WESTERN REGION TECHNICAL ATTACHMENT
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GOES SATELLITE OPERATIONS

The following letter describes plans for GOES launches and operations during the next few years. It should answer many of the questions that have arisen since the launch failure of GOES-G on May 3, 1986.

The GOES I-M series addressed in the letter is the next generation of geostationary satellites, often referred to as GOES-NEXT. It is expected that GOES-NEXT will provide additional capabilities such as higher resolution imagery, especially in the infrared spectrum, and pictures more frequently than the current half-hour interval.

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE
Silver Spring, Md. 20910

MAY 5 1986

MEMORANDUM FOR: Addressees Listed Below

FROM: James L. Rasmussen for
Director, Office of Meteorology

SUBJECT: Geostationary Satellite Operations

Since the failure to launch GOES-G on May 3, 1986, many questions concerning geostationary satellite operations have been raised. Following are our plans for the deployment of GOES-6 during the upcoming hurricane season and the remainder of 1986. Also included is the long-term outlook for geostationary satellites into the 1990's.

The remaining satellite, GOES-6, launched just over three years ago, is fully functional and is maintaining a stable orbit. Sufficient fuel remains to insure this orbit well into 1989. GOES-6 is presently operating using the second of four redundant encoder lamps. These lamps are also expected to last well into 1989. In summary, neither NESDIS nor NASA expects premature failure of GOES-6.

The last of the present GOES series satellites, GOES-H, is now being prepared for launch. The current target launch date is October 1986. This assumes that the investigation into the failure of the Delta launch vehicle is complete and the problem has been resolved. More information will be available later this summer and I will keep you informed concerning a more definitive launch date for GOES-H.

Since adequate fuel is available on GOES-6, the satellite will be moved on June 19, from its present location at 108°W to the hurricane reconnaissance position at 98°W. The station change maneuver will occur at a fuel efficient rate of 0.5° per day which will bring GOES-6 on station by July 9, 1986. Assuming a successful launch of GOES-H in October, GOES-6 will be moved to a permanent location at 135°W in November. If GOES-H is not in orbit by the end of October, GOES-6 will probably be moved back to 108°W. Again, more definitive information will be available later this summer.

Since management of the satellite program is becoming increasingly critical as available resources are diminished, an interagency GOES management team is being formed. The team includes members from the GOES Mission Office - NASA, the Satellite Operations and Control Center - NESDIS, and the Office of Meteorology - NWS. The team will coordinate launch schedules, satellite locations, encoder lamp operations, and VAS operations. Regional input is encouraged through the satellite program leader, Mike Young, at NWSH.

It is possible that NOAA will operate under a one-GOES contingency for a significant period during the next four years. The first of the GOES I-M series is expected in December 1989. The most critical periods will be the remainder of 1986 and 1989 when the current GOES-6 will be six years old. Therefore, we are pursuing alternative sources for satellite data and supplementary systems such as data buoys and increased aircraft operations. A joint NESDIS/NWS task team is currently preparing proposals to acquire and distribute more polar orbiter data from NOAA and DOD satellites, improve the acquisition and display of METEOSAT and GMS data, and acquire additional data buoys beyond the present area of single GOES coverage. As these plans are refined, my staff will continue to work with appropriate regional representatives.

ADDRESSEES:
Regional Directors
National Center Directors