

NATIONAL RESEARCH COUNCIL  
NATIONAL ACADEMY OF SCIENCES NATIONAL ACADEMY OF ENGINEERING  
2101 CONSTITUTION AVENUE WASHINGTON, D.C. 20418

U.S. COMMITTEE FOR THE  
GLOBAL ATMOSPHERIC RESEARCH PROGRAM  
DIVISION OF PHYSICAL SCIENCES

November 28, 1969

MEMORANDUM

TO: Members, U. S. Committee for the Global Atmospheric  
Research Program

FROM: *John R. Sievers*  
John R. Sievers, Executive Secretary

SUBJECT: Position of The Federal Committee on major issues  
requiring early decisions for programs, schedules  
and priorities for U. S. participation in the GARP

1. The enclosed copy of a letter from Dr. Robert M. White to Professor Jule G. Charney sets forth a number of key factors bearing upon major components of the GARP plan, as submitted to the Federal Government in July, on which early decisions are required for planning and budgetary needs.

2. The officers of the USC-GARP, in anticipation of a Federal response to the Committee's report "Plan for U. S. Participation in the Global Atmospheric Research Program", have established a Review Subcommittee under Dr. Verner E. Suomi to consider the evaluation of the GARP Plan by the Federal agencies.

The response of the Federal Government has taken on one major aspect, as set forth in Dr. White's letter, and in addition, the Committee has informally received a review document presenting a set of alternatives for a program plan based primarily upon preliminary estimates of costs for the conduct of the various field experiments outlined in the GARP Report.

3. The review process of the Committee was initiated on November 24, when several members of the Review Subcommittee met with Dr. Suomi in Chicago. Other members, who will be giving primary attention to the Tropical Cloud Cluster Experiment in terms

of scientific objectives and data requirements, technological needs, scheduling, location, and other planning factors, as they relate to the issues considered by the Federal Committee outlined in the attached letter, will be meeting (December 5-12, 1969) in Miami, Florida, following the Hurricane Conference in conjunction with the Joint GARP Organizing Committee Study Group on Tropical Disturbances at the University of Miami.

4. Those meeting in Chicago, recognizing that major issues on the Tropical Cloud Cluster Experiment would be considered in greater detail in Miami, did conclude that:

- A. The support and conduct of numerical modelling and observation system simulation experiments were of greatest priority at this moment, along with budgetary planning for the procurement of a super-computer at the earliest possible date. The highest priority should be given to the prompt initiation of the observation system simulation experiments.
- B. An Observation Systems Test in 1973 or 1974, based upon existing plans providing for ITOS and Nimbus F polar-orbiting satellites, and an early SMS (Synchronous Meteorological Satellite) at approximately  $50^{\circ}$  or  $100^{\circ}$  W longitude, should be conducted during this period, over water, utilizing small drifting and/or moored buoys, ships, and the balloons as presently planned for the Nimbus F experiment.
- C. The Observing Systems Test should be conducted in concert with a tropical research experiment; and both the test and the experiment should be internationalized insofar as this proves practicable without compromising the time-period now being considered for the test, nor the feasibility of the execution of a concurrent research program.

D. As part of the test, particular attention should be given to the important factors relating to data acquisition, transmission, processing, utilization, etc.

5. Since it appears that the Executive Committee will likely be meeting with Federal representatives (NSF, NASA, DOD & ESSA) during the week of December 15 to arrive at a consensus of decisions on these issues, please let us have your perspectives and comments on these matters as soon as possible - by phone should this prove more convenient and time-saving - in order that the Executive Committee will be able to fully consider your comments and suggestions.

JRS:cp  
Attachment