NCR

CIRCUIT NEWS

Field Engineering Division

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NEW SOUTH LONDON F E CENTRE OPENS

January 1975 heralds in a new FED operation known as the South London Service Centre and is sited between Brixton and Streatham in Sulina Road. The manpower strength of the Centre is approximately 50 personnel and is made up from the staff of what was previously known as Croydon and Sidcup Centres. It will be managed by Bert Jarman and an Assistant will be appointed to him in the near future.

The premises is a self-contained F E D Centre and is located in a residential area. Excellent facilities have been provided for bench work with a light and airy atmosphere around. It is comparable with the workshop area of the Croydon Centre and is certainly a vast improvement on the conditions previously used by Sidcup Engineers. The Centre will house a comprehensive Stores Dept. to cater for E D P, V R C, and Conventional Equipment.

The Centre will provide some Technical training such as Self-Teach, basic Retail, and a number of short courses for Engineers who are based locally.

The D A D Office Manager is Ernie Pye who many of us know well from the efficient service he provided whilst in the A/AMD Stores at the Service Building, 1000.

The Centre's territory will cover both the East and West parts of the Greater London area South of the River Thames and the remaining parts of the old territories will be adjusted as follows:-

All of Surrey outside the Greater London Area will be added to the Guildford Centre territory.
Kent has been added temporarily to Maidstone until the new Sittingbourne Centre opens later this year.

You will remember, in a previous issue, we stressed the importance of maintenance and how little time remained for us to overcome the adverse results we had experienced up to September.

We now know the splendid results achieved during the final 2 months of the 1974 Contest produced the shot in the arm the Division badly needed. As a Division we obtained 100.6% of our quota for the year and the October/November Contest sponsored by Dayton brought in the highest score we have ever achieved in a Contest with a total of 5,903 New Agreements and 1,003 M 3 Renewals from personal effort alone.To single out any particular Centre or Engineer's achievements would be wrong for results such as these could only have come from a united team effort both in the Field and by our Administrative Offices at 1000. Congratulations are extended to you all for the first class achievements.

We already know 1975 will be a difficult year and we cannot rest on our laurels of the previous one. Salaries, transportation and training overheads have already escalated and as maintenance premiums provide the major proportion of our income we must all continue our efforts not only for a two month period, but throughout the coming year.

Details of this year's Contest will shortly be publicised but, in the meantime remember it is everyone's responsibility to PLAN - APPROACH-SELL TODAY FOR TOMORROW'S FUTURE.

F E D COMPUTER

F E D Computer has now gone live by producing Renewal Invoices of Small Users for the month of February. The Field Engineering Centres first involvement will be in approximately two months time when they will receive their first analysis of any accounts which have not been paid. These of course will be similar to the M3's you have received in the past. The benefit as far as the Centre is concerned is that apart from the individual documents which are given out to Field Engineers, a compiled detailed listing will accompany them providing a facility for easier control.
It is anticipated the Rotadex Cards will commence to be issued to Centres on a gradual basis in the near future.

CLASS 770

Class 770 Self Service Financial Terminals have recently been installed on territory. Apart from the two units sited at Juxon House Central London, Barclays Bank branches at High Street and Cornmarket Oxford are now live.

National Westminster Bank have two terminals at Woolgate House, E.C.2 and another located at their branch in Drapers Gardens E.C.2.

PARTS DELAY

Telex requests for urgent parts from Stores Dept., NCR 1000 are being delayed due to messages being routed incorrectly.
The correct number to use for the Service Building is 262752.

280/725 Store Level Control System

The C280/725 Store Lever Controller (S L C) system is an expansion of the C280 Retail terminal system and can be configured in many different ways. The Hardware used in each system can vary from one installation to another. The entire system can be located in a single store. However, other stores within the group can be linked on-line or "on dial up" for bulk data transmission. In either event, the complexity of the system emphasises the increasing importance of the communications, which permit the individual units to function together as an S L C system.

Communications between units are performed for the following types of messages:

* Data to be collected onto magnetic tape for later processing.
* Data used to maintain terminal and distribution totals.
* Inquiry messages to check credit or cheque cashing status.
* Reply messages which indicate an individual's credit or cheque cashing status.
* Inquiry messages to obtain status of totals being accumulated in the control processor.

C725 STORE LEVER CONTROLLER

Within the C725 is a C605 General purpose mini computer. Its memory is used to store the programme and collects all terminals department

C725 also has a nine channel magnetic tape drive for data collection and future processing. Two cassette tape drives, one for programme load during the daily opening sequence, and the second used to convert data from cassette onto magnetic tape.

These may also be used for other purposes dependent on individual customer specifications.

TEST PANEL

The Test Panel is the Engineer's peripheral and is identical to that used with C605 based units. However, in this instance the operator has access to the panel to allow the programme to be read into memory.

CLASS 280 TERMINAL

The C280 Terminal is the point of sale device used in the SLC system. Visibly it is no different from a standard Terminal and incorporates all the usual features.

The Control of the machine is protected by three Control locks

1 On/Off 2 Read/Reset 3 Programme.

KEYBOARD is the familiar "10 Key" with eleven function keys and again incorporates an audible guidance tone.

T C U performs the same function previously described in other units.

READ WRITE MEMORY is a non-volatile 4K bit core contained on 2 PIB's which hold the customer's programme and totals.

THREE STATION PRINTER is of the Helical type with a thirty column capability and has identical features previously described in the C250 write up.

TOTALS in the basic model are Cash Sales and Returns. A further six distribution and/or forty Department totals are available.

The C280 SLC model can accumulate as many totals as the customer requires. These department totals are held in the memory of the C725 and can be accessed at any time.

COMMUNICATIONS. The C280 would normally transmit data to a C761 Cassette Recorder or C723 Data Collector for storage, however the SLC terminal has the ability to transmit and receive data from the C725 i.e. Department totals and Credit sanctions.

PERIPHERALS

The following peripherals are available with all C280 Retail systems:

C785 Wand Reader (Light Pen)
C710 Class 410 Interface
C410 Coin Dispenser

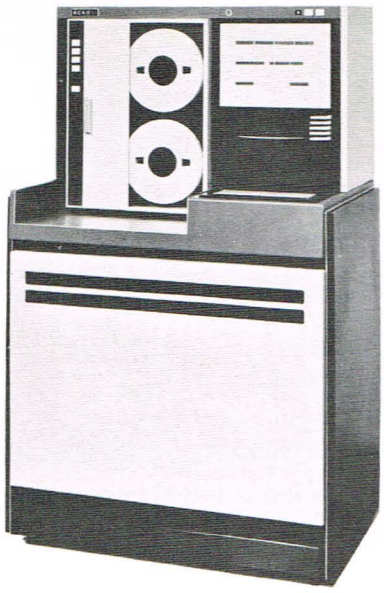
C751 DIGITAL CONCENTRATOR

The C751 Digital Concentrator for the C280/725 SLC system permits up to forty C280 Retail Terminals and two C260 or teletype units to share one communication line to the C725 Control Processor.

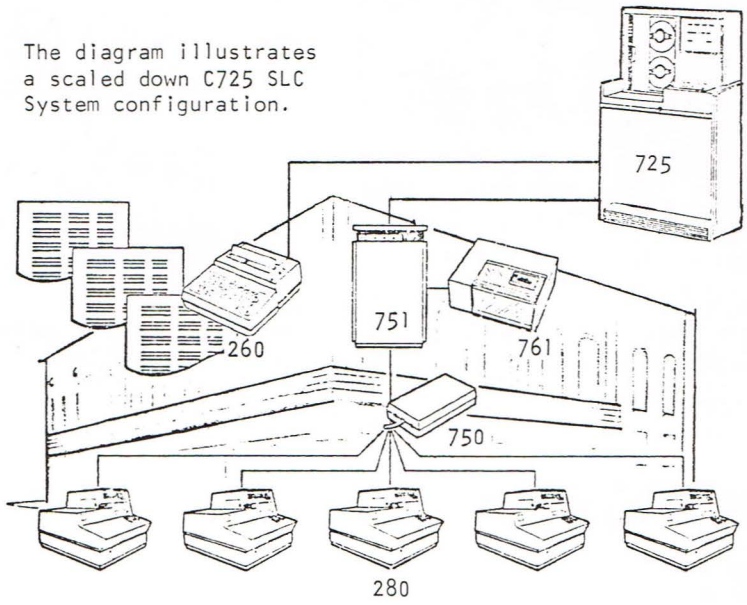
In addition to interfacing the C280s, the C751 also monitors and services all its terminals and teletypes. Its primary function is to relay the message and transaction of the terminals to the C725 but should the communication line between the C751 and C725 go down the C751 has an optional capability of sending the transaction and message to a C761 Cassette Terminal Recorder, enabling the C280s to continue normal operations with the communication network off-line.

C260 THERMAL PRINTER

The thermal printer acts as the receiver in a C-260 system. It is a device which prints in a page format at speeds up to 30 characters per second. The unit uses a single moveable print head containing a 5 x 7 matrix of individually energized dot producing heating elements. When lightly pressed against heat sensitive paper, the energized dots in the head produce a printed character. The printer



The diagram illustrates a scaled down C725 SLC System configuration.



is capable of printing up to 94 different character patterns across a line 80 columns wide with a line density of 6 lines per inch. The printer is also capable of performing all the necessary control functions such as carriage return, line feed, back space and actuating an operator alarm (bell tone). Since the printer is a non-impact device, it operates at very low noise levels and is suitable for any office atmosphere.

C260 KEYBOARD

The keyboard is an optional unit which is a completely solid-state device and acts as the transmitter in the C260 system. This unit is not necessary in a C260 system which receives only.

The function of the keyboard is to provide coded information as input to the thermal printer as well as for transmission over communication lines to remote devices. The unit contains 55 keys for the coding of 128 characters including upper and lower case alphabetic characters, numeric characters and control characters. The keyboard is capable of outputting data at either 10 or 30 characters per second in a local or remote mode and has a repeat function which permits the operator to output any one character continuously. An optional feature available in the keyboard is the Answerback module. This module automatically generates a programmed identity code when requested by any remote terminal.

The C260 Printer and keyboard are collectively known as an IO. Writer. It is used with other equipment including the Century series.

The first C280/725 SLC system in the U K region was sold to Peter Jones Ltd, Sloane Square, London who are part of the John Lewis Partnership. To date, it is the largest NCR system of its kind in Europe. The installation commenced during early August and was completed by the end of September.

The system incorporates the following units:

100 - Class 280 Terminals
  8 - Class 750 Junction Boxes
  4 - Class 751 Digital Concentrators
  4 - Class 761 Cassette Recorders
  1 - Class 260 Thermal Printer
  1 - Class 725 Store Level Controller (SLC)

These units have been installed to the configuration shown in the scaled down diagram.

Point of sale terminals are not new to the Peter Jones employees as for some time now they had been using competitive terminal equipment. Taking this into account together with NCR's recognition of the future business potential with the John Lewis Partnership it was obviously essential the installation should go smoothly.

F E D's team led by Supervisor Charlie Morgan, together with Field Engineers Vince Wake and Steve Molnar immediately recognised the importance. Their dedicated efforts in the performance of their duties undoubtedly played an invaluable part in what we now know to be a very successful system.

CLASS 725 SLC
TECHNICAL EDUCATION

Technical Training of the C725 SLC system is undertaken in Dayton with a course duration of eleven weeks.

Well Done

BRIGHTON

We learn from Sales representative R. Blake, that due to the first class service provided to the Cl. 395 sited at Flexer Sacks Limited, Portslade, and F.E. Denis Elmes's discussions with the customer on new equipment, has resulted in an order being taken for an expanded C299 against strong opposition and again brings to light the value of F E D.

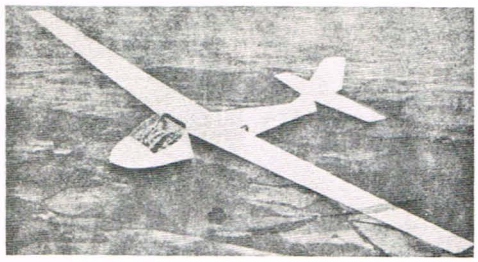
The Sub-Manager of National Westminster at Worthing has written in to express his appreciation for the assistance given by our Field Engineer Dave Gilbey during the recent move of their C 482.

CARDIFF

Congratulations to Tony Churchman F.E. who has successfully passed his City and Guilds certificate in computers for Telecommunication Engineers. Tony undertook his studies during the evenings at Llandaff College of Technology, Cardiff.

B.L.M.C. C455-5 PCMI READERS

British Leyland are importing C455 Readers direct from NCR West Salem U.S.A. Upon delivery their dealers will complete a warranty registration card and mail it direct to the local NCR Centre. These Cards should be sent to Maint. Records Dept., A/AM.



SOMETHING about GLIDING

We learn from Dave Walker, Senior Field Engineer, E D P Glasgow of another interesting way of spending your leisure hours amongst the birds, feathered of course.

Dave, a keen gliding enthusiast for the past six years and a fully qualified Instructor with the Scottish Gliding Union, Kinross, recommends if you have ever considered gliding as a sport, take the bull by the horns and try it. You will find it a fascinating sport and one which is becoming more popular every year. Any British Gliding Association Club in your area will be pleased to arrange an Air Experience flight without any obligation to join the Club.
Gliding is a sport where you will soon be flying solo, but first you will be shown how to handle a glider on the ground, and then how its controls work. In the air the Instructor will demonstrate how the glider is manoeuvered and it has dual controls so you will be able to handle it and feel what it is like to fly yourself. If you have some aptitude or have done a little previous flying then the Instructor may let you have a shot at making a landing after only a few flights.

It is a strange sport for it is exciting and beautiful, frustrating and cold, challenging and unexpected, and heavy on time unless you come to love it very much. When you try it you can decide for yourself and if you study the explanatory brochure given to all participants at the begining of their instruction, you will have more time to look around and enjoy your flying.

A glider flies just as an aeroplane or a bird when the speed of the air flowing over the wings is enough to cause lift. The glider obtains its speed, some 35 to 40 knots, by gliding downhill using gravity as motive power. The glider pilot therefore must look for rising air if he is to remain aloft. This is called soaring and flights of up to 5 hours are common. You will quickly find that no strength is needed to control the glider for it is quite stable in flight, and you only need a light gentle touch to glide it. You will be delighted at the wonderful view and the quietness. A glider is not of course silent, but the air flow is much more pleasant than the monotonous drone of an engine.

The weather of course, is an important part of gliding. If it looks like being cold or wet do not risk freezing by wearing inadequate clothing. Gliding fields are usually exposed and the air feels colder than in sheltered places so take that extra sweater, a windproof anorak and even a balaclava. Do not forget some tough shoes or boots.

Obviously there are many more technicalities and do's and donts which we cannot hope to outline in our short article. However, Dave informs us that if you are interested and require further information he would be only too pleased to provide the details.

A point worth remembering is that the site at Kinross is well within easy distance of the Dundee International Education Centre and therefore, if you feel you would like to go along for an Air Experience flight, then why not drop Dave a line at Glasgow Field Engineering Centre, for if you haven't tried it before here is your chance.

WHERE ARE THEY NOW

Yes! Where are they now? Many people upon retiring from F E D seem to go into complete oblivion. It is our intention from time to time to feature how our ex colleagues are enjoying their well earned part of life.
For our Number One story we turn the spotlight on H.S. Newman who for many years was Technical Supervisor, Banks Department. Herbert or as many of us knew him as "Bert" took the opportunity to retire a year early. His ambition was to make full use of the next five years whilst he and his wife are still active, and after talking to him recently he has certainly set off on the right foot.
Full use of his Fiat motorised caravan has been made by touring the north of England and Scotland, calling in on a number of Service Centres, two trips to Germany, and a three month tour of Spain and Portugal. This year's intended expedition is apparently to tour through Europe then across the Bosphorus into Turkey.

When the wagon wheels are not rolling he resorts to his many hobbies. His flair in wrought iron work has produced some fine garden furniture, candelabra, gates etc, and he has also bottled a number of palatable home made wines and beers. He is Treasurer of the Clapham Society, a group of professional people who play an active roll in ensuring the interests of the local area are taken into consideration at Council Meetings, and he is also the guardian and number one clock winder at Holy Trinity Church, Clapham Common. He also finds time to help other old aged pensioners who are not so fortunate as himself. Bert's latest hobby is framing old prints of London scenes from the olde worlde of Clapham.

He recently came into Head Office and it is no wonder he said he did not know how he ever found time to come to work with all the involvements he has.

Editor's Note:
I would be pleased to hear from you about other locally retired F E D Personnel, so don't leave them out in the cold, send me the details so we can include them in future editions.

Appointments

MR R SUTHERLAND appointed Manager, Computer Technical Education, IEC Dundee.

Bob commenced with NCR Manufacturing Dundee and transferred to Field Engineering in 1964 where he qualified as a 315 Site Engineer in the C M S North Area. Later he progressed to Senior Field Engineer covering Century 100 and 200 series before transferring to the International Education Centre as an Instructor in 1973.

We extend our congratulations to him in his new appointment.