NOAA FORM 17-4 (4-81) U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Form Approved OMB Control No. 0648-0025
Expires 05/31/2027

INITIAL REPORT ON WEATHER MODIFICATION ACTIVITIES

This report is required by Public Law 92-205; 85 Stat. 735; 15 U.S.C. 330b. Knowing and willful violation of any rule adopted under the authority of Section 2 of Public Law 92-205 shall subject the person violating such rule to a fine of not more than $10,000, upon conviction thereof.

Complete in accordance with instructions on reverse and forward one copy to:
National Oceanic and Atmospheric Administration
Office of Oceanic and Atmospheric Research
1315 East-West Highway, WWMC-3, Rm 11216
Silver Spring, MD 20910

1. PROJECT OR ACTIVITY DESIGNATION, IF ANY
South Texas Weather Modification Association

2. DATES OF PROJECT
a. DATE FIRST ACTUAL WEATHER MODIFICATION ACTIVITY IS TO BE UNDERTAKEN: 09/01/26
b. EXPECTED TERMINATION DATE OF WEATHER MODIFICATION ACTIVITIES: 10/31/26

3. PURPOSE OF PROJECT OR ACTIVITY
Rain Enhancement

4. (a) SPONSOR

NAME	Aarin Teague		
AFFILIATION	STWMA	PHONE NUMBER	(830) 569-4186
STREET ADDRESS	110 Wyoming Blvd.		
CITY	Pleasanton	STATE: TX	ZIP CODE: 78064

4. (b) OPERATOR

NAME	Recast Systems		
AFFILIATION	Recast System Inc.	PHONE NUMBER	+1 (628) 289
STREET ADDRESS	701 Tillery Street Unit 12-3499		
CITY	Austin	STATE: TX	ZIP CODE: 78702

5. TARGET AND CONTROL AREAS (See Instructions)

TARGET AREA		CONTROL AREA	
LOCATION: Bee & McMullen Counties	SIZE OF AREA: 2020 SQ. MI	LOCATION: N/A	SIZE OF AREA: 0 SQ. MI

6. DESCRIPTION OF WEATHER MODIFICATION APPARATUS, MODIFICATION AGENTS AND THEIR DISPERSAL RATES, THE TECHNIQUES EMPLOYED, ETC. (See Instructions)
See attached below.

7. LOG BOOKS *Enter name, affiliation, address, and telephone number of responsible individual from whom log books or other records may be obtained.*

NAME	Matthew Malone		
AFFILIATION	Meteorologist, Recast Systems Inc.	PHONE NUMBER	+1 (628) 289-4449
STREET ADDRESS	701 Tillery Street Unit 12-3499		
CITY	Austin	STATE: TX	ZIP CODE: 78702

8. SAFETY AND ENVIRONMENT

☐ YES	☑ NO	Has an Environmental Impact Statement, Federal or State, been filed? If yes, please furnish a copy as applicable.
☑ YES	☐ NO	Have provisions been made to acquire the latest forecasts, advisories, warnings, etc., of the National Weather Service, Forest Service, or others when issued prior to and during operations? If yes, please specify on a separate sheet.
☑ YES	☐ NO	Have any safety procedures (*operational constraints, provisions for suspension of operations, monitoring methods, etc.*) and any environmental guidelines (*related to the possible effects of the operations*) been included in the operational plans? If yes, please furnish copies or a description of the specific procedures and guidelines.

9. OPTIONAL REMARKS (See instructions. Use Separate Sheet).

CERTIFICATION: I certify that all statements in this report on this weather modification project are complete and correct to the best of my knowledge and are made in good faith.

NAME OF REPORTING PERSON	Matthew Malone		
AFFILIATION	Recast Systems Inc.	SIGNATURE	Matthew DMalone
STREET ADDRESS	701 Tillery Street Unit 12-3499	OFFICIAL TITLE	Project Meteorologist
CITY: Austin	STATE: TX	ZIP CODE: 78702	DATE: 08/28/26
			PHONE NUMBER: (619) 218-6491

INSTRUCTIONS FOR INITIAL REPORT ON WEATHER MODIFICATION ACTIVITIES

One completed copy of this form is to be received 10 days* or more prior to actual modification activities. A NOAA file number will be assigned by the Administrator after receipt of the initial report for each project or activity.

A supplemental report in letter form referring to the appropriate NOAA file number must be made to the Administrator if the "Initial Report" is found to contain any material inaccuracies, misstatements, omissions, or if there are changes in plans for the project or activity.

*For exceptions, see Sections 908.4(b) and (c), Part 908 of Title 15, Code of Federal Regulations.

Item 1 Enter designation, if any, used by operator for the project or activity.

Item 2 Enter: (a) Date first actual weather modification activity is to be undertaken;
(b) Date on which final weather modification activity is expected to occur.

Item 3 Enter the purposes of the project or activity: e.g., rainfall increase, hail suppression, cold fog dispersal, etc.

Item 4 Enter: (a) Name, phone number, affiliation, and address of the primary person for whom the project is to be performed (sponsor).
(b) Name, phone number, affiliation, and address of the person primarily responsible for carrying out the project (operator).

Item 5 A map should be attached showing size and location of target area, control area, coded number and location of each item of ground-based weather modification apparatus and coded number and location of key rain gauges, radars, or other precipitation measuring devices. Also show location of airport for airborne operations.

Item 6 Describe the weather modification apparatus, modification agents, and the techniques to be used. This would include type of ground or airborne apparatus to be used, type of modification material to be dispensed, rate of dispensing material in grams per hour or other appropriate units, type of precipitation gauges to be used in target and control areas, and any other pertinent information such as type of radars, type of aircraft to be used, techniques to be employed (e.g., cloud-based seeding at 10,000 feet msl).

Item 7 List name, phone number, affiliation, and address of the responsible individual from whom log books or other records may be obtained.

Item 8 Provide applicable answers to questions as indicated.

Item 9 This item is to permit the reporting person to include any information not covered by items 1 through 8 but which he feels is significant or of interest. It is also to be used to include any information not covered elsewhere that the Administrator may request.

INFORMATION PROVIDED UNDER THE PROVISIONS
OF THE
PAPERWORK REDUCTION ACT OF 1995

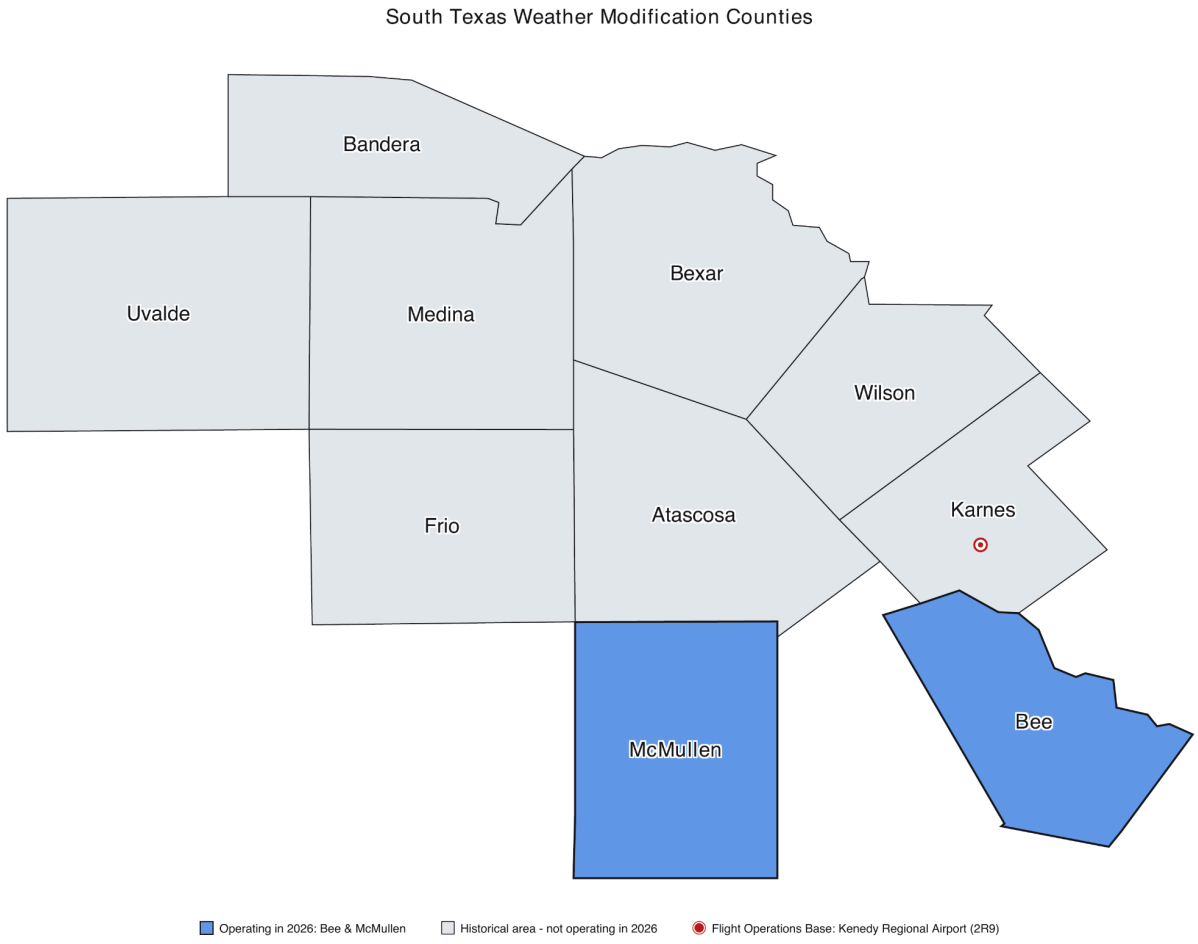
The Paperwork Reduction Act o f1995 requires that individuals or organizations be provided with the following information if they provide information on paper forms which are collected by the Federal Government.

1. Public Law 92-205, enacted December 18, 1971 (amended by Public Law 94-490, Section 6(b), October 15, 1976) requires that all non-federal weather modification activities in the United States and its territories be reported to the Secretary of Commerce. The National Oceanic and Atmospheric Administration has implemented the Act and the current reporting requirements are published in the Code of Federal Regulations (15 CFR 908).

2. The intent of the program is to increase expertise in the field of weather modification, to allow scientists and other concerned persons to have access to information on current and past efforts at weather modification, to help avoid unneeded and wasteful duplications, to aid in preventing territorial overlapping of weather modification operations, to provide data to assess possible harmful or dangerous activities, and to furnish information to check both desirable and undesirable atmospheric changes against records of weather modification efforts. To meet this objective, information is collected on the location and size of the target area, names and addresses of sponsors and operators, beginning and ending dates of the project, specific purpose, description of apparatus and seeding agents to be used, number of days of operations, number of hours of operations of each type of weather modification apparatus, and total amount of seeing agent used.

3. A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995 unless the information collection has a currently valid OMB Control Number. The approved OMB Control Number for this information collection is 0648-0025. Without this approval, we could not conduct this information collection. Public reporting for this information collection is estimated to be approximately 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. All responses to this information collection are mandatory pursuant to Public Law 92-205, enacted December 18, 1971 (amended by Public Law 94-490, Section 6(b), October 15, 1976). Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the OAR Weather Program Office at Weather.Modification@noaa.gov.

ITEM 5 – MAP OF TARGET AREA



ITEM 6 — DESCRIPTION OF APPARATUS, MODIFICATION AGENTS, DISPERSAL RATES, AND TECHNIQUES

Recast Systems will conduct airborne rain-enhancement operations for the South Texas Weather Modification Association within the approved target areas in Bee and McMullen Counties, Texas. Operations will use single-engine aircraft equipped with wing-mounted burn-in-place cloud-seeding flare racks. No ground-based seeding apparatus will be used.

The modification agents will consist of 30g glaciogenic flares containing 5.5 grams of silver iodide (AgI) and 500g hygroscopic flares containing calcium chloride ($CaCl_2$). Flares will be dispensed individually. The number and type used will be determined by the project meteorologist according to cloud size, updraft strength, temperature, moisture content, stage of development, and other observed characteristics. A typical treatment may involve approximately one to ten flares per selected cloud, subject to the approved operating procedures and manufacturer’s specifications.

Cloud-selection and seeding decisions will be made by a meteorologist licensed by the Texas Department of Licensing and Regulation. The meteorologist will use National Weather Service WSR-88D Doppler radar data, satellite imagery, surface observations, and aviation-weather information. Aircraft location, mission status, and flare-release information will be monitored using TITAN's radar display and Melon seeding software.

Cloud-base seeding will be conducted in the inflow and updraft regions of suitable developing convective clouds. The operating altitude and precise release location will be selected by the meteorologist and pilot based on observed cloud-base height, cloud structure, atmospheric conditions, airspace restrictions, and flight-safety considerations.

Precipitation will be monitored using National Weather Service radar estimates and available rain-gauge observations within and surrounding the target area.

ITEM 8 — SAFETY AND ENVIRONMENT

Before and throughout each operation, the Recast Systems project meteorologist will monitor current National Weather Service forecasts, short-term forecasts, watches, warnings, radar observations, and relevant products issued by the Storm Prediction Center. Aviation-weather conditions, including ceilings, visibility, winds, turbulence, lightning, and applicable airspace restrictions, will also be monitored. The meteorologist will maintain direct communications with the pilot during cloud evaluation and seeding operations.

Only suitable developing convective clouds will be considered for seeding. Operations will not begin, or will be suspended, when a Severe Thunderstorm Warning, Tornado Warning, or Flash Flood Warning affects the target area or the cloud being considered for treatment; when a storm is producing or is likely to produce excessive rainfall; when the meteorologist or pilot determines that turbulence, hail, lightning, visibility, ceilings, winds, aircraft condition, or airspace conditions present an unacceptable risk; or upon request of TDLR, STWMA management, or the participating Bee or McMullen County program representatives.

All operations will be conducted under the direction of a TDLR-licensed meteorologist and in accordance with the applicable TDLR license and permit conditions, Federal Aviation Administration requirements, and the approved operational plan. The aircraft will be equipped with a 406MHz emergency locator transmitter and will be tracked via telemetry on the TITAN radar display.

Only the modification agents and dispensing systems identified in Item 6 and authorized for the project will be used. The operator will maintain records of each operation, including the date and time, aircraft, cloud or cell treated, release location, type and quantity of agent dispensed, flight duration, and any operational suspension or safety event. No experimental or alternative seeding material will be used unless it is disclosed to NOAA and authorized by TDLR before use.

EXPLANATION ACCOMPANYING NOAA FORM 17-4
15 CFR § 908.4(b) AND (c)

August 28, 2026

The initial report for the South Texas Weather Modification Association's 2026 rain-enhancement program is being submitted fewer than ten days before the proposed commencement date because completion of insurance arrangements and the resulting final authorization to proceed remained pending. The report is being submitted at the earliest practicable date based on the project information currently available.

No actual weather modification activity will be undertaken until required insurance and applicable state authorizations are finalized. NOAA will be notified promptly by supplemental report if the commencement date or other material project information changes.