20-	11 pm-21 12:20 am			0	0	3	0	Hail, Heavy Rain
									1/2 to 3/4 inch hail, accompanied up to 2 1/2 inches of rain as the storm passed over Flint. Toppled trees damaged cars and localized flooding occurred. Thirty-two robins, roosting in a tree, were found on one lawn and believed to have been killed by the hail and wind, or lightning.
Saginaw Bay	22	3 pm-4 pm			0	0	0	0	Waterspout
									One large and six smaller waterspouts observed about 3 miles NW of Port Crescent were moving in a southwesterly direction.
Big Rapids, 8 SE Mecosta County	22	5:20 pm			0	3	3	0	Wind
									The wind toppled a tree on a camper on M20 in Colfax Township, injuring the 3 occupants.
Thumb Area	22	6 pm-7:30pm			0	18	6	0	Thunderstorm, High Winds
									Severe thunderstorms, wind and 1/2 inch hail moved southeastward from Sebawaing to Lakeport and northern Port Huron overturning mobile homes, trees, and damaging many buildings. The path of heaviest damage was about 30 miles wide. Total losses are estimated to exceed two million dollars. The injured suffered cuts, bruises and broken bones; 2 near Sebawaing, 2 near Cass City, 4 near Royal Oak, and 10 near Lakeport. About 700 trees were toppled in and around Lakeport.
Belle Isle, Wayne County	22	7:30 pm			1	0	0	0	Lightning
									Man killed by a limb from a lightning-shattered tree.
Grand Rapids, 20N Kent County	24	6 pm			0	0	0	4	Hail
									Hail, up to 3/4 inch in diameter, caused damage to some fruit orchards. Other damage associated with the storm was minimal.

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					KILLED	INJURED	PROPERTY	CROPS	
Michigan (continued)									
Detroit, Wayne and Macomb Counties	26	4 pm-7 pm			0	0	0	5	Hail, Heavy Rain
Hail, reported as 1 inch near Romeo and up to palm-sized on Detroit's east side, accompanied heavy rain which caused localized flooding of freeways. Damage in the area was minimal. Crop damage estimate exceeds \$200,000.									
Flint, Genesee County	26	4:30 pm			1	0	0	0	Lightning
Lightning struck a tree at the Elks County Club killing the youth that had sought shelter under it near the eighth green.									
Minnesota									
Across North Central Part of State	9	6:00 p to 11:00 p			0	0	5	5	Thunderstorm cells with wind, hail and tornadoes
Two 15 mile wide damaging thunderstorm cells developing in North Dakota moved parallel east-northeast across Minnesota at about 53 mph. The paths of the cells were about 45 miles apart with the northern cell entering the State about 6:00 p and just south of Fargo-Moorhead and slightly ahead of the southern cell. The northern cell moved on a Fargo-Leech Lake-Virginia line and the southern cell on a Fergus Falls-Wadena-Duluth line. The paths of these cells were similar to the cells that developed 12 tornadoes on August 6, 1968. Locations reporting damage in northern cell: Lake Park had 65 mph winds at 6:30p; dock and boat damages at Cotton, Floyd and Detroit Lake areas; at 7:30p 60 mph at Park Rapids; barn destroyed and 7 cattle killed south of Bemidji; at 8:30p damage to resorts in Scenic State Park and Bowstring Lake area; barn down at Kinney; mobile home overturned at Virginia; 58 mph winds at Hibbing; at 9:45p store roof blown off at Gibson; at 10:20p tornado at Whiteface Reservoir Dam (see separate report); winds and hail at Isabell Ranger Station at 11:00p. Heavy tree damage and power outages were common across all storm areas. Damages reported in southern cell: at 7:10p 55 mph at Fergus Falls with some minor damage to homes; Pebble Lake swimming dock destroyed; 40 boats stranded in Rush, Ottortail and Blanche Lake areas; 70 mph at Verdale; barn destroyed north of Staples; at 8:45p tornado at Pelican Lakes (see separate report); at 9:00p 55 mph at Crosby, semi-trailer overturned, garage destroyed and dock and boat damage at Serpent Lake; at 9:45p north of Floodwood barn blown down, another barn & mobile home damaged. Crop hail damage was reported in Otter Tail, Clay, Becker, Mahanomen, Pennington, Red Lake and Clearwater Counties.									
Pelican Lakes 3E, Crow Wing County	9	8:35 p to 8:50 p	6	30	0	0	4	0	Tornado
Small tornado was first observed as a funnel cloud northwest of Pelican Lakes. The tornado touched down on east side of Pelican Lakes skipped along southeast for 6 miles then lifted near the Mississippi River. It damaged a mobile home at Velvet Beach Resort, otherwise caused minor damages and tree damage.									
Whiteface Reservoir Dam 1/2W, St. Louis County	9	10:40p	1/5	30	0	1	3	0	Tornado
Small tornado moving easterly touched down just west of the Whiteface Reservoir Dam and knocked down a strip of trees 1,000 feet long and about 100 feet wide. An oil barrel was blown down and injured one person.									
Fargo-St. Paul Minneapolis Line	13	Forenoon & Afternoon			0	2	5	3	Electrical storm
Strong electrical storm moved southeast generally on a Fargo-Minneapolis-St. Paul line. Lightning injured one man near Bertha in the forenoon and a construction worker at 2:45p near Rosemount. Lightning killed 4 head of cattle at Wrightstown in Otter Tail County and 13 head of cattle near Bertha in Todd County. It also caused damage to a building and electric poles near Chisago City about 1:30p.									
Northern Counties	16	Late Afternoon			0	0	0	4	Hail & wind
Hail and wind caused light crop damage from Kittson and Marshall Counties east through International Falls which received gusts to 70 mph and 3/4 inch hail at 5:15p.									
Cloquet Area, Carlton & St. Louis Counties	17	5:30p to 7:40p			0	0	5	0	Heavy rain, wind and hail
Thunderstorms with heavy rain, winds and 1-1/4 inch hail at 5:30p and again at 7:40p across Carlton and lower edge of St. Louis County caused considerable basement flooding and some window breakage, blew over a mobile home and many trees. Lightning destroyed a barn with 2,000 bales of hay 6 miles east of Barnum at 8:30p. Greatest rainfall reported 4-1/2 inches at Scanlon.									
Becker, Mahanomen & Clearwater Counties	21	6:45a to 8:00a			0	0	4	4	Hail
Thunderstorm with 1-3/4 to 2-3/4 inch diameter hail caused crop damage on a 5 mile wide strip from south of Detroit Lakes north-northeast through Gonvick. Hail damaged automobiles and broke windows west and south of Bagley.									
Goodhue and Olmsted Counties	21	4:00p to 5:30p			0	0	0	4	Hail

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Minnesota (continued)									
Grove City 4S, Meeker County	23	6:40a			0	0	4	0	Lightning
Thunderstorms with 1/4 to 1/2 inch hail caused crop damage particularly in southwest Goodhue County near Kenyon and less damage southeast thru West Concord, Mantorville and Stewartville.									
Central Minnesota	31	Morning thru Evening			0	0	5	0	Strong electrical and rain storm
Lightning struck and burned a barn with 400 bales of straw, 92 pigs and some machinery in the Rosendale area of Meeker County.									
Thunderstorms with 2 to 3 inch rains and severe lightning moved through the central part of the State on the 31st. Morris received 3.67 inches in a 24 hour period. Rains caused some basement flooding. Severe lightning between 7:00a to 9:00a struck 5 homes in Benville and struck one home twice, causing minor damage to electrical equipment, lightbulbs in all homes and in one home it caused major damage to a wall and destroyed much of the electrical equipment. Lightning struck and burned a barn at 9:23a southeast of Montevideo and burned 3,500 bales of hay 5 miles south of Morris in early morning. Heavy rains and severe lightning between 6:30p and 7:15p through the northern suburbs of Minneapolis-St. Paul caused some minor basement flooding and electrical damage to homes and also washed out the evening performances of the Minnesota State Fair.									
FUNNEL CLOUDS ALOFT DURING AUGUST									
County	Date	Time	Location						
Hubbard	9	about 8:45p	Near Nevis						
St. Louis	9	10:40p	Buhl 5N						
Otter Tail	18	3:47p	Near Deer River						
Mississippi									
Warren County	3	About 1:30 p.			0	0	4	0	Lightning
Man reported severe thunderstorm; lightning seen to hit house and thunder heard about 1:30 p.m. in Chapel Hills, outside SE Wicksburg city limits. House burned and damages to it and contents estimated about \$35,000.									
Adams to Jefferson County	3	About 2:05 p.							Funnel Cloud Aloft
Newspaper noted, "A funnel cloud which never touched ground was sighted near Leesdale Tuesday afternoon, but later dissipated south of Fayette after 'extremely dark clouds' dropped 'extremely heavy rain' in Jefferson County." No damage reports received indicative of a touchdown.									
Mississippi Sound	9	About 8:00 a.							Waterspouts
Three waterspouts reported moved NNE between Horn Island and Pascagoula and dissipated offshore. A long spout was visible south of Gautier for about 10 minutes and could be seen 3 SW Pascagoula (lat. 30.3° N, long. 88.6° W); "we saw it form . . . it was churning and throwing water just like a giant hose, it was as large around as a house." As soon as the first spout disappeared another one formed in practically the same place as the first spout and traveled the same direction. A third waterspout was reported within a five mile area.									
DeSoto and Tate Counties	11	4:30 p.-6:00 p.			0	0	?	?	Funnel Cloud Aloft, Wind
Some wind damage reported with storms moving from NW towards SE. At 5:45 p.m. Jackson radar indicated band moderate to heavy thunderstorms from Middleton, Tenn. to Pine Bluff, Ark.; this band was 25 to 30 miles wide and moving towards SE at 25 m.p.h. DESOTO COUNTY: County agent reported general thunderstorms most of county, strong winds in most bases; some trees down, electricity failure, etc.; some crops down, no serious damage. At Hernando, during rainy weather about 5:00 p.m., some people observed one funnel that remained aloft and heard roaring sound. Highway Patrol reported some trees down near Hernando 5:15 p.m., winds estimated 40-45 m.p.h. TATE COUNTY: In Alphear community, about 10 SE Hernando, woman reported storm beginning between 5 and 6 p.m. and twister did damage on her property. She said, "It sounded like a freight train or a jet plane flying real low, it pulled the top out of a lot of trees around the house . . . it didn't come all the way down. . . ." A corn patch only yards away from the house was leveled by the winds. Newspaper noted, "Storm winds, clocked at around 45 miles per hour in the Senatobia area about 6 p.m. (HIT) . . . uprooted trees. . ."									
Alcorn County	11	6:30 p.			0	0	4	0	Funnel Cloud Aloft, Thunderstorm
Thunderstorm moved from SW towards NE. Civil Defense Director at 6:30 p.m. saw one funnel that remained aloft at Whiller Grove community, 3 SE Corinth, (lat. 34.4° N, long. 88.5° W). "There was a tremendous roar along with a black funnel shaped cloud very close to tree top level with heavy rainfall and lightning. Cloud . . . did not touch down." Lightning destroyed one house, damage estimated \$5,000.									
Tallahatchie County	11	Before 7:33 p.							Funnel Cloud Aloft
Man reported a short-wave conversation about a funnel cloud at Webb on Highway 49 (lat. 33.7° N, long. 90.4° W). Highway Patrol found no evidence of storm damage.									

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PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
Mississippi (continued)									
Mississippi Sound	21	Afternoon							Waterspout
			Waterspout observed as "a black band against a clear sky" to south of Pascagoula beachfront. A man estimated it got within about two miles from shore before it dissipated.						
Bolivar County	22	About 1:00 p.			0	0	?	0	Wind
			At 3:45 p.m. Jackson radar indicated a heavy thunderstorm embedded in a solid line of thunderstorms W of Cleveland; this thunderstorm moving towards E at 28 m.p.h. At 2 W Shaw (lat. 33.6° N, long. 90.0° W) on Highway 443, Highway Patrol at 4:35 p.m. saw a truck shed and a utility line down. At 4:45 p.m., radar indicated the thunderstorms in N Mississippi moving towards ESE at 28 m.p.h.						
Sharkey County	23	12:37 p.							Funnel Cloud Aloft
			Man sighted one funnel cloud that remained aloft 2 S Rolling Fork (lat. 32.9° N, long. 90.9° W) moving towards SE at 20 m.p.h. No reports indicative of touchdown damage received.						
Warren County	23	1:08 p.							Funnel Cloud Aloft
			Funnel cloud reported 12 NNE Vicksburg (lat. 32.5° N, long. 90.8° W). No reports indicative of touchdown damage received.						
Warren County	23	1:50 p.-1:55 p.							Funnel Cloud Aloft
			Pilot reported funnel cloud 10 NE Vicksburg (lat. 32.4° N, long. 90.7° W) moving towards SE about 20 m.p.h. No reports indicative of touchdown damage received.						
Jackson County	23	Before 5:41 p.							Funnel Cloud Aloft
			Newspaper noted a funnel cloud "... was sighted in the Virginia City area in Jackson County north of Ocean Springs the police department reported, but apparently the funnel did not touch down and no damage could be found by officers who investigated."						
Jackson County	24	1:00 p.-4:45 p.			0	0	4	0	Heavy Rain, Lightning
			Thunderstorm brought over three inches of rain in less than two hours and produced flash flooding. At 3:15 p.m. water stood 3 feet in many places. City officials said the flooding was general as storm sewers were unable to handle the heavy rainfall. Many automobiles were stalled and high tide during the storm increased the drainage problem. Lightning struck at least 8 homes, a storage tank at the Standard Oil Refinery (about 2 p.m.) and 6 power transformers. Damages from lightning estimated \$25,700.						
Jackson County	24	Before 1:45 p.							Funnel Cloud Aloft
			Newspaper noted, "A funnel-shaped cloud was sighted over the Bernard Beazley Fire Station (lat. 30.1° N, long. 88.8° W) in East Ocean Springs. ... during a heavy rain, caused no damage and did not touch down, police said."						
Pearl River County	25	3:35 p.-3:36 p.	1	100	0	0	4	2	Tornado
			Storm moved from E towards W. Small twister touched down in West Union community near Carriere (lat. 30.6° N, long. 89.7° W). During rainy weather there were 2 funnels, one remained aloft and one touched down. There was a roaring sound as a train makes. Many trees were broken off, a trailer was picked up, turned over and thrown against the top of a car. Property damages estimated \$13,000, crop damages \$200.						
Alcorn County	26	3:30 p.-4:00 p.			0	0	?	0	Heavy Rain, Wind
			Corinth newspaper headlined, "Near inch falls in 30 minutes;" it noted the storm "... hit just after 4:30 p.m. (CDT).... Roscoe Turner Airfield records show at 5 p.m. (CDT) a reading of .94 inches of rainfall just after the storm." There was some wind damage in the area.						
Harrison County	27	About 3:45 p.	Short	Narrow	0	0	4	0	Tornado
			A white funnel cloud came down Bernard Bayou and struck the Sugar Mill Marina area in Handsboro (lat. 30.4° N, long. 89.0° W) and there was about \$10,000 damages. At the marina about \$5,000 damages when 9 roofs on boat stalls were lifted by the winds. A building adjoining the marina received about \$2,000 damages. Three trucks parked near the building were damaged when the marina roofs fell on them.						
Adams County	30	7:03 p.							Funnel Cloud Aloft
			Public reported funnel cloud 5 E Natchez (lat. 31.5° N, long. 91.3° W) no reports received indicative of a touchdown.						
Neshoba County	30	Night			0	0	?	0	Heavy Rain
			Philadelphia newspaper noted, "Approximately two inches of rain fell in 40 minutes Monday night in Philadelphia." A building was flooded "In the eastern part of the county, residents reported it was 'dry as a bone.'"						
Missouri									
Hardin, Ray County	3	1:00 pm	short	narrow					Tornado
			The public reported a tornado which had the appearance of a "tall thin wisp of smoke" touched down briefly on a farm northeast of Hardin. It apparently did little damage.						
Missouri (continued)									
Baring, Knox County	13	12:45 pm			1	3			Lightning
			An eight-year-old daughter was killed and her mother and two brothers were injured when the tree under which they were sitting was struck by lightning.						
Gravois Mills, Morgan County	21	2:15 pm			1				Lightning
			A teenage boy was killed when lightning struck near him while he was standing on a patio at a lake resort near Gravois Mills.						
Saverton Dam, Ralls County	21	6:30 pm			1	1			Lightning
			An elderly man was killed while seeking shelter from a thunderstorm when lightning struck the tree under which he was standing. He and two others were on an island in the Mississippi River. One man was slightly injured.						
Montana									
Sanders County	5	Afternoon			0	0	0	0	Wind
			Strong winds accompanying a thunderstorm blew down numerous trees and caused scattered minor property damage in the Thompson Falls-Plains area.						
Big Timber Creek, Sweetgrass County	29-30		20		0	0	5	5	Flood
			Heavy rains in the Crazy Mountains the night of 29-30 caused flash flooding along the entire length of Big Timber Creek. All bridges over the creek were washed out except the U. S. Highway 191 bridge. Total damage to public and private property and crops was estimated at \$175,000.						
Fergus County	31	5 p.m.	?	?	0	0	4	?	Winds
			Strong winds accompanying a thunderstorm caused minor damage to a number of buildings in Lewistown and in the area northeast of town. Some hail also accompanied the storm. Wind gusts reached 64 m.p.h. at the Lewistown airport.						
Nebraska									
Lancaster County	1	6p-6:30p	3	1*	0	0	4	4	Hail
			Eastern portion of county. Stones mostly 1/2" in diameter, but ranged up to 1 1/4".						
Jefferson and Gage Counties	2	4p-6p	40	2*	0	0	4	5	Hail, wind
			Fossil to Beatrice area. Individual hail strips 1 to 2 miles wide and 6 to 8 miles long. Stones generally from 1/2" to 1" diameter but some were up to 2-2 1/2". Wind blew a small hangar down at the Beatrice Airport.						
Buffalo Co. to Clay Co.	5	3:30a - 5:30a	35	1*	0	0	3	4	Hail
			Strips of hail about a mile wide and 3 to 5 miles long occurred in the area between Kearney and Glenville. Stones 3/4" to 1" diameter covered the ground in small areas in center of strips.						
Phelps County	11	9p - 9:30p	10	2*	0	0	0	5	Hail
			Stones 1" in diameter brought severe crop damage to about 20 square mile area in north-central Phelps County.						
Red Willow County	11	9:15p	5	1*	0	0	3	5	Hail, wind
			Hail stones about 3/4" diameter accompanied by high winds destroyed crops in Bartley area. Farm sheds blown down.						
Dawson County	18	9:07p	-	-	0	0	0	0	Funnel cloud
			Sighted near Johnson Lake.						
Keith County	21	5:40p	?	?	0	0	0	0	Hail
			Hail 1/2 to 3/4 inch diameter, no damage reported.						
Chase County	21	Night	25	1-1.5*	0	0	0	5	Hail
			A north-south strip across the county just west of Imperial. Size of stones not reported.						
Harlan County	30	6:30p	?	?	0	0	0	0	Hail
			Hail 3/4" diameter in Alma area. No damage reported.						
Nevada									
Lake Mead, Clark County	01	p.m.			0	0	5	0	Thunderstorm
			A severe thunderstorm moved over the Lake Mead area and did approximately \$75,000.00 damage to recreation boats.						
Genoa, Douglas County	05	p.m.			0	0	?	0	Thunderstorm
			A heavy downpour associated with a local thunderstorm produced flooding which sent three to four-foot wall of water down the School Canyon in Genoa. The postmistress reported that she had seen nothing like this storm in 27 years. Hit hard were areas at the foot of the many canyons from Kingsbury Grade to Jack's Valley and sections of Foothill Road. Several						

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					KILLED	INJURED	PROPERTY	CROPS	
Nevada (continued)									
Las Vegas Valley, Clark County	08	8-10 p.m.			0	0	?	0	Flood, Thunderstorm
lightning strikes were observed, resulting in two small forest fires.									
East Las Vegas, Clark County	12	5:59-6:01 p.m.	?	150	0	0	?	0	Tornado
A storm struck Las Vegas. Although the airport received only .35 inch of rain, other parts of the city received more. Wind gusts to 50 mph were recorded at the National Weather Service Office at the airport. Several intersections were inundated with water. For example, the Charleston underpass was under 10 feet of water and two cars were reported submerged. Power was interrupted; a conservative 40 small fires were reported. A house was struck by lightning, but was not damaged extensively.									
Lahonton, Lyon County	26	p.m.			0	0	?	0	Windstorm
A tornado was witnessed by several train engineers from a distance of 8 miles away. The funnel protruded from a 3,000 footbase (thunderstorm cloud) and reached the ground like a "curved rope" in the town of Pittman (East Las Vegas). No report of any damage was available as the storm touched down in an area of little development. Swirls of dust at ground level were observed with the tornado.									
Strong winds, associated with a thunderstorm swept through Lahonton Dam boat harbor and caused extensive boat and dock damages. At least three boats were sunk and others suffered water and hull damage.									
New Hampshire									
Central	11	Mid-day			0	0	4	0	Wind, lightning, rain
Many trees, limbs, and signs were blown down. Some utility outages were caused by falling limbs and a car was smashed in Ashland. Some cottages at Newfound Lake were damaged. Scattered lightning damage. Minor flooding and washing from heavy rain in a few areas. Some street flooding in Laconia-Lakeport.									
State	27-28				0	3	5	4	Hurricane Doria
The diffuse center of the remnants of Doria sped north-northeastward at about 40 mph from the southwestern corner at about 11 AM, EST., to the northeastern corner at around 3 P.M. Strong, gusty winds occurred east of the track, with a peak gust at Concord of 52 mph occurring at 10 A.M. Damage from falling limbs and some whole trees was widespread in the southern and east-central portions, with buildings and cars hit. Numerous utility failures resulted. Signs, chimneys, and windows also were broken. Three were injured by glass from breaking windows in Laconia. Wind flattened corn in some areas and knocked fruit from trees. High surf battered boats and coastal installations but damage was limited as the storm's surge came at a time of low regular tide. A number of boats and docks on inland waters were damaged. Total storm rainfall, including that on September 27, prior to Doria's approach, was generally 1 to 2 inches in the north and east. Amounts increased to 2 to 3 inches, with a few higher, in the southwest, where damage from washouts and flooding were greatest. Roads were hazardous due to a littering by wet leaves in many areas, and some were blocked by fallen limbs or trees.									
New Jersey									
See Data at end of Table									
New Mexico									
Sandoval County	6	2:30 p.			0	0	0	0	Hail
Hail to 1-inch in diameter south of Placitas.									
San Jon	9	4:50 p.			0	0	0	0	Hail
Hail to 1-1/2 inches in diameter caused no damage.									
Luna County	9	5:56 p. **50	40	0	0	2	0	0	Tornado, funnel aloft
Tornado, 8 miles south of Bering, touched down briefly, damaged home and downed trees. Tornado moved toward southeast. Funnel cloud aloft sighted 15 miles east of Columbus, moving toward east-southeast, at 8:30 p. Winds to 60 miles per hour with blowing dust.									
Lea County	10	5:05 p.-10:00 p.			0	0	5	0	Heavy rain, local flooding
Five homes at Hobbs damaged by high water, and construction equipment trapped in pits. Rainfall estimated to 3 inches to north of Hobbs.									
Dona Ana County	11	6:20 p.							Funnel aloft
Funnel cloud aloft, 20 miles northwest of El Paso, Texas.									
Lea County	13	1:40 p.							Funnel aloft
Funnel cloud aloft, 10 miles south of Hobbs.									
Socorro County	29	1:58 p.							Funnel aloft
Funnel cloud aloft reported by pilot, 35 miles southwest of Corona.									
New York									
New York City	1	p.m.						5	Rain, flooding
Heavy rains struck New York City, the third occurrence in four days. Severely affected this time were the Boroughs of Manhattan, Brooklyn and Richmond as most of 2.1 inch storm total fell during afternoon hours. Subway tunnels flooded and many expressways around city were rendered perilous, if not impassable, to auto traffic. Portion of street collapsed, leaving hole 30 feet wide by 15 feet deep in Brooklyn, where flood waters were up to 5 feet deep in many places. Heavy flood damage on Staten Island, including cemetery and ground floor of hospital, as more than 1000 homes had basements flooded and streets blocked by mud slide. Telephone service crippled in wide areas of city. Storm brought total rainfall in four days (since July 29) to 5.87 inches at Central Park observatory.									
Oneida (20 miles SE of), Madison County	2	5 p.m.							Funnel cloud
Observed by pilot and described as dissipating.									
Oneida, Madison County	2							4	Wind
Wind toppled large tree onto home resulting in total loss of structure.									
Niagara County and Ellisburg, Jefferson County	10	p.m.						4 ⁰	C Wind
Afternoon and evening thunderstorm activity in counties along length of Lake Ontario resulted in locally damaging winds in northern Niagara County and at Ellisburg, southwestern Jefferson County. Barn demolished, fruit stripped from part of apple orchard and numerous large trees toppled in the Wilson, Newfane and Appleton areas in the former county. The autos heavily damaged by falling trees at Lockport in one of which youth narrowly escaped injury. In village of Ellisburg two hay wagons were blown considerable distance in separate incidents, lawn furniture strewn about, some windows broken and yards littered with downed trees and limbs; large hail fell briefly. Home in East Syracuse sustained considerable damage to roof and attic from lightning-caused fire.									
Rye, Westchester County	11	1:30 p.m.	short	narrow				4	Tornado
Funnel cloud witnessed by at least two persons moved down street for a distance of three city blocks in the Rye Beach-Milton Point sector of this community. Trees and limbs ravaged and broken along path, two children lifted off ground and dropped uninjured. Thundering noise observed as phenomenon accompanied by heavy rain, considerable lightning and hail of golfball size.									
Westchester County	11	1 to 3 p.m.						5	Wind, lightning, rain
Vicious winds caused heavy damage in south shore sections of Westchester County, affecting communities from New Rochelle and Mamaroneck to Connecticut border. Hundreds of large trees were splintered, broken and toppled with attendant damage to homes, buildings, cars and utility lines. One house heavily damaged by fallen tree and roof of another house punctured, allowing rain to heavily damage interior, both in Mamaroneck. Several cars smashed by trees in New Rochelle. Cloudburst rains accompanied winds as 0.62 inch measured in ten minutes by water plant in Larchmont; considerable flooding of streets and highways. Thunderstorms also affected Staten Island and Nassau County with heavy rains, flooding and scattered power failures. At Massapequa, southern Nassau County, two inches of rain fell in 30 minutes, about 3 p.m.									
Western quarter	21	early a.m. to early p.m.			1	6	5		Lightning, rain, flooding
Extreme western sector from Chautauque County northeastward to Rochester area struck by thunderstorms with heavy rain during early and mid morning hours. Storm total of 2.9 inches at Bemis Point, Chautauque County, most of which fell between 3:15 and 6 a.m. Lightning sparked a stubborn fire in sawdust at plywood factory and minor fires in garage and home in Jamestown; numerous power failures in Chautauque County. Heavy, short duration rains about 0630 a.m. in Rochester resulted in considerable flooding of basements, streets, intersections and expressways. In early afternoon a boy was killed, his sister badly injured and five other children stunned by lightning while under a tree at Clarence, Erie County.									
Lightning also caused extensive structural damage to sailboat at Grand Island marina.									
Duaneburg, Schenectady County	21	1:50 p.m.							Tornado
Observed 15 miles north of Duaneburg. Funnel returned to cloud after apparent brief contact with ground. Moved eastward. No reports of damage.									
Western half and Mohawk Valley	22-23	afternoon to early morning						1 6 4	Wind, lightning

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					KILLED	INJURED	PROPERTY	CROPS		
New York (continued)										
										Thunderstorms associated with a rapidly deepening and fast moving frontal wave produced severe wind and lightning damage throughout the western half of the State and in the Mohawk Valley region - easily the most vicious wind storm on a large scale of the 1971 summer. Immense numbers of large trees were toppled in communities near Lake Erie, across counties south of Lake Ontario, the northern Finger Lakes to the Syracuse area and in the Corning-Elmira area of the southern tier during the afternoon and evening hours of the 22nd. Especially hard hit with tree damage in western New York were the communities of Jamestown, Dewittville, Angola and Baldwinville. YMCA Camp on Ganawaga Lake had one cabin destroyed, several other cabins and the dining hall heavily damaged; several boats capsized in Lake Erie and barn flattened in Dundick-Silver Creek area; two light aircraft heavily damaged at Rochester where wind gusts of 60 to 70 mph. were measured. People on some 20 sailboats were stranded in rough waters of Lake Ontario, off Monroe County, and required rescue; 7 persons rescued from large houseboat which was battered and sunk by waves on Seneca Lake. Apple orchard near Fulton, Oswego County had some 60 trees toppled by winds with considerable loss of fruit. Several trailer homes overturned and damaged in scattered communities of western New York as tree damage to homes, garages, cars, power lines and blockage of streets by debris was universal. Fences, display booths, and machinery were overturned and smashed by winds at fairgrounds in Erie and Steuben Counties; a man was injured by flying debris at the latter. Lightning-caused fires took heavy toll. Dairy barn with 6 cows, 12,000 bales of hay and machinery in Cattaraugus County, dairy barn, contents and 8 cows in Chautauq County and stack of 9,000 bales of hay in Onondaga County were destroyed and home in Corning, Steuben County heavily damaged at Corning by lightning fires. Man killed by bolt on golf course at Niagara Falls, Ontario, Canada afternoon of 22nd. Winds estimated at 70 mph. struck the Mohawk Valley from Madison to Herkimer Counties during early morning hours of 23rd. Hard hit were communities of Herkimer, Ilion and Frankfort, where in the last named the Herkimer County Fairgrounds sustained \$50,000 damage to tents, small buildings and contents on display. Screen of drive-in movie demolished in Utica area as stores within city sustained widespread loss to windows, awnings and signs. Tree damage extensive from Oneida to Little Falls but diminished considerably to "light" in such areas as Rome, Canajoharie, Richfield Springs and Gloversville. Damage from this wide ranging storm was also relatively light in the Cortland-Binghamton-Ithaca areas.
Depew, Erie County	23	1 a.m.	1/4	narrow			4		Tornado	During thunderstorms described above severe localized damage to homes occurred along residential street for a distance of about four blocks. Small 8-foot shed was hurled 20 feet through house wall and lodged in kitchen. Second house had windows blown outward, roof partially ripped off and interior walls splintered on second floor. A truck-size camper was overturned and pushed into side of neighbor's house. Several residents testified to the "sucking out" of windows and other evidence of pressure on inside of buildings during disturbance.
Coastal, Hudson Valley	27-28	a.m. to a.m.			0	1	6	5	Tropical Storm DORIS	Center of tropical storm DORIS passed near Newark, New Jersey and northern sector of New York City about 5 a.m. ESTime on 28th on an inland path which continued northeasterly into the western interior of Connecticut. Heaviest precipitation totals of 6.0 to 8.0 inches occurred from New York City northward to Poughkeepsie area of lower Hudson Valley. Individual station storm totals included 8.55 inches at Suffern Water Works, 7.36 at Westerloigh, Staten Island, 7.01 at Glenham and 7.31 at Poughkeepsie. Storm totals of 4.0 to 5.0 inches prevailed in northern half of Hudson Valley and 2.5 to 3.5 inches occurred as far west as Sullivan, Delaware and Otsego Counties as well as in the eastern Mohawk Valley and northward to Essex County. A 24-hour total of 4.32 inches at Albany was heaviest such amount since October 1903. In extreme eastern Long Island precipitation totals decreased to 0.4 to 0.5 inch. Peak wind gust of 48 mph. measured at Central Park Observatory at 3:35 a.m. ESTime on the 28th, while gusts ranging between 40 and 60 mph. were observed in the lower Hudson Valley and eastern Long Island about 8 a.m. ESTime the same date. Minimum barometric pressure was 29.43 inches (996.6 mbs.) in New York City; 29.51 inches at Bridgehampton and 29.65 inches at Yorktown Heights, Westchester County. Streets, highways and subways flooded in Greater New York City area and all surface transportation hampered. Severe flooding on Staten Island where youth narrowly escaped drowning when pinned underneath car by flood waters. Deep flooding extensive in lower Hudson Valley as small streams overflowed and rain waters drained into all sorts of low lying areas. Several hundred acres of truck crops, corn and hay were inundated in Orange County with losses estimated near \$250,000. Some roads washed out, bridges undermined and city streets covered with mud and debris. Flood damage in 7 southeastern Counties estimated in excess of \$3 million. Damage from wind was comparatively light. Trees and power lines downed in scattered areas of New York City and western Long Island.
North Carolina										
Mountaine, Southwestern Piedmont	1-4	--					5	4	Rain	Heavy rains of late July continued into August, causing flooded highways, streets and basements; washed away shrubbery, damaged cotton, tobacco and vegetable crops. At least one highway landslide on a spur of Blue Ridge Parkway.
Burke County	1	1-1:30pm					4	3	Wind, electrical	Wind toppled shade and fruit trees, damaging roof of home and auto. Lightning set fire to mobile home; heavy smoke damage.
North Carolina (continued)										
Cumberland County	2	Aftn			0	2	0	0	Electrical	Two tobacco farm workers struck by lightning and injured.
Piedmont	4-5	Night					5	0	Electrical	Lightning killed four horses; struck a tree which damaged two houses in falling; caused power and communications outages several areas; set fires which destroyed or damaged at least six homes, a mobile home and a store.
Dare County	5	6:10am					0	0	Waterspout	Observed over Pamlico Sound near Hatteras Island.
Mountaine, Western Piedmont	11	Noon-8pm					5	4	Electrical, rain, hail	Thunderstorms apparently moving toward NW. Lightning damaged eight homes, power and communications lines, killed five swine. A large industrial plant shut down for a day by damage to electric circuits. Locally heavy rains flooded some basements, caused flash flooding of streets and highways. Hail and wind damaged tobacco and corn crops. Trees and limbs blown down, roofs damaged.
Dare County	12	5 am					0	0	Waterspout	Reported by Air Force; seen ten miles north of Hatteras.
Southeast	16-18	--					5	5	Rain, wind	Tropical low pressure storm moved northward out of Gulf of Mexico across State. Rains four to twelve inches in three days over area. Flash floods inundated roads, fields and gardens; flooded basements of homes and businesses. Much loss of livestock and poultry. Crops damaged, especially peanuts and sweet potatoes. Reports of wind gusts to 60 mph and ten foot seas just offshore.
New Hanover County	17	4-6 pm					0	0	Waterspout and Funnel Cloud	Waterspout seen on Cape Fear River near Wilmington Beach at 4:46pm; Funnel seen 3 mi. NE of Wilmington 5:40pm, not touching surface.
Granville County	21	Evening					0	4	Hail	Damaged tobacco in fields scattered over an 8 sq. mi. area.
Pasquotank County	26	7:30-9:30am					5	4	Rain	4.50 inches reported at Elizabeth City in two hours. Flooded streets, almost submerging autos. Water filled basements; heavy damage at newspaper office.
Rutherford County	26	6:15 pm					4	0	Electrical	Lightning set fire to church, causing extensive damage to roof, walls and carpeting.
Coastal Counties	27	--			0	0	5	5	Wind, rain	Tropical storm Doris entered coast, its center passing near Emerald Isle about 1:30 pm. Moved northward, crossing into Virginia south of Norfolk about 7:00 pm. Highest wind reported 39 mph at Atlantic Beach CHRN station. Rains four to twelve inches during a 3-day period before, during and after storm passage near path of center. Thunderstorm winds in advance fringed and roofed two beach cottages, damaged five mobile homes near Holly Ridge. Along the beaches, some windows blown out and two small fishing piers destroyed. Tides reported two to four feet above normal. A few trees and limbs down, one limb smashed an auto and a shed. Two motor boats sunk, two others damaged. Corn crop flattened by wind, soybeans damaged. Streets, highways and basements flooded; at least one highway wash-out.
North Dakota										
Jamestown - Fargo area	9	3:30p - 6:00p			0	3	5	5	Wind and hail	Thunderstorms developed west and south of Jamestown, moved to the east northeast at about 38 mph through Fargo into Minnesota. The maximum wind at Jamestown was 85 mph at 3:30p. Winds flipped a twin-engine aircraft, overturned 3 mobile homes and 10 miles east of Jamestown derailed 20 empty freight cars. Toward Fargo other mobile homes and campers were reported damaged and overturned. Some campers along the Interstate between Jamestown and Fargo were reported damaged. The maximum wind at Fargo Hector airport was 56 mph at 05:42p. Winds overturned and destroyed 3 mobile homes injuring a father and two children. Power outages were reported across the storm area. Wind and hail crop damage was reported in southeastern Stutsman County and in the Edkelson and Pingal areas in Barnes County, though some hail was reported across the entire storm area.
Nonango 5NNW, Dickey County	17	7:30p	1/8	20	0	0	0	0	Tornado	Small tornado touched down temporarily in a field. Dust was observed rising from the tornado.
Southeast part of state	17	Evening			0	0	4	4	Winds, rain and hail	Thunderstorms with strong winds, rain and hail moved east across the southeast district, the winds destroyed a barn north of Fullerton. Heavy rains of more than 3 inches in Dickey County and small hail caused crop damage in the area.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

AUGUST 1971

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM				
					KILLED	INURED	PROPERTY	CROPS							KILLED	INURED	PROPERTY	CROPS					
North Dakota (continued)										Oklahoma (continued)													
East of Napoleon, Logan County	23	4:00p			0	0	0	0	Funnel cloud	Oklahoma City area, Oklahoma County	11	Afternoon			0	0	0	0	Wind, hail, rain				
									Funnel cloud observed by pilot.										Strong wind up to 57 MPH, heavy rain and 3/4-inch hail fell in scattered areas in and around the City. No damage was reported.				
Ohio										West of Comanche, Stephens County	11	6:40p.			0	0	4	0	Wind				
Delaware, Delaware County	3	1:15p							Funnel aloft										Strong wind destroyed a trailer home, took the top off of a well house and tore up propane gas lines.				
									Public reported a funnel cloud not touching the ground 8 miles west of Delaware.	Cotton County	14-15				0	0	5	?	Flash Flooding				
Cherry Grove, Hamilton County	10	4:30p							Funnel aloft										Heavy rains caused flash flooding which did \$500,000 damage, mostly by washing the land. An unofficial 9 inches of rain was reported west of Walters.				
									Public reported a funnel but it was not observed touching ground.	Norman, Cleveland County	23	Around 5:30p.			0	0	0	0	Hail, wind				
Northern Half of State	10	Afternoon evening			1	4	5		Electric, wind, rain and hail										Winds of 58 MPH and 1 3/4-inch hail caused no reported damage.				
									A series of thunderstorms, some with heavy rain and/or strong winds, caused scattered damage in the northern areas. The steamer Rice at West Sister Island in Lake Erie reported winds of 100 MPH at 6:30 p.m. One drowning was reported at Maumee Bay when high waves capsized a boat. In Cleveland two people were injured when high winds broke some plate glass windows. One Cleveland person was injured when lightning struck a building and knocked bricks on the individual. Lightning set fires destroyed homes near Cambridge and another in Marion. Considerable wind damage was reported near Conneaut. Gallion recorded 4.11 inches of rain in under 2 hours causing relatively minor flooding.	McAlester area, Pittsburg County	23	5:30p.			0	0	3	0				Wind	Strong winds tore down light poles at a football field and overturned a mobile home.
Hicksville, Defiance County	10	7:59p	0.5	100	0	0	4		Tornado	Moore, Cleveland County	23	Late Afternoon			0	1	3	0	Wind	Strong wind caused \$5,000 damage to a hospital. One woman was cut by glass when wind blew out a window.			
									A Deputy County Sheriff was within a few hundred feet of a large building when a tornado dipped to the ground and ripped 2500 feet of roof from the building. The funnel quickly returned to its parent cloud and moved toward the southeast. There were no other reports of damage other than a few small limbs down in the area.	Near Ardmore, Carter County	24	?			0	1	0	0			Lightning	A motorcycle rider was injured when struck by lightning.	
Fairport, Lake County	11	11:40a							Waterspouts	Hough area, Texas County	31	About 6:00p.	?	*3	0	0	4	4	Wind, hail, rain	Strong wind, small hail and heavy rain caused approximately \$100,000 property and crop damage. Several hundred acres of corn and milo were damaged or destroyed and several buildings and utility lines damaged. Up to 4 inches of rain fell.			
									Numerous waterspouts were reported by the public along the Lake Erie shoreline.	Oregon Eastern two-thirds of State	1-4	All Days			0	0	?	?	Electrical	Scattered lightning storms across eastern Oregon during the period touched off 280 blazes and sleeper fires on National Forest lands and a number on BLM lands and other Protective districts. Burned acreage was very small except for a 200-acre burn just southeast of Dry Mountain located 25 miles west of Burns. Largest fire was a 400-acre burn near Keating located 14 miles ENE of Baker where 90 fire fighters helped contain the blaze on sagebrush and grass rangeland. Most National Forest blazes occurred on the Fremont, Malheur, Ochoco and the Mallow-Whitman Forests.			
Tuppers Plains, Meigs County	15	Evening			0	0	4		Wind	Most of State	1-20	All Days			0	0	?	?	Hot Spell	Abnormally warm weather continued from late July into the early part of August across most of Oregon. Relief came to western Oregon by the 14th but the eastern half of the State remained warm until late on the 20th when considerably cooler marine air pushed eastward across the State. Stations along the east central border of Oregon were warmest. Ontario was the hottest location with maximum temperatures of 100° and above on 32 consecutive days ending on the 20th. Ontario recorded 106° and above on 6 consecutive days with highest of 110° on the 8th and 9th.			
Tiffin, Seneca County	20	12:10a			0	0	4		Electrical	Pilot Rock-Helix, Umatilla County	3	1:30a-4:30a	25	*2.5	0	0	0	4	Hail	Thunderstorms moving northeastward across the county produced scattered hail swaths. Several wheat farmers in the Pilot Rock and Helix areas reported hail up to 3/4- and 1-inch size which caused loss up to 18 bushes per acre in scattered affected areas.			
									Lightning was blamed for setting off a fire that destroyed a large barn and all of its contents near Tiffin. Loss was set at \$20,000.	Umatilla County	9	1:30p			0	0	?	?	Electrical	A lightning hold-over fire burned 640 acres of State land on Cabbage Hill which is located just 12 miles southeast of Pendleton. Control of this grass and brush fire was aided by airplane-dropped retardant.			
Fremont, Seneca County	21	3:45p			0	0	?	?	Hail	Wasco and Malheur Counties	13	During Day	?	?	0	0	?	?	Electrical	Lightning was the determined cause of a 1660-acre blaze on Bureau of Land Management land near Vale. The State Forestry Department had a 120-acre forest and brush fire about 7 miles south of The Dalles which required up to 50 men on the firelines at one time.			
									Hail up to 1 3/4 inches in diameter fell near Fremont. The hail accompanied a storm which left nearly 3/4 inch of rain in one half hour.	Scappoose-Warren area Columbia County	22	10:37a-11:45a								Funnel Aloft	A public report of a funnel aloft indicated its position as 20 miles northwest of Portland. This report was also verified by a pilot report a few minutes later from the same area but movement was unknown.		
Northern Third of State	22	Afternoon evening			1	10	5	?	Electrical, wind, hail and rain														
									Lightning struck and killed one man and injured 7 others near Green Springs (Seneca County) at 6:40p.m. Strong winds and golf ball size hail were reported in Ottawa County. Unofficial reports of up to 5 inches of rain were received from the Fremont area. Winds downed several tents at the Ottawa County Fair causing three injuries. Lightning set fires and/or minor wind damage was common over northern portions of Ohio.														
South Central Ohio	25	Morning			0	0	4	?	Rain, wind and hail														
									An electrical and wind storm struck several areas near the Ohio River. Nearly 5 inches of rain fell along the border of Adams and Brown Counties. Several buildings were damaged by lightning set fires. Large hail was reported in parts of several counties and some tobacco crops were damaged.														
Oklahoma										4N Guyton, Texas County	7	4:30a.			1	0	4	0	Lightning	One man died in fire which destroyed his home after it was struck by lightning.			
										NE of Hooker, Texas County	7	12:25p.								Funnel aloft			
										Near Crescent, Logan County	11	1:05p.								Funnel aloft			
										Near Okmulgee, Okmulgee County	11	3:05p.			0	0	0	0		Hail	Three-fourths-inch hail caused no reported damage.		

STORM DATA AND UNUSUAL WEATHER PHENOMENA

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PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
Pacific 12 miles NW of Kobler Field, Saipan	29	1:30 a.-1:35 a.							Waterspout
									Dark-colored and columnar-shaped waterspout, movement undiscernible descended to gray sea surface from cloud reported as cumulonimbus, with estimated top 15,000 feet and base 1,800 feet. Other towering cumulus and cumulonimbus mammatus clouds were present during sighting.
Pennsylvania Lehigh County	1	Day			1	0	5	0	Wind, rain
									At Spring Valley the wooden supporting beams and stone piers of a bridge were carried away by the Saucon Creek. A 4-year old girl fell into the creek, was swept away and believed drowned. Trees were ripped out by wind or washouts. The cost of flooding in the main building at Allentown College of St. Francis de Sales was estimated at \$250,000. Damage to highways from washouts and heaving was greatest in the southern part of the county.
Bucks and Chester counties	1	Evening-Night			0	0	4	0	Lightning
									A barn along Hickon Road between Shelly and Richlandtown was hit by lightning and totally destroyed in the ensuing fire. In Kimberton a three-story barn used as a breeding place for turkeys was destroyed by lightning-started fire. Damage was estimated at \$10,000. In Lower Pottsgrove lightning struck two homes causing some smoke damage.
Lancaster County	1-2				0	0	5	0	Rain
									Damage due to flash flooding caused by heavy rains throughout Lancaster County was estimated at \$150,000.
Berks County	2	Afternoon			0	0	4	0	Rain, lightning
									Lightning struck shortly after 1:30 PM damaging a house in Willsboro extensively. In Reynolds lightning knocked the foundation out from under a home and caused \$5,000 damage.
Tork County	2	Day			0	0	2	0	Rain, lightning
									Heavy rain contributed to a rash of automobile accidents and flooded the banks of Codorus Creek. Lightning struck a home three miles east of Red Lion in the early morning hours and another two miles north of Freysville around 1:30 p.m.
Southeastern Pa.	3				0	0	4	2	Rain, lightning
									The Susquehanna River flooded its banks near Harrisburg and caused damage to hundreds of basements. As much as 3.5 inches of rain fell in a 2-hour period and inundated many streets. Around noon lightning struck a barn near Scranton, Lackawanna County. 1,000 bales of hay and farm equipment and machinery was destroyed in the ensuing fire. There were mudslides on Route 309 on the eastside of the mountain near Allentown. Flooded basements were common throughout the Lehigh Valley area. Some oat crops were flattened by the rain. Washouts and slides occurred on the Mohnton-Shillington road in Reading and rains damaged city streets. Lightning struck a barn around 4:30 AM in Auburn RD 1, Schuylkill County. The ensuing fire destroyed the structure which contained hay, feed mixture and farm equipment completely. An estimated \$3,000 damage was done to a home when excessive rain washed out the pavement and destroyed the cellar near Reading. Lightning struck the peak of a roof, blew a hole through brick, splintered roof supports and set the beams afire at a home in Lancaster. Damage was estimated at \$1,500. At 6:57 PM lightning caused a house fire in Costesville, Chester County.
Tork County	10	Morning			0	0	4	0	Lightning
									A barn located about 1 mile from Dillsburg caught fire when lightning hit it. The barn which housed two antique cars, straw, hay, and equipment, was a complete loss.
Carbon, Schuylkill counties	11	Afternoon			1	1	4	0	Lightning
									A 70-year-old barn near Barnesville was destroyed by fire after being struck by lightning about 1:30 PM. In addition to hay the structure contained motor boats, fishing equipment and supplies. The loss was estimated to exceed \$20,000. Shortly before 2 PM a man was killed by a bolt of lightning while visiting the Summit Hill dumpsite; his brother received bruises.
Westmoreland County	15	Late afternoon			0	0	3	0	Rain, wind
									For almost two hours West Newton was without electricity because of limbs falling onto power lines. Trees were uprooted and basements of many businesses and homes were flooded. The deluge was localized and communities only a few miles away had no rain at all.
Southwestern Pa.	21	Afternoon & evening			0	0	5	2	Rain, wind, lightning
									Fire triggered by lightning destroyed a barn near Route 588 about 6 miles west of Zellenople in Beaver County at 4:55 P.M. Damage to the barn containing 2,000 bales of hay, 1,000 bales of straw, and 2,000 bushels of grain was set at \$30,000. Near Conoquenessing lightning destroyed a garage workshop. Damage was estimated at \$5,000. Lightning damage to two other homes in that area was estimated at \$900. Trees were uprooted and damaged by lightning in Tarentum, Allegheny County. A 1964 automobile was demolished by a falling tree and a late model car by a toppled wall. There were
Pennsylvania (continued)									
Philadelphia County	21	Evening			0	0	4	0	Wind, rain
									several reports of minor house fires caused by lightning. In Westmoreland County electric and telephone service was disrupted in the Latrobe area after power lines and poles were knocked over and some minor flooding was reported. Corn fields were leveled by the 3-hour storm. In Washington County lightning struck a barn on Stone Church Road near Finleyville. Damage to the structure and its content was estimated at \$5,000.
Erie and Warren counties	21-22				0	0	3	1	Lightning, rain, hail, wind
									Winds reached about 82 miles an hour during a ten-minute storm that destroyed six small aircraft and damaged eight others at the North Philadelphia Airport at 5 P.M. At Red Lion Road near Academy Road a 37-foot ferris wheel collapsed and 20 booths and \$1,800 worth of merchandise were ruined.
Glaron County	26	3:30 P.M.			0	0	4	2	Wind, rain
									Heavy winds snapped off scores of large pine and hemlock trees and toppled a 12-foot high silo at a Mayport farm near Shannondale. Damage was done to roofs and farm equipment as well as some crops in the area and a large store window was pushed in at a Shannondale furniture store.
Lehigh, Berks, Bucks, Montgomery, Chester, Delaware, and Philadelphia counties	27-29				1	1	5	1	Rain, wind, lightning
									The combination of a frontal system and Tropical Storm Doria brought wind and rain to southeast counties, felling trees and taking power lines down with them. Basements were flooded, in some cases the water level reached the first floor. Rail service between Lansdale and Doylestown was shut down. A West Chester man died when a tree struck by lightning fell on a car in which he was riding along Brinton Lake Road in Thornbury. In Chester County several homes and cars were damaged by falling trees and power lines. Thousands of dollars worth of damages were reported in the Lower Bucks and North Penn area when a near record 5.61 inch 24-hour rainfall flooded basements. More than two feet of water penetrated a ladies garment manufacturing plant in Perkasie. Large trees were blown down across many of the roads in Upper Bucks. Thickston Creek flooded Route 113 and the East Branch of the Perkiomen overflowed its banks near Perkasie. Road damage was extensive. Two breaks in the Delaware Canal caused flooding in the Levittown area and washed out several homes completely. In Hatfield a mobile home was a total loss after wire and trees fell on it. A gust of wind overturned a single-engine airplane at the Old Star Airport on Route 1 and caused \$5,000 damage to the aircraft. In Philadelphia winds felled trees which damaged the walls of two homes in their fall. The Schuylkill Expressway was barricaded by logs which had been washed onto the highway. Sinkholes occurred on city streets and the storm washed out the subsurface of roadways in many spots. One injury was reported.
Puerto Rico Eastern Portion	23-24				1	2	0	0	Heavy Rains
									A tropical depression moving north of Puerto Rico on a westward course brought heavy rains to the eastern part of the island and especially concentrated in the Humacao area where 6.70 inches of rain fell in 24 hours. One woman was drowned while crossing the Collares River in Humacao. Landslides destroyed a home in Santa Rosa Barrio in Guaynabo and injured a woman and little girl. The Turabo River overflowed near Caguas and damaged property and homes.
Rhode Island Statewide	20	a.m.			0	0	4	0	Rain, lightning, wind
									Series of heavy thunderstorms, spawned by the passing remnants of a tropical storm, caused strong winds, heavy rain and much lightning activity. Many small utility failures occurred, several roadways were flooded and lightning damaged several homes in the Providence area. Rapid runoff was responsible for the temporary pollution of the shellfish fisheries in upper Narragansett Bay.
Statewide	28	7-10 a.m.			0	0	5	4	Wind, tide
									Tropical storm Doria, passing northeastward through western Connecticut produced gale force winds with gusts into the 60's and tides which ran up to 6 feet above normal, but at astronomical low tide. Falling trees and limbs put electric power to 40,000 customers in several communities, ruptured an underground gas line in Woonsocket and damaged a number of homes, especially in West Warwick. Some corn crops and orchards were damaged. Several pleasure craft were swamped or damaged along the outer coast and especially in Narragansett Bay. Damage in Rhode Island is estimated at between \$100,000 and \$200,000.
South Carolina Charleston County	8	6:40 a.			0	0	0	0	Waterspout
									Fishing boat operator reported a waterspout in Charleston harbor.

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					KILLED	INJURED	PROPERTY	CROPS	
South Carolina (continued)									
Colleton County	9	9:30 a.			0	3	3	0	Thunderstorm, lightning, heavy rain
									In Walterboro, a woman and two of her nieces were injured slightly by a lightning stroke. The woman, standing in water and with one hand on her car as she was unloading it in the carport, was knocked to the cement floor while both girls were severely shocked. They were treated at a local hospital and released. The heavy rains also caused a portion of Walterboro's main street to cave in. The damage was considerable and the street had to be closed for several days.
Sand Hills and Coastal Plain	15-18	Late on 15th - early on 18th	200		0	0	6	3	Tropical depression
									Heavy rains flooded many sections as 2/3 of the state was deluged by a tropical depression which moved nearly parallel to the coast from Allendale County to Marlboro County. Sullivan's Island, near Charleston, was swash and suffered heavy property and road damage as a total of 14.11 inches of rain fell. Most of the total, 12.03 inches, fell in a 2 day period. Beaufort County suffered heavily as 25 county roads were washed out and water flooded stores and businesses in the city of Beaufort which had 12 inches of rain. Trees and limbs downed power lines causing outages of power which lasted several hours. The city of Georgetown had many street, businesses, apartments and houses flooded to depths of 3 to 4 feet. Property damage was very great. Many persons had to be evacuated from homes and temporarily relocated. All of the beach areas from Georgetown to north of Myrtle Beach were flooded and remained so due to the flat nature of the topography and slow drainage unable to handle the ten to eleven inches of rain which fell in less than two days. Tides of 2 to 3 feet above normal helped to prevent or slow drainage in many of the coastal areas. Southern Calhoun County and Orangeburg County had extensive road damage, bridges washed out and one dam burst releasing the additional waters of a small lake. Although this area received only 5 inches of rain, Orangeburg was 30% in excess of normal for the year through July and had July rainfall which was 62% above normal, so the area was rather wet before the depression arrived.
Offshore from Charleston County	30	Afternoon			0	0	0	0	Waterspout
									Several persons in a fishing boat observed a large waterspout over the Atlantic several miles from the coast.
South Dakota									
40NW Rapid City, Pennington County	4	11:45 a							Funnel cloud aloft
Parker Area, Turner County	12	4:20 - 4:40 p	15	*1-2	0	0	0	5	Hail
									Hail averaging 1/2 inch damaged crops with a reported loss of up to 20% on corn and soybeans. Storm moved from NW to SE.
Black Hills	13-14				0	0	0	?	Lightning
									Lightning caused a number of forest fires. Two fires were reported in the Harney district and one at Elk Mountain.
SW Gettysburg, Potter County	18	?							Funnel cloud aloft
10W Wessington, Hand County	18	11:45 a							Funnel cloud aloft
Northeastern S. D.	18	11:30 a - 2:30 p			0	0	5	5	Wind and spotty hail
									Greatest wind damage occurred in the Henry vicinity in an area about 5 miles long and 2000 yards wide. Winds were estimated at 80 MPH in the Henry vicinity. Buildings on several farmsteads were damaged or destroyed. High winds in the Miller area damaged 2 planes at the airport.
Western S. D.	23-28-29-31				0	0	0	4	Lightning
									Lightning caused a number of prairie fires. On the 23rd, a prairie fire was started near Rollack by lightning. On the 28th, firemen spent 2 1/2 hours extinguishing a lightning-started prairie fire near Ft. Pierre. On the 29th, firemen spent 6 hours in the Mission Ridge area fighting a prairie fire covering 2,000 acres. On the 31st, another fire was started in the Ft. Pierre area by lightning and firemen spent 8 1/2 hours to control the blaze.
Tennessee									
Greenville (near), Greene County	5	5:30p.			0	0	2	2	Hail, rain, wind
									Marble size hail accompanied by strong winds and heavy rain in the Carney Branch community area of Greene County.
Hardeman County	6	p.m.			0	0	4	0	Lightning
Tennessee (continued)									
									Lightning caused some utility failures and minor damage to farm buildings. In Bolivar, a home was damaged by fire believed to have been due to lightning.
Memphis, Shelby County	6	p.m.			0	0	4	0	Rain, lightning
									Heavy rains of more than 2.5 inches produced flash flooding in scattered areas of Memphis. Damage occurred to homes, streets, and utilities. Lightning was the main source of power failures.
Nashville, Davidson County	11	1:07p.			0	0	4	0	Wind
									Scattered wind damage to windows, trees and power lines. Winds of 35 mph reported at Nashville Metropolitan Airport.
Chattanooga, Hamilton County	9	p.m.			0	0	4	0	Wind
									Several power and telephone lines down. Scattered reports of damage to mobile homes and trees.
Springfield, Robertson County	10	p.m.			0	0	3	0	Lightning
									Fire caused by lightning damaged the building of Jack's Rite-Way Cleaners in Springfield.
Northwest Tennessee	21-22				0	0	5 ⁰	0	Rain, flooding
									Excessively heavy rainfall of from 5 to 10 inches over portions of northwest Tennessee caused major flooding along small streams in rural areas. Many secondary and gravel roads washed out and a few mudslides closed state highways. About 10,000 acres were flooded in Dyer County. Crop damage was estimated at \$100,000.
Texas									
NE Sweetwater, Nolan County	1	?			1	0	3	0	Flash flooding
									Mrs. L. D. Favor, 77, drowned when an automobile carrying five persons was swept off a bridge by flood waters into Kildagen Creek northeast of Sweetwater. The driver and three other passengers were carried downstream for nearly a mile by the raging creek.
10 ESE Peecos, Reeves County	1	11:15 a							Funnel aloft
Corpus Christi, Nueces County	2	9:30 a							Funnel aloft
W Arkansas Pass, San Patricio County	2	10:35 a							Funnel aloft
Near Saratoga, Hardin County	2	4:15 p							Funnel aloft
Corpus Christi and vicinity, Nueces County	2-6				1	0	5	5	Flooding
									Torrential downpours of up to 1.00 inches within 24 hours, and 17 to 18 inches and more within five days caused extensive flooding in Robstown and Corpus Christi, and in neighboring communities. Flooding was most extensive in Robstown where 11.00 inches fell within 24 hours, and where streets resembled canals. Water rose in many houses and businesses to depths varying from three inches to three feet. The Red Cross reported 267 persons were evacuated from their homes. In the Corpus Christi-Robstown area, 91 dwellings were flooded. In Robstown, a particularly acute flooding problem occurred because a 50-foot section of the earthen wall along a main drainage ditch broke. This sent flood waters into southern sections of the city and residential sections just south of the city limits. Raul Sanchez, 16, of Robstown, fell into a drainage ditch and was carried away and drowned in the quick current.
									Extensive flooding occurred in the south portion of Corpus Christi and in the business district as 7.80 inches of rain fell downtown with a 24-hour period. A total of 17.52 inches fell downtown with the five-day period. Water blocked nearly every north-south thoroughfare in Corpus Christi, rising as high as car windows in places and causing 75 residences to be evacuated. Two of the most heavily inundated areas were the Leathers Center Housing Project near Brownlee and Interstate 35 and sections of Corpus Christi Beach north of the port.
									Total property damage was estimated at \$391,800 and crop damage in the surrounding area at \$77,000.
15 W Freer, Webb County	3	11:15 a							3 Funnels aloft
Near Bishop, Nueces County	3	12:50 p							Funnel aloft
10 W Kingsville, Kleberg County	3	2:00 p							Funnel aloft
7 SE Dilley, La Salle County	3	2:14 p							Funnel aloft
5 SW Leona, Leon County	3	2:40 p							Funnel aloft
Corpus Christi, Nueces County	4	11:28 a							Funnel aloft

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					KILLED	INJURED	PROPERTY	CROPS							KILLED	INJURED	PROPERTY	CROPS		
Texas (continued)										Texas (continued)										
Near Lake Corpus Christi, Live Oak County	4	11:18 a							2 Funnels aloft	Amarillo, Potter-Randall Counties	6	5:15 p-5:45 p				0	0	3	0	Lightning
Near Corpus Christi, Nueces County	4	11:53 a							Waterspout and funnel aloft	Lightning struck at least four Amarillo homes, causing a variety of damage. Lightning struck a garage at 1308 North Johnson, causing heavy damage. Heaviest damage from lightning was reported at the John Cameron residence, 5503 Berget Street. Cameron said the lightning hit the top of the house, and fire started in the drapes, carpet, television and telephone. Lightning was blamed for a fire in the home of Vana Reed, 4710 Mesa Circle, about 5:45 p.m. Lightning also hit a chimney at the home of Chester C. Szalkowski, 3402 Anherst, and knocked loose some bricks.										
Near Mathis, San Patricio County	4	12:45 p							2 Funnels aloft	Near Baffin Bay, Kleberg County	6	6:10 p								Funnel aloft
Near Rosebud, Falls County	4	1:20 p							Funnel aloft	Near Gregory, San Patricio County	6	7:41 p								Funnel aloft
Near Oglesby, Coryell County	4	1:29 p							Funnel aloft	N Happy, Randall County	7	4:39 p								Funnel aloft
Pleasanton, Atascosa County	5				0	0	4	0	Heavy rain	Cypress-Fairbanks, Harris County	8	5:14 p	**20	10	0	0	0	3	0	Tornado
Bexar County	5				0	0	4	0	Flooding	A small tornado hit the Cypress-Fairbanks Volunteer Fire Department Station No. Five, tearing down one wall and damaging another. No one was injured.										
An estimated five inch rain caused a 10-ton roof section of a nursing home to collapse. The central rotunda in the structure caved in because of the weight of the rainwater. Some 63 elderly patients were evacuated from the structure without injury.										10 W Lanessa, Dawson County										
Heavy rains in west and south Bexar County caused local flooding that sent water into a number of rural homes and covered many roads. The heaviest rain was apparently in the area of Campbellton Road and FM 1518 where a woman and child were trapped in their home for more than an hour when Leon Creek overflowed. Flooding occurred also near FM 2173, between Interstate 35 and Somerset Road. The Helotes community northwest of San Antonio received an unofficial total of 11 inches of rain within a three-day period.										5 NW Midland, Midland County										
5E Big Wells, Dimmit County	5	8:02 a							Funnel aloft	15 ENE Dumas, Moore County	10	7:00 p								Funnel aloft
Near Baffin Bay, Kleberg County	5	8:54 a							2 Funnels aloft	3 E Kress, Swisher County	10	Evening	1/2	100	0	0	0	0	Tornado	
North end Padre Island, Kleberg County	5	12:35 p							Funnel aloft	Tornado struck in open country. There was no damage or injuries.										
Near Goldsboro, Coleman County	5	12:45 p							Funnel aloft	Bula-Needmore area, Bailey County	11	12:45 p								Several funnels aloft
Near New Caney, Montgomery County	5	3:25 p							Funnel aloft	Slaton, Lubbock County	11	1:42 p								Funnel aloft
Houston, Harris County	5	5:00 p							2 Funnels aloft	10 W Ropesville, Hockley County	11	2:30 p								Funnel aloft
Corpus Christi, Nueces County	6	12:00 p-12:30 p	**10	7	0	0	2	0	2 Tornadoes, several funnels aloft	Southern Edwards Plateau, Southwest Texas	11-14				6	0	6	6	Flooding	
Two small tornadoes touched ground in Corpus Christi, but caused only slight damage. One hit at Holly and Ayers Streets where it damaged a metal building; the other damaged a fence on Weber Street. Several funnels that did not touch ground were observed also.										Heavy rainfall, locally in excess of 15 inches between the 11th and 14th, over the watersheds of the Medina, Nueces, Frio and Sabinal Rivers flooded most of the tributaries of these rivers and the main streams. Six deaths due to drowning resulted, and property damage was estimated to be \$1,000,000 or more. Damage to cropland because of soil erosion and washed out terraces was estimated at an additional \$500,000. Counties most effected were: Edwards, Bandera, Kendall, Real, Medina, Kerr and Bexar. Some downstream flooding occurred in McMullen, Live Oak and Frio Counties.										
NE Odem, San Patricio County	6	12:30 p							Funnel aloft	The period of very heavy rain began on the morning of the 11th, on the extreme upper Nueces, with up to 15 inches between Rocksprings and Camp Wood. On the morning of the 12th, very heavy rains fell in Medina and southern Bandera Counties. About 15 inches of rain fell at the Weather Service Office at Hondo in a little over 36 hours beginning about midnight of the 11th and continuing to 1 p.m. on the 13th. In Medina County, hardest hit areas were adjacent to Seco, Parker, Verde, Hondo, and Witch Creeks. About 70 percent of Hondo was under water. Extensive flooding isolated D'Hanis on the 13th and out off escape for more than three hundred persons. Nearly six inches of rain in less than 24 hours isolated Kerrville temporarily and flooded some streets. The Turtle Creek bridge on State Highway 16 south of Kerrville was washed out. Turtle Creek at 25 feet, was the highest it had been since it reached 31 feet in 1900. Other streams were reported to have reached their highest level in 50 years. Flood water at one time stood up to four feet deep in downtown areas of D'Hanis.										
Near Lawn, Taylor County	6	12:45 p							Funnel aloft	Clyde Laverne Jones, 51, drowned when his car was swept off a bridge across San Geronimo Creek in Medina County.										
Near Fannin, Goliad County	6	2:05 p							Funnel aloft	Ignacio Rios, 80, drowned when he stepped off into a water filled hole in Hondo.										
Freer, Duval County	6	2:23 p-2:47 p	1/2	10	0	0	2	0	Tornado	Louis Lawrence Marchek, 65, drowned in his car just west of Waring in Kendall County.										
A small tornado touched down briefly in a mobile home park south of Freer but caused only slight damage. One mobile home was "shaken up" a little. The tornado moved from southwest to northeast.										William Deal, 51, and Robert A. Childers, 51, both drowned in their car in the Sabinal River, about one mile south of Utopia.										
Near Kingsville, Kleberg County	6	2:30 p							3 Funnels aloft	Cleo Milton, 50, drowned when he attempted to walk across a low water crossing on the Medina River, off SH 16, about four miles east of Medina and was swept away by the flood waters.										
8 W Dyess AFB, Taylor County	6	2:35 p							Funnel aloft	Extensive flooding entered the Frio, augmented by water which came down the Leona River from near Uvalde, and moved down past Derby on the 14th and 15th and reached Fowlerton on the 16th,										
Near Kingsville, Kleberg County	6	3:45 p							2 Funnels aloft											
Near Santa Rosa, Cameron County	6	4:15 p							Funnel aloft											
8 NE Amarillo, Carson County	6	4:30 p-4:35 p	2	50	0	0	0	0	Tornado											
Tornado touched down in open farmland. There was no damage.																				
7 N Yorktown, DeWitt County	6	5:00 p							Funnel aloft											
5 SE Rhine, Wise County	6	5:15 p							Funnel aloft											

STORM DATA AND UNUSUAL WEATHER PHENOMENA

AUGUST 1971

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
Texas (continued)									
									Tilden on the 17th, Callahan on the 18th, and Three Rivers on the 19th. The flooding on the lower Prio was comparable to that following Hurricane Beulah in September 1967 and was about 3 1/2 feet lower than the flood of 1932. In Tilden most streets and roads were closed, with water up to 2 1/2 feet deep in city streets, and 200 persons were displaced. Water from the Prio entered the town of Three Rivers and caused some street flooding.
15 N Marathon, Brewster County	12	10:47 a							Funnel aloft
W Ropesville, Hockley County	12	Afternoon							3 Funnels aloft
Acuff-Idalou Area, Lubbock County	12	Afternoon							Funnel aloft
Near Amherst, Lamb County	12	Afternoon							Funnel aloft
Near Lorenzo, Crosby County	12	Afternoon							Funnel aloft
1 NW Giddings, Lee County	12	Afternoon	1/4	7	0	0	3	0	Tornado
									A small tornado dipped down on the Delfeal Mueller Farm one mile northwest of Giddings and ripped off the sheet metal roof of a 30 x 36-foot barn, scattering it in three directions. One piece of the roof was blown 350 feet north. The other sheds which adjoined the one which was unroofed were not damaged. There was no damage to trees either north or south of the barn.
Near Kilgore, Gregg-Rusk Counties	12	Afternoon			1	0	0	0	Lightning
									Rusty Lynn Harwell, 16, was struck and killed by lightning. The youth had been mowing on the A. G. Merton, Sr. farm when he was caught in an electrical storm. He had sought shelter under a pine tree.
5 ESE Brownfield, Terry County	12	1:00 p- 3:00 p	1/2- 2 1/2	33- 133	0	0	0	0	5 Tornadoes, 2 Funnels aloft
									Several units of the Brownfield Police Department and the Terry County Sheriff's Office observed seven funnel clouds between the Brownfield Country Club and Union School. Five of the funnels touched ground in open farmland without causing any damage. One of the five tornadoes was traveling from east to west about 20 miles per hour. It was about 100 feet wide and stayed on the ground for about 2 1/2 miles. The other four were about 100 feet in diameter and were traveling from northwest to southeast about 5-10 miles-per-hour. These tornadoes had shorter paths, the least being about one-half mile.
6 SE Lubbock, Lubbock County	12	2:57 p							Funnel aloft
5E Reese AFB, Lubbock County	12	3:09							Funnel aloft
12 N Lubbock, Lubbock County	12	3:30 p							Funnel aloft
20 S Palacios, Matagorda County	13	9:21 a							Waterspout
E Springlake, Lamb County	13	10:00 a- 10:30 a							Funnel aloft
SW Hale Center, Hale County	13	Afternoon							Several funnels aloft
5 SE Happy, Swisher County	13	1:10 p- 1:15 p	1/2	50	0	0	0	0	Tornado
									Tornado touched down briefly in open farmland and did not cause any damage.
5 E Plainview, Hale County	13	1:43 p- 3:00 p	1/4	50	0	0	0	0	2 Tornadoes
									Two tornadoes touched down briefly in open farmland and caused no damage. The tornadoes moved from west-northwest to east-southeast.
3 N Lubbock, Lubbock County	13	3:10 p							Funnel aloft
7 NW Brownfield, Terry County	13	4:38 p- 5:00 p	4	133	0	0	0	0	Tornado
									Tornado struck in open farmland and caused no damage. The storm moved from east to west about 25 miles-per-hour.
5 W Canyon, Randall County	13	4:45 p							Funnel aloft
NW Sweetwater, Nolan County	14	12:45 p							Funnel aloft
Near Beaumont, Jefferson County	14	2:45 p							Funnel aloft
10 NE Floydada, Floyd County	14	2:50 p							Funnel aloft
Texas (continued)									
Wichita Falls and vicinity, Wichita County	15	Noon-Midnight			0	0	5	5	Flooding
									Heavy rains in the Wichita Falls area sent the Wichita River to its highest level in nearly 30 years. Numerous roads were closed, some bridges were washed out, and at least 10 families had to evacuate their homes. Hardest hit by flooding was the northwest area of Wichita Falls adjacent to the Old Iowa Park Road. Residents in Pleasant Valley watched as their cars filled with water and washed out in waist-deep "rivers" which hit the roads. High waters damaged tracks of the Burlington Northern railroad two miles east of Iowa Park. At least two streets in Wichita Falls had cave-ins caused by flooding. The National Weather Service Office measured 0.76 inches of rain on the 14th and 4.32 inches on the 15th. A total of 10.70 inches was reported at the Texas A&M Experiment Station at Iowa Park. Property damage was estimated at \$25,000 and crop damage was estimated at \$250,000.
W Plainview, Hale County	17	8:10 p							Funnel aloft
Styer, Hockley County	22	Afternoon							Funnel aloft
1 W Kress, Swisher County	22	3:33 p- 4:20 p	3	20	0	0	0	3	Tornado, 2 Funnels aloft
									A tornado was on the ground for about 30 minutes near Kress but caused no property damage. It moved from east to west across fields of row crops at a speed of 4 to 5 miles-per-hour. Two funnels were observed aloft over the city of Kress about 4:19 p.m. The tornado east of Kress was observed by William J. Carley, a pilot for Atmospherics, Inc., who said the funnel was more than 6,000 feet long. He said the funnel skimmed across a lake and sucked water about 3,000 feet into the air.
									Mrs. G. C. Jarvis spotted the tornado on the ground ten miles south of Tullia.
									"All of a sudden I looked to my left and there was this long tail hanging down from the clouds. We stayed there for about 20 minutes watching it", said Mrs. Jarvis.
									"It (the tornado) was a white streak all the way to the ground where it turned blue and spread out along the ground, picking up soil. It was really beautiful, but I don't want to see any more", she said.
									Pilot William J. Carley said the tornado "weaved around several houses" before dissipating.
6 N Plainview, Hale County	22	3:53 p							Funnel aloft
NE Silverton, Briscoe County	22	4:00 p							Funnel aloft
Near Friona, Farmer County	22	8:30 p							3 Funnels aloft
5 1/2 E New Deal, Lubbock County	23	Night			0	0	3	0	Lightning
									Lightning struck a barn and caused damage estimated at \$1,000.
Near Sheppard AFB, Wichita County	23	Afternoon			0	0	4	0	Windstorm
									High winds of about 50 miles-per-hour demolished one mobile home and damaged several others in a mobile home park near Sheppard Air Force Base. The storm also demolished two segments of a newly constructed cinder block wall under construction at Sheppard AFB.
12 ESE Corpus Christi, Nueces County	24	9:30 a							3 Funnels aloft
Near Lake Granbury, Hood County	24	Noon							Funnel aloft
Near Texarkana, Bowie County	24	5:05 p- 6:00 p							2 Funnels aloft
									A funnel aloft was sighted about 10 miles southwest of Texarkana while another was observed over the city.
Near Jasper, Jasper County	24	4:30 p	1/4	20	0	0	0	0	Tornado
									Reported by pilot. There was no known damage.
Near West, McLennan County	25	10:15 a							Funnel aloft
10 SW Matagorda, Matagorda County	25	8:45 a							Waterspout
Dallas, Dallas County	25	8:51 a							Funnel aloft
									Observed on the north side of the city.
El Paso and vicinity, El Paso County	25	3:33 p- 4:26 p			0	0	0	?	Hailstorm
									One-quarter to three-quarters inch diameter hail fell in El Paso.

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					KILLED	INJURED	PROPERTY	CROPS	
Texas (continued)									
			A few hailstones 1/34 inches in diameter were reported to have fallen near the airport. The storm caused no known damage to property and little, if any, damage to crops.						
Houston, Harris County	25	5:30 p- 5:45 p	**200	10	0	0	4	0	Tornado
			A small tornado ripped through the Travel Mate Trailer Sales lot at 6603 Southwest Freeway in Houston and caused an estimated \$30,000 damage. Ten vehicles were flipped over by the funnel. An official of the trailer firm, Mr. Joe Bradley, said nearly all of his 45 trailers were damaged. The tornado moved toward the south or southeast about 10 miles per hour.						
Near Lakeview community, Cherokee County	25	Evening			0	0	4	0	Lightning
			Lightning caused a fire which destroyed an unoccupied house on West Kickapoo Street near the Lakeview Community.						
2 E Dublin, Erath County	25	2:45 p			0	0	4	0	Lightning
			Lightning struck and set fire to the home of Bill Gray, located two miles east of Dublin. The home and furnishings were destroyed.						
Near Round Rock, Williamson County	26	11:30 a							Funnel aloft
SW Red Rock, Bastrop County	26	11:31 a							Funnel aloft
8 SW Anson, Jones County	26	12:10 p							Funnel aloft
SE Belton, Bell County	26	4:00 p	**50	6	0	0	2	0	Tornado
			A small tornado touched down at the home of Mrs. Jody Bounds, just southeast of Belton, but it caused very little damage. "Sounded like a train", she said. "It was a black funnel cloud. I looked out and saw trash cans whirling around in the air and there was a terrible roar, something I never heard before". The tornado blew open the front door to her home and tore off the window screens.						
3 NE Beeville, Bee County	26	6:34 p							Funnel aloft
22 E Brownsville, Cameron County	28	9:30 a							Waterspout
Houston, Harris County	28	Afternoon			1	0	2	0	Lightning
			Daniel Blanco, 8, of 902 Redwood, in Houston was electrocuted by a power line knocked from a pole by lightning.						
5 NE Laredo, Webb County	30	3:13 p							Funnel aloft
E Galveston, Galveston County	31	8:40 a							Waterspout
Houston, Harris County	31	1:15 p			1	0	0	0	Lightning
			Lightning struck the roof of the New Grace Presbyterian Church in Houston, killing Leon Tony Acosta, 47, a sheet metal worker, who was on the roof at the time the lightning struck.						
7 W Fort Mansfield, Willacy County	31	1:15 p							Funnel aloft
Utah									
Levan	6	Aftn and Eve			0	0	4	0	Flash floods
			Flash floods caused by heavy thunderstorm activity contaminated the Levan city water supply, damaged the irrigation system and washed out county roads. Damage estimates 30 to 50,000 dollars.						
Salt Lake County	8	Aftn and Eve			3	0	4	0	Heavy rains and thunderstorms
			Thunderstorms accompanied by heavy rains in Salt Lake City and the vicinity caused two automobile collisions which killed three people at the mouth of Weber Canyon. Basements along the Wasatch Front were flooded.						
Minersville and Beaver County	20				0	0	4	3	Flash floods
			A flash flood pushed water to depths of over 10 feet in the river, damaged the basement of the elementary school and several homes. Highway 21 was covered with one foot of mud and gravel for over a mile. Over 1000 bales of hay were lost due to the flood.						
5 miles WNW Fillmore	22	17:30							Funnel cloud
			A funnel cloud was reported by a pilot as 5 miles WNW of Fillmore 22 miles S of Delta.						
Utah (continued)									
Tooele side of Oquirrh mountains	27	Night			0	0	4	0	Flash floods
			A heavy storm hit middle canyon severely damaged automobiles caught in the flood and closed the road with rock and mud slides.						
NW Utah	28	Aftn and night			2	0	5	3	Heavy rains and Flash floods
			Heavy rains and local flash flooding in many areas of northwest Utah caused two fatal auto accidents, one west of Delta, and the other west of Thompsons. A total of 15 weather caused accidents in 24 hours. Near Henri and Ephraim the floods washed out the water systems, killed 22 lambs and destroyed considerable hay. Lightning struck a home in east Salt Lake City which destroyed a television set and knocked over a church steeple.						
Vermont									
Addison County northeastward to Essex County	3				0	0	4	0	Rain
			Heavy thunderstorm rains, totalling 2 to 3 inches in many areas, caused local washing and flooding. At Bristol 2.0 inches of rain fell in 1 1/2 hours, an event to be expected there only once in 10 to 25 years.						
State	27-28				0	0	5	3	Hurricane Doria
			The diffuse center of the remnants of Doria brushed near the extreme southeastern corner of Vermont near 11 AM, EST, on September 28, as it sped north-northeastward through New Hampshire at around 40 mph. Heavy rain was the principal effect of Doria in Vermont. Storm totals, including that falling on September 27, prior to Doria's approach, ranged up to near 6 inches in parts of the southeast. Elsewhere totals were mostly 2 to 4 inches. The heavy rains caused a few landslides and many road washouts. Routes 17, 100, and 242 were especially troubled by washouts. Several bridges were damaged, including two in the Whitefield area.						
Virgin Islands									
			None	Reported					
Virginia									
Roanoke County	1	Aftn.			0	0	4	0	Rain
			Heavy rain caved in the roof of a night club in the Hanging Rock section.						
State	4				0	0	4	0	Rain, Lightning
			Heavy rain caused mostly minor flooding and rain and lightning caused scattered utility outages.						
Chesapeake and Portsmouth cities	27	2:30 p.m.	1/8	150	0	0	5	0	Tornado
			A tornado associated with hurricane Doria twisted off and felled hundreds of trees. About a dozen houses in Green Meadow Point and Hodges Manor were damaged by the trees falling and being driven through the roofs and walls. One trailer was overturned, one shed was demolished, and the roof of a garage blown off.						
Tidewater	27	Evening			1	0	5	0	Hurricane Doria
			Hurricane Doria reduced in intensity to tropical storm status passed just east of Norfolk and then up the Eastern Shore. Some minor flooding occurred due mostly to the heavy rain. One 13 year old girl in Alexandria drowned after falling in a drainage ditch. A wooden pier at Virginia Beach was badly damaged with a pile driver being dropped in the water. A large warehouse under construction with three walls up was demolished. A sewage plant in Virginia Beach was filled with silt and sand. The sewage had to be dumped into Chesapeake Bay with the beaches closed for two days. Scattered utility outages occurred. A tornado (reported above) occurred during the afternoon causing considerable damage.						
Washington									
9 NE Endicott	30	4:30 p.m.	.5	20			4	2	Tornado
			A tornado associated with a line of severe thunderstorms swooped down on a farm near Colfax about 4:30 P.M. A barn was demolished and much of the roof carried into an adjoining field. A tree was uprooted and a piece of wood from the barn was driven through a steel water tank. The tornado path was narrow and the remaining farm buildings were undamaged.						
Eastern portion of eastern Washington	30	4-7 P.M.	180		1		5	4	Severe thunderstorms, hail, wind, lightning & water damage
			A north-south line of severe thunderstorms moved across the eastern section of the State during the late afternoon and evening hours. Flooding from heavy rain caused some property and crop damage in Garfield, Lincoln and Spokane counties. Walnut-sized hail was reported in Garfield County with damage to uncut wheat. A man was killed in Inchellum when the wind blew a tree across his trailer. A \$5,000 trailer was totaled by a falling tree near Republic. Six lightning fires were started in the Colville National Forest but were controlled within a short period of time.						

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					KILLED	INJURED	PROPERTY	CROPS	
West Virginia		None	Reported						
Wisconsin									
State	10	8a - 12 noon			1	0	6	5	Wind, funnels aloft, lightning, hail
		Severe thunderstorms with accompanying high winds did extensive damage over eastern Wisconsin. Winds clocked at 95 MPH near Oshkosh. Counties hard hit include Columbia, Green Lake, Winnebago, Fond du Lac, Sheboygan, Calumet, Manitowish, Marathon, Shawano, Menominee, Oconto, Marinette and Northern Door. Also a few reports of wind damage from western Wisconsin where LaCrosse measured gusts to 75 MPH early in the morning. Funnels aloft reported at Ionia, Pardserville, Waupun, Marinette. Hail the size of golf balls fell at Antigo, Berlin and Lake Geneva. Lightning killed a 13-year old Racine girl under a tree in Kenosha County's Old Settlers' Park.							
State	13-14	Afternoon & evening			0	3	6	5	Wind, funnels aloft, hail
		Evening and nighttime thunderstorms caused extensive damage over much of state. Three planes and hangar damaged and mobile home overturned at Maesy. A 300-ft. transmitting tower toppled at Merrill. Outdoor theater screen knocked down near Ionia. Many trees down in southern Lincoln and Marathon counties. Funnels aloft sighted near Shawano, Edgar, Arkdale, Stevens Point, Green Bay, Fond du Lac, Milwaukee, and Racine. Three persons injured in Merrill area as strong winds toppled trailer at about 4:30 pm and roof blew off sports shop. Large hail fell at scattered locations around state.							
State	22	afternoon & evening			3	12	6	5	Wind, hail, funnels aloft
		Severe thunderstorms moved southeastward across state accompanied by strong winds and large hail. Southeast half of state hardest hit. Numerous trees and wires down and many parked cars crushed. Several barns down and boats and piers damaged up and down the Green Bay and Lake Michigan shoreline. High water flooded some shoreline areas. Three persons drowned off Port Washington. Many other narrow escapes. Eleven people hurt in tent collapses at Milwaukee and one at Kohler. Large hail reported at Wausau, DePere, and Tomah. Wind damage reported from all the counties bordering Lake Michigan from Marinette to Kenosha and in some inland counties such as Waukesha and Dane. Funnels aloft sighted near Madison and Cashton. Winds toppled a tree onto a trailer home in Hillside Heights east of Verona in Dane County.							
Southeast Counties	24	p.m.			0	0	4	0	Wind
		Strong windstorm destroyed large barn on Donald Krahn farm near Trevor in Kenosha County.							
Wisconsin (continued)									
Walworth County	24	5:15 p.m.			0	0	5	0	Wind, Lightning
		Sudden thunderstorm caused much wind damage to trees, electrical power lines, boats, piers, and a Piper Cub seaplane at Burlington and Browns Lake. Lightning struck a TV antenna on the Emmett Raetig residence and did extensive damage to appliances and electrical photographic equipment in the home. Several house trailers were overturned and damaged as well as numerous trees blown over.							
Wyoming		None	Reported						
New Jersey									
Cape May County	27	1a.m. EST	28	40	0	0	5	0	Tornado
		A tornado moved inland over Cape May City at about 1 a.m., and passed northward over the City, then continued in a northerly direction over the Cape May County Airport, over Woodbine, and across the Tutakohoe River into Atlantic County. No damage was reported in Atlantic County. The most serious damage was in Cape May City, where numerous homes were severely damaged with the loss of roofs and damage from falling trees being major factors. The electrical power substation was turned into a twisted mass of steel and wires. Power was out for nearly 12 hours until a mobile substation was delivered and hooked up to the trunk lines. Considerable damage was done to trees for the entire length of the County.							
Statewide	27-28				3	0	8	5	Tropical Storm DORIS
		The center of tropical storm DORIS passed from Delaware Bay over the extreme southern portion of Cumberland County, thence northward through the central part of the State, in the early morning hours of the 28th. From New Brunswick the storm passed over Newark, then across the Hudson River into southeastern New York State and Connecticut. Excessive rainfall had occurred over most of the State in the 24 hours just prior to DORIS, in connection with a frontal system moving across the State. The rainfall from DORIS was less than that from the preceding storm, but the total accumulation in such a brief span of time produced devastating flooding in the central and northeastern communities. Hardest hit were Bound Brook, Manville, and Elisabeth. Three deaths by drowning were attributed to the storm. No injuries were reported as directly caused by the storm. A Federal-State survey team estimated the damage at 138.5 million dollars. Of this amount \$5.5 million damage was to public property, mainly roads, bridges, water supply systems, and sewer systems. Damage to private and industrial holdings was estimated at \$85 million.							

- ^o Includes crop damage.
- C Crop damage.
- * Miles instead of yards.
- ** Yards instead of miles.
- † Storm damages are placed in categories varying from 1 to 9 as follows:
 - 1 Less than \$50
 - 2 \$50 to \$500
 - 3 \$500 to \$5,000
 - 4 \$5,000 to \$50,000
 - 5 \$50,000 to \$500,000
 - 6 \$500,000 to \$5 Million
 - 7 \$5 Million to \$50 Million
 - 8 \$50 Million to \$500 Million
 - 9 \$500 Million to \$5 Billion.

Note: This publication contains our best information on storms but, due to the difficulties inherent in collection of this type of data, it is not all-inclusive. Late Reports and corrections will be carried in the June and December issues of this publication.

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