

3 June 1975

MEMO TO: Cliff Murino

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

SUBJECT: Monthly Activities Report (May 1975)

I. SYSTEMS DEVELOPMENT

A. CP-3 Radar was at Marshall for the complete month. Repainting of the pedestal trailer was completed. Improvements in enroute tie-down devices were made and all installation items were color coded for better identification. Air conditioning ducting was modified to OSHA standards and the master air conditioning unit recharged and tuned up.

The system was made operationally ready (less radome) during the week of 12 May so that further experimental work and refined procedures could be developed for antenna controls.

B. CP-4 Radar remained under construction. Completion of internal electric wiring and lighting was delayed because of higher priority plant maintenance projects. Work on sub-components such as receiver, tube cooler, transmitter, power supplies, etc. continues.

The pedestal was still in the assembly phase by the machine shop. The pedestal trailer was moved to the Mesa and schedules call for completion of pedestal assembly and mounting of pedestal on trailer. Other trailer modifications are scheduled for completion during June. It was found that the cross member braces in the pedestal trailer are aluminum instead of steel and will complicate the installation of cable reels and storage boxes below deck. Materials are on order for the radome crane and assembly should be complete during June.

Plans call for Records and Bobka to recover an FPS-18 radome from Olympia, Washington during the first week in June. Considerable overtime has been worked to keep construction on schedule. NHRE and CP-3 to Florida will slow down production from 15 June through August.

Major components are on order for construction of a CP-4 Doppler and reflectivity processor and color TV display. First use starting 1 December 1975 at Chicago will have limited capabilities and

completion is not scheduled until May 1976.

- C. Tethered Boundary Layer System development work continued. One sensor is 90% complete, and the third package is 15% complete and awaiting delivery of components on order. Five winches are in the machine shop to reduce cubage for easier shipment. First use of the time systems is 1 July 75 in support of METROMEX.
- D. PAM testing and development continued with design modification to remote stations being evaluated.
- E. CP-2 Radar at Grover is being modified per NHRE specifications.

II. SYSTEMS OPERATION

- A. 60 Inch Ruby Lidar remained deployed at Oklahoma City for potential use by NSSL to monitor tropospheric dust. Data taken earlier during Project DUSTORM is being computer processed at Boulder by Frush.
- B. Equipment shipments (loans) were made this month to the University of Mimia and NHEML for Project FACE, Illinois State Water Survey, for project METROMEX. Other equipments were calibrated and sent to NHRE and loans continued to 16 NCAR and university investigators.
- C. With the addition of Don Morris (Computing Facility) we were able to begin processing radar data collected in Washington in support of Peter Hobbs.

III. TECHNIQUE DEVELOPMENT

- A. Dr. Baynton attended the First AMS Conference on Regional and Mesoscale Modeling, Analysis and Prediction at Las Vegas on 6 and 7 May. He presented a paper describing the FOF tethered balloon system.

He also attended a meeting at Las Vegas on 8 and 9 May of the Program Committee for the International Conference on Environmental Sensing and Assessment. He is the AMS representative on this program committee. The conference will be held September 15-19, 1975 at Las Vegas.

- B. At the May ATD Seminar, Bob McBeth, Dave Call, Al Morris and Harold Baynton presented the program concerning history, specifications, and examples of use of the FOF tethered balloon boundary layer profiler system.

C. Al Morris continued work in processing and B.P. data from the Fraser Valley program. The BP data processing should be complete in June. The rawinsonde data processing will start after B.P. data is completed.

IV. OUTLOOK

A. Preparations continue in anticipation of summer 1975 support to NHRE. Technicians will report to Grover the week of 9 June to activate the CP-2 radar. The Doppler processor, reflectivity and display system will be deployed before 7 July.

B. The CP-3 is being readied for deployment to Florida on or about 15 July in support of Professor Lhermitte in Project FACE. It will return to Boulder in September.

C. Renegotiations with Illinois State Water Survey provide for loan of two BP systems without operator during July.

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