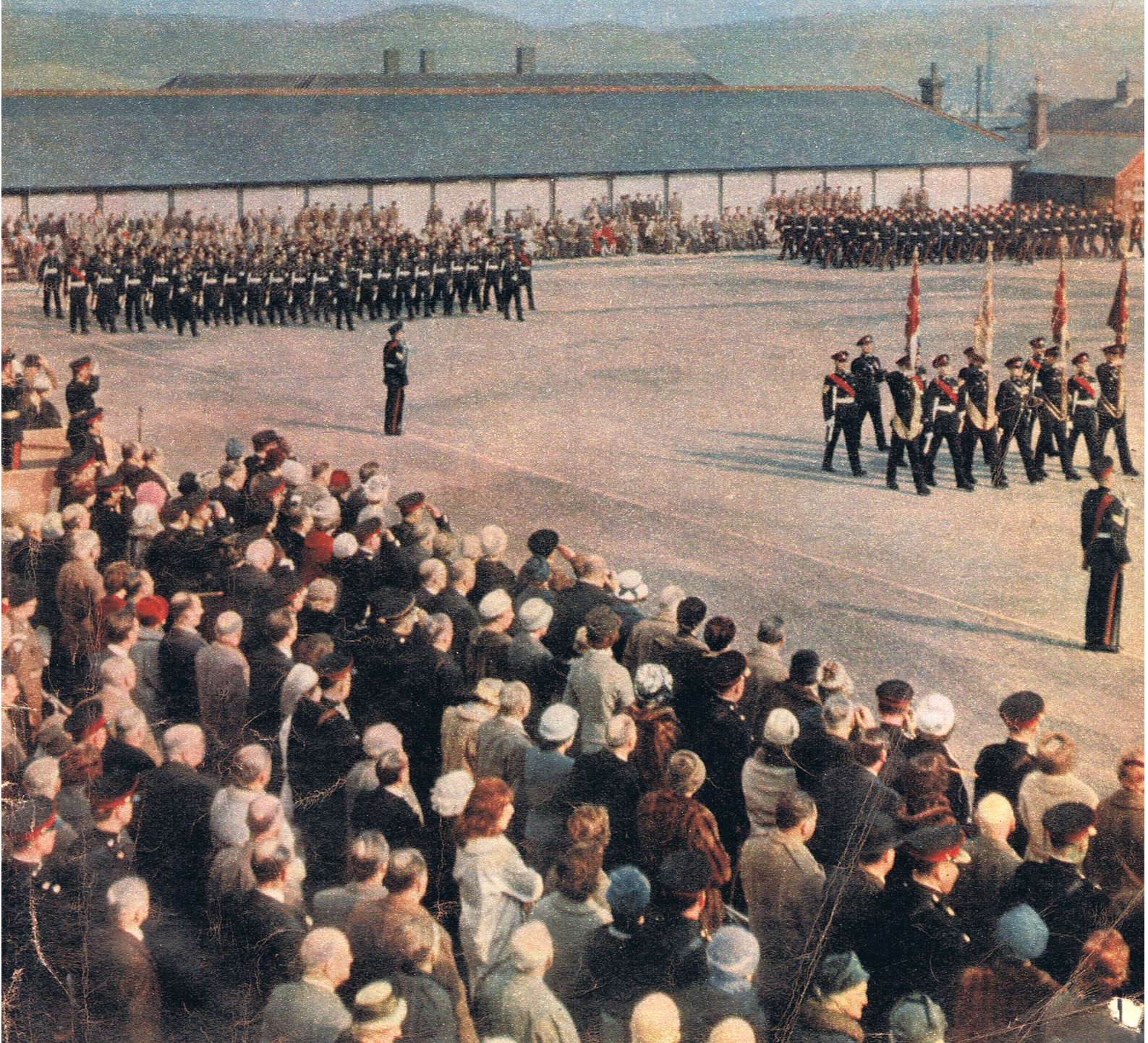


MAY 1961 ★ 9d

SOLDIER



Taking a deep plunge into the electronics world, an up-to-the-minute Royal Army Pay Corps now has a super computer which will condense hours of manual work on soldiers' accounts into mere seconds. It will save the Army £400,000 a year and 600 clerks. And, soon, the old pay parade may disappear

Ten Days' Work In 3½ Minutes!



Traditional and modern. Left: Cpl. C. Geal turns up the ledger to amend an account. In front of him are his reference books—Pay Warrant, Allowance Regulations and Manual of Pay Duties. Right: Cpl. D. J. Underwood "operates" an accounting machine in the computer process. He feeds in information — and electronics do the rest.



A GIGANTIC electronic "brain" which in 18 months' time will be dealing with the pay accounts of some 120,000 soldiers in the British Isles and North-Western Europe, has put the Royal Army Pay Corps well ahead of the other two Services—and indeed of industry—in this field of automatic data processing.

The computer, the only one of its kind in Britain, is housed in a specially designed new block at Worthy Down, in Hampshire, the former Fleet Air Arm station recently taken over by the Pay Corps.

Although the new computer, made in France to American design, has cost £600,000 and its buildings £160,000, the system will save £400,000 a year and solve the problem of recruiting some 600 clerks when National Service ends.

Apart from saving staff and money, the computer handles accounts incredibly more quickly than is achieved by present manual methods. For example, it takes an experienced clerk seven minutes to effect a corporal's promotion to sergeant—the computer does this in .001 of a second!

A soldier's account is reduced to a system of dots, invisible to the naked eye, recorded on one-inch-wide magnetic tape. A mere four inches of tape will contain an average account with all the soldier's and his family's

details, including income tax, insurance deductions and allowance book particulars.

The computer can change these items or add new information in split seconds. SOLDIER recently watched it make 310 similar and 61 miscellaneous alterations to 312 separate accounts in just over three and a half minutes. This task would take an expert clerk over 80 hours in ten full days' work.

Handled by the Royal Army Pay Corps' Electronic Accounting Development Unit, the computer is maintaining the accounts of the Royal Armoured Corps, The Parachute Regiment, Special Air Service Regiment and Army Air Corps, and is now converting the accounts of the Royal Engineers.

During and after conversion, unit casualties are transposed by Regimental Pay Office to punched cards from which information is converted at Worthy Down to a magnetic tape record.

This procedure will still be followed when soldiers' ledger accounts in all regimental pay offices are converted to this system, hence there will not be a revolutionary time-saving in giving effect to pay changes. But the soldier will benefit directly by receiving, instead of the present quarterly statement, a monthly and much more comprehensive statement, including full

particulars of income tax deductions. The "brain," which automatically rejects incorrect information, will also reduce the opportunities for human error in calculations.

The Electronic Accounting Development Unit—a mixed military and civilian establishment commanded by a colonel at the Royal Army Pay Corps—has been working on the automatic data processing system for over two years. Officers, non-commissioned officers and civilians have visited the United States to study American computing systems and have been attached to civilian firms for commercial experience.

Regular soldiers have been keen to join the unit and "nurse" the new infant, while at the same time increasing their potential within the Corps and in a future civilian life. National Servicemen have been employed mainly on short-term conversion work so that their eventual departure will not leave gaps.

After the regimental pay office accounts have been taken over the next application of the computer will be to officers' accounts.

In the meantime, while as yet working well within its capacity, the "brain" is to be used, manned by the Royal Army Pay Corps, to produce statistics from the 1961 National Census.

The Worthy Down computer can memorise the Army's 475 different rates of pay and allowances, 38 local overseas allowance tables (each of six different rates) and 350 other factors which can affect a soldier's pay.

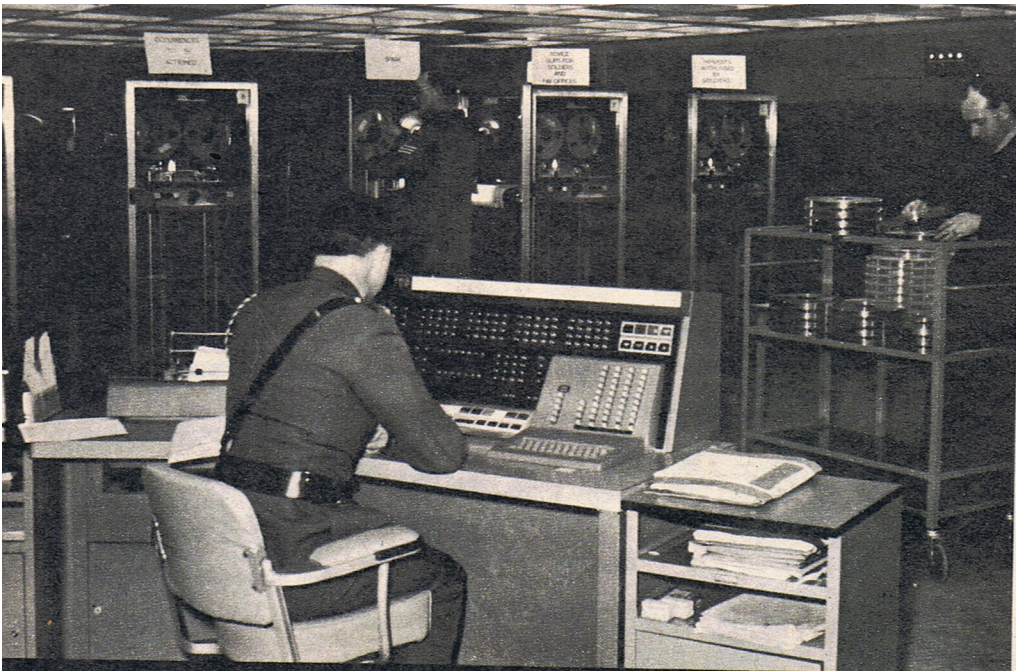
In one second it can make 8400 five-digit additions, 1250 five-digit multiplications or read 15,000 tape characters.

The modern buildings housing the computer centre at Worthy Down include a single-storey main block for the

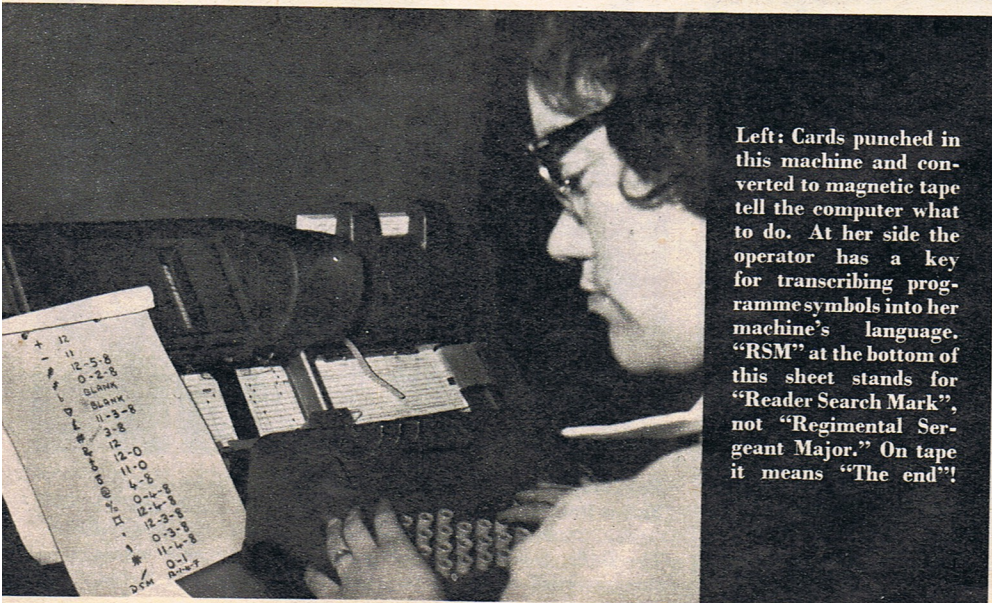
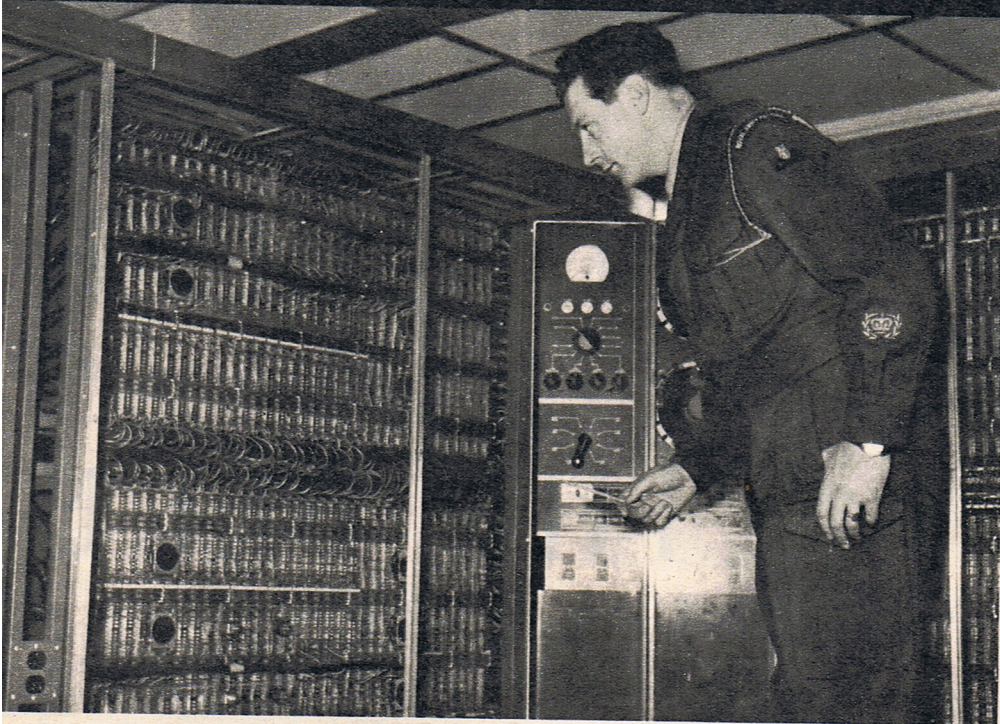
"brain" and its ancillary equipment and a four-storey general office block.

The computer room is automatically air-conditioned for the machine demands an equable temperature and humidity, and a dust-free atmosphere.

The Royal Army Ordnance Corps, too, is using computers, at Chilwell to control stocks of vehicle spares, and at Donnington for technical stores.



Captain C. W. J. Fey at the console which controls the computer runs. Four of the lights indicate machine and room temperatures and humidity. Below: Warrant Officer G. Thorning takes a look at the computer's complexities. That's a pencil in his hand and not a screwdriver!



Left: Cards punched in this machine and converted to magnetic tape tell the computer what to do. At her side the operator has a key for transcribing programme symbols into her machine's language. "RSM" at the bottom of this sheet stands for "Reader Search Mark", not "Regimental Sergeant Major." On tape it means "The end"!

TELLER



And The Pay Parade May Go

IN the not-too-distant future the Army pay parade, which has been criticised for years as a time-wasting, "bull"-laden, undignified procedure, may disappear.

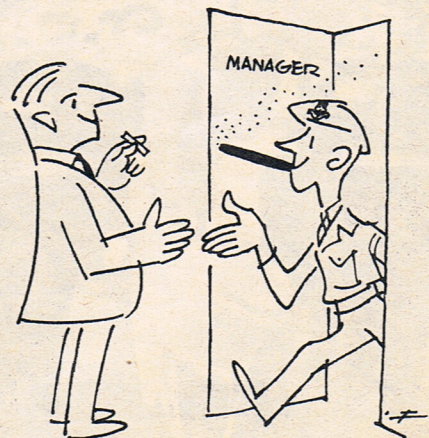
The Royal Army Pay Corps is carrying out experiments which may replace the present methods.

The first is payment by monthly cheques to warrant officers. This has not proved universally popular and a second scheme, the new bankers' credit system, is now being tried out in War Office and Far East Land Forces Headquarters. Income tax, insurance contributions and quarterly rentals are deducted at source and the balance credited monthly to a bank.

If this experiment is successful the bankers' credit system will be extended to sergeants and above, including the Territorial Army and Army Emergency Reserve, in the United Kingdom. Later, it may be adopted overseas, wherever banking facilities are available, and eventually it could possibly be extended to all junior ranks.

The Royal Army Pay Corps expects teething troubles—the soldier must have a bank account and may take a little time to familiarise himself with a monthly, instead of weekly, payment—but feels that the system will elevate the soldier's status and more aptly equip him for civilian life.

The man who prefers to draw weekly cash will still be able to do so, for the new scheme will be on a voluntary basis.



"... elevate the soldier's status ..."