

MEMORANDUM

30 January 1976

TO: A/Administrator

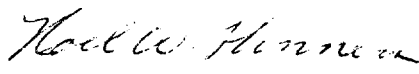
FROM: S/Associate Administrator for Space Science

SUBJECT: San Marco C-2 Post Launch Report #2

San Marco C-2 is declared a success based upon the results of the mission with respect to the approved prelaunch objectives. On February 18, 1974, San Marco C-2 was launched by a Scout vehicle from the San Marco Range into an elliptical equatorial orbit. The payload consisted of three scientific instruments, two U.S. and one Italian, designed to obtain measurements of the diurnal variations of the equatorial neutral atmosphere density, composition, and temperature and to use these data for correlation with Explorer 51 (AE-C) data for studies of the physics and dynamics at the thermosphere.

After 23 months in orbit, more than 17 diurnal cycles of data on the density, composition, and temperature of the equatorial thermosphere have been obtained, clearly meeting the primary mission objectives. Both U.S. scientific instruments continue to acquire data but the Italian air drag balance, which malfunctioned shortly after launch, has never performed properly.

Studies and correlations of data from AE-C and San Marco C-2 have begun and will continue as data acquired from the two satellites are processed and analyzed.

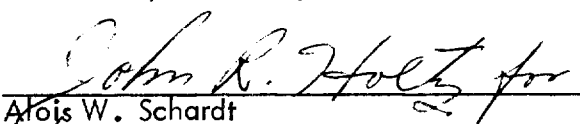

Noel W. Hinners

NASA MISSION OBJECTIVES FOR SAN MARCO C-2PRIMARY OBJECTIVE

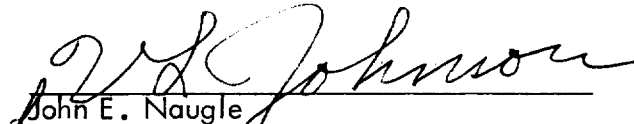
- To obtain measurements of the diurnal variations of the equatorial neutral atmosphere density, composition, and temperature.

SECONDARY OBJECTIVE

- To utilize these data for correlation with AE-C (Explorer 51) data for studies of the Physics and dynamics of the thermosphere.


 Alois W. Schardt
 Director, Physics and Astronomy Programs

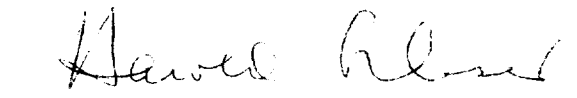
Date: 2/13/74


 John E. Naugle
 Associate Administrator for Space Science

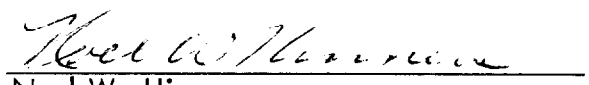
Date: 2/13/74

ASSESSMENT OF THE SAN MARCO C-2 MISSION

Based upon the results of the mission with respect to the approved prelaunch objectives, the San Marco C-2 Mission is adjudged as successful.


 Harold Glaser
 Director, Solar Terrestrial Programs

Date: 1/28/76


 Noel W. Hinners
 Associate Administrator for Space Science

Date: 1/29/76