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Barn-P. Reports  
(Dicker)

4 November 1976

MEMO TO: Cliff Murino  
FROM : V. E. Lally, *vel*  
SUBJECT: GAMP Monthly Report - October 1976.

EWE

In October, creep tests were completed on sample balloon-gore material. Balloon test and measurement specifications are being prepared prior to issuance of an RFP, presently scheduled for release by 1 November.

An automatic pressure controller has been designed and built for the testing of cutdown baro-switches. A magnetometer and longitudinal sensor is being breadboarded for evaluation.

An RFP is being prepared for release next month for the transmitter procurement. Materials have been ordered for a prototype antenna. One candidate data encoder circuit has been designed and breadboarded for evaluation. A second circuit using programmable matrices of diodes is being investigated. If feasible, it will reduce the large number of AND/OR select gates necessary in the first design.

Design of the power supply is continuing. A DC-DC converter, 12-V step-up for the transmitter is partially designed. A 6-V step-down is done and awaiting testing.

Design of the thermal control package is underway. Fabrication of three test packages is scheduled to commence soon.

Investigation of launch sites is being made by the NOAA/FGGE office.

Safesonde

Temperature, humidity, and engineering data analyses have been completed. The sonde performed exceptionally well. Bead thermistor and rod thermistor temperature measurements are of equal accuracy. The relative humidity element is not usable in its present form without a baseline check.

The Barnes and the Passi basic algorithms provide similar position accuracies. Two flights have been analyzed and indicate the wind accuracy will exceed system goals.

The Tektronics 4051, on loan from NOAA, was received. Initial tests show that it will handle the Barnes algorithm with sufficient speed to enable real-time processing of 20 sec winds. The system is now being programmed with the Passi algorithm.

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LLAMB

Agreement was reached in a meeting at the Sheldahl plant on the final procurement drawings. These are now being prepared. In addition, a suitable balloon test facility was located in Sioux Falls. Raven has used this facility in the past. Agreement was reached with both Raven and Sheldahl to cooperate in the testing of the balloon. This will be formalized soon.

Carrier Balloon

Volumes 1 and 2 of the final report have been printed and are being bound. The last volume is awaiting the completion of flowcharts by Graphics. We expect to have this volume to the Print Shop by 10 November.

END OF MEMO

VEL:n1