

## APPENDIX I

### Video Display Terminal (VDT) Workstation Guidelines

**Chair:** Chairs should have an adjustable back (height and angle) to provide support for the user's back, especially in the lumbar region. High-back chairs provide extra support for the upper back and neck. Chairs should have easily adjustable seat height, which should be adjusted to permit the feet to rest flat on the floor with the upper legs parallel to the floor. A footrest may be needed by some people to achieve this position if the work surface is too high and is not height adjustable. Chairs should have a five-star base for stability and casters compatible with the floor surface (hard casters for carpeted surfaces and rubberized casters for use on hard floor surfaces). Well-padded T-armrests with adjustable height and width are recommended for intensive computer users. To prevent contact stress when the user is seated, the front edge of the seat pan should not contact the back of the lower legs behind the knees.

**Work Surface:** Work surfaces should be large enough to accommodate all necessary equipment and provide proper viewing distance between the monitor and operator's eyes. An adjustable keyboard platform should be used to increase depth and to provide proper keyboard angle and height. The edges of work surfaces should be rounded or padded to minimize contact stress on the hands, wrists, forearms, and elbows. There should be enough room under the work surface to allow free leg movement. The height of the work surface should allow the forearms to be parallel with the floor when working at the computer, while not forcing the shoulders to be elevated. If the work surface is too high and the chair seat must be raised to match, a footrest can assist in supporting the feet as well, allowing the employee to sit back in his/her chair.

**Keyboard/Input Device:** The keyboard and pointing device (mouse or trackball) should be at the same level and directly in front of the operator. The height of the keyboard and input device should allow the operator to position the forearms and hands parallel to the floor with the fingertips resting on the home row keys. This can be achieved by using an adjustable keyboard platform or by adjusting the height of the chair and/or table. A padded wrist rest for the keyboard and input device should be used to prevent the operator's wrists from coming in contact with the work surface when the arms are at rest. Users should avoid overreaching by keeping input devices close to the body.

**Monitor (Terminal):** Computer monitors should be positioned directly in front of the operator, at a comfortable viewing distance, with the top of the screen approximately at eye level. Those wearing bifocals or other multi-vision glasses may prefer a slightly lower monitor height. When two monitors are used, they should be placed close together and their combined screen area should be centered in front of the seated work position if they are used equally; if one monitor is used more than the other, it should be moved closer to center. Monitors should have good contrast, sharp focus, and be

free from flicker and glare/reflections to minimize eyestrain. Direct glare—bright light from outside windows behind the monitor(s)—may also create eye strain.

**Document Holder:** Document holders should be located at eye level, close to the monitor and at the same height.

**Phone Head Set:** Headsets reduce awkward neck and shoulder postures, notably by eliminating the need to cradle the phone between the shoulder and chin. Headsets are particularly beneficial for people who use the telephone for long periods of time or work on the phone and computer or with paper documents simultaneously.

**Lighting:** Excessive overhead lighting can cause glare and eye discomfort. Dimming overhead lights and using a task lamp can reduce eye fatigue. Monitor shades and glare filters may also reduce glare. Monitor contrast and brightness should be adjusted for maximum personal comfort.

### A Well-Designed Computer Workstation

