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## Bravery awards announced

A Cross of Valour, the highest decoration for bravery in Canada, has been awarded to Corporal Amédéo Garrammone of the Canadian Forces Base Halifax.

Corporal Garrammone is one of 13 persons whose acts of heroism will be recognized by the awarding of bravery decorations at a ceremony at Government House at a later date. Three of the recipients will receive the Star of Courage; one of the Stars of Courage will be presented posthumously. The other nine recipients will receive the Medal of Bravery.

The Cross of Valour was awarded to Corporal Garrammone, who risked his life for another member of the Forces, Private Bradley Quinn, who was being stabbed by three persons in Halifax, on November 4, 1978. Corporal Garrammone was knifed just below the heart when he tried to intervene in the attack on Quinn. He survived, after undergoing heart surgery, but Quinn died of his wounds. Corporal Garrammone is the eighth person to be awarded the Cross of Valour since Canadian decorations for bravery were established in 1972 and is the fourth living recipient of the decoration.

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## Rapid word processing system

With the launching of a new automatic word processing system, AES Data Ltd. of Montreal has become the first manufacturer of "multi-processing" systems in Canada.

Word processing involves recording information on a magnetic medium (tape, card, cassette or floppy disk). Once recorded, documents are easily corrected and edited without the whole text having to be retyped. The result is a final copy without errors.

The new AES C20 system has a more powerful memory than conventional systems. Its two rigid disks can each record up to 192 million characters or more than 40,000 standard pages of text. Several work stations are connected to one central unit, thus the term "multi-processing".

The system makes it possible to rapidly compose the text, make corrections and produce specialized copy involving signs and symbols. The components of this sys-



*This version of the C20 consists of four local work stations (each with a screen and an electronic keyboard), five printers, each with a speed of 540 words/minute, a line-by-line printer with a speed approaching 8,000 words/minute and a central unit (or central module) containing the microprocessor.*

tem are able to produce texts at a maximum speed of 300 lines a minute.

The AES C20 system is modular, and enables the user to begin with a basic unit and to add work stations as the need arises. The complete set is made up of eight remote work stations, eight local stations, 18 printers and a memory unit with two rigid disks.

The system, which took two years to develop, is one of the most advanced in this category of office equipment, says

the firm's president, Ron Snelling. It was designed to meet the most exacting requirements of editorial and secretarial work. It enables editors of scientific and technical publications, in particular, to handle complex formulas and standard text simultaneously.

The AES firm, founded in 1974, is a subsidiary of the Canada Development Corporation. In four years its sales have risen more than 1,000 per cent and export figures reached \$50 million last year.

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## Acid rain produces fertilizer for crops in southern Ontario

Although acid rain poses a serious threat to Ontario's lakes and forests, a report prepared by the University of Guelph, Ontario, says it actually helps farm crops in southern Ontario.

"At the moment, the sulphur dioxide in rain is actually benefiting plants," said Robert Sheard, a professor in Guelph's department of land resource science.

Proper levels of sulphur and nitrogen oxide usually are maintained in agricultural soil by using commercial fertilizer, he said. In southern Ontario, acid rainfall produces a similar effect.

The study says crops in southern Ontario would not be harmed by the sulphur in acid rain for another 500 to 600 years. Professor Sheard said the long-term effects of nitrogen are not known.

He said farmers in southern Ontario added sulphur to their soils to improve crop yields until about 80 years ago, when the spread of industry raised the sulphur content of soil.

In a related study, Professor D.P. Ormord found that plants were not damaged unless sprayed with a solution ten times stronger than the strongest acid rain yet recorded by the federal environment department.

Acid rain is produced when sulphur and nitrogen oxides mix with water under sunlight. Inco Ltd. of Sudbury, is the largest single source of sulphur pollutants in North America.

Most soils in southern Ontario contain alkaline elements — such as calcium and magnesium — that neutralize the acid.