



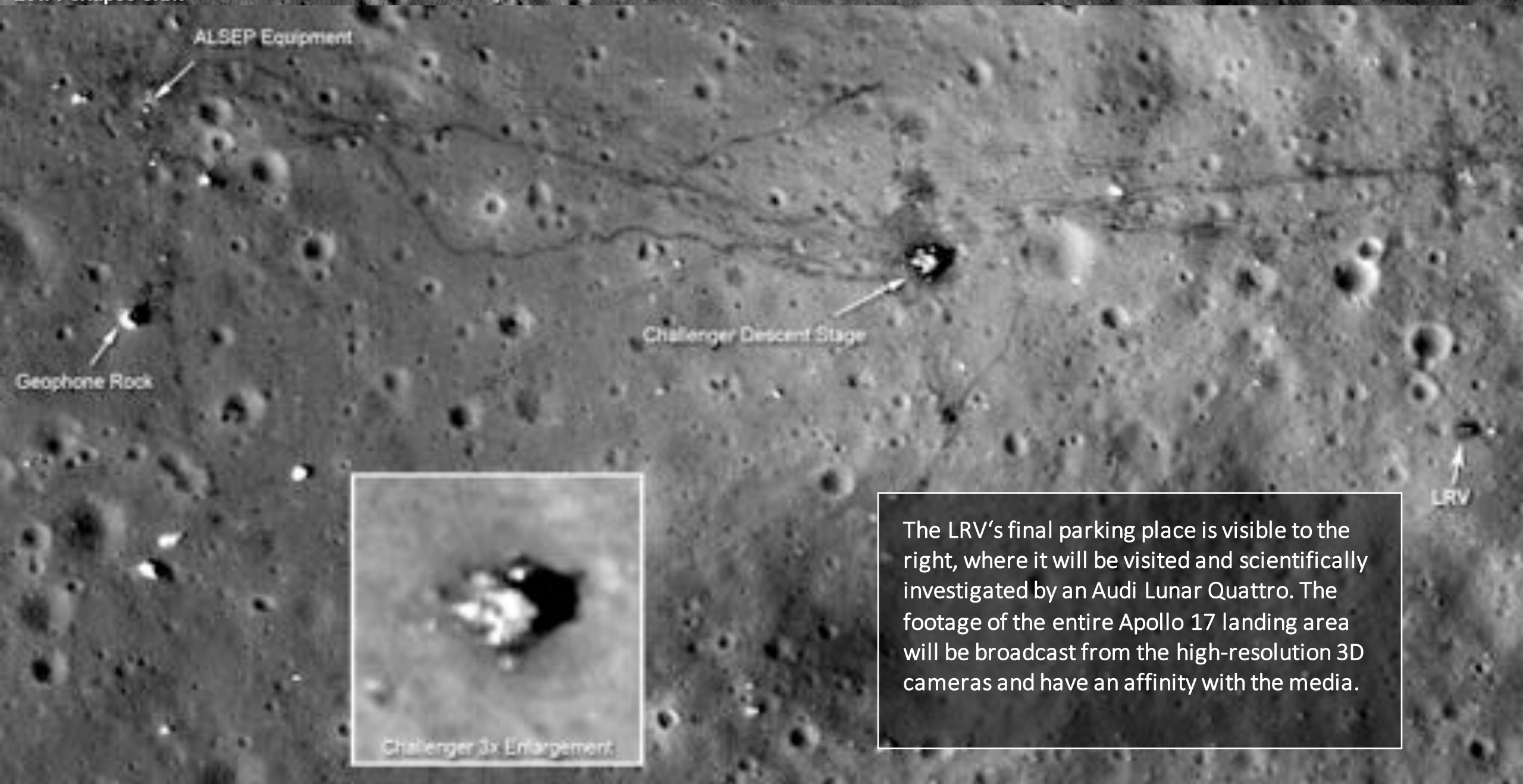
NEXT STOP: APOLLO 17

Re-visiting the Taurus-Littrow Valley
Continuing the Apollo Legacy



Exploring the moon where the last humans left off





Challenger 3A Enlargement

The LRV's final parking place is visible to the right, where it will be visited and scientifically investigated by an Audi Lunar Quattro. The footage of the entire Apollo 17 landing area will be broadcast from the high-resolution 3D cameras and have an affinity with the media.



AUDI LUNAR QUATTRO

Soon to visit his bigger brother, the Apollo-17 Lunar Roving Vehicle driven by astronaut Gene Cernan 44 years ago



Apollo-17 Commander Gene Cernan with PTS CEO Robert Böhme and Karsten Becker presenting the Audi Lunar Quattro at the Detroit Motorshow

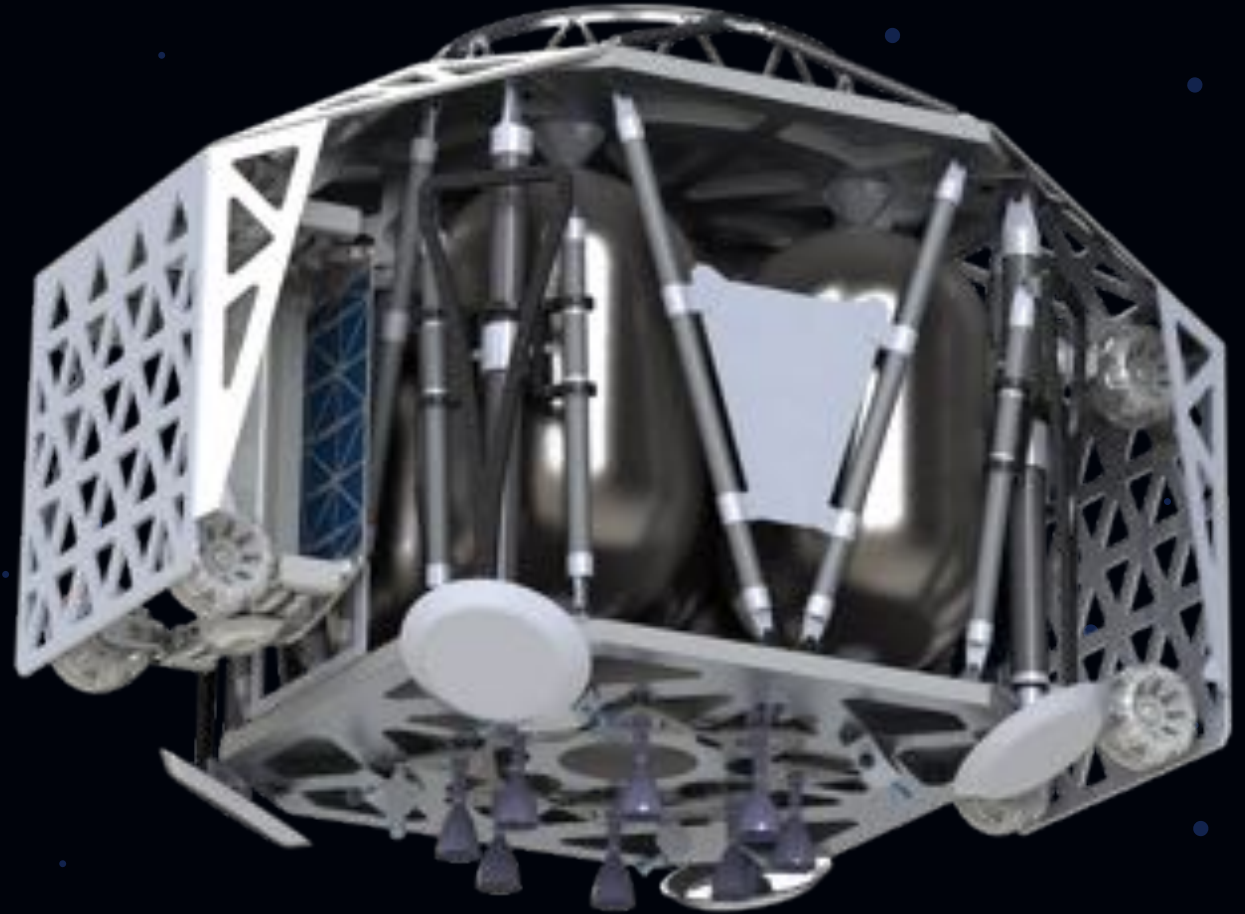


Discussing future flight control & roving techniques with the driver who already has been there



ALINA – THE AUTONOMOUS LANDING AND NAVIGATION MODULE

- **First european** autonomous soft-landing vehicle; delivering up to 100kg of payload to the lunar surface
- Modular design compatible with a range of commercial low-cost satellite launch vehicles from the US, Europe and world-wide.
- Capable of delivering technology to near earth destinations such as the Moon and more...





LUNAR PAYLOAD

- € 800.000
0.5 to 0.99kg
- € 750.000
1.0 to 1.99kg
- € 700.000
2kg

MISSION
TO THE
MOON

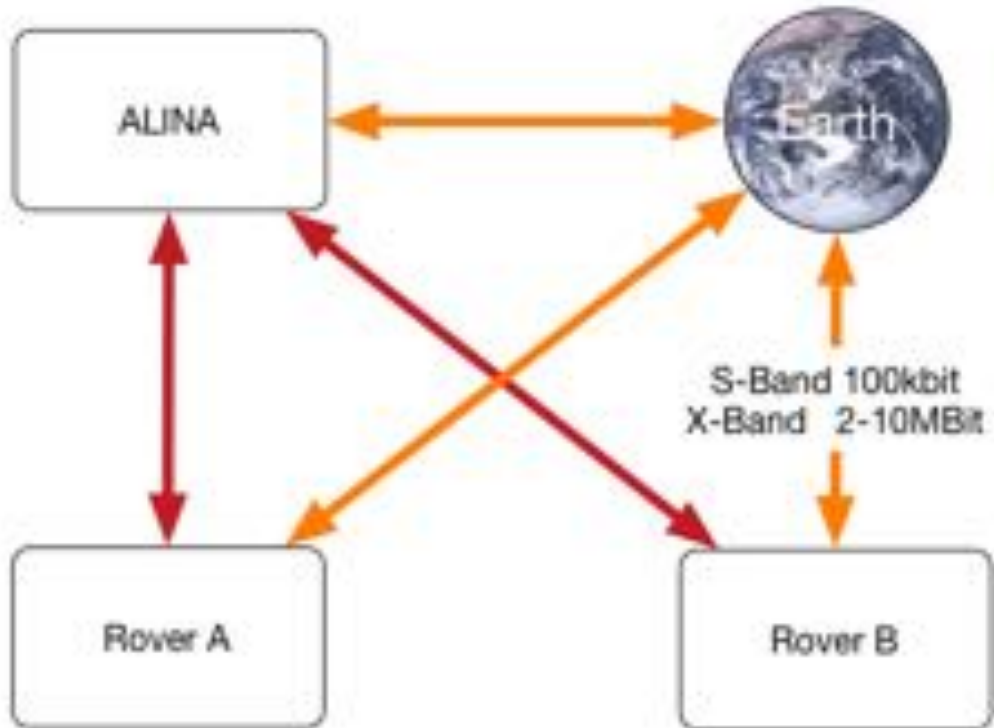


www.polarorbita.com



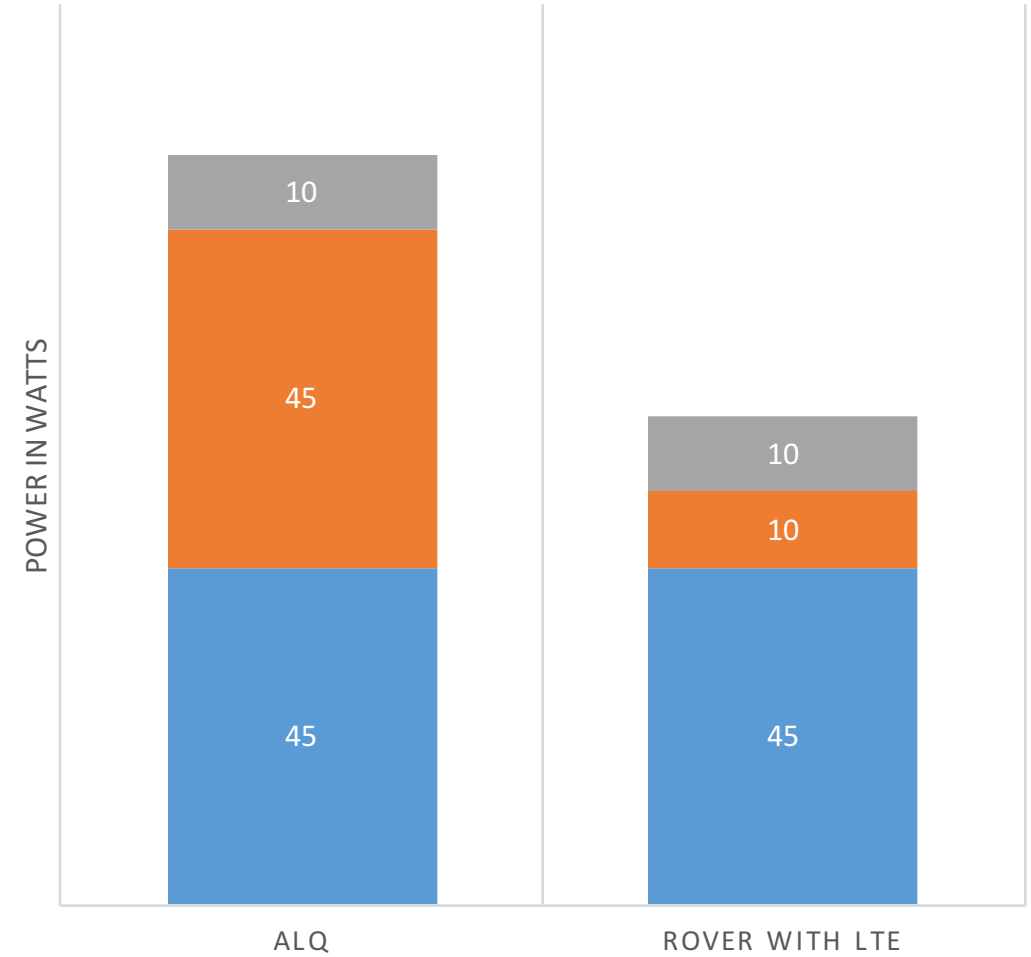
ESA ESTRACK Based communication

Vodafone LTE



POWER CONSUMPTION OF ROVERS

Locomotion Radio Processing



MISSION-1: RETURN TO APOLLO-17

MISSION
TO THE
MOON



Commander Gene Cernan

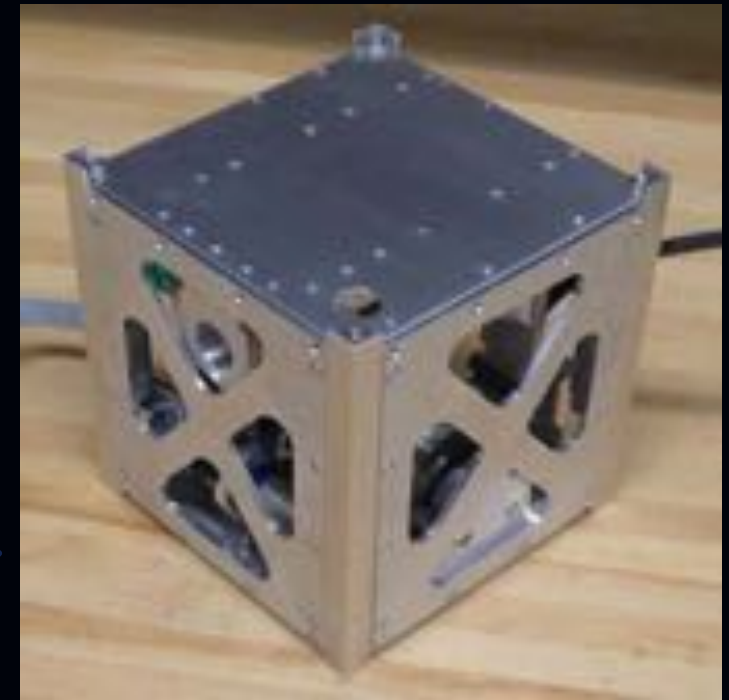


Dr. Jack Schmitt



Gedex Inc. – VEGA Gravimeter

- The VEGA Instrument is a traverse gravimeter following the developments of the original Apollo mission TGE (Traverse Gravimeter Experiment)
- It is highly mass and size optimized to fit into a cubesat sized unit with 2.1 kg mass and a power consumption of less than 5 watts
- The core objective is to demonstrate the technology and augment the Apollo 17 valley measurements as conducted by Dr. Harrison Schmidt in 1972







• Many PTScientists and engineers are working with us on making our first mission come true

What changes with Commercial Space? Why will it succeed?

- Government budgets stay limited -> So other - massive - budgets in industry and society are slowly being tapped to steadily develop new capabilities or make up for short-comings in government projects.
- This New Space industry can react and work super-fast – no Big Ship, little waste, efficiency.
- Today`s accumulated space expertise & Open Source technologies have made it possible for world class space teams to form & collaborate outside of the traditional space industry.
- Our Earth`s fascinating Moon generates volunteers (in every possible aspect)
- and brings out the best in us.

If such a New Space team manages to stay small enough and highly motivated with the right combination of experienced and rookie professionals – „anything is possible“. New Space can become one reliable pillar in much larger efforts, like an international lunar exploration effort. Dream Teams are forming around the globe.

**The Combination of all aspects is Game Changing:
Ability to build vital lunar infrastructure
AND receive financing
both inside and outside the government frameworks.**

In our humble opinion:
One Vital Pillar and Prerequisite to Succeed in a
Permanent Presence on the Moon

Ability to think both inside and outside the box
of accepted standards and customs



Back to the Moon
via a Commercial Approach

MISSION
TO THE
MOON

