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### Overview

TI Lander is an arcade game somewhat similar to the classic Lunar Lander game. You are in command of an unmanned 700kg lander that will be used to explore different planetary bodies with increasing gravitational pull.

# Gameplay

There are five different "planets" in the game each of which has five different landing areas with increasing levels of difficulty. In addition, the gravity of each planet increases progressively, starting with the equivalent of Earth's moon's gravity up to Jupiter's gravity. Your lander is equipped with one main thruster as well as two lateral smaller thrusters. The main thruster will affect the vertical velocity of the lander and counter the planet's gravitational pull, while the smaller thrusters will affect the horizontal velocity.

The game screen will show the current area's terrain, with a different color for each planet. The landing area will be green. The top left of the screen will display the current level (1-5), current area (1-5), and the current gravitational level. The top right of the screen will show the remaining fuel, which initially starts at 500 units, as well as the horizontal (Vx) and vertical (Vy) velocities in m/s. A negative velocity indicates either a left (Vx) or upward (Vy) motion. Next to each velocity display is a number in between square brackets [n], which indicates the maximum &landing Vy for the current gravity. Vx should always be between -1 and 1 inclusive.

You should attempt to land within the velocity specifications on the green landing strip, and if successful then you will move to the next area or planet depending on where you are in the game. Should you crash, i.e. come in contact with the terrain, then you will be given the option to retry the landing again.

You will not have to restart the whole game. If during the course of the landing you get too close to the top edge of the screen, then your lander will be "lost in space" and you will have to try again.

No scores are maintained. Your goal is to reach and successfully land in level 5 area 5 (Jupiter gravity), which I believe is close to impossible (I did say "close" however...)

# **Controls**

You can either use the joysticks or the keyboard to control the thrusters. Left or right joystick fire the corresponding contralateral small thruster, while either up or down joystick will fire the main thruster. It is possible to fire the main and one of the lateral thrusters simultaneously (Note: this is not possible with keyboard control).

With the keyboard, the left and right arrows control the corresponding contralateral thrusters, and the ";" key fires the main thruster.

Each firing of the main thruster consumes 10 units of fuel, and the lateral thrusters use 5 units. When your remaining fuel reaches 50 or less, a repeating warning beep will be heard to alert you of impending thruster shutdown. Of course, when you run out of fuel, then you will be at the mercy of the planet's gravity and will likely slam onto the surface at unhealthy velocities....

### **Program Requirements**

- A) TI-99/4A with E/A cartridge, 32K RAM and Disk Drive or CF7+ / Nano PEB
- B) Emulator like Classic99 or Win994a

### **Optional Hardware**

Joysticks, Speech synthesizer

# Running the Program

The files TILANDER and TILANDES should be on the same disk/directory.

Using the Editor/Assembler Module go to option 5 and type **DSKn.TILANDER** then press ENTER.

# Final & Notes

TI Lander is freeware, and you are welcome to modify it and distribute it as you see fit. The source code is included, along with all the necessary C99 libraries. There is also a batch file (TILANDER/P) that can be used with Tom Bentley's C-Loader to create an E/A 5 executable.

Comments and suggestions can be E-Mailed to me at wmaalouli@attbi.com.