



The old and the new. ACT Region's Operations Room, as it was, is pictured above. Compare it with the lay-out of the newly-opened Operations Room, left.

... and now it's radio by computer!

By Peter Windsor

THE Operations Room Staff's pride in their new 'toy' comes through as clear as the voice reproduction from the 'state-of-the-art' equipment they are handling.

"And why not," says Acting Inspector Peter O'Boyle, "they even had a hand in determining the colour of the paint and the selection of pictures on the walls."

The 'toy' is the Act Region's control centre with its new \$400,000 worth of gadgetry and computerisation that will meet communications requirements for the Region into the 21st century.

Peter O'Boyle has lived and breathed the project for many months.

The system has now become fully operational and is able to cope comfortably with the 150,000 telephone calls and 40,000 response situations arising in the ACT each year.

Electronic Services Branch head, Chief Inspector Peter Brittliff, said the system

was the first of its type operational outside the United States.

Designed by Motorola Electronics Australia Pty. Ltd., it is housed in an area three times the size of the ACT's former Operations Room.

"Such is the state of the technology that in theory the system can correct and repair its own faults so that the control room should never be out of action," Chief Inspector Brittliff said.

"Make no mistake about it, it has many benefits. Fundamentally, of course, the purpose of any police operations room is to speed incident response time.

"This it does, plus giving far greater clarity of voice, play-back facilities and the ability to patch one car to another so that there is a totality of communications.

"No-one need be left in the dark," he added.

Peter Brittliff said the new equipment had been needed for some considerable time. The former Operations Room had grown in stages up to 1975, but there had been very few improvements since then.

"Where hundreds of lines were needed under the old system, only seven now run to the main communications bank."

For the technically minded, the system operates from the main 497444 switch-board number and its extensions, direct lines to the 000 emergency centre, the Departments of Civil Aviation, security services, the ambulance, fire brigade and general purpose exchange lines, with direct telephone patching to any mobile vehicle through the radio network and instant recall of radio and telephone traffic. Each radio channel and telephone service is fully monitored by a voice logging recorder with a recording warning 'pip' tone presented to the caller on the telephone service.

Peter Brittliff said that, in addition, the system also monitored calls from numerous ACT recreational areas and the five computer terminals in the Centre provided access into the AFP, New South Wales Police and the Department of Territories and Local Government computer systems.

"The benefits are immense," he said. "The system must rank as perhaps the

Operator comfort is paramount in the new Operations Room, below, compared with the old facilities, below left.



most modern and functional of its type currently in use in Australia."

As Peter O'Boyle said, even the AFP's phenomenally successful nationwide 'Operation Lavender' could have been co-ordinated through the new Control Centre. 'Lavender' involved the simultaneous arrest around Australia of more than 30 people in a huge operation by the AFP against a group which allegedly imported \$40 million worth of hashish.

"Another immense benefit is its usefulness to aid our vital VIP protection function," Peter O'Boyle said. "Previously the communications channel used by VIP Protection could not be connected directly to ordinary police patrol cars.

"The Operations Room had to act as the relay point.

"Now we can receive a communication on one channel and immediately patch it through to a car on another channel or to a telephone link," he said.

Peter O'Boyle's pride in the new system is infectious.

"She's a beauty," he said. "The system has been designed after full and total consultation with police operators and the technical experts from Motorola."

He pointed out the conveyor belt which carries messages from one operating point to another and to the supervising officer. It worked almost without a sound.

He then took me around to the old room and switched on the belt system there. It chugged away like a thrashing machine.

"In the old system, everything was bolted to something else," he said. "Not only was it noisy, but it couldn't be moved, without great difficulty, into a different configuration.

"The new system can be transported and re-erected in any location," he said.

Peter O'Boyle looked ahead to even newer developments.

"It's a long, long way from December 1966 when the former ACT Police Force's first Operations Room opened in one room, with one operator per shift and just four differently coloured telephones for the various types of calls.

"Now, of course, it gives the AFP far greater control of its resources. And I've no doubt this system will be added to — and even further improved — in the years ahead."

It is already technically possible — as some of America's biggest police forces have proved — for each patrol car to be equipped with a visual display unit as well as direct voice communications.

"Think of that potential as an electronic aid to policing," Peter O'Boyle said.

IN FROM THE COLD ON ADP

By M. Humphrey, ADP Executive Officer.

WHETHER we like computers or not, they are an integral part of the modern day life and have become a necessity in many fields.

What is a computer and how can we better understand what it does?

In simple terms, a **computer** is a name given to an electronic filing system.

Around the home we have a number of filing systems. The refrigerator door and a magnet is a very popular, modern filing system on which can be stored such things as bills, memos, important things to do and birthday dates.

But what of the terminology?

Take 'input-processing-output' for example. The dictionary defines 'input' as 'data supplied to, or stored in, a computer'. Using our fridge door and magnet example, 'input' is the bill, memo etc. stored on the door.

The 'process' would be the order in which we physically store the bills and memos on the door. This could, in the case of bills, be the date by which each individual bill has to be paid. The 'output' would be removing the bills from the door and paying them by the due date.

If a reminder notice is received, which is another input, then we would process it by storing it with the original bill. The final output would then be the original bill and the reminder notice.

ANYTHING LEFT IN THE FILING SYSTEM LUV, I COULD DO WITH A BYTE!



All computers work in exactly the same way: Input-process-output.

The terms 'file, record and item' mean exactly the same in computer terms as they do in everyday life.

If we examine our electricity bill we see that it is made up of a number of items — the name and address of the electricity authority, the name and address of the householder, the date of the meter reading, the amount of units consumed, the tariff rate, the amount we are being charged, and the date by which we have to pay the bill.

All these 'items' form one individual 'record' — that is, the physical piece of paper that we know as the bill. It is totally complete in itself.

Records are usually held together in some sequence. In the case of the electricity bill, it may be a customer number, or it may be held in alphabetical name order, within suburbs. This collection of records is known as a 'file'.

Computers keep many different files — just as a filing cabinet may hold many different files. The important thing to remember is that a 'file' contains many 'records' which are made up of detailed 'items'.

The dictionary defines the word 'system' as a 'group of objects related or interacting so as to form a unity'.

A house could be described as a 'system', and the plumbing as a 'sub system' (complete in itself, but only part of the whole house). Other 'sub systems' would be the electrical wiring and the gas pipes and heaters.

A 'data processing system' often refers to the computer doing its input-process-output for one specific task, such as the electricity billing system.

'Computer system' refers to the computer and all its physical attributes, and includes the metal boxes that make it up.

NEXT ISSUE: The Hardware — the boxes that make up the computer.