

Neil Sullivan

(FD x 6336)

NEUBAUER

LMS CONSOLE DIRECTORY

8/13/71

ALL ACTIVE TM CHANNELS ARE LISTED BY MEASUREMENT NO.

ALL SPARE EVENT CHANNELS ARE SET TO 00000000

ALL SPARE ANALOG CHANNELS ARE SET TO 00100000

THE FOLLOWING COLUMN DESCRIPTION IS VALID FOR ALL PARAMETERS EXCEPT ASCENT GUIDANCE SYSTEM SERIAL DIGITAL WORDS

- COLUMNS 1 - 7 MEASUREMENT I.D.
- 10 - 24 MEASUREMENT DESCRIPTION
- 27 - 30 TM CONSOLE DIAL NO.
- 32 TM CONSOLE BIT NO (EVENTS ONLY)
- 35 - 42 DOWNLINK PCM CHANNEL NO.
- 45 - 47 PCM TABLE ORDER (CHANNEL+XXX IN PROGRAM LISTING)
- 49 PCM TABLE BIT NO, (EVENTS ONLY)
- 52 - 59 INPUT DATA SOURCE (SUBSYSTEM VARIABLE, REDUNDANT CHANNEL INPUT, OR FIXED VALUE.)
- 62 - 73 RANGE OR FIXED VALUE (ANALOGS ONLY)
BIT FUNCTION (EVENTS ONLY)
- 76 - 77 SPACECRAFT EFFECTIVITY (NO ENTRY INDICATES ALL)
4S = LM4 + SUBS; 5S = LM5 + SUBS
- 79 * IN THIS COLUMN INDICATES MULTI-REDUNDANT CHANNEL
- 80 COMPUTER MEASUREMENT PROCESSED IN

IN019
FAILURE
156773 AL
14331 AL
ML
BA

10

WHEN A PRIME OR MULTI-REDUNDANT CHANNEL IS MALFUNCTIONED AT THE TM CONSOLE ONLY THAT CHANNEL FAILS

WHEN A REDUNDANT CHANNEL IS MALFUNCTIONED THAT CHANNEL AND ALL ASSOCIATED CHANNELS ARE FAILED

THE BASIC MEASUREMENT NUMBER FOR LM IS AS FOLLOWS:

GZYYYYA-P

WHERE G IS THE MODULE CODE (FOR LM ALWAYS THE LETTER G),
Z IS THE FUNCTIONAL SYSTEM (SEE BELOW)
YYYY IS THE IDENTIFICATION NUMBER
A IS THE MEASUREMENT CLASSIFICATION CODE (SEE BELOW)
P IS THE PAM GATE (NUMBER 1-4) INTO WHICH THIS MEASUREMENT
IS LOADED. (THIS SUFFIX IS NOT ALWAYS PRESENT.)

FUNCTIONAL SUBSYSTEM CODES

CODE LETTER	SUBSYSTEM	ASSOCIATED DIRECTORY PAGE NUMBER(S)
A	ADAPTER STRUCTURES	NONE
B	LM LANDING RADAR EQUIPMENT STORAGE ASSEMBLY	,5
C	LM ELECTRICAL POWER	1,1A
F	LM ENVIRONMENT CONTROL	2,3
G	LM GUIDANCE AND NAVIGATION	4,5
H	LM CONTROL ELECTRONICS (STABILIZATION AND CONTROL)	6,7
I	LM ABORT GUIDANCE (AGS)	8-12
L	LM INSTRUMENTATION AND SCIENTIFIC EQUIPMENT	13-14
N	LM RADARS	15
P	LM PROPULSION - ASCENT ENGINE	16
Q	LM PROPULSION - DESCENT ENGINE	17,18
R	LM REACTION CONTROL	19,20
T	LM COMMUNICATIONS	21
W	LM MISSION PROGRAMMING	NONE
Y	LM PYROTECHNICS	21

MEASUREMENT CLASSIFICATION CODES

U - COMBINATION
C - CURRENT
X - DISCRETE EVENT
F - FREQUENCY
B - PHASE
H - POSITION
E - POWER
P - PRESSURE
Q - QUANTITY
T - TEMPERATURE
W - TIME
V - VOLTAGE

LANDING RADAR - PRIME ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
GB0541T	TEMP NO.1 MESA	A422	KM10A192	547	GGMESAT	71.9° 0/200	10S	B
GB0542T	TEMP NO.2 MESA	A412	KM10A184	539	GGMESAT	71.9° 0/200	10S	B
GB0543T	TEMP NO.3 MESA	A303	KM10A113	468	GGMESAT	- 0/200	10S	B

ELECTRICAL POWER SYSTEM - PRIME ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
GC0071V	AC BUS VOLTS	A244	KM10A082	437	CBVTMACA	0/+125	115.1	B
GC0155F	AC BUS FREQ	A360	KM10A158	513	KM10A174	+380/+420	399.9	A
GC0201V	BAT 1 VOLTS	A232	KM10A072	427	CBVTM1	0/+40	30.7	B
GC0202V	BAT 2 VOLTS	A173	KM10A041	396	CBVTM2	0/+40	"	B
GC0203V	BAT 3 VOLTS	A241	KM10A079	434	CBVTM3	0/+40	"	B
GC0204V	BAT 4 VOLTS	A213	KM10A057	412	CBVTM4	0/+40	"	B
GC0205V	BAT 5 VOLTS	A133	KM10A009	364	CBVTM5	0/+40	29.9	B
GC0207V	VOLT, LUNAR BAT	A123	KM10A001	356	CBVTML	0/+40	37.1	B
GC0206V	BAT 6 VOLTS	A166	KM10A036	391	CBVTM6	0/+40	29.9	B
GC0301V	CDR BUS VOLTS	A320	KM10A126	481	CBVTMCDR	0/+40	29.9	B
GC0302V	LMP BUS VOLTS	A330	KM10A134	489	KM10A143	0/+40	29.9	A
GC1201C	BAT 1 CUR	A255	KM10A091	446	KM10A106	0/+60	*	A
GC1202C	BAT 2 CUR	A314	KM10A122	477	KM10A167	0/+60	12	A
GC1203C	BAT 3 CUR	A221	KM10A063	418	KM10A095	0/+60	12	A
GC1204C	BAT 4 CUR	A225	KM10A067	422	KM10A094	0/+60	12	A
GC1205C	BAT 5 CUR	A226	KM10A068	423	KM10A102	0/+120	53	A
GC1206C	BAT 6 CUR	A235	KM10A075	430	KM10A087	0/+120	53	A
GC1207C	CURR, LUNAR BAT	A243	KM10A081	436	KM10A096	0/+60	-	A

ELECTRICAL POWER SYSTEM - REDUNDANT ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
GC0155F	AC BUS FREQ	A400	KM10A174	529	CBFTMACA	+380/+420		B
GC0302V	LMP BUS VOLTS	A341	KM10A143	498	CBVTMSE	0/+40		B
GC1201C	BAT 1 CUR	A274	KM10A106	461	CBITM1	0/+60		B
GC1202C	BAT 2 CUR	A371	KM10A167	522	CBITM2	0/+60		B
GC1203C	BAT 3 CUR	A261	KM10A095	450	CBITM3	0/+60		B
GC1204C	BAT 4 CUR	A260	KM10A094	449	CBITM4	0/+60		B
GC1205C	BAT 5 CUR	A270	KM10A102	457	CBITM5	0/+120		B
GC1206C	BAT 6 CUR	A251	KM10A087	442	CBITM6	0/+120		B
GC1207C	CURR, LUNAR BAT	A262	KM10A096	451	CBITML	0/+60		B

ELECTRICAL POWER SYSTEM - EVENTS

MEAS, ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	BIT FUNCTION	SC *C
GC4361X	BAT 1 HI TAP	D403-1	KM10E030	258-9	C607	1=HI	B
GC4362X	BAT 1 LO	D403-2	KM10E030	258-8	C524	1=LO	B
GC4363X	BAT 2 HI	D403-3	KM10E030	258-7	C612	1=HI	B
GC4364X	LUN BAT LMP BUS	D403-4	KM10E030	258-6	C611	1=LO	B
GC4365X	BAT 3 HI	D403-5	KM10E030	258-5	C890	1=HI	B
GC4366X	LUN BAT CDR BUS	D403-6	KM10E030	258-6	C892	1=LO	B
GC4367X	BAT 4 HI	D403-7	KM10E030	258-3	C893	1=HI	B
GC4368X	BAT 4 LO	D403-8	KM10E030	258-2	C894	1=LO	B
GC4369X	BAT 5 B/U CDR	D406-1	KM10E033	261-9	C613	1=ON	B
GC4370X	BAT 6 NORM CDR	D406-2	KM10E033	261-8	C995	1=ON	B
GC4371X	BAT 5 NORM LMP	D406-3	KM10E033	261-7	C606	1=ON	B
GC4372X	BAT 6 B/U LMP	D406-4	KM10E033	261-6	C996	1=ON	B
GC9961X	BAT 1 MALF	D402-1	KM10E029	257-9	C278	1=MALF	B
GC9962X	MALF BAT 2/LUN	D402-2	KM10E029	257-8	C280	1=MALF	B
GC9963X	MALF BAT 3/LUN	D402-3	KM10E029	257	C282	1=MALF	B
GC9964X	BAT 4 MALF	D402-4	KM10E029	257-6	C284	1=MALF	B
GC9965X	BAT 5 MALF	D402-5	KM10E029	257-5	C286	1=MALF	B
GC9966X	BAT 6 MALF	D402-6	KM10E029	257-4	C288	1=MALF	B

ENVIRONMENTAL CONTROL SYSTEM - PRIME ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
GF0500P	PRES DES H2O T2	A410	KM10A182	537	FP0500	0/+60		A
GF0584F	PRES DES O2 TK2	A407	KM10A181	536	FP34ATM	0/+60 3K		A
GF1281T	SUIT TEMP	A376	KM10A172	527	KM10A177	+20/+120		A
GF1301P	SUIT PRESS	A324	KM10A130	485	KM10A147	0/+10		A
GF1521P	CO2 PART PRESS	A143	KM10A017	372	KM10A046	0/+15		A
GF1651T	CABIN TEMP	A322	KM10A128	483	FT39TM	+20/+120		A
GF2021P	PRI GLY PUMP DP	A215	KM10A059	414	KM10A099	0/+50		A
GF2531T	W/B GLY IN TEMP	A333	KM10A137	492	FTG21T	+20/+120	4S	A
GF2581T	W/B GLY OUT TMP	A321	KM10A127	482	FTG22T	+20/+120	4S	A
GF2921P	SEC GLY LP PRES	A142	KM10A016	371	KM10A043	0/+60	5S	A
GF3571F	CABIN PRESS	A245	KM10A083	438	KM10A098	0/+10		A
GF3582P	ASC O2 TK1 PRESS	A136	KM10A012	367	KM10A028	0/+1000		A
GF3583P	ASC O2 TK2 PRESS	A233	KM10A073	428	KM10A007	0/+1000		A
GF3584P	DES O2 PRESS	A325	KM10A131	486	KM10A142	0/+3000 ✓		A
GF3591P	U/H RLF PRESS	A424	KM10A194	549	FPSV1TM	0/+25		A
GF3592P	F/H RLF PRESS	A411	KM10A183	538	FPSV2TM	0/+25		A
GF4101P	PRI H2O REG DP	A415	KM10A187	542	KM10A159	0/+2		A
GF4500P	DES TK1 H2O PRES	A214	KM10A058	413	KM10A088	0/+60	9S	A
GF4501P	DES H2O PRESS	A163	KM10A033	388	FP4501	0/+25		A
GF4502P	ASC TK1 H2O PRES	A146	KM10A020	375	KM10A054	0/+60	9S	A
GF4503P	ASC TK2 H2O PRES	A152	KM10A024	379	KM10A050	0/+60	9S	A
GF4511T	PRI W/B H2O TEMP	A354	KM10A154	509	KM10A163	+20/+160		A
GF45810	DES H2O QTY	A214	KM10A058	413	KM10A088	0/+100		A
GF45820	ASC H2O TK1 QTY	A146	KM10A020	375	KM10A054	0/+100		A
GF45830	ASC H2O TK2 QTY	A152	KM10A024	379	KM10A050	0/+100		A
GF4585T	TEMP ASC TANK 1	A331	KM10A135	490	KM10A170	259.69/659.69	8S	A
GF4586T	TEMP ASC TANK 2	A137	KM10A013	368	KM10A027	259.69/659.69	8S	A
GF9997U	GLY PUMP PRESS	A145	KM10A019	374	KM10A029	0/+60		A
GF9998U	GLY TEMP	A312	KM10A120	475	KM10A169	+20/+120		A
GF9999U	H2O SEP RATE	A153	KM10A025	380	FRPMP	+500/+3600		A

ENVIRONMENTAL CONTROL SYSTEM - REDUNDANT ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
GF1281T	SUIT TEMP	A403	KM10A177	532	FT45TM	+20/+120		A
GF1301P	SUIT PRESS	A345	KM10A147	502	FP49ATH	0/+10		A
GF1521P	CO2 PART PRESS	A200	KM10A046	401	FPC02TM	0/+15		A
GF2021P	PRI GLY PUMP DP	A265	KM10A099	454	FDPG2TM	0/+50		A
GF2921P	SEC GLY LP PRES	A175	KM10A043	398	FP28TM	0/+60	5S	A
GF3571P	CABIN PRESS	A264	KM10A098	453	FP39TM	0/+10		A
GF3582P	ASC 02 TK1 PRESS	A156	KM10A028	383	FP35TM	0/+1000		A
GF3583P	ASC 02 TK2 PRESS	A263	KM10A097	452	FP38TM	0/+1000		A
GF3584P	DES 02 PRESS	A340	KM10A142	497	FP37TM	0/+3000		A
GF4101P	PRI H2O FFG DP	A361	KM10A159	514	FDPH20TM	0/+2		A
GF4500P	DES TK1 H2O PRES	A252	KM10A088	443	FP4500	0/+60	9S	A
GF4502P	ASC TK1 H2O PRES	A210	KM10A054	409	FP4502	0/+60	9S	A
GF4503P	ASC TK2 H2O PRES	A204	KM10A050	405	FP4503	0/+60	9S	A
GF4511T	PRI W/B H2O TEMP	A365	KM10A163	518	FT4511TM	+20/+160		A
GF4581Q	DES H2O QTY	A252	KM10A088	443	FW56TM	0/+100		A
GF4582Q	ASC H2O TK1 QTY	A210	KM10A054	409	FW54TM	0/+100		A
GF4583Q	ASC H2O TK2 QTY	A204	KM10A050	405	FW55TM	0/+100		A
GF4585T	TEMP ASC TANK 1	A374	KM10A170	525	FT54R	259.69/659.69	8S	A
GF4586T	TEMP ASC TANK 2	A155	KM10A027	382	FT54R	259.69/659.69	8S	A
GF9997U	GLY PUMP PRESS	A157	KM10A029	384	FP6110TM	0/+60		A
GF9998U	GLY TEMP	A373	KM10A169	524	FT6111TM	+20/+120		A

ENVIRONMENTAL CONTROL SYSTEM - PRIME EVENTS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	BIT FUNCTION	SC	*C
GF1083X	SUIT FAN 1 MALF	D352-1	KM10E005	233-9	F603	1=MALF		A
GF1084X	SUIT FAN 2 MALF	D352-2	KM10E005	233-8	F604	1=MALF		A
GF1201X	CDR SUIT DISC	D350-1	KM10E003	231-9	F442	1=CLOSED		A
GF1202X	LMP SUIT DISC	D350-2	KM10E003	231-8	F443	1=CLOSED		A
GF1211X	SUIT RLF CLSD	D352-3	KM10E005	233-7	F444	1=CLOSED		A
GF1212X	SUIT RLF OPEN	D352-4	KM10E005	233-6	F445	1=OPEN		A
GF1221X	SUIT DIV EGRESS	D352-5	KM10E005	233-5	F609	1=CLOSED		A
GF1231X	CABIN RET CLSD	D351-1	KM10E004	232-9	F446	1=CLOSED		A
GF1232X	CABIN RET OPEN	D351-2	KM10E004	232-8	F447	1=OPEN		A
GF1241X	SEC CO2 SEL	D352-6	KM10E005	233-4	F448	1=SEC SELECTED		A
GF2936X	GLY PUMP SNOVR	D351-7	KM10E004	232-3	F756	1=FAIL		A
GF3071X	DND REG A CLSD	D351-3	KM10E004	232-7	F614	1=CLOSED		A
GF3073X	DND REG B CLSD	D351-5	KM10E004	232-5	F616	1=CLOSED		A
GF3572X	REPR ELEC OPEN	D350-4	KM10E003	231-6	F621	1=OPEN		A
GF9986X	SEL GLY LEV	D350-3	KM10E003	231-7	F675	1=LOW	5S	A

ENVIRONMENTAL CONTROL SYSTEM - REDUNDANT EVENT WORDS

DIAL-B	PCM CHAN	DIS	*SOURCE*	BIT SETTINGS	C
D365	KM10E016	244	KM10E005	CONTENTS OF EACH	A
D363	KM10E014	242	KM10E003	WORD SAME AS	A
D364	KM10E015	243	KM10E004	PRIME CHANNEL	A

PRIMARY GUIDANCE AND NAVIGATION SYSTEM - PRIME ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC *C
GG1040V	PLS TORQ REF	A124	KM10A002	357	KM10A049	+ .708/+1.125	A
GG1110V	2.5VDC TM RIAS	A151	KM10A023	378	KM10A051	0/+2	A
GG1201V	100 28VAC 800	A313	KM10A121	476	GA8HCPTM	0/+1.11	A
GG1331V	IPIG SUSP 3.2KC	A127	KM10A005	360	GA32HCTM	+ .09/+1.14	A
GG2001V	X PIPA OUT IN PH	A037	KM51A002	304	KM51A005	-106.3/+106.3	A
GG2021V	Y PIPA OUT IN PH	A036	KM51A001	303	GAAYTM	-106.3/+106.3	A
GG2041V	Z PIPA OUT IN PH	A040	KM51A003	305	KM51A006	-106.3/+106.3	A
GG2107V	IG SVO ERR IN PH	A010	KM12A001	281	KM12A009	-3/+3	A
GG2112V	IG RSVR OUT SIN	A065	KM11A016	326	GASIGATM	-.766/+ .766	A
GG2113V	IG RSVR OUT COS	A063	KM11A014	324	GACIGATM	-.766/+ .766	A
GG2137V	NG SVO ERR IN PH	A012	KM12A003	283	KM12A016	-3/+3	A
GG2142V	NG RSVR OUT SIN	A056	KM11A009	319	KM11A040	-.766/+ .766	A
GG2143V	NG RSVR OUT COS	A131	KM10A007	362	KM11A012	-.766/+ .766	A
GG2167V	OG SVO ERR IN PH	A024	KM12A013	293	KM12A019	-3/+3	A
GG2172V	OG RSVR OUT SIN	A075	KM11A024	334	GASOGATM	-.766/+ .766	A
GG2173V	OG RSVR OUT COS	A222	KM10A064	419	KM11A028	-.766/+ .766	A
GG2219V	PITCH ATT ERR	A110	KM11A035	345	GAPCDUTM	-50/+50	A
GG2249V	YAW ATT ERR	A066	KM11A017	327	GAYCDUTM	-50/+50	A
GG2279V	ROLL ATT ERR	A074	KM11A023	333	GARCDUTM	-50/+50	A
GG2300T	PIPA TEMP	A315	KM10A123	478	KM10A166	+120/+140	A
GG3304V	RR SHAFT SIN	A105	KM11A032	342	GSINETL	-.766/+ .766	A
GG3305V	RR SHAFT COS	A057	KM11A010	320	GCOSETL	-.766/+ .766	A
GG3324V	RR TRUN SIN	A060	KM11A011	321	GSINATL	-.766/+ .766	A
GG3325V	RR TRUN COS	A071	KM11A020	330	GCOSETL	-.766/+ .766	A

PRIMARY GUIDANCE AND NAVIGATION SYSTEM - REDUNDANT ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC *C
GG1040V	PLS TORQ REF	A203	KM10A049	404	GAH20VTM	+ .708/+1.125	A
GG1110V	2.5VDC TM BIAS	A205	KM10A051	406	GA2P5VTM	0/+2	A
GG2001V	X PIPA OUT IN PH	A042	KM51A005	307	GAAXTM	-106.3/+106.3	A
GG2041V	Z PIPA OUT IN PH	A043	KM51A006	308	GAAZTM	-106.3/+106.3	A
GG2107V	IG SVD ERR IN PH	A020	KM12A009	289	GAFTM	-3/+3	A
GG2137V	HG SVD ERR IN PH	A027	KM12A016	296	GAENTM	-3/+3	A
GG2142V	HG RSVR OUT SIN	A155	KM11A040	350	GASMGATH	- .766/+ .766	A
GG2143V	HG RSVR OUT COS	A061	KM11A012	322	GACMGATH	- .766/+ .766	A
GG2167V	OG SVD ERR IN PH	A032	KM12A019	299	GAFTM	-3/+3	A
GG2173V	OG RSVR OUT COS	A101	KM11A028	338	GACOGATH	- .766/+ .766	A
GG2300T	PIPA TEMP	A370	KM10A166	521	GATA	+120/+140	A

PRIMARY GUIDANCE AND NAVIGATION SYSTEM - PRIME EVENTS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	BIT FUNCTION	SC *C
GG1513X	IND STRY	B353-1	KM10E006	234-9	G602	1=STRY	A
GG1523X	LGC OPER	B353-2	KM10E006	234-8	G607	1=OPER	A
GG9001X	LGC WARNING	B347-1	KM10E002	230-9	G695	1=WARNING	A
GG9002X	ISS WARNING	B347-2	KM10E002	230-8	G694	1=WARNING	A

PGNS - REDUNDANT EVENT WORDS

DIAL-B	PCM CHAN	DIS	*SOURCE*	BIT SETTINGS	C
B366	KM10E017	245	KM10E006		A
B362	KM10E013	241	KM10E002		A

STABILIZATION AND CONTROL SYSTEM - PRIME ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
GH1240V	X TRANS CMD	A046	KM11A001	311	HGH1240T	-10/+10		A
GH1241V	Y TRANS CMD	A055	KM11A008	318	HGH1241T	-10/+10		A
GH1242V	Z TRANS CMD	A067	KM11A018	328	HGH1242T	-10/+10		A
GH1247V	YAW ERR CMD	A076	KM11A025	335	KM10A139	-13/+13		A
GH1248V	PITCH ERR CMD	A106	KM11A033	343	KM10A155	-13/+13		A
GH1249V	ROLL ERR CMD	A052	KM11A005	315	KM10A175	-13/+13		A
GH1311V	MAN THRUST CMD	A326	KM10A132	487	HGH1311T	-0.3/+14.6		A
GH1313V	PITCH GDA POS	A150	KM10A022	377	KM11A030	-6.64/+6.64		A
GH1314V	ROLL GDA POS	A135	KM10A011	366	KM11A031	-6.64/+6.64		A
GH1331V	AUTO THRUST CMD	A414	KM10A186	541	KM11A021	0/+12		A
GH1455V	YAW ATT ERR	A064	KM11A015	325	KM11A039	-3.5/+3.5		A
GH1456V	PITCH ATT ERR	A054	KM11A007	317	KM11A042	-3.5/+3.5		A
GH1457V	ROLL ATT ERR	A062	KM11A013	323	KM11A037	-3.5/+3.5		A
GH1461V	RGA YAW RATE	A070	KM11A019	329	KM11A043	-3.5/+3.5		A
GH1462V	RGA PITCH RATE	A102	KM11A029	339	KM11A045	-3.5/+3.5		A
GH1463V	RGA ROLL RATE	A113	KM11A038	348	KM11A034	-3.5/+3.5		A

STABILIZATION AND CONTROL SYSTEM - REDUNDANT ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
GH1247V	YAW ERR CMD	A335	KM10A139	494	HGH1247T	-13/+13		A
GH1248V	PITCH ERR CMD	A355	KM10A155	510	HGH1248T	-13/+13		A
GH1249V	ROLL ERR CMD	A401	KM10A175	530	HGH1249T	-13/+13		A
GH1313V	PITCH GDA POS	A103	KM11A030	340	HGH1313T	-6.64/+6.64		A
GH1314V	ROLL GDA POS	A104	KM11A031	341	HGH1314T	-6.64/+6.64		A
GH1331V	AUTO THRUST CMD	A072	KM11A021	331	HGH1331T	0/+12		A
GH1455V	YAW ATT ERR	A114	KM11A039	349	HGH1455T	-3.5/+3.5		A
GH1456V	PITCH ATT ERR	A117	KM11A042	352	HGH1456T	-3.5/+3.5		A
GH1457V	ROLL ATT ERR	A112	KM11A037	347	HGH1457T	-3.5/+3.5		A
GH1461V	RGA YAW RATE	A120	KM11A043	353	HGH1461T	-3.5/+3.5		A
GH1462V	RGA PITCH RATE	A122	KM11A045	355	HGH1462T	-3.5/+3.5		A
GH1463V	RGA ROLL RATE	A107	KM11A034	344	HGH1463T	-3.5/+3.5		A
GH1455V	YAW ATT ERR	A154	KM10A026	381	KM11A039	-3.5/+3.5		*A
GH1456V	PITCH ATT ERR	A216	KM10A060	415	KM11A042	-3.5/+3.5		*A
GH1457V	ROLL ATT ERR	A305	KM10A115	470	KM11A037	-3.5/+3.5		*A

STABILIZATION AND CONTROL SYSTEM - PRIME EVENTS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	BIT FUNCTION	SC	*C
GH1204X	OUT DET	D404-1	KM10E031	259-9	H711	1=OUT		A
GH1214X	AUTO ON	D374-1	KM10E023	251-9	H712	1=ON		A
GH1217X	AUTO OFF	D404-2	KM10E031	259-8	H911	1=OFF		A
GH1230X	APS ARM	D416-1	KM10E041	269-9	H713	1=ARM		A
GH1260X	APS ON	D341-1	KM51E001	224-9	H714	1=ON		A
GH1283X	ABORT STAGE CMD	D341-2	KM51E001	224-8	H715	1=STAGE		A
GH1286X	ENG FIRE OVERRIDE	D404-3	KM10E031	259-7	H721	1=ON		A
GH1301X	DPS ON	D374-2	KM10E023	251-8	H722	1=ON		A
GH1323X	P TRIM FAIL	D374-3	KM10E023	251-7	H720	1=FAIL	4S	A
GH1330X	R TRIM FAIL	D374-4	KM10E023	251-6	H723	1=FAIL	4S	A
GH1348X	DPS ARM	D416-2	KM10E041	269-8	H719	1=ARM		A
GH1418X	JD B4U OUTPUT	D335-8	KM12E001	220-2	H967	1=ON		A
GH1419X	JD A4D OUTPUT	D335-7	KM12E001	220-3	H969	1=ON		A
GH1420X	JD B4F OUTPUT	D340-8	KM12E004	223-2	H970	1=ON		A
GH1421X	JD A4R OUTPUT	D340-7	KM12E004	223-3	H971	1=ON		A
GH1422X	JD A3U OUTPUT	D335-6	KM12E001	220-4	H972	1=ON		A
GH1423X	JD B3D OUTPUT	D335-5	KM12E001	220-5	H973	1=ON		A
GH1424X	JD B3A OUTPUT	D340-6	KM12E004	223-4	H974	1=ON		A
GH1425X	JD A3R OUTPUT	D340-5	KM12E004	223-5	H975	1=ON		A
GH1426X	JD B2U OUTPUT	D335-4	KM12E001	220-6	H976	1=ON		A
GH1427X	JD A2D OUTPUT	D335-3	KM12E001	220-7	H977	1=ON		A
GH1428X	JD A2A OUTPUT	D340-4	KM12E004	223-6	H978	1=ON		A
GH1429X	JD B2L OUTPUT	D340-3	KM12E004	223-7	H979	1=ON		A
GH1430X	JD A1U OUTPUT	D335-2	KM12E001	220-8	H980	1=ON		A
GH1431X	JD B1D OUTPUT	D335-1	KM12E001	220-9	H981	1=ON		A
GH1432X	JD A1F OUTPUT	D340-2	KM12E004	223-8	H982	1=ON		A
GH1433X	JD B1L OUTPUT	D340-1	KM12E004	223-9	H983	1=ON		A
GH1603X	MIN DBND	D416-3	KM10E041	269-7	H736	1=WIDE 0=NARROW		A
GH1621X	AGS SELECT	D374-5	KM10E023	251-5	H739	1=AGS 0=PNGS		A
GH1628X	ROLL PLSD/DIR	D400-1	KM10E027	255-9	H716	1=ON (IN)		A
GH1629X	PITCH PLSD/DIR	D400-2	KM10E027	255-8	H717	1=ON (IN)		A
GH1630X	YAW PLSD/DIR	D400-3	KM10E027	255-7	H718	1=ON (IN)		A
GH1641X	AGS MODE AUTO	D404-8	KM10E031	259-2	H072	1=AGS AUTO	4S	A
GH1642X	AGS MODE ATT HLD	D404-7	KM10E031	259-3	H073	1=AGS ATT HLD	4S	A
GH1643X	PNG MODE AUTO	D404-4	KM10E031	259-6	H752	1=PNGS AUTO	4S	A
GH1644X	PNG MODE ATT HLD	D404-5	KM10E031	259-5	H751	1=PNGS ATT HLD	4S	A
GH1893X	X TRANS OVERRIDE	D416-4	KM10E041	269-6	H740	1=OFF		A
GH1896X	UNBAL CPLS	D404-6	KM10E031	259-4	H724	1=ON		A

STABILIZATION AND CONTROL SYSTEM - REDUNDANT EVENT WORDS

DIAL-B	PCM CHAN	DIS	*SOURCE*	BIT SETTINGS	C
D342	KM51E002	225	KM51E001		A
D336	KM12E002	221	KM12E001		A

GI0001X ABORT GUIDANCE SYSTEM SERIAL DIGITAL WORDS -(PROCESSED IN A COMPUTER)

FRAME/ WORD NO	TM CONS DIAL NO (DXXX)	DOWNLINK CHAN NO (KM51CXXX)	PCM TBL NO	PCM TBL OUT BITS 10-24 OCTAL (X=	BIT STRUCTURE ZERO ALL WORDS BIT(S)	SUB- SYSTEM SYMBOL	BIT(S)
1	66 67 70	01A B C	53 54 55	00X 000 000	7 = 1	8 = ITELREAD	24
2	71 72 73	02A B C	56 57 58	01X XXX XXX	7 = 0	8-9 = ITELDATA 2-9 2-9	1-2 3-10 11-18
3	74 75 76	03A B C	59 60 61	01X 000 000	7 = 1	8 = ITELICLEA	24
4	77 100 101	04A B C	62 63 64	02X XXX XXX	7 = 0	8-9 = IA11P 2-9 2-9	1-2 3-10 11-18
5	102 103 104	05A B C	65 66 67	02X XXX XXX	7 = 1	8-9 = IA12P 2-9 2-9	1-2 3-10 11-18
6	105 106 107	06A B C	68 69 70	03X XXX XXX	7 = 0	8-9 = IA13P 2-9 2-9	1-2 3-10 11-18
7	110 111 112	07A B C	71 72 73	03X XXX XXX	7 = 1	8-9 = ITELADDR 2-9 2-9	7-8 9-16 17-24
8	113 114 115	08A B C	74 75 76	04X XXX XXX	7 = 0	8-9 = IA31P 2-9 2-3	1-2 3-10 11-18
9	116 117 120	09A B C	77 78 79	04X XXX XXX	7 = 1	8-9 = IA32P 2-9 2-9	1-2 3-10 11-18
10	121 122 123	10A B C	80 81 82	05X XXX XXX	7 = 0	8-9 = IA33P 2-9 2-9	1-2 3-10 11-18
11	124 125 126	11A B C	83 84 85	05X XXX XXX	7 = 1	8-9 = IH 2-9 2-9	1-2 3-10 11-18

FRAME/ WORD NO	TM CONS DIAL NO (DXXX)	DOWNLINK CHAN NO (KM51CXXX)	PCM TBL NO	PCM TBL BITS 10-24 OCTAL (X=	OUT BIT ZERO ALL BIT(S)	STRUCTURE)	SUB- SYSTEM SYMBOL	BIT(S)
12	127	12A	86	06X	7 = 0	8-9 = IX		1-2
	130	B	87	XXX		2-9		3-10
	131	C	88	XXX		2-9		11-18
13	132	13A	89	06X	7 = 1	8-9 = IY		1-2
	133	B	90	XXX		2-9		3-10
	134	C	91	XXX		2-9		11-18
14	135	14A	92	07X	7 = 0	8-9 = IZ		1-2
	136	B	93	XXX		2-9		3-10
	137	C	94	XXX		2-9		11-18
15	140	15A	95	07X	7 = 1	8 = I722 9 = IS1		24 2
	141	B	96	XXX		2-9		3-10
	142	C	97	XXX		2-9		11-18
16	143	16A	98	10X	7 = 0	8-9 = IXC		1-2
	144	B	99	XXX		2-9		3-10
	145	C	100	XXX		2-9		11-18
17	146	17A	101	10X	7 = 1	8-9 = IYC		1-2
	147	B	102	XXX		2-9		3-10
	150	C	103	XXX		2-9		11-18
18	151	18A	104	11X	7 = 0	8-9 = IZC		1-2
	152	B	105	XXX		2-9		3-10
	153	C	106	XXX		2-9		11-18
19	154	19A	107	11X	7 = 1	8-9 = IRF		1-2
	155	B	108	XXX		2-9		3-10
	156	C	109	XXX		2-9		11-18
20	157	20A	110	12X	7 = 0	8-9 = IDEVXT		1-2
	160	B	111	XXX		2-9		3-10
	161	C	112	XXX		2-9		11-18
21	162	21A	113	12X	7 = 1	8-9 = IDEVYT		1-2
	163	B	114	XXX		2-9		3-10
	164	C	115	XXX		2-9		11-18
22	165	22A	116	13X	7 = 0	8-9 = IDEVZT		1-2
	166	B	117	XXX		2-9		3-10
	167	C	118	XXX		2-9		11-18
23	170	23A	119	13X	7 = 1	8-9 = ITA2		1-2
	171	B	120	XXX		2-9		3-10
	172	C	121	XXX		2-9		11-18

FRAME/ WORD NO	TM CONS DIAL NO (DXXX)	DOWNLINK CHAN NO (KM51CXXX)	PCM TBL NO	PCM TBL OUT BITS 10-24 OCTAL (X=	BIT STRUCTURE ZERO ALL WORDS BIT(S)	SUB- SYSTEM SYMBOL	BIT(S)
24	173	24A	122	14X	7 = 0	8-9 = IDEALXT	1-2
	174	B	123	XXX		2-9	3-10
	175	C	124	XXX		2-9	11-18
25	176	25A	125	14X	7 = 1	8-9 = IDEALXT+1	1-2
	177	B	126	XXX		2-9	3-10
	200	C	127	XXX		2-9	11-18
26	201	26A	128	15X	7 = 0	8-9 = IDEALXT+2	1-2
	202	B	129	XXX		2-9	3-10
	203	C	130	XXX		2-9	11-18
27	204	27A	131	15X	7 = 1	8-9 = ITB	1-2
	205	B	132	XXX		2-9	3-10
	206	C	133	XXX		2-9	11-18
28	207	28A	134	16X	7 = 0	8-9 = IVX	1-2
	210	B	135	XXX		2-9	3-10
	211	C	136	XXX		2-9	11-18
29	212	29A	137	16X	7 = 1	8-9 = IVY	1-2
	213	B	138	XXX		2-9	3-10
	214	C	139	XXX		2-9	11-18
30	215	30A	140	17X	7 = 0	8-9 = IVZ	1-2
	216	B	141	XXX		2-9	3-10
	217	C	142	XXX		2-9	11-18
31	220	31A	143	17X	7 = 1	8-9 = IMU8S12T	1-2
	221	B	144	XXX		2-9	3-10
	222	C	145	XXX		2-9	11-18
32	223	32A	146	20X	7 = 0	8-9 = IVXC	1-2
	224	B	147	XXX		2-9	3-10
	225	C	148	XXX		2-9	11-18
33	226	33A	149	20X	7 = 1	8-9 = IVYC	1-2
	227	B	150	XXX		2-9	3-10
	230	C	151	XXX		2-9	11-18
34	231	34A	152	21X	7 = 0	8-9 = IVZC	1-2
	232	B	153	XXX		2-9	3-10
	233	C	154	XXX		2-9	11-18
35	234	35A	155	21X	7 = 1	8-9 = IRD	1-2
	235	B	156	XXX		2-9	3-10
	236	C	157	XXX		2-9	11-18

FRAME/ WORD NO	TH CONS DIAL NO (DXXX)	DOWNLINK CHAN NO (KM51CXXX)	PCM TSL NO	PCM TBL OUT BIT STRUCTURE BITS 10-24 ZERO ALL WORDS OCTAL (X= BIT(S))	SUB- SYSTEM SYMBOL	BIT(S)
36	237	36A	158	22X	7 = 0	8-9 = IVG 1-2
	240	B	159	XXX		2-9 3-10
	241	C	160	XXX		2-9 11-18
37	242	37A	161	22X	7 = 1	8-9 = IVPO 1-2
	243	B	162	XXX		2-9 3-10
	244	C	163	XXX		2-9 11-18
38	245	38A	164	23X	7 = 0	8-9 = ITCBO 1-2
	246	B	165	XXX		2-9 3-10
	247	C	166	XXX		2-9 11-18
39	250	39A	167	23X	7 = 1	8-9 = ITIG 1-2
	251	B	168	XXX		2-9 3-10
	252	C	169	XXX		2-9 11-18
40	253	40A	170	24X	7 = 0	8-9 = IA11BD 1-2
	254	B	171	XXX		2-9 3-10
	255	C	172	XXX		2-9 11-18
41	256	41A	173	24X	7 = 1	8-9 = IA12BD 1-2
	257	B	174	XXX		2-9 3-10
	260	C	175	XXX		2-9 11-18
42	261	42A	176	25X	7 = 0	8-9 = IA13BD 1-2
	262	B	177	XXX		2-9 3-10
	263	C	178	XXX		2-9 11-18
43	264	43A	179	25X	7 = 1	8-9 = ITAL 1-2
	265	B	180	XXX		2-9 3-10
	266	C	181	XXX		2-9 11-18
44	267	44A	182	26X	7 = 0	9 = IS3 2
	270	B	183	X00		2-3 3-4
	271	C	184	000		
45	272	45A	185	26X	7 = 1	9 = IDISC1C 7
	273	B	186	XXX		2-8 8-14
	274	C	187	000		
46	275	46A	188	27X	7 = 0	8-9 = IDER 1-2
	276	B	189	XXX		2-9 3-10
	277	C	190	XXX		2-9 11-18

FRAME/ WORD NO	TM CONS DIAL NO (DXXX)	DOWNLINK CHAN NO (KM51CXXX)	PCM TBL NO	PCM TBL OUT BITS 10-24 OCTAL (X=	BIT STRUCTURE ZERO ALL WORDS BIT(S)	SUB- SYSTEM SYMBOL	BIT(S)
47	300	47A	191	27X	7 = 1	8-9 = IQD	1-2
	301	B	192	XXX		2-9	3-10
	302	C	193	XXX		2-9	11-18
48	303	48A	194	30X	7 = 0	8-9 = IVDX	1-2
	304	B	195	XXX		2-9	3-10
	305	C	196	XXX		2-9	11-18
49	306	49A	197	30X	7 = 1	8-9 = IVDY	1-2
	307	B	198	XXX		2-9	3-10
	310	C	199	XXX		2-9	11-18
50	311	50A	200	31X	7 = 0	8-9 = IVDZ	1-2
	312	B	201	XXX		2-9	3-10
	313	C	202	XXX		2-9	11-18

ABORT GUIDANCE SYSTEM - ANALOG

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
GI3301T	ASA TEMP (PRIME)	A223	KM10A065	420	KM10A089	+20/+200		A
GI3301T	ASA TEMP (RED'T)	A253	KM10A089	444	ITASI	+20/+200		A

ABORT GUIDANCE SYSTEM - EVENTS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	BIT FUNCTION	SC	*C
GI3305X	AGS WARMUP	D400-4	KM10E027	255-6	I431	1=WARMUP		A
GI3306X	AGS STBY	D400-5	KM10E027	255-5	I432	1=STBY		A

INSTRUMENTATION SYSTEM - FRAME SYNC AND ID WORDS (GL0300)

WORD 1	ALL FRAMES	D320	KM51D01A	207	37500000	A
WORD 2	ALL FRAMES	D002	KM51D01B	1	31200000	A
WORD 3	ALL FRAMES	D003	KM51D01C	2	15000000	A
WORD 4	FRAME 1	D004	KM51D01D	3	00100000	A
	2	D005	KM51D02D	4	00200000	A
	3	D006	KM51D03D	5	00300000	A
	4	D007	KM51D04D	6	00400000	A
	5	D010	KM51D05D	7	00500000	A
	6	D011	KM51D06D	8	00600000	A
	7	D012	KM51D07D	9	00700000	A
	8	D013	KM51D08D	10	01000000	A
	9	D014	KM51D09D	11	01100000	A
	10	D015	KM51D10D	12	01200000	A
	11	D016	KM51D11D	13	01300000	A
	12	D017	KM51D12D	14	01400000	A
	13	D020	KM51D13D	15	01500000	A
	14	D021	KM51D14D	16	01600000	A
	15	D022	KM51D15D	17	01700000	A
	16	D023	KM51D16D	18	02000000	A
	17	D024	KM51D17D	19	02100000	A
	18	D025	KM51D18D	20	02200000	A
	19	D026	KM51D19D	21	02300000	A
	20	D027	KM51D20D	22	02400000	A
	21	D030	KM51D21D	23	02500000	A
	22	D031	KM51D22D	24	02600000	A
	23	D032	KM51D23D	25	02700000	A
	24	D033	KM51D24D	26	03000000	A
	25	D034	KM51D25D	27	03100000	A
	26	D035	KM51D26D	28	03200000	A
	27	D036	KM51D27D	29	03300000	A
	28	D037	KM51D28D	30	03400000	A
	29	D040	KM51D29D	31	03500000	A
	30	D041	KM51D30D	32	03600000	A
	31	D042	KM51D31D	33	03700000	A
	32	D043	KM51D32D	34	04000000	A
	33	D044	KM51D33D	35	04100000	A
	34	D045	KM51D34D	36	04200000	A
	35	D046	KM51D35D	37	04300000	A
	36	D047	KM51D36D	38	04400000	A
	37	D050	KM51D37D	39	04500000	A
	38	D051	KM51D38D	40	04600000	A
	39	D052	KM51D39D	41	04700000	A
	40	D053	KM51D40D	42	05000000	A
	41	D054	KM51D41D	43	05100000	A
	42	D055	KM51D42D	44	05200000	A
	43	D056	KM51D43D	45	05300000	A
	44	D057	KM51D44D	46	05400000	A
	45	D060	KM51D45D	47	05500000	A
	46	D061	KM51D46D	48	05600000	A
	47	D062	KM51D47D	49	05700000	A
	48	D063	KM51D48D	50	06000000	A
	49	D064	KM51D49D	51	06100000	A
	50	D065	KM51D50D	52	06200000	A

INSTRUMENTATION SYSTEM - PRIME ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
GL0401V	CAL 85 PCT	A077	KM11A026	336	KM11A041	FIXED - 85PFS		
GL0402V	CAL 15 PCT	A111	KM11A036	346	KM11A027	FIXED - 15PFS		
GL0422V	PCM OSC FAIL 2	A375	KM10A171	526	27700000	FIXED - 75PFS		
GL0423V	PCM OSC FAIL 3	A247	KM10A085	440	27700000	FIXED - 75PFS		
GL8275T	RTG CASK SHLD T	A406	KM10A180	535	RTGCST	-200/+500	4S	

INSTRUMENTATION SYSTEM - REDUNDANT ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
GL0401V	CAL 85 PCT	A116	KM11A041	351	33000000	FIXED - 85PFS		
GL0402V	CAL 15 PCT	A100	KM11A027	337	04700000	FIXED - 15PFS		

INSTRUMENTATION SYSTEM - DIGITALS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	BIT FUNCTION	SC	*C
GL0302X	PCM FORMAT ID	D321	KM10D001	208	KFORMATM	34400000 = LBR 03300000 = HBR		
GL0501W	CTE TIME - DAYS	D315	KM11D01A	204	TMWD40UT	00/40DAYS		
	HOURS	D316	KM11D01B	205	TMWD30UT	00/23HOURS		
	MINS	D317	KM11D01C	206	TMWD20UT	00/59MIN		
	SECS	D001	KM11D01D	0	TMW010UT	00/59SEC		

INSTRUMENTATION SYSTEM - PRIME EVENTS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	BIT FUNCTION	SC	*C
GL0400X	PCM OSC FAIL 1	D354-8	KM10E007	235-2	ZERO	1=FAIL		
GL4026X	CES AC PWR FAIL	D354-1	KM10E007	235-9	H741	0=FAIL		
GL4027X	CES DC PWR FAIL	D354-2	KM10E007	235-8	H742	0=FAIL		
GL4028X	AGS PWR FAIL	D354-3	KM10E007	235-7	I430	0=FAIL		
GL4047X	EPS BATT CAUT	D354-6	KM10E007	235-4	C980TM	0=CAUT	4S	
GL4054X	C+W PWR FAIL	D354-4	KM10E007	235-6	E135T	0=FAIL		
GL4069X	MASTER ALARM ON	D354-5	KM10E007	235-5	E005T	0=ON		

INSTRUMENTATION SYSTEM - REDUNDANT EVENT WORD

DIAL-B	PCM CHAN	DIS	*SOURCE*	BIT SETTINGS	
D367	KM10E018	246	KM10E007		

RADAR AND MECHANICAL SYSTEMS - PRIME ANALOGS

MEAS, ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
GN7563T	LR ANT TEMP	A366	KM10A164	519	KM10A149	-200/+200		A
GN7723T	RR ANT TEMP	A161	KM10A031	386	KM10A055	-200/+200		A

RADAR AND MECHANICAL SYSTEMS - REDUNDANT ANALOGS

MEAS, ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
GN7563T	LR ANT TEMP	A347	KM10A149	504	GGTLRTMT	-200/+200		B
GN7723T	RR ANT TEMP	A211	KM10A055	410	GETRRT	-200/+200	5S	A
GN7723T	RR ANT TEMP	A334	KM10A138	493	KM10A055	-200/+200		*A

RADAR AND MECHANICAL SYSTEMS - PRIME EVENTS

MEAS, ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	BIT FUNCTION	SC	*C
GM5000U	LAND GEAR DEPLOY	D415-1	KM10E040	268-9	D025	1=DEPLOY		B
GN7521X	LR RANGE BAD	D346-1	KM10E001	229-9	G803	1=BAD		B
GN7557X	LR VEL BAD	D346-2	KM10E001	229-8	G804	1=BAD		B
GN7621X	RR NO TRACK	D346-3	KM10E001	229-7	G750	1=NO TRACK		B

RADAR SYSTEM - REDUNDANT EVENT WORD

DIAL-B	PCM CHAN	DIS	*SOURCE*	BIT SETTINGS	C
D361	KM10E012	240	KM10E001		A

ASCENT PROPULSION SYSTEM - PRIME ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC *C
GP0001P	APS HE 1 PRESS	A405	KM10A179	534	KM10A153	0/+4000	A
GP0002P	APS HE 2 PRESS	A257	KM10A093	448	KM10A100	0/+4000	A
GP0018P	APS HE REG PRESS	A230	KM10A070	425	PPMANAT	0/+300	B
GP0025P	APS HE REG PRESS	A167	KM10A037	392	PPMANATT	0/+300	B
GP0041P	HE TK1 PRESS NO2	A051	KM11A004	314	PPHE1ATM	0/+4000	B
GP0042P	HE TK2 PRESS NO2	A073	KM11A022	332	PPHE2ATM	0/+4000	B
GP0718T	APS FUEL TEMP	A304	KM10A114	469	PTFRAT	+20/+120	B
GP1218T	APS OX TEMP	A342	KM10A144	499	KM10A129	+20/+120	A
GP1501P	APS FUEL PRESS	A220	KM10A062	417	KM10A092	0/+250	A
GP1503P	APS OX PRESS	A217	KM10A061	416	KM10A105	0/+250	A
GP2010P	APS TCP	A377	KM10A173	528	KM10A178	0/+150	A

ASCENT PROPULSION SYSTEM - REDUNDANT ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC *C
GP0001P	APS HE 1 PRESS	A353	KM10A153	508	PPHE1ATT	0/+4000	B
GP0002P	APS HE 2 PRESS	A266	KM10A100	455	PPHE2ATT	0/+4000	R
GP1218T	APS OX TEMP	A323	KM10A129	484	PTORAT	+20/+120	B
GP1501P	APS FUEL PRESS	A256	KM10A092	447	PPBPFATT	0/+250	B
GP1503P	APS OX PRESS	A273	KM10A105	460	PPBPOATT	0/+250	B
GP2010P	APS TCP	A404	KM10A178	533	PPCAT	0/+150	B
GP2010P	APS TCP	A007	KM22A007	280	KM10A178	0/+150	*A

DESCENT PROPULSION SYSTEM - PRIME ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
• GQ3015P	DPS START TK P	A172	KM10A040	395	PP12T	0/+1750		A
• GQ3018P	DPS HE REG P	A174	KM10A042	397	PP1TT	0/+300		B
• GQ3025P	DPS HE REG P	A276	KM10A108	463	PP1T	0/+300		B
• GQ3435P	DPS HE PRESS	A130	KM10A006	361	KM10A030	0/+2000		A
• GQ360301	DPS FUEL 1 QTY	A017	KM12A008	288	KM10A077	0/+95		A
• GQ360403	DPS FUEL 2 QTY	A034	KM12A021	301	KM10A069	0/+95		A
• GQ3611P	DPS FUEL PRESS	A001	KM22A001	274	KM22A004	0/+300		A
• GQ3718T	FUEL TANK1 SURF	A126	KM10A004	359	KM10A047	+20/+120		A
• GQ3719T	FUEL TANK2 SURF	A307	KM10A117	472	KM10A148	+20/+120		A
• GQ4103Q4	DPS OX 1 QTY	A022	KM12A011	291	KM10A116	0/+95		A
• GQ4104Q3	DPS OX 2 QTY	A016	KM12A007	287	KM10A176	0/+95		A
• GQ4111P	DPS OX PRESS	A002	KM22A002	275	KM22A005	0/+300		A
• GQ4218T	OX TANK 1 SURF	A125	KM10A003	358	KM10A048	+20/+120		A
• GQ4219T	OX TANK 1 SURF	A164	KM10A034	389	KM10A056	+20/+120		A
• GQ6510P	DPS TCP	A236	KM10A076	431	KM10A086	0/+200		A
• GQ6806H	VAR INJ ACT POS	A041	KM51A004	306	KM51A008	-8/+105		A

DESCENT PROPULSION SYSTEM - REDUNDANT ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC	*C
GQ3435P	DPS HE PRESS	A160	KM10A030	385	PPHETT	0/+2000		B
GQ3603Q	DPS FUEL 1 QTY	A237	KM10A077	432	PFPYTP	0/+95		B
GQ3604Q	DPS FUEL 2 QTY	A227	KM10A069	424	PFNYTP	0/+95		B
GQ3611P	DPS FUEL PRESS	A004	KM22A004	277	PP7T	0/+300		B
GQ3718T	FUEL TANK1 SURF	A201	KM10A047	402	PTF1T	+20/+120		B
GQ3719T	FUEL TANK2 SURF	A346	KM10A148	503	PTF2T	+20/+120		B
GQ4103Q	DPS OX 1 QTY	A306	KM10A116	471	PONZTP	0/+95		B
GQ4104Q	DPS OX 2 QTY	A402	KM10A176	531	POPZTP	0/+95		B
GQ4111P	DPS OX PRESS	A005	KM22A005	278	PP6T	0/+300		B
GQ4218T	OX TANK 1 SURF	A202	KM10A048	403	PT01T	0/+200		B
GQ4219T	OX TANK 2 SURF	A212	KM10A056	411	PT02T	0/+200		B
GQ6510P	DPS TCP	A250	KM10A086	441	PP8T	0/+200		B
GQ6806H	VAR INJ ACT POS	A045	KM51A008	310	PTGPT	-8/+105		B
GQ3603Q4	DPS FUEL 1 QTY	A272	KM10A104	459	KM10A077	0/+95		*A
GQ3604Q2	DPS FUEL 2 QTY	A267	KM10A101	456	KM10A069	0/+95		*A
GQ4103Q2	DPS OX 1 QTY	A367	KM10A165	520	KM10A116	0/+95		*A
GQ4104Q2	DPS OX 1 QTY	A327	KM10A133	488	KM10A176	0/+95		*A
GQ3611P	DPS FUEL PRESS	A144	KM10A018	373	KM22A004	0/+300		*A
GQ4111P	DPS OX PRESS	A134	KM10A010	365	KM22A005	0/+300		*A
GQ6510P	DPS TCP	A006	KM22A006	279	KM10A086	0/+200		*A
GQ6806H	VAR INJ ACT POS	A423	KM10A193	548	KM51A008	-8/+105		*A

PROPULSION SYSTEMS - EVENTS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	BIT FUNCTION	SC	*C
GP0318X	APS HE 1 CLSD	D420-1	KM10E043	271-9	P210	1=CLSD		B
GP0320X	APS H2 2 CLSD	D420-2	KM10E043	271-8	P211	1=CLSD		B
GP0908X	APS FUEL LO	D375-1	KM10E024	252-9	P255	1=LO		B
GP1408X	APS OX LO	D375-2	KM10E024	252-8	P254	1=LO		B
GP2997U	APS PROP VLVS A	D337-1	KM12E003	222-9	P141	1=MISMATCH		B
	DELTA PS	D405-3	KM10E032	260-7	P141			B
GP2998U	APS PROP VLVS B	D337-2	KM12E003	222-8	P142	1=MISMATCH		B
	DELTA POS	D405-4	KM10E032	260-6	P142			B
GQ4455X	DPS PROP LO	D405-2	KM10E032	268-8	P240	1=LO		B

REACTION CONTROL SYSTEM - PRIME ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC *C
GR1085Q	RCS PROP A QTY	A364	KM10A162	519	KM10A151	0/+108.2	A
GR1095Q	RCS PROP B QTY	A344	KM10A146	501	KM10A119	0/+108.2	A
GR1101P	RCS A HE PRESS	A317	KM10A125	480	KM10A160	0/+3500	A
GR1102P	RCS B HE PRESS	A316	KM10A124	479	KM10A145	0/+3500	A
GR1201P	RCS A REG PRESS	A302	KM10A112	467	KM10A110	0/+350	A
GR1202P	RCS B REG PRESS	A336	KM10A140	495	RREGTB	0/+350	A
GR2121T	RCS A FUEL TEMP	A224	KM10A066	421	RTFTA	+20/+120	A
GR2122T	RCS B FUEL TEMP	A234	KM10A074	429	RTFTB	+20/+120	A
GR2201P	RCS A FU MFLD P	A140	KM10A014	369	KM10A045	0/+350	A
GR2202P	RCS B FU MFLD P	A141	KM10A015	370	KM10A044	0/+350	A
GR3201P	RCS A OX MFLD P	A147	KM10A021	376	KM10A053	0/+350	A
GR3202P	RCS B OX MFLD P	A170	KM10A038	393	KM10A052	0/+350	A
GR6001T	QUAD 4 TEMP	A132	KM10A008	363	RTC4T	-60/+260	A
GR6002T	QUAD 3 TEMP	A165	KM10A035	390	RTC3T	-60/+260	A
GR6003T	QUAD 2 TEMP	A242	KM10A080	435	RTC2T	-60/+260	A
GR6004T	QUAD 1 TEMP	A246	KM10A084	439	RTC1T	-60/+260	A

REACTION CONTROL SYSTEM - REDUNDANT ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC *C
GR1085Q	RCS PROP A QTY	A351	KM10A151	506	RPCTAP	0/+108.2	A
GR1095Q	RCS PROP B QTY	A311	KM10A119	474	RPCTBP	0/+108.2	A
GR1101P	RCS A HE PRESS	A362	KM10A160	515	RPHETA	0/+3500	A
GR1102P	RCS B HE PRESS	A343	KM10A145	500	RPHETB	0/+3500	A
GR1201P	RCS A REG PRESS	A300	KM10A110	465	RPREGTA	0/+350	A
GR2201P	RCS A FU MFLD P	A177	KM10A045	400	RPFMTA	0/+350	A
GR2202P	RCS B FU MFLD P	A176	KM10A044	399	RPFMTB	0/+350	A
GR3201P	RCS A OX MFLD P	A207	KM10A053	408	RPOMTA	0/+350	A
GR3202P	RCS B OX MFLD P	A206	KM10A052	407	RPOMTB	0/+350	A

REACTION CONTROL SYSTEM - PRIME EVENTS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	BIT FUNCTION	SC *C
GR5031X	RCS TCP B4U	D333-8	KM22E01A	218-2	R950	1=ON	A
GR5032X	RCS TCP A4D	D333-7	KM22E01A	218-3	R951	1=ON	A
GR5033X	RCS TCP B4F	D333-6	KM22E01A	218-4	R952	1=ON	A
GR5034X	RCS TCP A4R	D333-5	KM22E01A	218-5	R953	1=ON	A
GR5035X	RCS TCP A3U	D333-4	KM22E01A	218-6	R954	1=ON	A
GR5036X	RCS TCP B3D	D333-3	KM22E01A	218-7	R955	1=ON	A
GR5037X	RCS TCP B3A	D333-2	KM22E01A	218-8	R956	1=ON	A
GR5038X	RCS TCP A3R	D333-1	KM22E01A	218-9	R957	1=ON	A
GR5039X	RCS TCP B2U	D334-8	KM22E01B	219-2	R958	1=ON	A
GR5040X	RCS TCP A2D	D334-7	KM22E01B	219-3	R959	1=ON	A
GR5041X	RCS TCP A2A	D334-6	KM22E01B	219-4	R960	1=ON	A
GR5042X	RCS TCP B2L	D334-5	KM22E01B	219-5	R961	1=ON	A
GR5043X	RCS TCP A1U	D334-4	KM22E01B	219-6	R962	1=ON	A
GR5044X	RCS TCP B1D	D334-3	KM22E01B	219-7	R963	1=ON	A
GR5045X	RCS TCP A1F	D334-2	KM22E01B	219-8	R964	1=ON	A
GR5046X	RCS TCP B1L	D334-1	KM22E01B	219-9	R965	1=ON	A
GR9609U	RCS MAIN A CLSD	D357-3	KM10E010	238-7	R905	1=CLSD	A
GR9610U	RCS MAIN B CLSD	D357-4	KM10E010	238-6	R908	1=CLSD	A
GR9613U	A/B XFEED OPEN	D357-7	KM10E010	238-3	R906	1=OPEN	A
GR9631U	ASC FD A FU OPN	D357-5	KM10E010	238-5	R907	1=OPEN	A
GR9632U	ASC FD B FU OPN	D357-6	KM10E010	238-4	R909	1=OPEN	A
GR9641U	ASC FD A OX OPN	D357-1	KM10E010	238-9	R918	1=OPEN	A
GR9642U	ASC FD B OX OPN	D357-2	KM10E010	238-8	R919	1=OPEN	A
GR9661U	A4 ISO SWITCH	D417-1	KM10E042	270-9	R825	1=DISABLED	A
GR9662U	B4 ISO SWITCH	D417-2	KM10E042	270-8	R833	1=DISABLED	A
GR9663U	A3 ISO SWITCH	D417-3	KM10E042	270-7	R824	1=DISABLED	A
GR9664U	B3 ISO SWITCH	D417-4	KM10E042	270-6	R832	1=DISABLED	A
GR9665U	A2 ISO SWITCH	D417-5	KM10E042	270-5	R823	1=DISABLED	A
GR9666U	B2 ISO SWITCH	D417-6	KM10E042	270-4	R831	1=DISABLED	A
GR9667U	A1 ISO SWITCH	D417-7	KM10E042	270-3	R822	1=DISABLED	A
GR9668U	B1 ISO SWITCH	D417-8	KM10E042	270-2	R830	1=DISABLED	A

REACTION CONTROL SYSTEM - REDUNDANT EVENT WORD

DIAL-B	PCM CHAN	DIS	*SOURCE*	BIT SETTINGS	C
D372	KM10E021	249	KM10E010		A

COMMUNICATIONS SYSTEM - PRIME ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC *C
GT0454T	ST ANT ELEC ASSY	A275	KM10A107	462	TGT0454	-200/+200	A
GT0625V	VHF B RCVR AGC	A254	KM10A090	445	KM10A103	+.20/+.375	A
GT0992R	S-BND ST PH ERR	A413	KM10A185	540	KM11A002	FIXED AT 50PFS	A
GT0993F	S-BND XMTR PO	A425	KM10A195	550	TYP0	-.950/+4.764	A
GT0994V	S-BND RCVR SIG	A352	KM10A152	507	KM10A161	0/+5	A

COMMUNICATIONS SYSTEM - REDUNDANT ANALOGS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	RANGE OR VAL	SC *C
GT0625V	VHF B RCVR AGC	A271	KM10A103	458	TVRAGC	+.20/+.375	A
GT0992R	S-BND ST PH ERR	A047	KM11A002	312	20000000	FIXED AT 50PFS	A
GT0994V	S-BND RCVR SIG	A363	KM10A161	516	TAGCG	0/+5	A

GT0441X DCA UPLK VERIFY D314 KMS10002 203 (UDL PROG. LOADS CHANNEL, NOT TM)

PYROTECHNICS SYSTEM - PRIME EVENTS

MEAS.ID	**DESCRIPTION**	DIAL-B	PCM CHAN	DIS-B	*SOURCE*	BIT FUNCTION	SC
GY0050X	ABORT CMD	D360-1	KM10E011	239-9	D112	1=CMD	B
GY0201X	ED RLY A K1-K6	D360-6	KM10E011	239-4	D220	1=CLSD	B
GY0202X	ED RLY B K1-K6	D360-7	KM10E011	239-3	D221	1=CLSD	B
GY0231X	ED RLY A K7-K15	D360-4	KM10E011	239-6	D210	1=CLSD	B
GY0232X	ED RLY B K7-K15	D360-5	KM10E011	239-5	D211	1=CLSD	B

PYROTECHNICS SYSTEM - REDUNDANT EVENT WORD

DIAL-B	PCM CHAN	DIS	*SOURCE*	BIT SETTINGS	C
D373	KM10E022	250	KM10E011		A

	Fu 1	Fu 2	95 %	95%
#1	81.5	81.5		94.6
#2	87.1	87.1		95.0
#3	94.6			95.
#4	87.1			95.
#5	87.9			
#6	93.0			
#7	92.0			