VOYAGER EXCURSION (c) 1980 by Eric Popejoy PROGRAMMA International, Inc.

MEMORY REQUIREMENT: 16K

VOYAGER EXCURSION is a HIRES, REAL-TIME, LUNAR LANDING GAME. After you boot up the disk you will see a message telling you to stand-by. At this time, the computer is processing the initial program information. Then there will be another short 10 second or so delay while the HIRES screen is drawn. After the HIRES screen appears you will see GREEN AREAS forming at the bottom of the lunarscape. These GREEN AREAS are the BONUS AREAS. When you land in a BONUS AREA you get extra points.

Notice that the lunarscape is divided up into areas marked; X1, X2, X3 and X4. Your landing points are multiplied times the number after the 'X'. There are three score readouts. The game displays the highest score achieved while playing, the score of your last landing, and the present landing score when you land.

The VOYAGER MODULE appears at the UPPER LEFT portion of the screen. You start the first game with 2000 UNITS OF FUEL. PADDLE 0 controls the thrust, PADDLE 1 controls the direction. The vertical and horizontal speed are displayed at the bottom of the screen. A NEGATIVE vertical number indicates upward thrust, a NEGATIVE horizontal number indicates movement to the left. A POSITIVE vertical speed number means the VOYAGER MODULE is falling. A POSITIVE horizontal speed number means the MODULE is moving to the right.

THE OBJECT of the game is to land the VOYAGER MODULE at as slow a vertical speed as possible and within a safe horizontal speed range. The object also is not run out of fuel. If you do, you will crash into the lunar surface. There is a GREEN DIRECTION NEEDLE in the center of the screen. It is a FINE TUNING TYPE gauge that tells you if you have a slight tilt in your direction. You will understand how it works when you play the game. Even though the MODULE seems to be straight up and down, it is not, unless the GREEN NEEDLE is also straight up and down.

The game will automatically restart itself after every landing

VOYAGER EXCURSION LOADS IN THE FOLLOWING MANNER:

subroutines might not work properly and everything will explode.

GUN OVERHEATING

Most real guns will overheat in rapid fire and must cool down. The overheating parameter is nearly disabled in the original game. You can turn it on by POKEing a number into location 4491 (\$118B). This disables the gun if more than a maximum number of bullets is in the air. The original number in this location is 51 (\$33). The maximum number of bullets in the air will be one fifth of the number in this location. Example: POKE 4491, 15 allows three bullets to be in the air at once.

You will find that just a few bullets will crash into each other as they leave the gun during rapid fire. This is another way that gun overheating is simulated. You have no control over this effect.

NEAR MISSES

Some antiaircraft shells have proximity fuses that explode if they get close to a plane. The shells in this game have the same ability. If they get close to a plane, then the plane will blow up. The closeness required is a number in location 3755 (\$EAB). This number is originally 4. It can be decreased to 1 for a hard game, or increased to 10 or 15 for an easier game.

NUMBER OF AIRPLANES

A new plane is created about once every 32 internal program time units. The frequency of new planes can be adjusted by POKEing a number into location 4585 (\$11E9). This number is originally 31 (\$1F). Put 15 in here for twice as many targets; 63 for half as many targets; or 7 for four times as many targets.

DIRECTION OF FLIGHT

One fourth of the planes fly from right to left, permitting collisions. This fraction is determined by location 4652 (\$122C).

Fraction Flying Left	Number to Poke
almost none 1/4 -original game 1/2 ALL	255 (\$FF) 192 (\$CO) 128 (\$80) 0