

5 September 1975

MEMO TO: Cliff Murino

VIA: Bob Serafin *Bob*FROM: Walt Records *Walt Records*

SUBJECT: Monthly Activities Report (August 1975)

I. SYSTEMS DEVELOPMENT

A. Construction of the CP-4 radar system continued with initial turn-on date still scheduled for mid-October. Main power wiring and inter-console wiring are predominant activities for the electronics. Antenna balancing and pedestal checkout will start soon. The fiber-glass radome was completely reinforced and painted. The pedestal trailer was painted and work continues on the enroute storage and tie-down systems.

B. A second BLP sensor package is in construction with all needed components on hand. Completion was delayed because of the transfer of a technician to Grams' lidar group. A temperature structure function sensor was designed and partially assembled but will be delayed until well after another technician is hired. It will not be ready for the Haswell experiment.

The sensor package lost near St. Louis in July has not been recovered.

C. A low level effort continues to place the environmental chamber under microprocessor control.

D. FOF has assumed the design responsibility for sensor systems for the PAM and continues to provide engineering and technician support for this system.

II. SUPPORT

A. The CP-3 radar was operated during August, 17 miles south of Belle Glade, Florida in support of a triple Doppler radar program supervised by Dr. R. Lhermitte, University of Miami. This program was part of the larger Florida Area Cumulus Experiment (FACE). The radar will depart for Boulder on 8 September 1975. Field reports indicate only minor problems were encountered and several good storm sequences were observed. Our summer visitor, Dr. Bob Perret, worked with the system on site most of the month.

B. One Boundary Layer Profile System and an operator were deployed near Lincoln, Nebraska in support of the University of Nebraska from 5-20 August. Some problems developed with the pressure sensor because of temperature compensation problems. Efforts are under way to repair this component.

C. The 60-inch ruby lidar made intermittent observations for the UAP at the Mesa Laboratory site in Boulder.

D. FOF personnel manned the Grover radar systems for one week, 18-22 August, in support of a special NHRE requirement.

E. FOF continued to outfit a mobile instrumentation trailer for the BLP and rawinsonde support to be provided at Haswell, Colorado, 15-30 September.

F. Don Morris of CF and Chuck Frush of FOF devoted most of their August efforts to developing software for the processing of Doppler velocity and spectral analysis for recovery of data taken for the University of Washington. These programs will be invaluable to future system users.

G. Minor meteorological equipment systems remain on loan to universities with many programs ending soon. A reconditioning program for this winter will be required.

III. OTHER ITEMS

A. Considerable administrative effort was expended in the development of the FY 76-82 Multi-Year Program Plan.

B. A two-year graduate assistantship for Alan Bohne of the University of Chicago was approved for multiple Doppler radar studies of winter storms. This assistantship was jointly requested by Srivastava of the University of Chicago and Serafin. Srivastava, Atlas and Serafin are all members of Bohne's thesis advisory committee.

C. NCAR activities related to JMOF were highlighted by a workshop held at NCAR to discuss initial scientific emphasis at the JMOF. A second meeting is proposed for December. NCAR, University and NOAA personnel attended this conference.

D. Two employees hired for the Community Action Training Program were terminated at the end of their term appointment. They performed valuable services during their tenure.

IV. OUTLOOK

- A. CP-4 radar construction and PAM design activities will continue.
- B. The CP-3 radar will return from Florida and it will be set up at Marshall for calibration checks.
- C. FOF will support the 15-30 September research program at Haswell with BLP and rawinsonde systems. We will have two persons on site during that period.
- D. Considerable coordination will be conducted with the Universities of Chicago and Washington concerning deployment of the CP-3 and CP-4 radar systems during the 75-76 winter season.

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