

A2.7 MAGNETOMETER SUBSYSTEM TELEMETRY

These paragraphs describe the format and content of the output of the Magnetometer Subsystem.

A2.7.1 MAG Packet. The schematic of a MAG Packet is shown in Figure A2.7.1. One packet is placed in each LRS frame.

Title	Instrument Status	1st Science Sample	2nd Science Sample	3rd Science Sample
Packet Offset	0	16	64	112
Bits/packet	16	48	48	48
Description	A2.7.3	A2.7.4	A2.7.5	A2.7.6

Figure A2.7.1 MAG Packet

A2.7.2 Instrument Synchronicity. The contents of the MAG Packet can be uniquely determined from the data within the packet and the SCIA Mod 91 count. The MAG Synchronization Index is equal to the SCIA Mod 91 count.

A2.7.3 Instrument Status. The contents of the Instrument Status section are two bytes of subcommutated analog and digital status values. They are shown in table A2.7.1. The positions are shown relative to synchronization index in Table A2.7.2.

Table A2.7.1 Instrument Status (MSB is bit 1)

Bit(s)	Measurement	Contents
1-8	Most significant 8 bits of subcommutated instrument status data.	8 MSB's of subcommutated data
MAG Byte #1		
1-8	Least significant 8 bits of subcommutated instrument status data.	8 LSB's of subcommutated data
MAG Byte #2		