

## **Landing**

by Ian Mallett

Jebediah realizes something is wrong. This is what happens when you don't do the math. Jebediah's spaceship is on a one-way mission to a base moonside and now, just 1000 precious meters below him, the dusty gray surface is approaching rapidly.

What Jebediah has just belatedly realized is that his ship lacks adequate fuel to make the descent. Too late to regain orbit, too little to land, Jeb is out of options.

Jebediah powers up his SAS system, and the whir of the capsule's three reaction wheels ascends to an anxious hum. Once they reach full speed, Jeb twists the attitude control stick and the craft rotates against their angular momentum, lining up the ship's rocket nozzle against its decent vector. There's nothing for it now. He punches the gas.

Hydrazine monopropellant hits an Iridium catalyst, and the resulting 800°C fireball blasts aft. Jeb holds down the throttle, face distorting under three Gs. The surface is alarmingly close now, and the altimeter is still clicking downward. A loud thunderclap signals the end of the reserves. Not enough. Jeb floats from his seat in free fall.

In a flash of inspiration, Jebediah engages the autostabilizer and opens the hatch. The stars glisten overhead, unobstructed. Lights from the base are visible to the naked eye below. He crawls outside, takes one last look at the ground, and leaps into the void.

The capsule falls away below him, and Jebediah engages his RCS MMU, firing the microthrusters upward. It's going to be close. Below him, the capsule impacts the surface at 90m/s, throwing debris high in the low gravity. 40m/s, 30m/s, 20m/s, 10m/s, then Jeb lands hard, rolling backwards to soften the blow.

A moment passes.

Jeb stands up. The lights of the base twinkle perhaps 2km distant, but for the moment at least Jeb stands amid the wreckage, still alive.