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GEORGE SILVER

Memo to: W. Tanner
From: J. Lawrence
Date: 6 October 1970
Subject: SKYLOTS (Skylab B Optical Telescope System)

The following listings supply information concerning LM and CM flight quality subsystems. The data supplied includes Part Number and Dash Number indicating change level status, S/N, location and system designation number. Apollo 14/15 and previously flown equipment are not listed. The chronological baseline is 21 August 1970.

A. Command Module

1. IMU - Part Number 2018601-231

-231	S/N	Location	System #
"	29	AC	
"	9	AC	
"	20	AC	
"	30	AC	219
"	22	AC	
"	34	AC	221
"	25	AC	222
"	24	AC	
"	31	AC	
"	35	AC	205
"	44	AC	213
"	48	NR	217

2. PSA - Part Number 2007200 - xxx

-161	26	AC	
151	17	AC	
"	24	AC	

151	24	AC	
"	19	AC	
"	7	AC	219
161	25	AC	221
"	14	AC	
"	8	AC	205
"	16	AC	213
151	23	NR	216
"	21	NR	217
"	22	NR	218

3. AGC - Part Number 2003993-xxx

071	41	NR	216
111	36	NR	217
081	39	NR	218
041	23	AC	
111	35	AC	
061	50	AC	
051	38	AC	
091	59	AC	219
061	55	AC	220
"	51	AC	
051	52	AC	205
061	47	AC	213

4. DKSY - Part Number 2003994-xxx

121	90/83	NR	216
"	95/94	NR	217
"	100/99	NR	218
"	75	AC	
"	76	AC	
"	86	AC	
"	84/89	AC	
021	60/52	AC	

051	45	AC	
121	82/101	AC	219
"	73	AC	
"	91	AC	221
051	88	AC	221
"	47	AC	
121	92/93	AC	
"	97/98	AC	205

5. CDU - Part Number 2007222-xxx

-231	20	NR	216
234	44	NR	217
-181	50	NR	218
"	17	AC	
231	23	AC	
"	30	AC	
"	39	AC	
181	23	AC	
"	16	AC	219
231	51	AC	221
181	14	AC	222
231	36	AC	205

B. Lunar Module System

1. IMU - Part Number 2018601-221

-221	38	GAC	614
"	39	GAC	615
"	33	AC	
"	28	AC	
"	32	AC	616
"	36	AC	617
"	37	AC	
"	12	AC	
"	18	AC	

2. PTA - Part Number 6007000-041

-041	19	GAC	614
"	20	GAC	615
	15	AC	
	17	AC	
	18	AC	
	5	AC	
	9	AC	
	16	AC	
	14	AC	

3. PSA - Part Number - 6007200-081

081	21	AC	
"	15	AC	
	19	AC	
	16	AC	
	22	AC	
	14	AC	
	13	GAC	
	8	GAC	614
	5	GAC	615

4. LGC - Part Number 2003993-xxx

061	56	AC	616
"	58	AC	617
051	48	AC	618
071	28	AC	
091	26	AC	
"	29	GAC	614
111	43	GAC	615
"	45	KSC	

5. DSKY - Part Number 2003994-xxx

091	68	AC	
"	71	AC	
"	40	AC	
121	70	AC	
021	55	AC	
"	49	AC	
121	44	AC	
091	81	AC	617
"	87	AC	618
"	41	AC	

6. CDU - Part Number 2007222-xxx

241	47	AC	616
221	48	AC	617
241	49	AC	618
221	24	AC	
261	28	AC	
"	32	AC	
221	27	AC	
251	18	GAC	614
261	46	GAC	615

The second and third part of your request has been quite difficult as far as getting reasonable numbers. I am submitting, for your information, essentially three different sets of numbers which don't appear to have too much correlation.

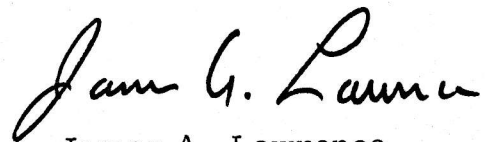
1. The first group of data is attached. It proports to show, "Cost Factors and Assumptions and Rationale for Cost Estimates."

2. The second set of data originated at MIT/DL and is as follows. The equipment for which you required information is shown in Column I: Column II shows the unit cost for manufacture of existing units: and, Column III shows cost of manufacturing 1 to 4 more units.


<u>Column I</u>	<u>Column II</u>	<u>Column III</u>
IMU	230K	345K
PSA	102K	153K
AGC	500K	750K
DKSY	130K	195K
CDU	140K	210K
PTA	40K	60K
Rope Module	30K/module	30K

3. Another ROME was supplied by DELCO Electronics. Their guess was 1.42 million per system including ropes. Delivery time to first unit would be approximately 15 months at a rate of one/month thereafter. Their estimate assumed that IRIG's and PIPA's would be supplied as GFE to them. They further assumed no engineering changes and all Apollo tooling and test equipment would be available.

They thought the most reasonable course of action would be to divert systems from LM-9, 13, 14, and 15. They would refurbish and provide certification checkout for approximately 15K/system. The estimated flight ropes for these system would cost 235K.


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