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

Form Approved OMB Control No. 0648-0025
Expires 05/31/2021

INITIAL REPORT ON WEATHER MODIFICATION ACTIVITIES

This report is required by Public Law 92-205; 85 Stat. 735; 145 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

WY Aerial Weather Modification Project

2. DATES OF PROJECT

a. DATE FIRST ACTUAL WEATHER MODIFICATION ACTIVITY IS TO BE UNDERTAKEN: 11/1/2023

b. EXPECTED TERMINATION DATE OF WEATHER MODIFICATION ACTIVITIES: 4/30/2024

3. PURPOSE OF PROJECT OR ACTIVITY

Increase snowpack in Never Summer Range, CO

4. (a) SPONSOR

NAME: Mr. Jim Baller
AFFILIATION: Jackson County Water Conservancy District
PHONE NUMBER: (970) 819-1382
STREET ADDRESS: P.O. Box 1019
CITY: Walden
STATE: CO
ZIP CODE: 80480

4. (b) OPERATOR

NAME: Bruce A. Boe
AFFILIATION: Weather Modification LLC
PHONE NUMBER: 7012355500
STREET ADDRESS: 3802 20th Street North
CITY: Fargo
STATE: ND
ZIP CODE: 58102

5. TARGET AND CONTROL AREAS (See Instructions)

TARGET AREA		CONTROL AREA	
LOCATION: North-Central Colorado	SIZE OF AREA: 580 SQ. MI	LOCATION: none	SIZE OF AREA: SQ. MI

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

One (1) twin-engine turboprop aircraft will be used to seed supercooled orographic clouds with glaciogenic pyrotechnics. Seeding will be guided by a meteorologist, aided by weather observations and a four-dimensional (x, y, z, t), high resolution prognostic numerical model configured for this specific target area. The aircraft will be based in Cheyenne, WY. Flight pattern will be approximately at right angles to the prevailing wind at seeding altitude, upwind of the targeted range.
Seeding will occur only when the following conditions are met over the range: (1) supercooled cloud exists upwind and/or over the target ranges, and (2) the wind direction is such that the proper transport of the cloud ice thus nucleated will occur resulting in snow development, from the seeding zone to the target. Seeding rates will be approximately 20 grams every 30-60 seconds while the aircraft is encountering supercooled cloud.

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

NAME: Mr. Jake Van Ornum
AFFILIATION: Weather Modification LLC
PHONE NUMBER: (701) 235-5500
STREET ADDRESS: 3802 20th Street North
CITY: Fargo
STATE: ND
ZIP CODE: 58102

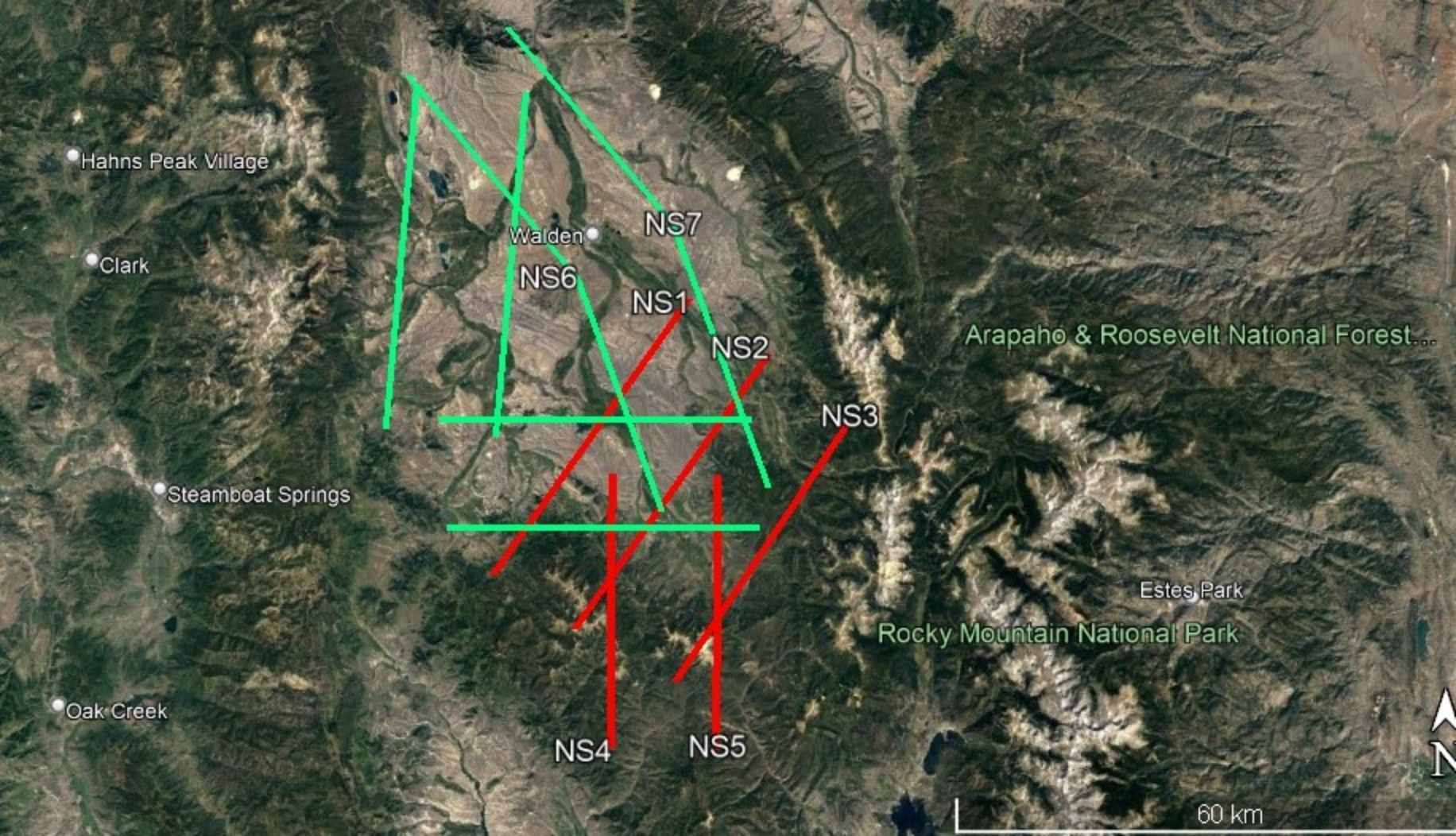
8. SAFETY AND ENVIRONMENT

☐ 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: Jake Van Ornum
AFFILIATION: Weather Modification LLC
SIGNATURE:
STREET ADDRESS: 3802 20th Street North
OFFICIAL TITLE: Client Services Assistant
CITY: Fargo
STATE: ND
ZIP CODE: 58102
DATE: 10/17/2023
PHONE NUMBER: (701) 235-5500


Hahns Peak Village
Clark
Walden
NS7
NS6
NS1
NS2
NS3
Arapaho & Roosevelt National Forest...
Steamboat Springs
Estes Park
Rocky Mountain National Park
Oak Creek
NS4
NS5
60 km