



**Aerospace  
Systems Division**

A. D. Little LRRR Contractor Parts List

NO.	REV. NO.
ATM 869	A
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DATE 20 August 1970	

1. This ATM is in response to CCP 242, Exhibit F-1, Item 27.
2. Parts and materials used in the Array are listed on the attached sheets which reflect the three subassemblies of the array for the Apollo 14 Flight Unit:
  - A. Panel Structure Assembly
  - B. Insulation Assembly
  - C. Retro-Reflector Array Assembly

All parts and materials listed are in accordance with:

- A. ATM 242D, "Approved Materials for ALSEP Equipment"
- B. ARD 447, LRRR Array II, Statement of Work and Requirements

3. Errata

Item 8, Retro-Reflector Array Assembly, should be changed as follows:

Was: Drawing No. C7028-003 (Qual Unit)

Is: Drawing No. C7066-003 (Flight Unit)

4. Drawing changes listed in this ATM were taken from the Configuration Data List supplied by ADL as part of the ADP for the Apollo 14 Flight Unit.

Prepared by:

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Approved by:

S. J. Ellison  
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# LASER RANGING RETRO-REFLECTOR ARRAY II

## APOLLO 14

Bondix Contract SC-749  
C-72461

### MATERIAL LIST

ITEM NO	ASSM.	PART NAME	MAT'L	BXA SPEC.	DRAWING NUMBER
1	1	Panel Structure	Aluminum 6061-T6		R7066-01-001
2	2	Hinge Bracket	" 7075-T6		C7028-01-003
3	2	Release Bracket	" 7075-T6		C7028-01-004
4	120	Closure Plug 1/4"	" 6061-T6		A7028-01-001 P1
5	100	" " 3/8"	" 6061-T6		" P2
6	20	" " 5/8"	" 6061-T6		" P3
7	10	Shear Bolt-Hex HD	Titanium Alloy 6AL-4V		ADL Spec 7029
8	4	Shear Bolt-Hex HD	" " "		" " 7029
9	14	Preload Indicating Washer	Alloy Steel		" " 7031
10	14	Hex Nut-Self Locking	Titanium Alloy 6AL-4V		" " 7030
11	AR	Adhesive	Narmo 7343/7139	ATM-242-110	
12	100	Alignment Pin	304 S/S Wire	ATM-242	
13	10	Pad	Velcro Pile	ATM-242-1101	
14	AR	Strip	Velcro Pile	"	

LASER RANGING RETRO-REFLECTOR ARRAY II  
APOLLO 14

MATERIAL LIST

Assembly  
Panel Structure

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ITEM NO.	QTY. PER ASSM.	PART NAME	MAT'L	BXA SPEC.	DRAWING NUMBER
2	AS	Tape	Velcro Hook	ATM-242-1101	
3	↑	Spacer	Dacron Net	" " -1104	
4		Double Alum, Mylar	Film	" " -1109	
5		Edge Filler Strip	Urethane Form	Appl Pending	
6		Cover	Dacron Cloth	ATM-242-1104	
7		Tape	Velcro Hook	" " -1101	
8		Tape	Velcro Hook	" " -1101	
9		Thread	Dacron	" " -1104	
10	↓	Tape	Teflon Temp-R-T	" " - 310	
11		Netting	Fiberglass Type 2530	ARD-447	
12		Kapton, Double Aluminized	Polyimide, Aluminum	ARD-447	
13		Beta Cloth	Fiberglass Type 15035 Finish 9362	ARD-447	
14		Beta Yarn	Fiberglass - Teflon Coated Type 753-24	ARD-447	
15		PYRE M.L.	Polyimide Wire Enamel	ATM-242-1106	
16		Insulation Assembly			E7066-02

LASER RANGING RETRO-REFLECTOR ARRAY II  
 APOLLO 14

MATERIAL LIST

Insulation Assembly

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ITEM NO 7028	QTY. PER ASSM.	PART NAME	MAT'L	BXA SPEC.	DRAWING NUMBER
5	100	Lower Mounting Ring	Teflon		C7028-002
6	100	Upper Mounting Ring	Teflon		B7028-001
7	100	Flight Prism	Amersil Suprasil I Grade Fused Quartz		Perkins-Elmer
8	100	Retaining Ring	Aluminum 1100F		C7066-003
9	50	Rivets	2017 Aluminum		ATM 242

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MATERIAL LIST  
 Assembly  
 Retro-Reflector Array

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