Using the Alto Systems:

Each reproduction Alto is running multiple copies of the Contralto emulator, as well as a Javascript version of Smalltalk-78 running SimKit and a bitmap graphic editor. Only one of these is visible at a time, but at any time you can switch between them by pressing the "Win" key on the keyboard in combination with the numbers 1-7. The available systems are:

Win+1: Bravo. By default this loads up a sample document that can be interacted with.

Win+2: BravoX.

Win+3: Laurel. This loads up the Laurel Tutorial which is a good introduction for new users.

Win+4: Mazewar

Win+5: Non-Programmer's Disk. This gives you manual access to SIL, Icarus, Draw, and Neptune.

Win+6: Pinball

Win+7: Javascript Smalltalk-78: SimKit and Bitmap Editor

Bravo:

Bravo will be automatically started with a training document that describes how to use Bravo (so it is in some sense self-teaching). Further reading materials can be found on Page 37 of Alto_Users_Handbook_Sep79.pdf (bitsavers.org). (There is a handy cheat-sheet on Page 69).

Bravo X:

Bravo X will automatically start when the system boots; the manual is at: bitsavers.org/pdf/xerox/alto/BravoXMan.pdf (you may wish to skip to page 30 in the PDF, since the prior pages cover various details not important for emulator use.)

Laurel:

Laurel will automatically start with a Tutorial set of mail files which guide the user through basic use of the e-mail client. Further reading materials can be found on Page 70 of Alto_Users_Handbook_Sep79.pdf (bitsavers.org).

Mazewar:

Mazewar will only function on the two systems nearest the back corner of the exhibit. When started (or restarted) it will ask you if you need instructions, and then ask you for a player name (enter whatever you like). Start only one system at a time: The first system started will become the server after about 30 seconds. After 30 seconds, start the second system, and it should connect to the first – you will see both player names below the 3D maze view. If you do not see both names, the systems did not connect; try resetting the emulated systems (Ctrl+Alt+R) and starting them again.

The game provides a first-person view of the maze, the user can turn in 90-degree increments and move forward and backwards corresponding to the direction they are currently facing. The object is to find other players and shoot them. The game is played with the keyboard and the mouse:

Keys:

S – Turn Left

D – Go forward

F – Turn Right

G – Go backward

The mouse buttons are used to fire and "peek" around corners:

Left – Peek Left

Middle – Shoot (you will not see a projectile but if another player is in sight they will be hit)

Right – Peek Right

To start a new game, reset the systems and start over at the beginning.

Non-Programmer's Disk:

This will boot to the Alto Executive command-line prompt (">"). From here you can start a number of programs (this is intended to be used by Experts during live demos). To start one type one of the following names at the prompt, followed by **Enter**.

Icarus2 – The IC layout package

Draw – a Spline-based drawing program (see Page 106 of Alto_Users_Handbook_Sep79.pdf (bitsavers.org))

SIL – a drawing program specialized for schematics and diagrams.

Neptune – a simple graphical file manager (see Page 155 of Alto_Users_Handbook_Sep79.pdf (bitsavers.org))

Pinball:

This will boot into a graphical Pinball game. The basic instructions are detailed on the first screen; hit **Tab** to start a new game. The left and right **Shift** keys control the bumpers, and holding down **S** will fire the ball.

Troubleshooting:

Ctrl+Alt+R can be used at any time to reset the system that is in use, in case a program crashes or gets into a weird/unusable state.

There is a reset button on the rear base of the monitor, which will reboot the entire system. This will reset all of the emulated Alto systems to their initial state.