



**Aerospace  
Systems Division**

LRRR Task Sequence/Timeline  
for Littrow Landing Site

NO. ATM-874	REV. NO.
PAGE <u>1</u> OF <u>2</u>	
DATE 27 May 1970	

The attached LRRR Task Sequence/Timeline for the Littrow Landing Site provides a basic description of the astronaut operations required to completely deploy the Apollo 14 configuration of the LRRR. The times allocated are fairly conservative. The 6 minutes and 45 seconds total deployment time is well within the 10 minute time limit specified in the Statement of Work. Additional tasks (i. e., photography) will undoubtedly be interspersed with the LRRR deployment tasks, as presently defined, and the total LRRR deployment time will therefore be bound to increase.

Prepared by: Leslie D. Marcus

Approved by: [Signature]  
[Signature]



**Aerospace  
Systems Division**

NO.	REV. NO.
ATM-874	
PAGE <u>2</u>	OF <u>2</u>
DATE 27 May 1970	

LRRR Task Sequence/Timeline  
for Littrow Landing Site

ASTRONAUT ACTIVITIES

TIME  
(MIN : SEC)

00:20	Remove LRRR thermal cover from LM and discard cover
00:10	Release LRRR/LM adaptor tie-downs
00:20	Pull LRRR/LM adaptor from LM stowage and lower to lunar surface
00:10	Release LRRR tie-downs
00:20	Separate LRRR from LRRR/LM adaptor and discard LRRR/LM adaptor*
01:40	Carry LRRR to deployment site 300 feet from LM +Z landing leg
00:05	Remove leveling leg pull pin and discard pull pin
00:10	Deploy leveling leg and ensure leveling leg is locked
00:10	Place LRRR on lunar surface so that LRRR will be directed toward the subearth point when deployed (array facing nominally southwest prior to final LRRR emplacement)
00:05	Unstow UHT from Yo-Yo
00:15	Engage UHT in UHT socket
00:10	Remove LRRR dust cover and discard dust cover
00:10	Use UHT to emplace LRRR on lunar surface
00:10	Observe sun compass and use UHT to rough align LRRR
00:20	Observe bubble level and use UHT to level LRRR
00:10	Observe sun compass and use UHT to finely align LRRR
00:05	Disengage UHT from UHT socket
00:05	Check leveling and alignment
00:10	Report accuracy of leveling and alignment
01:40	Return to LM
<hr/>	
06:45	<u>Total Time</u>

(\* ) If the LRRR must be temporarily set down on the lunar surface (resting on the back support structure), following separation of the LRRR from the LRRR/LM adaptor, the astronaut should partially embed the back support structure in the lunar surface material (scrunch maneuver) to prevent toppling of the experiment.