

# NOTE ON PROJECT SCUD

J. M. WELLS and M. A. WELLS  
UNIVERSITY OF CALIFORNIA, BERKELEY

## 1. General information

Information on Project SCUD stems from the article by Jerome Spar published in *Meteorological Monographs* [1].

Project SCUD originated at New York University in May 1952, as an attempt to discover quantitative effects of cloud seeding on cyclones developing in the east coastal region of the United States. A meteorological group at New York University forecast the location of the center and the zero hour of an incipient cyclone. The personnel at Naval facilities based in the coastal area were responsible for randomization, for seeding, and for collection of observations. The experiment was designed to test the hypothesis that cloud seeding in areas of cyclogenesis on the east coast of the United States has no measurable effect on the development of storms there. Precipitation data were taken because it was thought that they would reflect the effects of the seeding treatment, if any. The experiment was designed with the leading idea that seeding during an early stage of a cyclone would be more effective than during the later stages. It was hoped that the seeding of clouds would produce rain over large areas where it would not occur of its own accord and, in accordance with a suggestion of Langmuir, that the heat so generated would have a marked effect on the general circulation of the atmosphere. With the above in mind, an effort was made to seed situations in which cyclogenesis appeared imminent.

Even though the duration of the experiment was too short to detect the possible effects of seeding of an intensity that was reasonable to expect, some of the findings attained in this experiment deserve serious attention.

## 2. Meteorological variables

Two meteorological variables were observed: precipitation and pressure change. The present account is concerned with precipitation only.

## 3. Seeding

Seeding was done with silver iodide released from seventeen ground based generators and with dry ice dispensed from aircraft. The silver iodide smoke

Prepared with the partial support of the Office of Naval Research (Contract No. N00014-66-C0036-G01; NR 307-303X).