### To The Moon

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by Miles Mann WF1F Marex

# NASA is going back to the Moon

- Unmanned rovers will start arriving on the Moon in 5 years (2010).
- Manned missions in 2015.

# Piggy Back on a Soft Lander

• ARISS and AMSAT should accept the challenge of installing a Mode B/J transponder on a Moon rover lander.

### Goals

- Install an operational SSB Transponder on the moon.
- Support Modes B, J and possibly 1.2 ghz uplinks.
- Support limited telemetry
- Keep it simple

### Moon Base Setup

- Antennas 2m, 70cm, 23cm, Gain 9 dBd
- Transponder 50k bandwidth
- Down link power, Minimum 25 watts

### **Ground Station**

- This will not be for beginners, but it will be much easier than EME.
- Antenna 2 meters, 2x16, 15 dBd
- Antenna 70cm, 2x16, 15 dBd
- These values are only rough estimates.

### Audience

- It is difficult to calculate the number of users that will try the Moon repeater.
- There hundreds of active EME Moon bounce stations.
- On the web I found 138,000 hits on the word Moon bounce.
- Hams are monitoring satellites on Mars with 18dbic antennas.

# If we can get a free ride

• Lets go for it.