

PRESENTS

# THE HGS-1 LUNAR RESCUE MISSION



**Mark Skidmore  
and  
Jerry Salvatore**  
*Hughes Global Services*

**WEDNESDAY,  
NOVEMBER 10,  
1999**

**4:45 P.M.**

**VON KARMAN  
AUDITORIUM**

*Join now for FY 2000 and you will be eligible to attend the November 29th "Members Only" dinner at the Athenaeum where Dr. Huntress will share his experience as a scientist in Washington. Applications are available from Madeline Wallace, JPL M/S 180-401, (818) 354-8304.*

In June 1998, Hughes engineers completed an unprecedented mission using the moon's gravity to reposition a stranded communications satellite into a geosynchronous orbit around the Earth. This was the first known commercial use of the moon and the first lunar mission by a nongovernment entity.

The satellite, originally launched as AsiaSat 3 and now known as HGS-1, was left in a useless orbit by a booster failure in December 1997. On April 10, 1998, Hughes controllers began a sequence of liquid apogee motor burns, sending the spacecraft toward the moon. On May 13, HGS-1 passed around the moon and returned to Earth three days later. On May 16, the satellite's motor was again fired, putting the spacecraft on target for a second lunar encounter. HGS-1 passed the moon again on June 6. It arrived in geosynchronous orbit on June 17.

Come hear how this was done from the people who led the effort. Mark Skidmore is the Director of Advanced Programs at Hughes Global Services and was the HGS Project Manager for the lunar salvage mission. Jerry Salvatore, a Chief Technologist at Hughes Space and Communications, has directed or participated in the launch of over 100 spacecraft.

Contact for questions about this event: send e-mail to [CMA.Announce@jpl.nasa.gov](mailto:CMA.Announce@jpl.nasa.gov) or call Michael Eastwood, (818) 354-9273.

THIS EVENT IS FREE. ALL PERSONNEL ARE WELCOME.