

TR72-29 (EP2015-3)

1 OCTOBER 1972

~~T. LAWTON~~
MIT/IL MSC

APOLLO INERTIAL INSTRUMENT LOGISTICS SUMMARY

QUARTERLY ISSUE



Delco Electronics

*General Motors Corporation
- Santa Barbara Operations
Santa Barbara, California*

APOLLO
INERTIAL INSTRUMENT
LOGISTICS SUMMARY
QUARTERLY ISSUE

1 October 1972

EP2015-3

NASA Contract NAS 9-10356

This document supersedes all previous issues of this report.

Submitted by
Delco Electronics Division
General Motors Corporation
Santa Barbara, California 93017

TABLE OF CONTENTS

SECTION	TITLE	PAGE
I	INTRODUCTION	1
II	IRIG STATUS AND LOCATION	3
III	PIPA STATUS AND LOCATION	23
IV	IMU LOCATION AND INSTRUMENT ASSIGNMENT	38
V	G & N SYSTEM LOCATION — IMU AND SPACECRAFT ASSIGNMENT	41

SECTION I

INTRODUCTION

This report contains current Apollo Block I and Block II inertial instrument data. The data includes part number, site location, specific IMU and G & N system assignment, and pertinent status or remarks. The following terms and abbreviations are used.

1. Site Designations

DEL	Delco Electronics
GAC	Grumman Aircraft Corporation
KSC	Kennedy Spacecraft Center
MIT	Massachusetts Institute of Technology
MSC	Manned Spacecraft Center, Houston, Texas
NR	North American Rockwell
NOR	Nortronics
SPE	Sperry Gyroscope Company
FRC	Flight Research Center, Edwards, California

2. IMU Serial Number Designations

SN/0	Block I	Series 0
SN/50	Block I	Series 50
SN/100	Block I	Series 100
SN/CM	Block II	Command Module
SN/LM	Block II	Lunar Module
SN/CM/SP	Block II	Command Module Spare
SN/LM/SP	Block II	Lunar Module Spare

3. G & N System Numbers

Under 100 Series	Block I	Series 0 and 50
100 Series	Block I	Series 100
200 Series	Block II	Command Module
600 Series	Block II	Lunar Module

4. Status and Remarks Abbreviations

CAT I or I	Category I, Requalification by Testing
CAT II or II	Category II, Repair Down to Shroud Level
CAT III or III	Category III, Repair Down to Float Level
CAT IV or IV	Category IV, Internal Float Repair
EVAL	Evaluation
T	Tentative
TD	Torn Down
BR	Bond Room
INV. SCH. B	DD543 in Process on NAS 9-497 Hardware

†Units Flown

SECTION II
IRIG STATUS AND LOCATION

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
7870250-011	1A 1	MIT				Suspension short to case
011	1A 2	MIT				Suspension short to case
011	1A 3	MIT				For test
011	1A 4A					Terminated
011	1A 5	MSC	Z	LRN/0	NA	
011	1A 6	MIT				For test
011	1A 7A	MSC				For test
011	1A 8	MIT				Overheated
011	1A 9A	MIT				Gravity transient, rebuilt R4 program
011	1A 10	MIT	X	MIT/5		MIT IMU
7871776-011	2A 1	MSC	X	LRN/0	NA	
011	2A 2	MSC	Y	LRN/0	NA	
021	2A 3A					Terminated
011	2A 4	MIT				For test
021	2A 5A	MIT				Bearing failure (MIT change wheel) , R4 program
011	2A 6	NR	Z	2/0	6	
011	2A 7	NR	Y	2/0	6	
011	2A 8	MSC				For test
011	2A 9	MSC	Y	3/0	7	
011	2A 10	MSC	Z	3/0	7	
011	2A 11					Terminated
011	2A 12	MSC	X	3/0	7	
011	2A 13					Terminated, bearing failure
031	2A 14	NR	X	2/0	6	
031	2A 15	MSC	Z	5/0	20	

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
7871776-041	2A 16	MSC	Y	5/0	20	
041	2A 17	MSC	Z	4/0	8	
031	2A 18	MSC	X	4/0	8	
031	2A 19	MSC				For test
041	2A 20					Terminated
041	2A 21					Terminated
041	2A 22	MSC	X	5/0	20	
041	2A 23	MIT	Y	MIT/5		MIT IMU
041	2A 24	MIT				ADIA instability. R4 program
041	2A 25	MIT				For test
041	2A 26	MSC	Z	3/100	110	
041	2A 27					Terminated
041	2A 28	MIT	Z	MIT/4		MIT IMU
041	2A 29	MSC				For test
041	2A 30	MIT				Bearing failure
041	3A 1	MSC				For test
031	3A 2	MSC				For test
041	3A 3	MSC	X	3/100	110	
031	3A 4					Terminated
041	3A 5					Terminated
2021500-111	3C 6	FRC	Z	3/LM	604	F8-Iron Bird Testing
7871776-041	3A 7	MIT	Y	MIT/4		MIT IMU
041	3A 8					BR storage
041	3A 9	MSC				NASA disposition
041	3A 10 †	MSC	Y	1/50	17	Flown IMU 1/50

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
7871776-041	3A 11	MIT				For test
041	3A 12 †	MSC				Flown IMU 1/50, NASA disposition
041	3A 13	MIT				For test
041	3A 14					Terminated, float freedom failure
041	3A 15					Terminated
041	3A 16					Terminated, bearing failure
2021500-111	3C 17	NOR				Terminated
7871776-041	3A 18					Terminated
041	3A 19					Terminated
041	3A 20					Terminated
041	3A 21	MSC				For test
041	3A 22					Terminated
041	3A 23	MSC				For test
041	3A 24 †	MSC	X	8/100	SP	Flown IMU 1/50
051	3A 25	MSC	Y	7/100	SP	
051	3A 26					Terminated
051	3A 27 †	MSC	X	4/100	123	Flown IMU 4/100
041	3A 28	MSC				For test
051	3A 29					Terminated
051	3A 30					Terminated
2021500-111	4C 1†		Y	17/CM	210	Flown unit, Apollo 11, terminated
2021602	4A 2					Terminated

IRIG

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
7871776-071	4A 3		Z	10/100	12	Expended, Langley AFB Float freedom failure. R4 program BR storage
071	4A 4	MIT				
2021500-111	4C 5	DEL				
7871776-061	4A 6 †	MSC				Recovered after flight, flown IMU 11/100, NASA disposition
061	4A 7	MSC	Y	8/100	SP	
011	4A 8	MSC	X	7/100	SP	
061	4A 9		Y	10/100	12	Expended, Langley AFB
2021500-111	4C 10	NOR				
7871776-071	4A 11					Terminated Flex lead failure. R4 program For test
071	4A 12	MIT				
071	4A 13	MSC				
071	4A 14 †	MSC				Recovered for test, flown IMU 11/100 Terminated
071	4A 15					
071	4A 16	MIT	Y	5/100	111	Overheated, failed Flown unit, Apollo 11, terminated terminated
071	4A 17	MSC				
2021500-111	4C 18†		X	17/CM	210	
7871776-071	4A 19	MIT	X	5/100	111	USAF Terminated
071	4A 20					
071	4A 21	MIT				For test
071	4A 22	MIT	Z	MIT/5		
071	4A 23 †	MSC	Z	4/100	123	Flown IMU 4/100
071	4A 24	MSC	Z	8/100	SP	
071	4A 25	MIT	Z	5/100	111	

2015-3-6

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021500-111	4C 26†		Z	17/CM	210	Flown unit, Apollo 11, terminated
7871776-061	4A 27					Terminated
2021500-111	4C 28	DEL	Z	LRN/CM		Terminated
7871776-061	4A 29					Terminated
071	4A 30	MIT				Bearing failure. R4 program
7871776-081	5A 1					Terminated
081	5A 2	MSC				Overheated, failed
071	5A 3		X	10/100	12	Expended, Langley AFB
081	5A 4					Terminated
081	5A 5	MSC	Y	6/100	109	
081	5A 6					Terminated
081	5A 7	MIT				Recovered after flight. For test, flown IMU 11/100
081	5A 8	MIT				Bearing failure. R4 program
081	5A 9	MSC	Y	4/100	123	Flown IMU 4/100
071	5A 10	MSC				Overheated, failed
071	5A 11	MSC				For test
071	5A 12	MSC				For test
2021500-111	5C 13	NOR				WHL Fail
7871776-071	5A 14	MSC				NASA disposition
071	5A 15	MIT				Disassembled, bearing failure
071	5A 16	MSC	Y	3/100	110	
081	5A 17	MSC				For test
081	5A 18	MSC				For test
081	5A 19	MSC				Overheated, failed
081	5A 20	MIT				Bearing failure

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS		
			POS.	IMU	SYSTEM			
7871776-081	5A 21	NOR				Terminated		
7871776-071	5A 22					Terminated		
2021500-111	5C 23					Terminated		
7871776-071	5A 24	MSC	Y	LRN/CM	NA	For test		
2021500-041	6A 1	NOR				S/N retired		
081	6A 2	DEL				(MIT Preamp)		
041	6A 3					Terminated		
041	6A 4					Terminated		
041	6A 5	NOR				ADIA shift		
041	6A 6	NOR				Float freedom failure		
041	6A 7	NOR				Float freedom failure		
041	6A 8	NOR				Bearing failure		
041	6A 9	NOR				S/N retired		
041	6A 10	NOR				S/N retired		
041	6A 11	NOR				S/N retired		
041	6A 12					Terminated		
041	6A 13	NOR				S/N retired		
041	6A 14	NOR				S/N retired		
041	6A 15	NOR				S/N retired		
041	6A 16	MSC				Z	1/LM	
041	6A 17	NOR						Float freedom failure Cat IV repair
041	6A 18	MIT						ADIA shift
041	6A 19	NOR						Testing/TD bearing failure
041	6A 20	MSC	Y	1/LM				

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021500-041	6A 21	MSC	X	PP2/CM	NA	
041	6A 22	MSC	X	1/LM		
041	6A 23	NOR				Bearing failure
041	6A 24	NOR				Float freedom failure
041	6A 25	NOR				Bearing failure
031	7A 1					Repair IV (S/N Retired)
031	7A 2	MSC				For test
031	7A 3	DEL	Z	2		
031	7A 4	DEL	X	5/CM	202	
031	7A 5	DEL	X	2		
031	7A 6	NOR				CAT IV—Repair
051	7A 7					Repair IV (S/N Retired)
111	7C 8	DEL				BR storage
051	7A 9					Terminated
111	7B 10	NOR				S/N retired
2021602-011	7C 11	DEL				Repair III, BR storage denorm
2021500-031	7A 12	DEL	Z	5/CM	202	
031	7A 13	MSC				For test, qualification program
051	7A 14					Repair IV (S/N Retired)
111	7C 15	DEL				BR storage, Bad ADIA
031	7A 16	NOR				S/N retired
071	7A 17	NOR				S/N retired
111	7A 18	NOR				S/N retired
111	7C 19	DEL	X	36/LM		
051	7A 20	MSC				For test, qualification program

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021500-031	7A 21	NOR				ADIA instability — Repair
031	7A 22	MIT				Drift instability
111	7B 23	NOR				S/N retired
031	7A 24	DEL	Y	2		
051	7A 25					Terminated
111	7C 26	DEL				BR storage
111	7A 27	FRC	X	18	DFCS-2	F-8
051	7A 28	NOR				S/N retired
051	7A 29	NOR				S/N retired
031	7A 30					Repair IV (S/N Retired)
111	7A 31†	NOR				S/N retired
051	7A 32					Terminated
111	7C 33	DEL	Y	34/CM		
111	7B 34	FRC	Z	32	DFCS-1	Iron Bird
081	7A 35					Repair IV (S/N Retired)
111	7A 36	NOR				S/N retired
111	7C 37					Repair IV (S/N Retired)
111	7A 38	NOR				S/N retired
051	7A 39					Repair IV (S/N Retired)
051	7A 40					Repair IV (S/N Retired)
111	7A 41	GAC	Y	PP1		
111	7A 42					Repair IV (S/N Retired)
071	7A 43					Repair IV (S/N Retired)

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021500-071	7A 44					Repair IV (S/N Retired)
051	7A 45					Repair IV (S/N Retired)
051	7A 46					Repair IV (S/N Retired)
031	7A 47	NOR				CAT IV — Repair
081	7A 48	NOR				S/N retired
071	7A 49					Repair IV (S/N Retired)
051	7A 50	MSC				Bearing evaluation
2021500-051	7A 51					Repair IV (S/N Retired)
111	7A 52†	DEL	X	45/CM	206	Launched, Apollo 10, Recovered
111	7A 53†		Z	27/LM	606	Launched, Apollo 10, expended
111	7C 54	DEL				Removed from IMU 31
051	7A 55					Terminated
111	7A 56	NOR				S/N retired
111	7A 57	NOR				S/N retired
071	7A 58					Repair IV (S/N Retired)
031	7A 59					Repair IV (S/N Retired)
111	7C 60	DEL	Z	30/CM		
111	7A 61	NOR				Engineering workhorse, BR storage
031	7A 62					Repair IV (S/N Retired)
111	7C 63	NOR				S/N retired
111	7C 64	NOR				S/N retired
071	7A 65					Repair IV (S/N Retired)
051	7A 66					Terminated

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021500-051	7A 67					Repair IV (S/N Retired)
051	7A 68	MSC	Z	PP2/CM	NA	
111	7A 69†	FRC	Z	18	DFCS-2	Launched, Recovered (IMU14), F-8
051	7A 70					Repair IV (S/N Retired)
051	7A 71					Terminated
071	7A 72					Repair IV (S/N Retired)
051	7A 73	FRC	X	3/LM	604	F8-Iron Bird Testing
071	7A 74					Repair IV (S/N Retired)
111	7C 75	DEL				BR storage
051	7A 76	MSC	Y	PP2/CM	NA	
2021602-011	7C 77	DEL				BR storage, denormalized, CAT IV
2021500-031	7A 78	NOR				S/N retired
071	7A 79					Repair IV (S/N Retired)
111	7A 80	NOR				S/N retired
101	7A 81†		Z	6/LM	603	Launched, expended
111	7B 82					Repair IV (S/N Retired)
111	7A 83†		Y	19/LM	605	Launched, expended, Apollo 9
071	7A 84	DEL	Y	26/LM	608	
111	7A 85†	FRC	Y	18	DFCS-2	Launched, returned (IMU 8, Apollo 7), F-8
111	7A 86†	NOR				S/N retired
071	7A 87					Repair IV (S/N Retired)
111	7C 88	NOR				S/N retired

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021500-081	7A 89†	MSC				For test (Flown IMU S/N 23)
071	7A 90					Repair IV (S/N Retired)
111	7C 91	FRC	X	32	DFCS-1	Iron Bird
111	7A 92					Repair IV (S/N Retired)
081	7A 93					Repair IV (S/N Retired)
031	7A 94					Repair IV (S/N Retired)
111	7A 95					Repair IV (S/N Retired)
111	7A 96	NOR				S/N retired
071	7A 97					Repair IV (S/N Retired)
111	7A 98†		X	19/LM	605	Launched, expended, Apollo 9
071	7A 99	NOR				S/N retired
081	7A 100					Repair IV (S/N Retired)
051	7A 101	MSC				Qualification program
051	7A 102					Repair IV (S/N Retired)
101	7A 103†		X	6/LM	603	Launched, expended
111	7A 104	NOR				S/N retired
111	7C 105	DEL				Float freedom failure. B/R storage
111	7A 106	DEL				Engr Test, storage test
111	7A 107†		X	27/LM	606	Launched, Apollo 10, expended
2021619	7A 108	DEL				CAT III — Repair cancelled, float to BR storage
2021500-111	7C 109	DEL	X	10/CM	207	Eng Lab
081	7A 110†	NOR				S/N retired
111	7C 111	MSC				MSC sent to Bendix for analysis — Torn down
111	7A 112	DEL	Y	10/CM	207	Eng Lab

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021500-051	7A 113					Repair IV (S/N Retired)
051	7A 114	MIT				
071	7A 115					Repair IV (S/N Retired)
051	7A 116	NOR				CAT IV — Repair
051	7A 117	MSC				Bearing evaluation
051	7A 118	MSC				Bearing evaluation
111	7A 119	NOR				S/N retired
111	7C 120	DEL				For assignment, BR storage
051	7A 121					Repair IV (S/N Retired)
111	7A 122	MIT				S/N retired
111	7A 123	DEL	Z	10/CM	207	Eng lab
051	7A 124					Repair IV (S/N Retired)
2021619	7A 125	DEL				Unit TD for salvage, float to BR storage
2021500-111	7A 126	NOR				S/N retired
051	7A 127					Repair IV (S/N Retired)
111	7A 128†	DEL	Y	45/CM	206	Launched, recovered Apollo 10, Recovered
071	7A 129					Repair IV (S/N Retired)
111	7A 130†		Z	19/LM	605	Launched, expended, Apollo 9
111	7C 131					Repair IV (S/N retired)
101	7A 132†		Y	6/LM	603	Launched, expended
111	7C 133	NOR				S/N retired
111	7A 134	GAC	X	PP1/LM		
111	7A 135	NR	X	4/CM	201	
111	7C 136	GAC	Z	PP1/LM		

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021500-051	7A 137					Repair IV (S/N Retired)
051	7A 138					Repair IV (S/N Retired)
111	7C 139	DEL				
071	7A 140					Repair IV (S/N Retired)
111	7A 141	DEL				BR storage
051	7A 142	NOR				S/N retired
111	7C 143	DEL	Y	30/CM		
111	7B 144	DEL				BR storage
071	7A 145					Repair IV (S/N Retired)
111	7B 146	NOR				Test Unit
111	7C 147	DEL	X	26/LM	608	
051	7A 148	DEL	Z	26/LM	608	
051	7A 149	NOR				S/N retired
111	7B 150	DEL	X	34/CM		
111	7A 151	NOR				S/N retired
051	7A 152					Repair IV (S/N Retired)
111	7C 153	DEL				Engineering workhorse, BR storage
051	7A 154					Repair IV (S/N Retired)
051	7A 155					Repair IV (S/N Retired)
071	7A 156					Repair IV (S/N Retired)
071	7A 157					Repair IV (S/N Retired)
2021602-011	7A 158	NOR				S/N retired
2021500-051	7A 159					Repair IV (S/N Retired)
051	7A 160					Repair IV (S/N Retired)

IRIG

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021500-111	7A 161					Repair IV (S/N Retired)
111	7C 162	DEL				BR storage
111	7C 163	DEL	X	30/CM		
051	7A 164					Repair IV (S/N Retired)
111	7A 165					Repair IV (S/N Retired)
111	7A 166	DEL				CAT III repair, BR storage, disassembled
071	7A 167					Repair IV (S/N Retired)
111	7C 168	MSC				MSC sent to Bendix for analysis
081	7A 169	DEL	X	LRN/CM		(MIT Preamp)
111	7C 170	DEL				BR storage, temperature failure
2021602-011	7A 171	NOR				S/N retired
2021500-051	7A 172					Repair IV (S/N Retired)
051	7A 173					Repair IV (S/N Retired)
111	7B 174	NR	Y	4/CM	201	
111	7A 175	FRC	Y	3/LM	604	F8-Iron Bird testing
111	7A 176	DEL				BR storage
081	7A 177	NOR				S/N retired
111	7C 178	DEL				BR storage
2021619	7C 179	DEL				Repair III cancelled, float to BR storage
2021500-111	7C 180	NOR				S/N retired
051	7A 181					Repair IV (S/N Retired)
051	7A 182					Repair IV (S/N Retired)
111	7A 183	NOR				S/N retired
111	7A 184					Repair IV (S/N Retired)
111	7C 185	DEL	Y	36/LM		

2015-3-16

IRIG

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021500-111	7A 186					Repair IV (S/N Retired)
111	7A 187					Repair IV (S/N Retired)
2021619	7A 188	DEL				Unit TD for salvage, float to BR storage
2021500-111	7B 189	DEL	Z	34/CM		
111	7C 190†	DEL	Z	45/CM	206	Launched, Apollo 10, Recovered
111	7A 191	NOR				S/N retired
111	7B 192	NR	Z	4/CM	201	
051	7A 193	DEL	Y	5/CM	202	
051	7A 194	DEL				Repair IV on hold, BR storage, disassembled
111	7A 195	DEL	Z	36/LM		
111	7A 196	NOR				S/N retired
081	7A 197†	MSC				For Test (Flown IMU S/N 23)
111	7A 198	NOR				S/N retired
111	7C 199	NOR				S/N retired
051	7A 200	NOR				S/N retired
111	7C 201	DEL				Repair IV - on hold, BR storage, disassembled
051	7A 202					Repair IV (S/N Retired)
111	7C 203	DEL				
111	7A 204†		Y	27/LM	606	Launched, Apollo 10, expended
051	7A 205					Repair IV (S/N Retired)

2015-3-17

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021500-111	7C 206	FRC	Y	32	DFCS-1	Iron Bird
081	7A 207+	NOR				S/N retired
051	7A 208					Repair IV (S/N Retired)
071	7A 209					Repair IV (S/N Retired)
051	7A 210					Repair IV (S/N Retired)
111	7A 211+	NOR				S/N retired
111	7A 212	DEL				Repair III - on hold, BR storage, disassembled
091	8A 1					Terminated
121	8A 2					Terminated
091	8A 3					Terminated
121	8A 4					Terminated
091	8A 5					Terminated
091	8A 6					Terminated
091	8A 7					Terminated
091	8A 9					Terminated
151	8A 81	NOR				S/N retired
151	8A 101	DEL	Z	39/LM	LM/SP	LM Prime spare, Apollo 17
151	8A 102	DEL	Y	39/LM	LM/SP	LM Prime spare, Apollo 17
151	8A 103+	DEL	X	44/CM	205	SKY LAB II
151	8B 104+	DEL	Z	44/CM	205	SKY LAB II
151	8A 105+	DEL	Y	44/CM	205	SKY LAB II
151	8A 106+		Z	11/LM	609	Expended, Apollo 11
151	8A 107+	DEL				Launched, recovered, Apollo 14. BR storage
151	8A 108+		Y	11/LM	609	Expended, Apollo 11
151	8A 109+	DEL	Z	35/CM	221	Launched, recovered, Apollo 14. SKYLAB III

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021500-151	8A 110†		X	11/LM	609	Expended, Apollo 11
151	8A 111†	DEL				Launched, recovered, Apollo 14. BR storage
151	8A 112†	DEL				Launched, recovered, Apollo 13, in testing
						Launched, recovered, Apollo 13, discrepant , BR storage
151	8A 113†		X	15/LM	607	Launched, expended, Apollo 12
151	8A 114†	DEL	X	35/CM	221	Launched, recovered, Apollo 13; SKY LAB III
151	8A 115†	DEL	Y	35/CM	221	Launched, recovered, Apollo 13; SKY LAB III
151	8A 116†		Z	15/LM	607	Launched, expended, Apollo 12
151	8A 117†	DEL				Launched, Apollo 15, recovered, BR storage
151	8A 118†		Y	15/LM	607	Launched, expended, Apollo 12
151	8A 119†	DEL				Launched, Apollo 15, recovered, BR storage
151	8A 120	KSC	Z	20/CM	218	Apollo 17, pad testing
151	8A 121	KSC	X	20/CM	218	Apollo 17, pad testing
151	8A 122†		Z	21/LM	611	Launched, expended, Apollo 14
151	8A 123	MIT				Normal hardware in BR
151	8C 124†		X	21/LM	611	Launched, expended, Apollo 14
151	8A 125†	DEL				Launched, Apollo 15, recovered, BR storage
151	8A 126	MIT				Normal hardware in BR
151	8A 127†		Y	13/LM	610	Launched, expended, Apollo 13
151	8A 128	KSC	Y	20/CM	218	Apollo 17, pad testing
151	8A 129†		X	13/LM	610	Launched, expended, Apollo 13
151	8A 130	KSC	X	38/LM	613	Apollo 17, pad testing
151	8A 131	KSC	Z	38/LM	613	Apollo 17, pad testing
151	8A 132†		Z	13/LM	610	Launched, expended, Apollo 13
151	8A 133	DEL				Engineering testing, lost wheel sync
151	8A 134	KSC	Y	38/LM	613	Apollo 17, pad testing
151	8A 135†	KSC	Y	33/LM	615	LM-11, Apollo 16, launched, expended
151	8A 136	DEL	Y	9/CM		CM Spare

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021500-151	8A 137†		Z	33/LM	615	LM-11, Apollo 16, launched, expended
151	8A 138†		X	33/LM	615	LM-11, Apollo 16, launched, expended
151	8A 139†		Y	21/LM	611	Launched, expended, Apollo 14
151	8A 140	NOR				S/N retired
151	8A 141	DEL	X	39/LM		LM Spare
151	8A 142	DEL	X	9/CM		CM Spare
151	8A 143	DEL	Z	9/CM		CM Spare
181	8A 201†		X	12/LM	614	Apollo 15, expended
181	8A 202†		Z	12/LM	614	Apollo 15, expended
181	8A 203†		Y	12/LM	614	Apollo 15, expended
181	8A 204	DEL	Z	22/CM		CM Spare
181	8A 205	DEL	X	22/CM		CM Spare
181	8A 206	DEL	Y	22/CM		CM Spare
181	8A 207	DEL	Z	28/LM		LM Spare
181	8A 208	DEL	X	28/LM		LM Spare
181	8A 209	DEL	Y	28/LM		LM Spare
181	8A 210†	DEL	Z	29/CM	216	Apollo 16, launched, recovered
181	8A 211†	DEL	X	29/CM	216	Apollo 16, launched, recovered
181	8A 212†	DEL	Y	29/CM	216	Apollo 16, launched, recovered
181	8A 213	DEL				For assignment -BR storage
181	8A 214	DEL				For assignment -BR storage
2021602-041	9A1	MIT				
2021602-041	9A2	MIT				
2021602-041	9A3	MIT				Storage Sensitive
2021602-071	9A4	MIT				
2021500-161	9A6	DEL				For assignment. BR storage
2021500-171	9A7	DEL	Z	24/CM		
2021602-081	9A8	NOR				S/N retired - megger fail
2021500-161	9A9	DEL				BR storage - float freedom failure
2021602-071	9A10	DEL				Float freedom failure, BR storage
2021500-171	9A11	DEL	Z	31/CM	213	SKY LAB B/U

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS	IMU	SYSTEM	
2021500-171	9A12	DEL	Y	31/CM	213	SKY LAB B/U
2021500-171	9A13	DEL	X	31/CM	213	SKY LAB B/U
2021500-171	9A14	NR	Y	25/CM	222	SKY LAB IV
2021500-171	9A15	DEL				Wheel problem — BR storage
2021602-081	9A16	Bendix				Gravity transient OOS
2021602-081	9A17	DEL				BR storage, failed float freedom
2021602-081	9A18	Bendix				Megger failure
2021602-081	9A19	DEL				Failure — BR storage
2021500-171	9A20	DEL				Testing
2021602-081	9A21	DEL				BR storage. Megger failure
2021500-171	9A22	NR	Z	25/CM	222	SKY LAB IV
2021602-081	9A23	DEL				Hold — BR storage
2021500-171	9A24	DEL				For assignment -BR storage
2021500-171	9A25	DEL				For assignment
2021500-171	9A26	DEL				BR storage, bias instability
2021602-081	9A27	DEL				Failure - BR storage
2021500-171	9A28	DEL				For assignment -BR storage
2021500-171	9A29	DEL				BR storage — failed
2021602-081	9A30	DEL				BR storage — failed
2021500-171	9A31	DEL				1109 Diag. test, megger failure
2021602-081	9A32	MIT				Megger failure
2021500-171	9A33	DEL				For assignment
2021602-081	9A34	DEL				Failed Unit -BR storage
2021602-081	9A35	DEL				Failed Unit -Br storage
2921602-081	9A36	DEL				Failed Unit -BR storage
2021602-071	9A37	MIT				Failed unit
2021602-081	9A38	DEL				Failed Unit -BR storage
2021602-081	9A39	DEL				Failed Unit - BR storage
2021500-171	9A40	NR	X	25/CM	222	SKY LAB IV
2021500-171	9A41	DEL	Y	24/CM		
2021500-171	9A42	DEL	X	24/CM		
2021500-191	10A1	DEL				For assignment — BR storage
2021500-191	10A2	DEL				For assignment — BR storage

PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
			POS.	IMU	SYSTEM	
2021602-121	10A3	NOR				
2021602-121	10A4	NOR				
2021602-111	10A5	DEL				1109 in normalization
2021602-121	10A6	NOR				94-03 awaiting DD 1149
2021602-121	10A7	DEL				For assignment, BR storage
2021602-121	10A8	DEL				Discrepant — BR storage
2021602-121	10A9	DEL				1109 - In normalization
2021602-121	10A10	DEL				1109 - In normalization
2021602-121	10A11	DEL				1109 - Testing
2021602-121	10A12	NOR				Failed gravity transient
2021602-121	10A13	DEL				1109 - In normalization
2021602-121	10A14	DEL				1109 - Testing
2021602-121	10A15	DEL				1109 - Testing
2021602-121	10A16	DEL				1109 - Testing
2021602-121	10A17	DEL				1109 - Testing
2021602-121	10A18	DEL				1109 - Testing
2021602-121	10A19	DEL				1109 - Testing
2021602-121	10A20	DEL				1109 - Testing
2021602-121	10A21	DEL				1109 - Testing
2021602-121	10A22	DEL				1109 - Testing
MIT BUILD IRIGS						
	84	MIT	X	SV	Servo	MIT Block II ↓
	86B	MIT	Y	SV	Servo	
	91A	MIT	Y	6F	600F	
	94	MIT	Z	SV	Servo	
	99A	MIT	X	6F	600F	
	100A	MIT	Y	2	200	
	102	MIT	Z	2	200	
	105B	MIT	Z	6F	600F	
	106	MIT	Z	6	600	

SECTION III

PIPA STATUS AND LOCATION

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
I <							

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
I ↓	96180	1AP 26	SPE				Failed, expended Inactive Unit
	96180	1AP 27	SPE				Sperry unit, failed. Disassembled
	113600-1 ↓	2AP 28	MSC	X	5/0	20	
		2AP 29	MSC	Y	5/0	20	
		2AP 30	MSC	X	6/100	109	
		2AP 31	MSC	Z	5/0	20	
		2AP 32	MSC				NASA disposition
	113600-2 113600-1 113600-1 113600-1 113600-2 113600-2 113600-1 ↓	2AP 33	MSC	Z	6/100	109	
		2AP 34	MSC	X	3/100	110	
		2AP 35	MSC	Y	3/100	110	
		2AP 36	SPE				Sperry unit, failed. Disassembled
		2AP 37	SPE				Sperry unit, failed. Disassembled
		2AP 38	SPE				Sperry unit, failed. Disassembled
		2AP 39	MSC	Y	3/0	7	
		2AP 40	MIT				For test, bubble failure
		2AP 41	MIT				For test, failed, disassembled
		2AP 42	MSC	Z	3/100	110	
	113600-1 ↓ 113600-2 113600-1 113600-1	2AP 43	NR	Z	2/0	6	
		2AP 44	MSC	Z	3/0	7	
		2AP 45	MIT	Y	5/100		
		2AP 46	MSC	Z	4/0	8	
		2AP 47	MIT	X	5/100		
		2AP 48	MIT				For thermal test
		2AP 49	MIT				Failed
		2AP 50	MIT	Z	5/100		

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
I ↓	113600-3	2AP 51	MIT	Y	MIT/4		For MIT IMU Block I test Inactive Unit
	113600-1	2AP 52	MSC	Y	4/0	8	
	113600-2	2AP 53	MSC	X	4/0	8	
	113600-5	2AP 54	MSC	X	6/50	SP	
	113600-5	2AP 55	MSC				Failed unit, NASA disposition
	113600-5	2AP 56	MSC	Y	6/50	SP	
	113600-2	2AP 57	MSC	Z	6/50	SP	
	113600-2	2AP 58	SPE				Failed, expended
	113600-2	2AP 59	MSC				NASA disposition
	113600-2	2AP 60	MSC	Y	6/100	109	
	113600-5	2AP 61	MIT				For test
	113600-4	2AP 62+	MSC	X	1/50	17	Flown IMU 1/50
	113600-4	2AP 63	MIT				For test
	113600-6	2AP 64	MIT	X	MIT/4		For MIT IMU Block I test
	113600-6	2AP 65 +	MSC	Y	4/100	123	Flown IMU 4/100
	113600-4	2AP 66 +	MSC	Z	1/50	17	Flown IMU 1/50
	113600-6	2AP 67	MSC				Failed unit, NASA disposition
	113600-6	2AP 68	SPE				
	113600-6	2AP 69	SPE				
	113600-6	2AP 70	SPE				
II I I	113600-4	2AP 71	MIT				For PIP lab test-inactive unit
	113600-6	2AP 72	SPE				Sperry unit, failed. Disassembled-inactive unit
	2001730-2	2AP 73R	DEL				BR storage
I	108000	2AP 74	SPE				
I	108000	2AP 75	MIT				Sperry unit, failed. Disassembled-inactive unit

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
I	108000	2AP 76	SPE				Prototype - inactive unit
II	2001730-2	2AP 77R	DEL				Inactive unit
II	108077-1	2AP 78A	FRC	X	32	DFCS-1	Failed unit, BR storage Iron Bird
II	108077-1	2AP 79A	DEL	X	37/LM		
II	2001730-2	2AP 80R	DEL				Failed unit, BR storage
I	113600-6	2AP 81	MIT	Z	MIT/4		For MIT IMU Block I test-inactive unit
II	2001730-2	2AP 82R	DEL	X	31/CM	213	SKY LAB backup
II	2001730-2	2AP 83R	DEL				Failed unit, BR storage
I	113600-6	2AP 84	MSC	Y	1/50	17	Inactive unit
I	108077-1	2AP 85	SPE				Inactive unit
I	113600-6	2AP 86	SPE				Inactive unit
II	2001730-2	2AP 87R	DEL				Failed unit-BR storage ; Inactive unit
I	108077-1	2AP 88 +	SPE				Flown IMU 4/100-inactive unit
II	2001730-2	2AP 89R	DEL				Failed unit, BR storage
II	↓	2AP 90R	MSC				Failed unit — NASA disposition
II		2AP 91R	DEL	Z	31/CM	213	SKY LAB backup
II		2AP 92R†		Y	21/LM	611	Launched, expended, Apollo 14
I	113600-6	2AP 93	SPE				Flown IMU 4/100-inactive unit
I	↓	2AP 94	MIT	X	MIT/5		For MIT IMU Block I test-inactive unit
I		2AP 95	MIT	Z	MIT/5		For MIT IMU Block I test-inactive unit
I		2AP 96	SPE				Inactive unit
II	2001730-2	2AP 97R†	DEL				Launched, recovered, Apollo 14. BR storage
I	113600-6	2AP 98	MIT	Y	MIT/5		For MIT IMU Block I test-inactive unit

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
I	113600-6	2AP 99	SPE				Inactive unit
II	113600-6	2AP 100	SPE				Inactive unit
I	108000-3	2AP 101	MIT				Expended-inactive unit
I	113600-6	2AP 102	SPE				Inactive unit
I	113600-6	2AP 103	SPE				Inactive unit
II	2001730-2	2AP 104R	DEL				Failed unit, BR storage
II	2001730-2	2AP 105R	DEL	Z	28/LM		LM spare
I	113600-6	2AP 106	MIT				Expended-inactive unit
II	2001730-2	2AP 107R	DEL				Failed unit, BR storage
I	108077-2	2AP 108	MIT	Z	MIT/2	200	MIT IMU Block II
II	2001730-2	2AP 109R	DEL				Program spare, BR storage
II	2001730-2	2AP 110R	NR	X	25/CM	222	SKY LAB IV
I	108077-2	2AP 111	MIT				Inactive unit
	113600-6	2AP 112	MIT				Expended-inactive unit
	108077-4	2AP 113	MIT	Y	MIT/2	200	MIT IMU block II - inactive unit
	113600-6	2AP 114		Z	10/100	12	Expended, Langley AFB-inactive unit
		2AP 115 +	SPE				Recovered. IMU 11/100-inactive unit
		2AP 116	MIT				Expended-inactive unit
		2AP 117	SPE				Inactive unit
		2AP 118	SPE				Inactive unit
		2AP 119	SPE				Inactive unit
II	2001730-2	2AP 120R	DEL				Program spare, BR storage
I	113600-6	2AP 121 +	SPE				Recovered. IMU 11/100-inactive unit
II	2001730-2	2AP 122R	DEL				BR storage
II	2001730-2	2AP 123R	DEL	Y	37/LM		

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
I	113600-6	2AP 124	MIT				For test-inactive unit
I	108077-2	2AP 125	MIT	Y	MIT/6	600	MIT IMU Block II
I	108077-2	2AP 126	MIT				Inactive unit
II	108077-2	2AP 127	MSC	X	1/LM		Inactive unit
II	108077-2	2AP 128	MSC	Z	1/LM		Inactive unit
II	108077-2	2AP 129+	DEL				Launched, returned, IMU 23/CM, BR storage
II	108077-2	2AP 130	GAC	X	PP1/LM		Inactive unit
I	108077-4	2AP 131	MIT	X	MIT/2	200	MIT IMU Block II
II	108077-2	2AP 132	GAC	Z	PP1/LM		Inactive unit
II	113600-6	2AP 133	GAC	Y	PP1/LM		Inactive unit
I	113600-6	2AP 134		X	10/100	12	Expended, Langley AFB
I	113600-6	2AP 135		Y	10/100	12	Expended, Langley AFB
II	2001730-2	2AP 136R	DEL	X	9/CM		CM spare
	108077-2	2AP 137	MSC	Y	1/LM		
	2001730-3	2AP 138R	DEL				BR spare
	108077-2	2AP 139	DEL	Y	35/CM	221	SKY LAB III
	2001730-2	2AP 140R	KSC	Y	20/CM	218	Apollo 17, pad testing
	108077-4	2AP 141	DEL				BR spare
		2AP 142	NR	X	4/CM	201	
		2AP 143	DEL	X	2		Inactive unit
		2AP 144	SPE				Inactive unit
		2AP 145	NR	Y	4/CM	201	
		2AP 146	DEL	X	LRN/CM		
		2AP 147	DEL				Engineering test unit - Inactive unit
		2AP 148	DEL	Z	30/CM		

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
II ↓	108077-2	2AP 149	DEL	Y	LRN/CM		Launched, recovered, Apollo 14. MIT IMU Block II
	108077-4	2AP 150†	DEL				
	108077-4	2AP 151	MIT	Z	MIT/6	600	
	108077-4	2AP 152	DEL	Z	LRN/CM		Failed, expended-inactive unit Inactive unit
	108077-2	2AP 153	MIT				
	108077-2	2AP 154	SPE				Inactive unit
	108077-2	2AP 155	DEL	X	5/CM	202	Inactive unit
	108077-4	2AP 156	FRC	Z	3/LM	604	F8 - Iron Bird testing
	108077-2	2AP 157	DEL	Y	2		Inactive unit
	108077-4	2AP 158	FRC	Y	3/LM	604	F8 - Iron Bird testing
	108077-4	2AP 159	SPE				Failed, expended-inactive unit
	108077-2	2AP 160	DEL	Z	2		Inactive unit
	108077-2	2AP 161	DEL	Y	5/CM	202	Inactive unit
	108077-2	2AP 162	SPE				Inactive unit
	108077-2	2AP 163†		Y	6/LM	603	Launched, expended, LM-1, Apollo 5
	108077-4	2AP 164†		X	15/LM	607	Launched, expended, Apollo 12
		2AP 165	DEL	X	24/CM	205	
		2AP 166	MIT				Test article
		2AP 167	DEL	Z	5/CM	202	Inactive unit
		2AP 168†		X	6/LM	603	Launched, expended, LM-1, Apollo 5
		2AP 169	SPE				Inactive unit
	108077-2	2AP 170	MIT				Inactive unit
	108077-2	2AP 171†		Y	12/LM	614	Apollo 15 - expended
	108077-2	2AP 172†		X	12/LM	614	Apollo 15 - expended
	108077-4	2AP 173	MIT				Failed, expended-inactive unit

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
II ↓	108077-4	2AP 174	SPE				Failed, disassembled-inactive unit
		2AP 175	NR	Z	35/CM	221	SKY LAB III
		2AP 176†	DEL	X	8/CM	204	Launched, returned, CM 101, Apollo 7
		2AP 177†		Y	15/LM	607	Launched, expended, Apollo 12
		2AP 178	SPE				Inactive unit
		2AP 179†	DEL				Launched, Apollo 15 - recovered, BR storage
		2AP 180	DEL	X	22/CM		CM spare
	2001730-2	2AP 181R	MSC				Failed unit, NASA disposition
	108077-4	2AP 182	SPE				Inactive unit
	108077-4	2AP 183	MIT				
	108077-2	2AP 184†	DEL	Z	8/CM	204	Launched, returned CM 101, Apollo 7
	108077-2	2AP 185†	DEL				Launched, recovered, Apollo 14.
	108077-4	2AP 186	DEL	X	44/CM	205	SKY LAB II
		2AP 187	MSC	Z	PP2/CM		Inactive unit
		2AP 188†	DEL				Launched, recovered-CM104, Apollo 9
							BR storage
		2AP 189	DEL	Y	9/CM		CM spare
		2AP 190	MSC	X	PP2/CM		Inactive unit
	108077-2	2AP 191	SPE				Inactive unit
	108077-4	2AP 192†		X	13/LM	610	Launched, expended, Apollo 13
		2AP 193	SPE				Failed, expended-inactive unit
		2AP 194	FRC	X	3/LM	604	F8 - Iron Bird testing
		2AP 195	KSC	X	20/CM	218	Apollo 17, pad testing

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
II ↓	108077-4	2AP 196†		X	11/LM	609	Expended, Apollo 11
	↓	2AP 197	SPE				Inactive unit
		2AP 198†		Z	15/LM	607	Launched, expended, Apollo 12
		2AP 199	DEL				Failed unit, BR storage, Inactive unit
		2AP 200†		Z	13/LM	610	Launched, expended, Apollo 13
	108077-2	2AP 201	DEL	X	45/CM	206	
	108077-4	2AP 202†	DEL				Launched, recovered, CM 104, Apollo 9, BR storage
	↓	2AP 203	SPE				Failed, disassembled-inactive unit
		2AP 204	MIT	X	MIT/6	600	MIT IMU Block II
		2AP 205	DEL				Inactive unit
		2AP 206	KSC	Y	38/LM	613	Apollo 17, pad testing
	2001730-2	2AP 207R	DEL				Testing
	108077-4	2AP 208†	DEL				Launched, recovered, CM 104, Apollo 9
							BR storage
	108077-4	2AP 209	DEL	Z	9/CM		CM spare
	108077-4	2AP 210†		Y	13/LM	610	Launched, expended, Apollo 13
	108077-2	2AP 211	SPE				Failed
	108077-4	2AP 212†	DEL	Y	8/CM	204	Launched, returned, CM-101, Apollo 7
	↓	2AP 213†		Z	6/LM	603	Launched, expended, LM-1, Apollo 5
		2AP 214	SPE				Inactive unit
		2AP 215	DEL	Y	28/LM		LM spare
		2AP 216	SPE				Inactive unit
	↓	2AP 217	DEL				Assigned to engineering
		2AP 218	SPE				Failed, disassembled-inactive unit
	2001730-2	2AP 219R	DEL				Testing
	108077-4	2AP 220	SPE				Inactive unit

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
II ↓	108077-2	2AP 221	SPE				Inactive unit
	108077-2	2AP 222†		X	21/LM	611	Launched, expended, Apollo 14
	108077-4	2AP 223	SPE				Failed-inactive unit
	108077-2	2AP 224	MSC	Y	PP2/CM		Inactive unit
	2001730-2	2AP 225R	DEL				Failed unit - BR storage, Inactive unit
	108077-4	2AP 226	MIT				Failed unit - Inactive unit
	2001730-2	2AP 227R	DEL				Failed unit, BR storage
	108077-4	2AP 228†		Z	21/LM	611	Launched, expended, Apollo 14
	108077-2	2AP 229	SPE				Inactive unit
	108077-4	2AP 230	DEL	X	26/LM	608	
	108077-2	2AP 231	SPE				Inactive unit
	108077-4	2AP 232†	DEL				Launched Apollo 15 - recovered, BR storage
	108077-4	2AP 233†	FRC	Z	18	DFCS-2	Launched, recovered, Apollo 12; F-8
	108077-4	2AP 234	SPE				Inactive unit
	2001730-2	2AP 235R	DEL				Program spare, testing
	108077-4	2AP 236	SPE				Inactive unit
		2AP 237†		Z	19/LM	605	Launched, expended, LM-3, Apollo 9
		2AP 238	KSC	Z	20/CM	218	Apollo 17, pad testing
		2AP 239	MSC				Overheated, expended-inactive unit
		2AP 240	MIT				Overheated, expended-inactive unit
		2AP 241	DEL	Z	39/LM		LM spare
		2AP 242	MSC				Overheated, expended
		2AP 243	SPE				Inactive unit
	2001730-2	2AP 244R	DEL				BR storage
	108077-4	2AP 245	MSC				Overheated, expended-inactive unit

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
II ↓	2001730-2	2AP 246R	DEL				Testing
	2001730-2	2AP 247R	MIT				Failed unit, for test - inactive unit
	108077-2	2AP 248	SPE				Inactive unit
	108077-4	2AP 249†		Y	11/LM	609	Expended, Apollo 11
	108077-2	2AP 250X	SPE				Prototype — failure analysis-inactive unit
	2001730-2	2AP 251R	MIT				For test - inactive unit
	108077-4	2AP 252	DEL	Z	22/CM		CM spare
	108077-2	2AP 253	MIT				Inactive unit
	108077-4	2AP 254†	DEL				Launched, returned, IMU 23/CM 103, Apollo 8, BR storage
	2001730-2	2AP 255R	DEL				Program spare, testing
	108077-4	2AP 256	DEL				Failed unit, BR storage - inactive unit
	108077-4	2AP 257	SPE				Inactive unit
	2001730-2	2AP 258R	DEL				Program spare, BR storage
	108077-4	2AP 259	MIT				Inactive unit
		2AP 260	DEL				Failed unit, BR storage - inactive unit
		2AP 261	DEL	Y	30/CM		
		2AP 262	KSC	X	38/LM	613	Apollo 17, pad testing
		2AP 263	DEL				Failed unit, BR storage - inactive unit
	2001730-2	2AP 264R	DEL	Y	31/CM	213	SKY LAB backup
	2001730-2	2AP 265R†	DEL				Launched Apollo 15, recovered, BR storage
	2001730-2	2AP 266R	MIT				Inactive unit
	108077-4	2AP 267	DEL	Z	24/CM	205	
	108077-4	2AP 268	DEL	Y	45/CM	206	
	2001730-2	2AP 269R	DEL	Y	22/CM		CM spare
	108077-4	2AP 270	SPE				Inactive unit

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
II ↓	108077-4	2AP 271	DEL				1109 Testing
		2AP 272†		X	33/LM	615	LM-11, Apollo 16, expended
		2AP 273	SPE				Inactive unit
		2AP 274†	DEL				Launched, returned, IMU 23/CM 103, Apollo 8, BR storage
		2AP 275	DEL	Z	45/CM	206	
		2AP 276	NR	Y	25/CM	222	SKY LAB IV
		2AP 277†	DEL	Z	29/CM	216	Apollo 16, launched 4/72, recovered
	2001730-2	2AP 278R	MIT				For test - inactive unit
	2001730-2	2AP 279R	DEL				Failed unit, BR storage
	108077-4	2AP 280	SPE				Inactive unit
	108077-4	2AP 281	SPE				Inactive unit
	108077-4	2AP 282	NR	Z	25/CM	222	SKY LAB IV
	108077-2	2AP 283	DEL	Z	26/LM	608	
	2001730-2	2AP 284R	DEL	Y	24/CM		
	108077-4	2AP 285†		Y	19/LM	605	Launched, expended, LM-3, Apollo 9
	2001730-3	2AP 286R†		Z	11/LM	609	Expended, Apollo 11
	108077-4	2AP 287†	DEL	Y	29/CM	216	Apollo 16, launched 4/72, recovered
		2AP 288	DEL	Z	44/CM	205	SKY LAB II
		2AP 289†		X	19/LM	605	Launched, expended, LM-3, Apollo 9
		2AP 290†		Z	27/LM	606	Launched, Apollo 10, expended
		2AP 291†		Y	27/LM	606	Launched, Apollo 10, expended
		2AP 292†		Z	12/LM	614	Apollo 15 - expended
	2001730-3	2AP 293R	DEL	X	39/LM		LM spare
	108077-4	2AP 294†		Z	33/LM	615	LM-11, Apollo 16, expended
	108077-4	2AP 295†	FRC	Y	32	DFCS-1	Launched, recovered, Apollo 13; Iron Bird

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
II ↓	108077-4	2AP 296	DEL	X	36/LM		
	↓	2AP 297	MIT				For test - inactive unit
		2AP 298	NR	Z	4/CM	201	
		2AP 299	SPE				Inactive unit
		3AP 300	DEL				BR storage
	2001730	3AP 301	MIT				Failed unit - inactive unit
	↓	3AP 302	DEL				Inactive unit
		3AP 303+	DEL				Launched, recovered, Apollo 13
		3AP 304	SPE				Inactive unit
	2001730-2	3AP 305R	DEL				Failed unit, BR storage
	2001730	3AP 306	DEL				BR storage
	2001730	3AP 307+	DEL	Y	44/CM	205	SKY LAB II
	2001730-3	3AP 308R		Y	17/CM	210	Flown unit, Apollo 11 - inactive unit
	2001730	3AP 309+	DEL	X	29/CM	216	Apollo 16, launched 4/72, recovered
	2001730	3AP 310+		X	27/LM	606	Launched, Apollo 10, expended
	2001730	3AP 311	MIT				Failed unit
	2001730-2	3AP 312R	MIT				Inactive unit
	2001730	3AP 313	DEL	Y	39/LM		LM spare
		3AP 314	DEL	Y	26/LM	608	
		3AP 315+	FRC	Y	18	DSCS-2	Launched, recovered, Apollo 12; F-8
	↓	3AP 316+	DEL	Y	36/LM		
	2001730-3	3AP 317R		X	17/CM	210	Flown unit, Apollo 11 - inactive unit
	2001730	3AP 318	DEL	Z	37/LM		
	2001730	3AP 319	DEL				BR spare
	2001730	3AP 320+	DEL				Launched, recovered, Apollo 10, BR storage

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
II ↓	2001730	3AP 321†	FRC	Z	32	DFCS-1	Launched, recovered, Apollo 13; Iron Bird
	2001730-3	3AP 322R	FRC	X	18	DFCS-2	Launched, recovered, Apollo 12; F-8
	2001730	3AP 323	DEL	X	28/LM		LM spare
	2001730	3AP 324	DEL				BR storage
	2001730	3AP 325	DEL	X	30/CM		
	2001730-2	3AP 326R	DEL				BR, spare
	2001730	3AP 327	DEL	Z	36/LM		
		3AP 328	DEL				Failed unit, BR storage - inactive unit
		3AP 329	SPE				Inactive unit
		3AP 330	SPE				Inactive unit
		3AP 331	SPE				Inactive unit
		3AP 332†	DEL				Launched, recovered Apollo 10, BR storage
		3AP 333	DEL	X	34/CM		
		3AP 334	DEL	Y	34/CM		
		3AP 335	DEL	Z	34/CM		
		3AP 336	SPE				Inactive unit
		3AP 337	NR	X	35/CM	221	SKY LAB III
		3AP 338†		Y	33/LM	615	LM-11, Apollo 16 - expended
		3AP 339	KSC	Z	38/LM	613	Apollo 17, pad testing
		3AP 340†	DEL				Launched, recovered, Apollo 10, BR storage
		3AP 341†		Z	17/CM	210	Flown unit, Apollo 11 - inactive unit

BLOCK	SPERRY PART NUMBER	SERIAL NUMBER	SITE	ASSIGNED UNITS			STATUS/REMARKS
				POS.	IMU	SYSTEM	
NOTE: 1) The following comments explain the block designation and Sperry P/N's contained in the PIPA status and location section. The block designation contained in this section specifies the utilization or intended utilization of the PIP as being either for (I) a block I G & N system or (II) for a block II or LM G & N system. The NASA P/N's corresponding to these are: Block I — NASA No. 1000013 Block II, LM — NASA NO. 2018844 The Sperry P/N specifies the configuration of the GFE unit as built by Sperry Gyroscope Company. 2) † — following unit serial number designates a flown unit.							

SECTION IV

IMU LOCATION AND INSTRUMENT ASSIGNMENT

BLOCK I

IMU S/N	SYSTEM S/N	SITE	IRIG S/N			PIPA S/N		
			X	Y	Z	X	Y	Z
<u>Block I MIT Systems</u>								
4		MIT	3A 30	3A 7	2A 28	2AP 64	2AP 51	2AP 81
5		MIT	1A 10	2A 23	4A 22	2AP 94	2AP 98	2AP 95
<u>Block I Series 0</u>								
LRN	NA	MSC	2A 1	2A 2	1A 5	1AP 4	1AP 14	1AP 9
2	6	NR	2A 14	2A 7	2A 6	1AP 23	1AP 22	2AP 43
3	7	MSC	2A 12	2A 9	2A 10	1AP 25	2AP 39	2AP 44
4	8	MSC	2A 18		2A 17	2AP 53	2AP 52	2AP 46
5	20	MSC		2A 16	2A 15	2AP 28	2AP 29	2AP 31
<u>Block I Series 50</u>								
6	SP	MSC				2AP 54	2AP 56	2AP 57
1	17	MSC		3A 10		2AP 62	2AP 84	2AP 66
2		DEL						
<u>Block I Series 100</u>								
3	110	MSC	3A 3	5A 16	2A 26	2AP 34	2AP 35	2AP 42
4	123	MSC	3A 27	5A 9	4A 23		2AP 65	
5	111	MIT	4A 19	4A 16	4A 25	2AP 47	2AP 45	2AP 50
6	109	MSC		5A 5		2AP 30	2AP 60	2AP 33
7	SP	MSC	4A 8	3A 25				
8	SP	MSC	3A 24	4A 7	4A 24			
9		MSC						
10	12	Langley AFB	5A 3	4A 9	4A 3	2AP134	2AP135	2AP114
11	122	Exhibit						

BLOCK II ACTIVE -

IMU S/N	SYSTEM S/N	VEHICLE	SITE	IRIG S/N			PIPA S/N		
				X	Y	Z	X	Y	Z
9	CM/SP		DEL	8A142	8A136	8A143	2AP136R	2AP189	2AP209
18	DFCS-2	F-8	FRC	7A27	7A85+	7A69+	3AP322R	3AP315	2AP233
20	218	CM-114	KSC	8A121	8A128	8A120	2AP195	2AP140R	2AP238
22	CM/SP		DEL	8A205	8A206	8A204	2AP180	2AP269R	2AP252
24			DEL	9A42	9A41	9A7	2AP165	2AP284R	2AP267
25	222	CM-118	NR	9A40	9A14	9A22	2AP110R	2AP276	2AP282
28	LM/SP		DEL	8A208	8A209	8A207	3AP323	2AP215	2AP105R
29+	216	CM-113	DEL	8A211	8A212	8A210	3AP309	2AP287	2AP277
30			DEL	7C163	7C143	7C60	3AP325	2AP261	2AP148
31	213	CM-119	DEL	9A13	9A12	9A11	2AP82R	2AP264R	2AP91R
32	DFCS-1	Iron Bird	FRC	7C91	7C206	7B34	2AP78	2AP295+	3AP321+
34			DEL	7B150	7C33	7B189	3AP333	3AP334	3AP335
35	221	CM-117	DEL	8A114+	8A115+	8A109+	3AP337	2AP139	2AP175
36			DEL	7C19	7C185	7A195	2AP296	3AP316	3AP327
37			DEL				2AP79A	2AP123R	3AP318
38	613	LM-12	KSC	8A130	8A134	8A131	2AP262	2AP206	3AP339
39			DEL	8A141	8A102	8A101	2AP293R	3AP313	2AP241
44	205	CM-116	DEL	8A103+	8A105+	8B104+	2AP186	3AP307	2AP288
45+	206	CM-106	DEL	7A52+	7A128+	7C190+	2AP201	2AP268	2AP275
47+	212	CM-109	DEL						
48+	217	CM-112	DEL						
<u>Block II MIT System</u>									
2	200		MIT	814*	100A*	102*	2AP131	2AP113	2AP108
SV	Servo		MIT	84*	86B*	94*			
6	600		MIT	99A*	92*	PPDI**	2AP204	2AP125	2AP151

*MIT-build IRIG's

**Nortronics-built IRIG

+ Flown Units

2015-3-39

BLOCK II INACTIVE —

IMU S/N	SYSTEM S/N	VEHICLE*	SITE	IRIG S/N			PIPA S/N		
				X	Y	Z	X	Y	Z
LRN	NA		DEL	7A169	6A2	4C28	2AP146	2AP149	2AP152
PP1	-		GAC	7A134	7A41	7C136	2AP130	2AP133	2AP132
PP2	NA		MSC	6A21	7A76	7A68	2AP190	2AP224	2AP187
1			MSC	6A22	6A20	6A16	2AP127	2AP137	2AP128
2	602		DEL	7A5	7A24	7A3	2AP143	2AP157	2AP160
3	604		FRC	7A73	7A175	3C6	2AP194	2AP158	2AP156
4	201		NR	7A135	7B174	7B192	2AP142	2AP145	2AP298
5	202	CM-098	DEL	7A4	7A193	7A12	2AP155	2AP161	2AP167
6†	603	LM-1	Expended	7A103	7A132	7A81	2AP168	2AP163	2AP213
7†	214	CM-110	DEL						
8†	204	CM-101	DEL				2AP176	2AP212	2AP184
10	207		DEL	7C109	7A112	7A123			
11†	609	LM-5	Expended	8A110	8A108	8A106	2AP196	2AP249	2AP286R
12†	614	LM-10	Expended	8A201	8A203	8A202	2AP172	2AP171	2AP292
13†	610	LM-7	Expended	8A129	8A127	8A132	2AP192	2AP210	2AP200
14†	209	CM-104	DEL						
15†	607	LM-6	Expended	8A113	8A118	8A116	2AP164	2AP177	2AP198
17†	210	CM-107	NR	4C18	4C1	4C26	3AP317R	3AP308R	3AP341
19†	605	LM-3	Expended	7A98	7A83	7A130	2AP289	2AP285	2AP237
21†	611	LM-8	Expended	8C124	8A139	8A122	2AP222	2AP92R	2AP228
23†	208	CM-103	DEL						
26	608		DEL	7C147	7A84	7A148	2AP230	3AP314	2AP283
27†	606	LM-4	Expended	7A107	7A204	7A53	3AP310	2AP291	2AP290
33†	615	LM-11	Expended	8A138	8A135	8A137	2AP272	3AP338	2AP294
46†	211	CM-108	DEL						

† Systems flown or flown units

* For IMU's which have flown, this column indicates the vehicle in which the flight was made.

SECTION V

G & N SYSTEM LOCATION — IMU AND SPACECRAFT ASSIGNMENT

BLOCK	SYSTEM S/N	IMU S/N	SPACECRAFT	SITE	REMARKS
Block I Series 0	LRN 6 7 8 20	LRN 2 3 4 5		MSC NR MSC MSC MSC	
Block I Series 50	17	1		MSC	Launched and recovered 8/26/66
Block I Series 100	12 109 110 122 123	10 6 3 11 4	CM 020	Langley AFB MSC MSC NR DEL	Expended Launched and recovered 11/9/67 Launched and recovered 4/14/68
Block II MIT Systems	200 Servo 600	2 5V 6		MIT MIT MIT	

BLOCK	SYSTEM S/N	IMU S/N	SPACECRAFT	SITE	REMARKS
Block II Command Module	201	4	House	NR	G & C Lab
	202	5	CM 098	DEL	Vehicle inactive
	204	8	CM 101	DEL	Launched 10/11/68, Apollo, recovered
	205	44	CM 116	DEL	SKY LAB II
	206	45	CM 106	DEL	Launched 18 May 1969, Apollo 10, recovered
	207	10		DEL	Engineering Laboratory
	208	23	CM 103	DEL	Launched 12/21/68, Apollo 8, recovered
	209	14	CM 104	DEL	Launched 3/69, Apollo 9, recovered
	210	17	CM 107	NR	Apollo 11, launched 7/69, recovered
	211	46	CM 108	DEL	Apollo 12, launched 11/69, recovered
	212	47	CM 109	DEL	Apollo 13, flown 4/70, recovered
	213	31	CM 119	DEL	SKY LAB backup
	214	7	CM 110	DEL	Apollo 14, Launched 1/71, recovered
	216	29	CM 113	DEL	Apollo 16, launched 4/72, recovered
	217	48	CM 112	DEL	Apollo 15, Launched 7/71, recovered
	218	20	CM 114	KSC	Apollo 17, pad testing
	221	35	CM 117	DEL	SKY LAB III
	222	25	CM 118	NR	SKY LAB IV
Block II Lunar Module	602	2		DEL	Inactive, IMU in bondroom
	603	6	LM 1		Launched 1/22, vehicle expended, Apollo 5
	604	3		FRC	
	605	19	LM 3		Launched 3/69, vehicle expended, Apollo 9
	606	27	LM 4		Launched 18 May 1969, Apollo 10, expended
	607	15	LM 6		Apollo 12, expended 11/69
	608	26	LM 2	DEL	
	609	11	LM 5		Expended unit, Apollo 11, 7/69
	610	13	LM 7		Apollo 13, expended 4/70
	611	21	LM 8		Apollo 14, Expended 2/71
	613	38	LM 12	KSC	Apollo 17, pad testing
	614	12	LM 10		Apollo 15, expended 7/71
	615	33	LM 11		Apollo 16, expended 4/72