



MISSION BRIEFING

To: Commander, Mars Base Alpha

A resupply vessel, bound for Mars Base Bravo, has crash landed some distance from its destination. Due to the hazardous environment and distances involved, it has been decided that a robot should be sent instead of using astronauts.

As Base Bravo lacks the proper robotics equipment, it will be your task to design and construct a robot that can find and retrieve the resupply vessel and transport it to Bravo.

Your robot will need to:

- Navigate through the roads of Alpha to safely leave the town in your base
- Cross the mountain ridges that don't yet have navigational markings
- Pass through the valley, avoiding the large rocks scattered around
- Find the resupply vessel in the plains area
- Collect (pick up and carry) the resupply vessel; and
- Deliver it to Mars Base Alpha

Your robot should be autonomous enough so that it can succeed in its mission in the event communication with it is lost.

Your assistance in this matter is greatly appreciated. Successful delivery of the resupply vessel to Bravo will help ensure those astronauts don't run out of food.

Additional documentation further describes each of the various challenging conditions that will be faced which can be found at <https://pbaumgarten.com>

Yours truly,

A handwritten signature in black ink, appearing to read "Elon Musk".

Elon Musk