

PRELIMINARY DATA ON REPORTED WEATHER
MODIFICATION ACTIVITIES IN THE U.S. FOR CY 1983 AND 1984

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INTRODUCTION

Public Law 92-205, enacted in 1971, requires that all nonfederally sponsored attempts to modify the weather be reported to the Secretary of Commerce. Responsibility for administering the reporting program was delegated by the Secretary to the National Oceanic and Atmospheric Administration (NOAA). In 1973 Federal agencies agreed to report their weather modification activities to NOAA. Since then the reporting program files have become a unique source of information on weather modification projects undertaken in the United States and its territories. Timely reporting of activities supplies information that can be used to assess the possibility of harm to persons, property, or the environment, or of interference with federal or other research projects. The data are also used to show the trends in weather modification activity over the years and around the country.

The reporting procedures include the submittal of Initial, Interim, and Final Reports covering weather modification activities for individual target areas. An Initial Report is required at least 10 days prior to the start of the activity. Interim Reports are required for those projects active on January 1 of each year and must be filed by February 15. Final reports must be submitted within 45 days after completion of the weather modification activity or project. A weather modification activity is considered active until a Final Report is filed with NOAA.

Requests for copies of the reporting law, reporting procedures, the reporting forms, and information on the reporting program should be directed to:

Program Development and Coordination Office
Office of Oceanic and Atmospheric Research
NOAA
6010 Executive Blvd
Rockville, MD 20852
Tel. (301) 443-8108

ANALYSIS

Preliminary analyses of the weather modification data for CY 1983 and 1984 are provided in Tables 1 and 2. Table 1 gives the number of activities and total target area in CY 1983 and 1984 and provides a breakdown of weather modification operators and sponsors. Table 2 lists the states with modification activities and the total area targeted for weather modification in each state. CY 1982 figures are included in each table for comparison.

The data presented show that the downward trend in the number and scope of weather modification activities, which began in 1977, continued through 1984. The number of activities decreased from 40 in 1982 to 32 in 1984, and the total target area decreased by nearly 19% during the same period -- from 81,342 square miles to 66,120 square miles. Two states with activities in 1982, Florida and Louisiana, reported none in 1983 or 1984, and no new states were added to the list. California again had the greatest number of projects and the largest total target area in both years.

The nature of the activities has changed little during the past two years. Thirty-one of the 35 activities reported in 1983 were continuations of activities reported in 1982, while 31 of the 32 reported in 1984 were continuations of 1983 activities. Twenty-nine of the projects were conducted in all three years.

Twenty-seven of the 35 activities reported in 1983 and 24 of the 32 reported in 1984 had precipitation augmentation as their principal objective. Four of them in each year had two purposes — rain increase and hail alleviation. The remaining activities were cold fog or stratus dissipation projects (6 in 1983 and 5 in 1984) or for research purposes (2 in 1983 and 3 in 1984).

Table 1

Weather modification Data for 1983 and 1984

	<u>1982</u>	<u>1983</u>	<u>1984</u>
Activities	40	35	32
Non-federal activities	35	32	29
Federally sponsored activities	5	3	3
Commercial modifiers	16	11	9
University operators	4	3	3
Federal operators	2	1	1
Water district operators	*	3	3
Utility operators	*	2	2
State operators	*	0	1
Water district sponsors	10	10	8
Community sponsors	7	4	4
University sponsors	4	6	5
State sponsors	4	7	8
Airline/airport sponsors	*	4	3
Agribusiness sponsors	*	1	1
States with activities	16	14	14
Total target area (mi ²)	81,342	77,805	66,120

*These categories were not used in 1982.

Table 2

States With Weather Modification Activities

	<u>Activities</u>			<u>Area (mi²)</u>		
	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
Alaska	3	3	2	103	13	12
California	12	13	11	25,810	25,910	24,610
Colorado	2	2	2	4,700	4,000	1,600
Florida	1	0	0	50	0	0
Idaho	4	1	1	453	100	100
Kansas	1	1	1	9,071	9,122	9,798
Louisiana	1	0	0	1,295	0	0
Nevada	5	5	5	7,161	7,161	7,161
North Dakota	2	2	3	12,193	12,193	13,533
Oklahoma	3	2	2	2,524	1,574	1,574
Oregon	1	1	1	10	10	10
South Dakota	1	1	1	2,682	2,682	2,682
Texas	1	2	2	3,500	4,500	4,500
Utah	4	3	2	10,810	10,310	310
Washington	1	1	1	50	50	50
Wyoming	2	1	1	930	180	180
	44*	38*	35*	81,342	77,805	66,120

*Four projects in 1982 and three projects in 1983 and 1984 were conducted in adjoining states and crossed state boundaries.