



**Aerospace
Systems Division**

LRRR (300) Task Sequence/Timeline
for Hadley Rille Landing Site

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The attached LRRR (300) Task Sequence/Timeline for the Hadley Rille Landing Site provides a basic description of the astronaut operations required to completely deploy the Apollo 15 configuration of the LRRR (300). The times allocated are fairly conservative. The 5 minutes and 55 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. Marrus
L. D. Marrus



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Time
(min:sec)

Astronaut Activities

00:10 Release LRRR (300)/LM adaptor tie-downs.

00:15 Pull LRRR (300)/LM adaptor from LM stowage and lower to lunar surface.

00:20 Release and remove forward support of LM adaptor.

00:10 Release LRRR (300) tie-downs.

00:10 Separate LRRR (300) from LM adaptor and discard LM adaptor.

01:40 Use carry handle to transport LRRR (300) to ALSEP deployment site 300 feet west of LM.

00:05 Emplace LRRR (300) on lunar surface in vertical position.

00:35 Following deployment of ALSEP central station, use carry handle to transport LRRR (300) to LRRR (300) deployment site 100 feet west of ALSEP.

00:05 Emplace LRRR (300) on lunar surface in vertical position.

00:05 Unstow UHT from yo-yo.

00:10 Engage UHT in UHT socket while standing on array side of LRRR(300).

00:15 Unstow reflector array pull ring, remove reflector array pull pins and discard pull pins.

00:15 Use reflector array deployment knob to rotate small reflector array 180° to deployed position. Verify that small array is fully deployed and locked.

00:15 While standing on leveling leg side of LRRR(300), unstow leveling leg pull ring, remove leveling leg pull pin, discard pull pin and verify that leveling leg is fully deployed and locked.

00:10 Remove alignment mechanism pull pin, discard pull pin, and verify that alignment mechanism is fully deployed and locked.



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Astronaut Activities

00:15

Unstow dust cover pull ring, pull on lanyards to remove dust covers and discard dust covers.

00:10

Use UHT to emplace LRRR (300) on lunar surface in deployed position with arrays directed toward the subearth point (nominally south-westward).

00:10

Observe sun compass and use UHT to rough align LRRR (300).

00:20

Observe bubble level and use UHT to level LRRR (300).

00:10

Observe sun compass and use UHT to finely align LRRR (300).

00:05

Disengage UHT from UHT socket.

00:05

Check leveling and alignment.

05:55

Total Time