Complete in accordance with instructions on reverse and forward copy:

TO: National Oceanic and Atmospheric Administration
Office of Oceanic and Atmospheric Research
1315 East-West Highway SSMC-3 Room 11216
Silver Spring, MD 20910

Form Approved: OMB No. 0648-0025 Expires 12/31/2007

NOAA FORM 17-4 (4-81)

U.S. DEPARTMENT OF COMMERCE
NAT'L OCEANIC AND ATMOSPHERIC ADM.

# INITIAL REPORT ON WEATHER MODIFICATION ACTIVITIES (P.L. 205, 92ND. CONGRESS)

**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: 4/1/2022

b. EXPECTED TERMINATION DATE OF WEATHER MODIFICATION ACTIVITIES: 10/31/2022

**3. PURPOSE OF PROJECT OR ACTIVITY**
Rain Enhancement

**4. (a) SPONSOR**

| NAME | | |
|---|---|---|
| Craig Funke | | |
| AFFILIATION: Manager, STWMA | PHONE NUMBER: 325-949-1950 | |
| STREET ADDRESS: 110 Wyoming Blvd. | | |
| CITY: Pleasanton | STATE: TX | ZIP CODE: 78064 |

**4. (b) OPERATOR**

| NAME | | |
|---|---|---|
| Bria Hieatt | | |
| AFFILIATION: Meteorologist, STWMA | PHONE NUMBER: 214-893-2723 | |
| STREET ADDRESS: 110 Wyoming Blvd. | | |
| CITY: Pleasanton | STATE: TX | ZIP CODE: 78064 |

**5. TARGET AND CONTROL AREAS (See Instructions)**

| TARGET AREA | | CONTROL AREA | |
|---|---|---|---|
| LOCATION: South Texas | SIZE OF AREA: 10800 SQ.MI | LOCATION: South Texas | SIZE OF AREA: 10800 SQ.MI. |

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

The STWMA utilizes single engine aircraft equipped with flare racks to enhance rainfall in 10 counties in South Texas (Atascosa, Bandera, Bee, Bexar, Frio, Karnes, McMullen, Medina, Uvalde and Wilson). Flares include 40g glaciogenic flares (5.5g silver iodide) and 1 kilogram hygroscopic flares (made of mainly calcium chloride). Operations are conducted by a state licensing meteorologist (licensed by the Texas Department of Licensing and Regulation) using radar provided by Weather Decisions Technologies via the National Weather Service. Aircraft are tracked via telemetry on the TITAN radar display from the office in Pleasanton, TX. Dosaging can range from 1 flare per cloud upwards to 10 flares per cloud, depending on the size and characteristics of the cloud. Any operations will be suspended under severe thunderstorm, thunderstorm, flood or tornado warnings or upon request by the TDLR and/or management of the STWMA and associated counties.

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

| NAME | | |
|---|---|---|
| Bria Hieatt | | |
| AFFILIATION: Meteorologist, STWMA | PHONE NUMBER: 214-893-2723 | |
| STREET ADDRESS: 110 Wyoming Blvd. | | |
| CITY: Pleasanton | STATE: TX | ZIP CODE: 78064 |

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.

**8. SAFETY AND ENVIRONMENT**

- [ ] YES [X] NO — Has an Environmental Impact Statement, Federal or State been filed? If yes, please furnish a copy as applicable.
- [X] 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.
- [X] 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.)*

| NAME | CERTIFICATION: I certify that the above statements are true, complete and correct to the best of my knowledge and belief. | |
|---|---|---|
| Bria Hieatt | | |
| AFFILIATION: Meteorologist, STWMA | SIGNATURE: B Hieatt | |
| STREET ADDRESS: 110 Wyoming Blvd. | OFFICIAL TITLE: Project Meteorologist | |
| CITY: Pleasanton / STATE: TX / ZIP CODE: 78064 | DATE: 2/27/2022 | PHONE NUMBER: 214-893-27 |

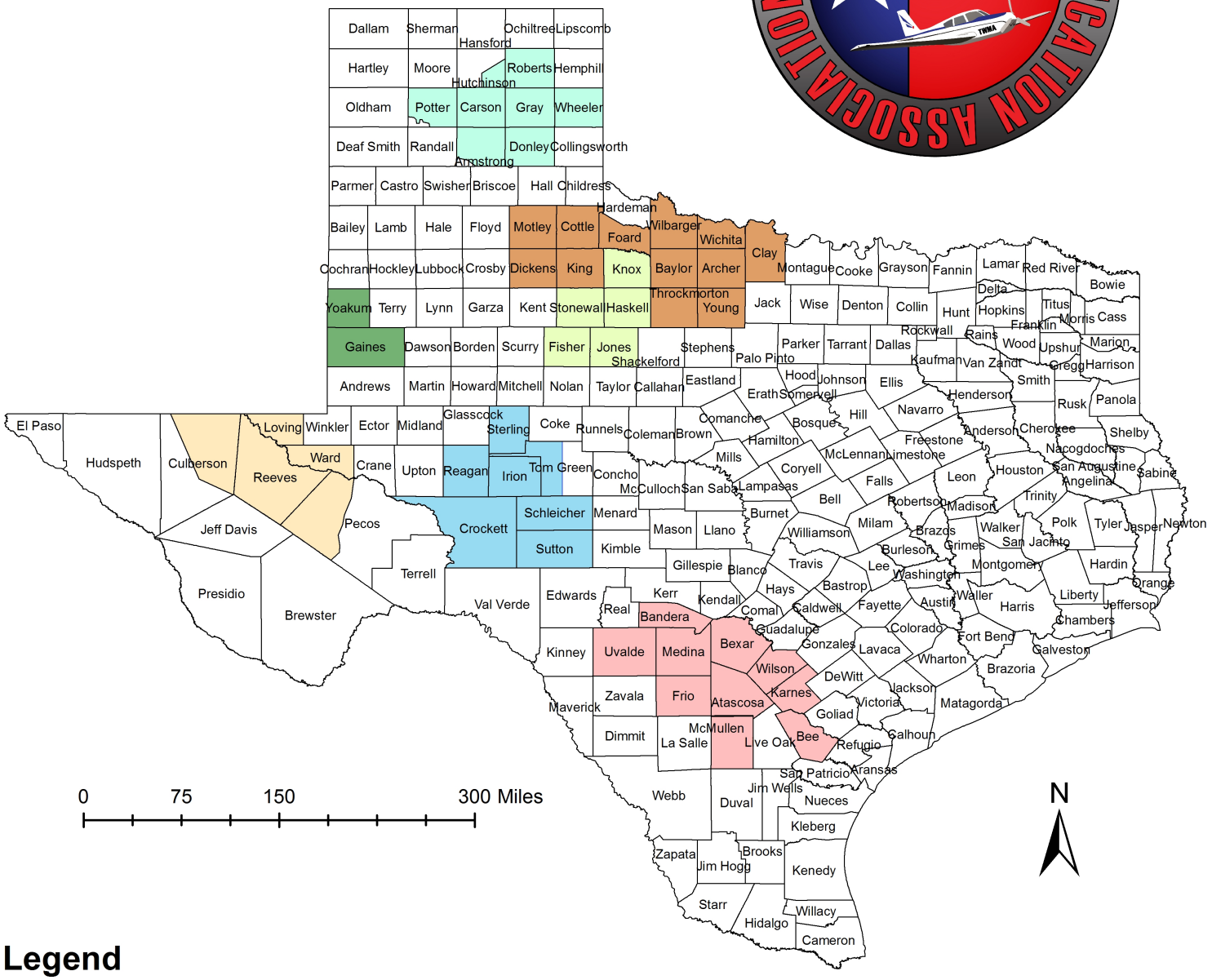
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8. The South Texas Weather Modification Association continues to strengthen its relation with the National Weather Service. The project meteorologist will monitor weather watches issued by the Storm Prediction Center and all warning, advisories and short term forecasts issued by the National Weather Service via weather radio, television and internet websites. The meteorologist is also, at times, in contact with the NWS via telephone, social media or text message.

The STWMA has also been using new radar software called the GR2Analyst. This product provides live radar, watches, warnings and real time weather reports on the radar screen. This product has also been used for aircraft safety especially with the viewing of vertical updrafts which can at times skew ahead or behind a storm. This has been utilized as a new tool during seeding operations.

Furthermore, all aircraft are equipped with a 406 Mhz emergency beacon. This will alert a Rescue Coordination Center in the event of a distress message being sent out from our aircraft. It will allow Search and Rescue (SAR) forces to locate the aircraft in a timely manner.

# Texas Weather Modification Association Program Target Areas




## Legend

- Rolling Plains
- SOAR
- Wichita Falls
- Panhandle Groundwater Conservation District
- Trans-Pecos Weather Modification Association
- South Texas Weather Modification Association
- West Texas Weather Modification Association