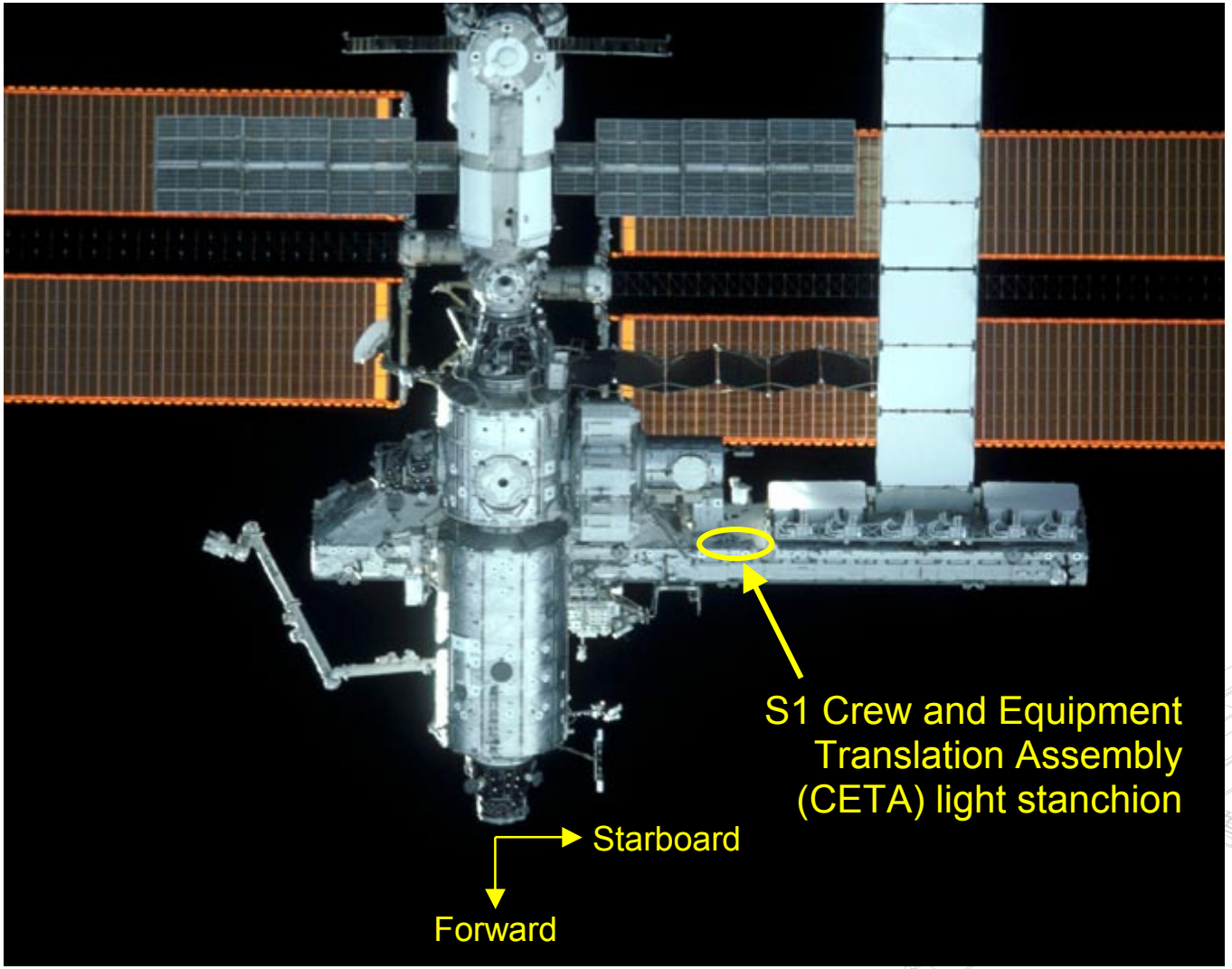
Hammer Taps To Remove S1 CETA Light Stanchion Qualify

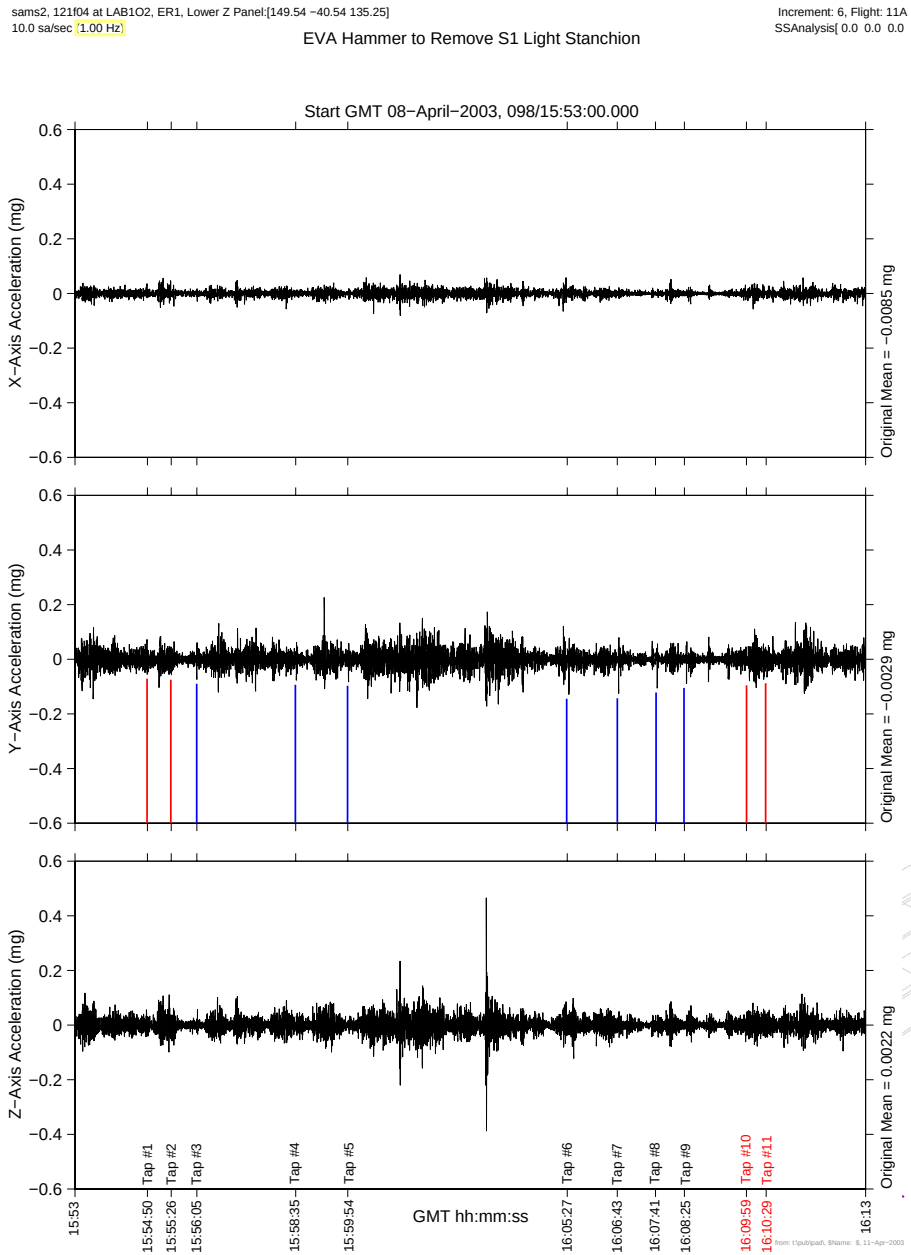


Data Description	
Sensor	SAMS 121f04 10.0 sa/sec (1.00 Hz)
Location	LAB1O2, ER1, Lower Z Panel
Inc/Flight	Increment: 6, Flight: 11A
Plot Type	

Notes:
During the extravehicular activity (EVA) on GMT 08-April-2003, the Expedition 6 crew successfully freed the light stanchion of the S1 crew and equipment translation assembly (CETA) railcart. This stanchion had remained stuck after an aborted light installation during the first stage EVA and had to be removed by tapping it 11 times with a Russian hammer. Predictions indicated that these hammer blows might impart significant transient accelerations.

Regime:	Vibratory
Category:	Crew
Source:	Hammer Taps During EVA

Hammer Taps To Remove S1 CETA Light Stanchion Quantify



Data Description	
Sensor	SAMS 121f04 10.0 sa/sec (1.00 Hz)
Location	LAB1O2, ER1, Lower Z Panel
Inc/Flight	Increment: 6, Flight: 11A
Plot Type	time series

Notes:
This figure shows SAMS data that has been lowpass filtered at 1 Hz, which is well below the nominal cutoff frequency. This filtering was done in order to more clearly show the impact of the hammer taps on the vibratory environment at the Z-panel of the EXPRESS rack 1 location. The long blue ticks on the Y_A-axis plot show positive correlation between times of hits from taps #3 through #9 with small, transient accelerations aligned with the Y_A-axis. Polarity of the SAMS data is such that these small, negative accelerations are in the station starboard direction. For these 1 Hz lowpass filtered data, the largest acceleration attributable to these hammer taps was #6, the one that occurred at GMT 16:05:27 with a magnitude of about 0.13 mg. The last 2 time ticks are shown on the bottom axis in red due to ambivalent timeline information.

Regime:	Vibratory
Category:	Crew
Source:	Hammer Taps During EVA