## NSSDC INFORMATION PACKAGE

# EXPERIMENT SECTION

Alpha Particle Spectrometer (72-031A-09)

Prepared by Julius J. Brecht

Spacecraft Common Name

Apollo 16A

Spacecraft Alternate Names

Apollo 16, 1972-031A

Experiment Names

NSSDC/Alpha Particle Spectrometer (72-031A-09) OTHER/S-162

January 1973

#### Apollo 16A

## Alpha Particle Spectrometer

### Experiment Performance Summary

The experiment performed normally throughout the mission. A detailed log of experiment operational modes as a function of ground elasped time from launch is given below.

70:00	SIM door jettison α - on, door closed, out of SIM attitude (S.A. SIM bay pointed 90 deg to lumar surface)
73:25	α - off; LOI (Lunar Orbit Insertion)
75:20	α - on, door closed
79:00	$\alpha$ - off
80:00	α - on, door open
92:10	α - on, door closed
94:23	system off
106:08	α - on, door open
119:10	α - on, door closed
120:10	lpha - on, door open
121:10	$\alpha$ - on, door open, out of S.A.
122:10	resume S.A.
130:30	$\alpha$ - on, door closed
131:30	lpha - on, door open
142:00	maneuver out of S.A. (Gegenschein)
144:30	maneuver to deep space, $\alpha$ - on, door open
146:30	resume S.A., $\alpha$ - on, door open
150:20	α - on, door closed
151:10	$\alpha$ - on, door open, out of S.A.
168:10	$\alpha$ - on, door closed
170:10	lpha - on, maneuver to deep space
176:00	$\alpha$ - off
178:00	$\alpha$ - on, door open, out of S.A.
179:00	$\alpha$ - on, door open, in S.A.
192:00	α - on, door closed
193:00	$\alpha$ - off
193:40	α - on, door closed
200:33	Trans Earth Insertion (TEI); end surface data

For further discussion of the experiment and its performance, see P. Gorenstein "Alpha Particle Spectrometer Experiment," Apollo 16 Preliminary Science Report (in press 1973). Also see "Calibration Information for Experiments 71-063A-10 and 72-031A-09," (NSSDC TRF B14951) for a description of the temperature correction to be applied in working with the data.