A touch of the VDTs

MILLIONS OF VDTs (Visual Display Terminals) are in use throughout the world, with millions more promised by that magic year of 1984!

Libraries are installing VDTs at an increasing rate, but how much thought and attention has been given to the harmful effects they could have on the operators?

Will VDT operators be able to combat the hazards associated with the operation of these machines? Or will the effects of tomorrow's technology become today's headache?

A report, prepared by the New York Committee for Occupational Safety and Health, 1980 (NYCOSH), states that 'unless companies that manufacture and use the machines begin to pay more attention to worker complaints, many millions of workers will soon be unnecessarily exposed to serious hazards'.

Maybe a point we should keep in mind is that it's only 30 years since asbestos was declared a 'no risk' business by the people who owned it!

The NYCOSH report states that the new office of the computer age could bring major improvements to working conditions. But the emphasis in the design of equipment, environment and work process is on increasing productivity, with little or no attention paid to work comfort and health. The report goes on to give practical advice on how to recognise and eliminate many of the hazards so that working conditions can be substantially improved. Here are a few of the major points:

Eye Strain

To eleviate eye strain, VDT operators should have a 15-minute break every hour (or a half-hour every two hours). Two hours is the maximum time that should be spent doing continuous screen work.

An alternative, is for workers to alternate — one hour working on the machines, one hour doing another kind of work involving viewing at greater distances and more body movement.

LA BUYS BINGLEY

THE Library Association (UK) has bought the publishing company Clive Bingley Ltd for £70,000.

This follows on from the transfer of the Library Association's Publishing Division into a limited liability company, under the name of Library Association Publishing Ltd, which will be a wholly owned subsidiary of the LA.

Clive Bingley himself sold the company two years ago to the K.G. Saur organisation. Mr Bingley will remain as a consultant of the new LA company.

(After hearing news like this, one wonders if the LAA should put in a bid for A & R!)
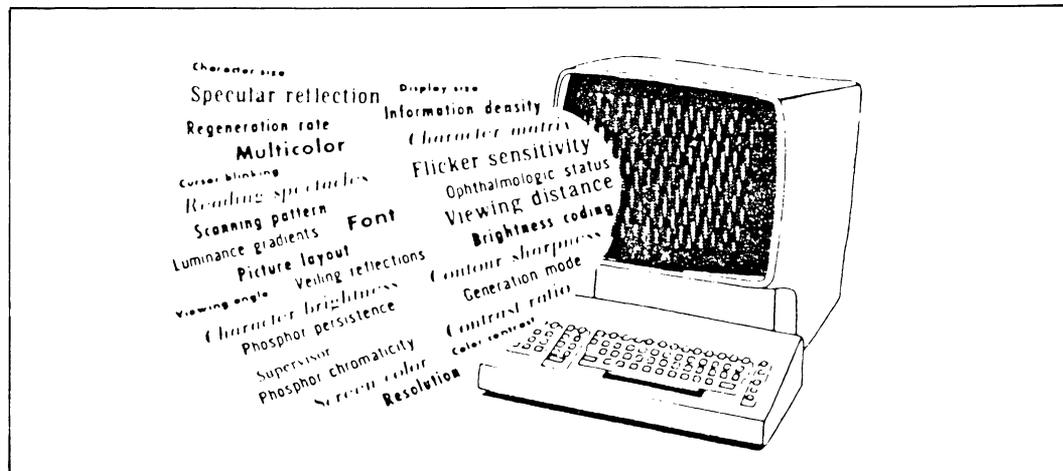
Glare

A significant cause of eye strain is glare on the VDT screen produced by light from windows, from shiny work surfaces, keyboards and lighting that is too bright or incorrectly positioned in relation to the machines. This reflected light makes it difficult to see the characters on the screen. This may also be a cause of neck and back pains as the operator contorts body posture to minimise the glare.

VDT machines should be equipped with non-reflective glass screens to minimise this kind of glare. Special clip-on glass screens are available for some machines. Plastic covers that reduce glare are also available, but they are not a good solution because they reduce the clarity of the image.

Various measures can be taken to prevent glare that is caused by direct light being reflected on the screen:
● Blinds or awnings installed on nearby windows;
● Relocation of machines or lighting fixtures;
● Installation of indirect lighting, correctly designed for screen viewing;
● Reduction of general lighting, without making printed copy difficult to read;
● Installing dimmers on overhead lighting so that operators can adjust lighting to the most comfortable brightness.

Contrast glare

Another kind of glare that causes eye strain is the result of a background that is too bright, such as a window or a white wall. To compensate, operators sometimes put their heads down to block the light and raise their eyes in order to look at the screen. This can cause back and neck problems. Another bad solution tried by some operators is the use of ordinary sunglasses. While these may improve viewing, they may pose a greater long-term hazard to the eyes.

Good solutions include dimming the lights, changing the location of the machine, painting or covering the facing wall in a colour and

texture that reflects less light, and installing a simple partition or screen behind the machine.

But if the lights are dimmed, the windows shaded and the walls darkened, the atmosphere may become depressing and perhaps more stressful in other ways. Before changes are made in the working environment, proposals should be discussed and agreed to by everyone who will be affected.

Dimming lights may also make printed copy difficult to read. If direct lighting is then focused on the copy, contrast glare results when operators look back and forth between the difficult brightness of the copy and screen. If the lighting and the screen are both equipped with controls to adjust brightness, the operator can find the balance that causes least strain.

Brightness controls are important, and if the machines don't have them the employer should be advised of their availability and requested to buy properly designed equipment in the future.

Flickering

Another important reason for brightness controls is to be able to control the flicker effect.

Increasing the brightness increases the flicker effect. While increasing the brightness may improve viewing, flicker is a cause of annoyance, stress and eye strain. The best balance can only be achieved if the operator can adjust the machine. There is no brightness that is best for all operators and all situations.

Screen size

To save money and space, many machines have small screens. In order to squeeze more information on the screen, character size is often reduced. At normal viewing distances, these small characters are difficult to read, sometimes causing eye strain, and often requiring the operator to lean forward. The