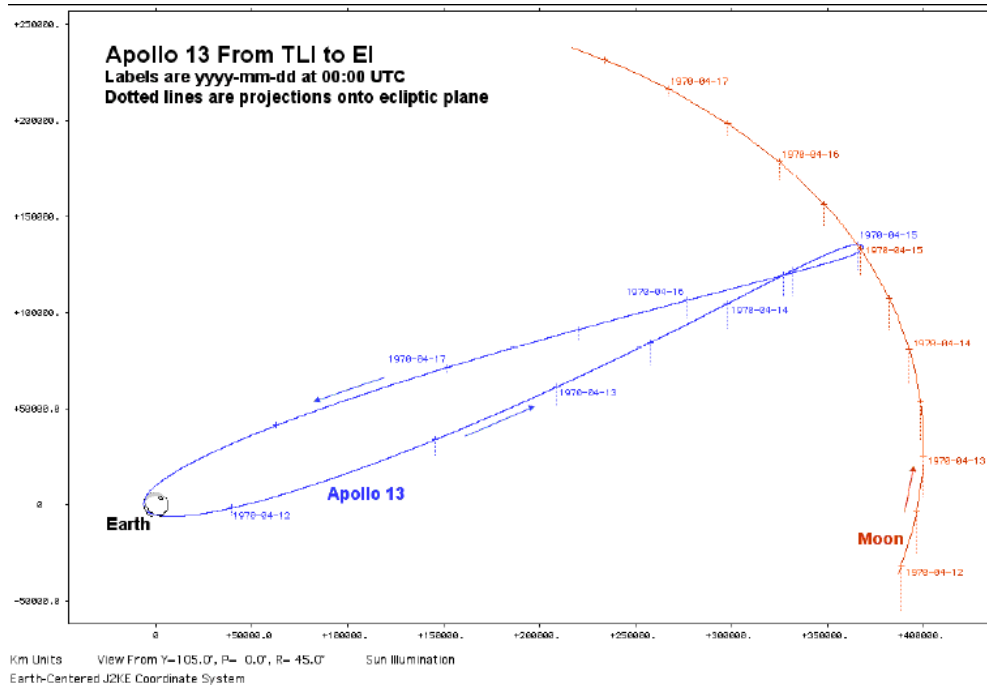


Astrodynamics Technical Committee
“Lunch-and-Learn”



Apollo 13 Trajectory Reconstruction

Daniel R. Adamo

DATE: Friday, November 2, 2007
TIME: Noon to 1:00 PM

PLACE: JSC Building 30 Auditorium
ROOM CAPACITY: 135

"Celestia" is an open-source freeware space simulation program available via <http://www.shatters.net/celestia>. Celestia provides a means with which educators and their students can visualize even the most exotic trajectories arising in space exploration. A challenge to reconstruct the Apollo 13 as-flown trajectory was issued in 2006 through a Celestia discussion forum. In answering this challenge, methods of accurately reconstructing any as-flown Project Apollo trajectory have been developed using publicly available internet sources. During the course of verifying these methods, multiple insights regarding Apollo 13's trajectory have been realized. Come share some enlightenment from the way it was in April 1970!

Dan Adamo has worked on trajectory aspects of simulation, flight design, and Mission Control operations since commencing his JSC career in 1979. Beginning in 1990, he supported 57 Space Shuttle missions from the Flight Dynamics Officer console. As a high school and college student, he was an avid follower of Apollo missions to the Moon, including Apollo 13.

Please bring a friend and join us. This event is open to badged personnel. AIAA membership is not required. Non-badged visitors who are US citizens may contact us with visitor badging requests 3 days or more in advance. Professional Engineers earn one hour of credit toward Continuing Education requirements by attending this event. If you plan to attend, registration is recommended on-line at www.aiaa-houston.org. As for lunch, a sign on the door here says, "No Food or Drink", but exceptions have been tolerated if room is left clean. For additional information contact Douglas Yazell at 281-244-3925.