

## **Using the Head-Mounted Display (HMD)**

You will undoubtedly develop procedures, which you feel most comfortable with and which work best for you but here are some guidelines ...

- 1) Select HMD as the Display Device on the EIMPACT Setup screen (Type [S] from within EIMPACT. Set the time for the simulation to be no more than 3 minutes from the setup screen also.
- 2) Have the visitor sit in the chair which is used for performing VR.
- 3) Depending on your time constraints, you can optionally explain in simple terms how the HMD works, and what they'll see during the EIMPACT simulation and what to do to control their flightpath.
- 4) Have the visitor sit in a comfortable position and grasp the Flightstick.
- 5) Place the HMD on the visitors head and tighten very carefully. Adjust it to be loose but secure. Adjust the IPD for the user by turning the knob on either side of the front of the HMD and asking the user when they see the clearest image. The IPD (Inter- Pupillary distance) adjusts how far apart the display in each eye is from each other . Children's IPD will be closer than adult's IPD. If you're having a group of visitors of nearly the same age (Or students in the same grade) at a time, you'll probably only need to adjust the IPD for the first one, and assume that all others are identical or nearly the same.
- 6) Instruct the visitor to start the simulation by pressing the Flybox trigger.
- 7) When the simulation ends, carefully remove the HMD from the users head and prepare for the next visitor.

## **Computer Operation Notes**

The Octane/MXI Computer should be left on continuously (24 Hours a day) since a power surge during power-on, and power-off can create the largest chance of system failure. All other Virtual Reality Station components (Such as the video monitor's) may be powered down during periods of non-use. In the event that the OCTANE/MXI computer must be powered down, it is very important to shut down the computer using the software shutdown command before power is removed from the unit. If the computer is not shut down properly, damage could occur to the computer's disk files or disk operating system. It is important to provide sufficient ventilation to the Octane/MXI computer to prevent overheating. The Processor and Graphics subsystems in the Octane/MXI workstation are far more advanced and of a higher performance than those in a standard personal computer.

## **Head-Mounted-Display Notes**

- 1) It is probably best to let very young visitors fly the flight simulator cockpit rather than use the HMD since their small size usually places them out of range of the head tracker causing the display to jump and jitter. The upgraded EIMPACT software enables very fast and easy switching between HMD and Cockpit

modes. If a visitor complains of getting dizzy or nauseous, simply instruct the visitor close their eyes and then stop the simulation (Upper case [Q] ) and remove the HMD.

- 2) The MAEL Attendants should have the option of refusing Virtual Reality flights to students who appear intoxicated, appear under the influence of drugs, or who have mental problems which would make them a danger to themselves or to the Virtual Reality Station Hardware.
- 3) It is a good idea to CLEAN the HMD (The parts which come in contact with the head) with an approved cleaning solution (Consult the V6 HMD's manual) at least once a day (At the beginning or end of the day) during periods of heavy use.