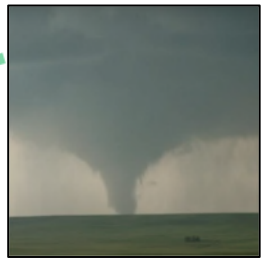
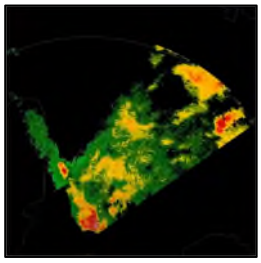
EXHIBIT 1
DESCRIPTION OF EXPERIMENT

The Ohio State University (OSU) Atmospheric Sciences Program proposes to utilize an experimental vehicle-mounted X-Band weather radar to collect data on a variety of storms and atmospheric phenomena. This research program will allow OSU students to go out into the field to use the radar as part of their curriculum, and will also collect data to validate the performance of the radar. Part of this research will support contracts issued by the National Oceanic and Atmospheric Administration and the National Geographic Society.



Attribution: Ohio State University



Attribution: Collins Aerospace

OSU will utilize one experimental Collins Aerospace Skyler-III radar using a maximum bandwidth of 17.5 MHz with additional technical details below:

Frequency Range:	9300 – 9500 MHz
Emission Designators:	9M20Q3N 8M30Q3N 17M5W8N
Output Power	301 W Peak
ERP	2378 kW Peak
Frequency Tolerance:	0.00100000 %
Modulating Signal:	NLFM/LFM
Approximate Range:	25 miles

The radar will be deployed on a periodic basis as weather events and atmospheric phenomena arise. It is estimated that the radar will be utilized for approximately 120 days each year. Most deployments will be short, lasting for 5-60 minutes, although there may be some missions that require continuous scanning for several hours. The radar is proposed to initially be utilized on a statewide basis in the following states:

California
Colorado
Iowa
Kansas
Missouri
Nebraska
Ohio
Oklahoma
Texas
Wyoming

Interference Mitigation

OSU will mitigate interference to existing federal and non-federal users by:

1. **Frequency Selection.** OSU will identify existing licensees in the area of the storm and measure the RF environment. OSU will only transmit on frequencies that are not utilized.

2. **AESA Radar Beam.** Skyer is an active electronically scanned array (AESA) radar that transmits in a very narrow "pencil beam" directional pattern. It will be steered by software to focus precisely on the targeted weather phenomenon such as a tornado.

3. **Limited Use & Duration.** The radar will only be utilized to measure weather and atmospheric events as they arise, and typically for less than 1 hour.

4. **Termination for Interference.** The OSU team will immediately terminate the experiment if interference is detected or an interference complaint is received.

The stop buzzer is:

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