

Free-TV from Moon

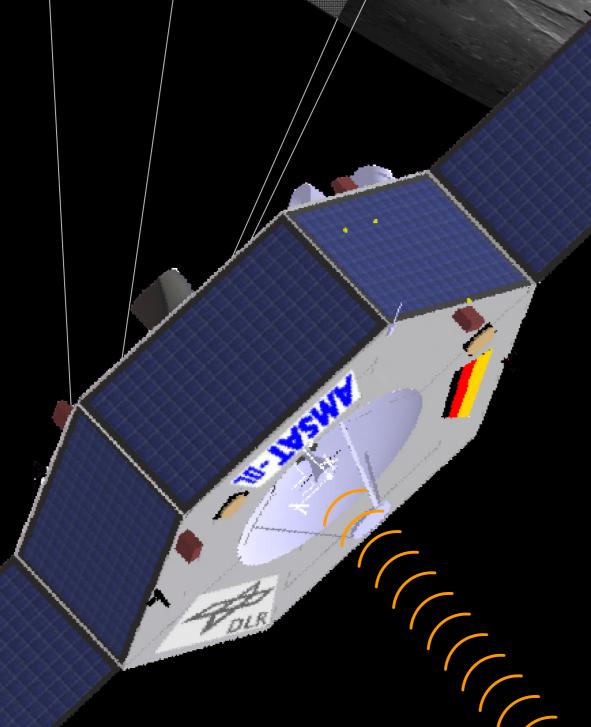
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Successfull cooperation between a private association (AMSAT-DL) and DL

Mission

- +Main Instruments:
 - + Slewable HDTV camera combined with a high gain antenna
 - + Sensor imaging infrared spectrometer for mineralogy of lunar silicates and temperature measurements
- + Camera for monitoring of impact flashes on lunar night side caused by meteoroid impact events
- + Camera technology test for interplanetary and planetary approach navigation
- +Transfer: using Weak-Stability-Boundary



<u>Satellite</u>

+Launch mass: ~670 kg into GTO

+Propulsion: 400 N, 1625 m/s delta-v

+Diameter: 2.3 m +Height: 1.7 m

~ 380 W (45° solar angle) +Power: 30 Mbit/s using TV dish +Data Rate: X-, S-, L-Band and UHF +Comm.:

+Desinged using Concurrent Engineering

Public Participation

- +Receiving live images from the lunar surface using a commercially available satellite TV dish at home
- +Utilizing data of all instruments
- +Spending free time to support the satellite project via AMSAT-DL
- +Public ownership due to donations

Cost

- +Partnership between AMSAT-DL and DLR
- +Satellite built by AMSAT-DL (analogue P3D)
- +Payload, science, launch and early operation phase by DLR
- > effective and attractive exploration mission with costs comparable to an Earth satellite

