

#### "RESEARCH LAB REPORTER"

It is with some nostalgia that I look back to the "good old" times a little more than 15 years ago when I joined the Long Line Equipment Section as a New Australian; everybody knew almost everybody else. I enjoyed in particular the friendly relations which I soon established with Research old-timers like Joe Lynch, Rudolph Buring, Duncan Gray and Ernie Rumpelt. It was always a pleasure to do business with these old-timers and they have helped me with many problems, big and small. Some of my happiest memories from this time are some dusk to dawn sessions with Rudolph Buring at Kal Kallo repeater station to sort out some important crosstalk problems.

Now that I am a Researcher myself I am striving towards maintaining and, if possible, increasing the esteem and respect in which the Laboratories are held and to foster happy co-operation with outsiders for the benefit of us all and of the Department.

I hope - as do many others - that the "Reporter" will contribute towards our sense of pride in the achievements of the Laboratories, which is so important if we are to succeed in our work. For this reason I urge all readers, who have had the time and patience to read so far, that they make an effort to produce worthwhile contributions to the editors, so that the success of the Reporter may be ensured forever hereafter.

(S. Dossing)

# thumbnail Sketches

Mr. Svend Dossing, M.Sc.E.E.(Hons.), M.E.E., M.I.E.(Aust.), Assistant Director-General (Systems).

Having grown up as a country lad in rural Denmark, on completion of his secondary schooling Svend commenced his University career at the University of Denmark, Copenhagen, on the very day that the Second World War started in September 1939. Active on the students council and the Resistance Movement against the German occupation, within the University, Svend had the unnerving experience of being reprieved from a death sentence by Court Martial a bare two Upon completion hours before the time set for his execution. of his course Svend was retained at the University in the capacity of Assistant to the Professor of Telecommunications. this for the space of one year during which time Svend and his resistance friends assembled the first non-military controlled radar set in Denmark from odd bits of equipment pirated from the occupation forces. The next three years Svend spent as a Sales Engineer selling, installing and maintaining electronic equipment including radar and telephones spending six months of this time on study visits to England. Accepting an offer from the Australian Post Office Svend arrived in Australia with Mrs. Dossing and commenced duty with Long Line Equipment Section in January 1950. Settling into his new work and environment with characteristic will and determination Svend was placed in charge of Long Line Equipment Laboratories almost from their inception with the responsibility of prototype testing of new equipment and after acting periods in all divisional positions in Long Line was promoted Engineer Class 4 on 16th March, 1962, being awarded a Masters Degree of Electrical Engineering by the Melbourne University in 1959 on the basis of his published work. The Class 4 promotion placed Svend in charge of network design he being required also to spend a considerable portion of his time discussing new equipment designs with Departmental contractors. Svend has had two extensive trips abroad on Departmental business, in 1962 to the C.C.I.T.T. meeting in

Montreal followed by a study tour of Canada and the U.S.A. and in 1964 to the Plenary Assembly of the C.C.I.T.T. at Geneva before a study tour of Europe and Japan where, in the latter country, he also assumed the role of Leader of the Australian Delegation to an E.C.A.F.E. meeting in Tokyo. Promoted to A.D.G. on 7th May, 1964, Svend reflects that the Engineering strength of his Systems Section is now twice what it was when he took over, after the industrious filling of positions obtained by Mr. L.M. Harris before he left the Laboratories.

Svend, who has his home at Nunawading, finds relaxation in sport in moderation and gardening, with a big interest in touring the outback areas of Australia in his own motor car, so much so that daughter Rita at the age of 12 is a very much travelled young lady.

## Mr. David Shaw, B.E.Elect.Eng., (University of New South Wales), Divisional Engineer, Multichannel Systems.

Educated at Sydney Grammar School and the University of New South Wales where he obtained his B.E. Degree with Honours in 1953 David Shaw brought to the Labs. valuable "outside experience" gained through thousands of miles of travel by train, plane and road and accommodation in innumerable country pubs, motels and boarding houses while in New South Wales Country Installation Long Line Divisions employed on the installation of carrier systems and equipment, trunk signalling equipment and transit switching schemes to say nothing of a further three years installing C.A.X's, P.A.B.X's and manual and automatic exchanges as a member of Country Installation Exchange Divisions throughout the length and breadth of New South Wales. A member of the Citizen Military Forces for 12 years with the University of New South Wales Regiment and an Associate Member of the Institution of Engineers, Australia, David is correcting what he considers to be a surfeit of practical work by a balanced study programme but still finds time to indulge in his favourite sports of Snow and Water Skiing and is a regular member of the Y.M.C.A. Business Man's Keep Fit Course with its rather rigorous schedule of Callisthenics and Swimming. bachelor but not a confirmed one, David fends for himself in a pleasant flat in East Melbourne and in the interests of self preservation attended a Gas and Fuel Corporation Cooking Course with such positive results that the Office Tea Club is at intervals regaled with his biscuits and cakes. In younger days a ten year member of the

Mosman Rowing Club, David often enjoys a game of golf at Cranbourne and in the Laboratory tournaments.

#### Sue McNeil, Steno-Secretary.

That most attractive, even tempered and industrious Steno-Secretary to Mr. Eddie Sandbach, A.D.G. Apparatus and Services. Sue McNeil came from England to Hobart with her family in 1952 at the tender age of five and stayed in Hobart till 1958 when the family, mother, father, younger brother and Sue returned to England on a wave of homesickness only to return again to Hobart in 1960 in time for Sue to finish her schooling at Hobart High before joining the Department through the P.S.I. training class for typists in 1963. Posted initially to the Planning Section, Tasmania, Sue and family moved to Melbourne in early 1965 and now live at Coburg, Sue transferring to the Labs. initially as a Stenographer before acting as Steno-Secretary for each of the three A.D.G's for about twelve months when she and Miss Marg McDonald were the only Steno-Secretaries available in the Labs. Sue was appointed to her present position at the start of 1966 and says she could not work for a better boss. Keen on sewing and making her own clothes. Sue is thrilled that her young brother Allan has just started work with the A.N.Z. Bank. To make her Christmas complete Sue announced her engagement to that stalwart of the Labs. Brian Lafferty and when they marry, probably Easter 1968, the couple will undoubtedly take with them the sincere best wishes of the whole Laboratories' staff.

## Vic McMaster, Senior Technical Officer, Grade 2, Model Shop.

After six years in PBX installation, Victoria, Vic McMaster tried his luck in New Zealand for a couple of years in N.Z. Railway Telegraphs before commencing an eleven year term with Postal Workshops, South Melbourne. Coming to the Labs. in 1945 the day after World War II finished, Vic put in the first six years in the Physics Lab., then at 59 Little Collins Street, first as a Senior Technician being promoted progressively to Supervising Technician in charge of the Model Shop receiving his appointment to Senior Technical Officer, Grade 2, a couple of years ago. At one stage, after the demise of the late Jack

Groves, Vic put in a period of approximately eight years as Acting Class 2 Engineer, Model Shop. With positions available for a staff of thirty-four, depleted a little at the moment because of the current staff shortage, Vic with his Supervising Technician, Grade 2, Charlie Eyre in charge of the shop, Phil Westbrook, Foreman, Grade 1 in charge of the Tool Store, Bert Cooper, Supervising Technician, Grade 1, plus a number of Senior Technicians, Technicians, Tradesmen and Apprentices look after the construction of experimental and prototype equipment including the construction of unprocurable laboratory equipment and is on call not only to the Labs. but to all other Sections and Branches of Central Office. With a substantial home at Beaumaris close to the beach, Vic fills in what would otherwise have been his spare time with microscopy, astronomy, lapidation, geology, fly fishing and model engineering, with nineteen year old son Graham doing Science at Monash and sixteen year old younger can Max doing Matriculation at Mentone Grammar. As for Mrs. Mac. Therefore says Vic, "she is quite content to look after her house, her garden and her three boys".

#### Miss Mary Smith

Mary with her warm and wise personality is an institution around the Laboratories. With close to 20 years service behind her and experience in a dozen jobs around the Labs. Mary joined the Library staff in September 1963 to immediately take over the exacting task of circulation of periodicals and recording and updating of valve data publications. It is patently obvious that the regular circulation of the great variety of publications available to the Library, to twenty-three different and well spaced locations is a demanding but extremely necessary part of the Library's activities. However, Mary and her staff manage to keep the circulation going with a smile with maybe an occasional warning frown for the Engineer who in an unguarded moment holds a periodical too long and does not return it to the rack in time for the weekly collection. Mary's "raids" around Cheneys, Watkins and Taubmans Buildings are now well known but maybe what is not so well known is that Mary can shin up those Library ladders to the top shelf just as quickly as her seventeen year old assistants. Incidentally, Mary by her promptness in handling requests for document copying and diligence in following up her orders on Central Registry has taken much of the sting out of the loss by the Labs. of its Xerox copying machine. For outside

interest and relaxation Mary keeps a weather eye on how they are racing at Flemington.

## Ray Jepson, Senior Technical Officer, Grade 2, Laboratory Equipment Division.

Entering the Department in 1938 by way of Mechanic, Grade 1 for 12 months, with the Elsternwick Telephone Exchange, after nine years service with Postal Workshops as Acting Senior Mechanic on Electrical Measuring Instruments, on appointment to Senior Mechanic, Ray transferred to Radio Section, Jolimont in 1954 receiving promotion to the Laboratories as Supervising Technician Grade 4, in 1956 with Laboratory Equipment Division where he has been ever since. However, Ray's prior experience with the Workhops and Radio stood him in good stead for it had brought him into frequent contact with the Labs. and Lab. personnel, and during the war Ray often found himself on loan to the Labs. for work with Laboratories' Engineers. In Laboratory Equipment, the largest of the Divisions, Ray stands as right hand man for Alan Collins, Divisional Engineer, for the purchase, maintenance servicing and calibration of all the measuring equipment used in the Labs., something indeed to the order of 9,000 instruments with a capital value of over \$2,000,000. With all new Lab. equipment flowing in through the Division, the drawing of all specifications for contracts for the purchase of new items and the continual flow back and forth of existing equipment in the Labs, for calibration, servicing or eventual disposal the paper work involved can best be imagined and keeps Ray and his clerical helpers on Equipment Records, Dolly Chapman, Nell Fewster. Heather Bentley, Rodney Higgs, Geraldine Lee and George Jansz flat to the boards.

Married with three grown-up boys, Peter a Valuer with the Taxation Department, Keith an Arts student at Monash and Neil with the Victorian Law Department with his eye on getting Matriculation Honours this year, Ray's abiding interests lie with the A.L.P. as an active compaigner of many years standing and as a Radio Amateur since 1936 with call sign VK3J1 and confirmation of two way contact with 180 different countries. Still building new equipment Ray lives at Highett and finds time for surf fishing at Marlo and the Ninety Mile Beach. Ray's only complaint is that his home somewhat resembles a used car yard,

with each of his boys and himself owning a car plus a further two bombs in the back garden, a total of six cars for which the family regards Ray as the only practising mechanic. It is to Ray of course that we are mainly indebted for the recent magnificent Christmas party, but more about this later.

## Hec Ruddell, A.M.T.C., Senior Chemist, Polymer Division.

With the Labs. now for the past 11 years after employment with Vacuum Oil Company and I.C.I.A.N.Z., Hec Ruddell, genial Senior Chemist of the Polymer Division, entered the Service as Chemist, Grade 1, under the watchful eye of Mr. Rollo Brett then Senior Physicist, at Watkins. With a staff designed to have a Chemist. Class 1, T.O. 1 and T.A. 2, Hec is concerned with the evaluation, development, investigation and testing of all types of plastics, adhesives and elastomers (rubbers to us) but the Division is best known for its work in the epoxy resin field. Hec well remembers the time when Rollo Brett was the proud possessor of the first sample of epoxy resin in Australia and the fantastic strides that have been made since the day Rollo handed over the sample with the injunction to explore its possibilities. From such a modest start the Department now uses annually something in the nature of 200 tons a year of the resin on such work as cable jointing, cable sealing, installation of hauling eyes, terminal strips, potting of electrical components and non-skid surfaces. Most staff are now familiar with the special pack developed by Hec for use by cable jointers which is in use by the Department to the tune of some 800,000 a year and which contains an epoxy resin developed by Hec and his helpers to their own specifications. Hec grieves a little that the spectacular development of his epoxy resin tends to overshadow the Division's other potential and he draws attention to the fact that the Division is also open to give advice on all plastics, rubbers and adhesives.

A married man with two children, son Glyn aged 8 and daughter Kym aged 11, Hec has played a large part in the building of his own double brick home at North Balwyn complete with swimming pool; digging and laying foundations, carrying bricks and tiles and putting in floors and woodwork unaided. Interested in all sport and having played football at Footscray and Yarraville, Hec still holds the high-marking championship won on the stage at the Melbourne Town Hall against such stalwarts as Arthur Oliver and Ron Todd.

Further, having played cricket for Seddon for 10 years as opening bowler, Hec is now satisfied with tennis and golf and the care of his fruit tree garden, for which both he and Mrs. Ruddell studied at the Burnley School of Horticulture.

Abreast of world developments in the plastic field by virtue of an eight weeks overseas trip in 1965 covering the U.S.A., U.K., Holland, Germany, Switzerland and Japan, Hec recalls with amusement the sight of diminutive Japanese factory managers ushering his expansive six-foot-six frame through the factory tours of inspection.

# MICROWAVES Potherwise

Golf. Another well attended Golf Day was held at Rosanna on Saturday, 10th December From a strongly packed field marked by concentration and perspiration, the ultimate winners in each group were as follows:

Group "A" - Garth Jacoby Group "B" - Frank Arter Group "C" - Rick Heath.

Alva Allen the acknowledged Von Nida of the Labs. was really "switched on" and kept a large gallery intrigued by the manner in which, and the language with which, he addressed the ball. Incidentally lost balls were again a problem (mainly because of the tendency of the fairway to move out of position after each stroke) so much so that Charlie Bates opined that when the dust finally settles and the last divot is replaced after a Research Labs. tournament the Links must look as though they were sprinkled with hundreds-and-thousands.

Vacation Students. The Christmas period once again saw the Laboratories playing host to a number of students from the Universities, Technical Colleges and Secondary Schools. Drawn mainly from Melbourne and Monash Universities, R.M.I.T. and Caulfield Tech., Branch Clerk, Mack Apsey, fathered in and allocated twenty-nine senior students for work with the Divisions

plus a further nine boys from Secondary Schools for relief of the messengerial staff. That reciprocal benefits flow from the scheme is undoubted when one sees the avidity with which the students tackle their appointed tasks. Enabling in the first instance convenient rostering of Christmas leave for regular staff the opportunities afforded to the students for full time practical work under expert assistance for the two month period provide a helpful boost to their careers in the formative stage to say nothing of the little extra lining in the pocket for the academic year ahead. What is also worthy of note and must later count with the visitors when the question of a permanent job comes up is the friendly acceptance and genuine interest afforded to them by all concerned.

Eddie Durand. The opportunity does not fall to the lot of every rotation engineer to end his term with the Labs. with such a bang as made by Eddie Durand before his return to Adelaide. Further, as his many friends will echo, it couldn't have happened to a nicer bloke, the occasion of course being a full scale working demonstration with lecture by Eddie in the Switching Group Labs. on his Computer Controlled Exchange on Friday, 10th February, before an audience of local and visiting Engineers and A.D.P. men.

On the Sunday following the demonstration, Lab. friends gathered at the Kevin Curley's at Moorabbin to give Eddie and family a rousing farewell and are happy to see from the Gazette that since his departure Eddie has received the South Australian Class 2 nomination of his choice.

Xmas Party. Christmas has come and gone again this time with a wonderful party at Watkins organised by Ray Jepson and ably assisted by such stalwarts as Dolly Chapman, Nell Fewster, Maree Zara, Jan Tinworth, Heather Bentley, Bob Barclay, Joe Blake and Ken Young, not to mention all those other helpers who collected the donations around the buildings or who stepped in unprompted at the crucial hour to cater for the visitors and keep the party moving.

With an abundance of everything but space (at the height of festivities one guest remarked that it reminded him of the Captain's party on a submarine "just enough room to take a drink but not enough to salute") Ray and his helpers catered for 230 participants with 80 lbs. of chicken, 16 dozen sandwiches,

18 dozen fish patties, 30 gallons of ale, not to mention lashings of savoury rolls, meat pies and pasties, cakes, patties and soft drinks. As the Director-General himself said "well done Ray".

Wedding Bells. A very happy surprise was sprung on the members of the Model Shop by the "Munster" Howard Timbury who while on annual leave entered into the Holy Bonds of Matrimony with the girl of his choice, Cheryl Stonehouse - Congratulations Howard.

Congratulations also to Eddie Bondarenko for whom the Bells tolled on Saturday, 11th February.

Doug Barclay of the Laboratory Equipment Division got his daughter Anne married off on Saturday, 21st January.

Engagements. Every happiness to the popular couple, Sue McNeil and Brian Lafferty. Brian got the affirmative answer to his leading question over Christmas.

Congratulations and happiness also to <u>Tony Stevens</u> of the Laboratory Equipment Division who announced his engagement to Clare Varley of Glen Iris in early January and to <u>Jim Blake</u> in Electronic Services of Laboratory Equipment Division who has also gone and gotten himself engaged.

Julie DiMuzio petite Steno-Secretary to A.D.G. Systems, Mr. Svend Dossing and attractive Mary Dwyer, Clerical Assistant, Grade 4, at Watkins, have now both passed sufficient Leaving Certificate subjects and qualified for the Third Division. A meritorious effort indeed by both girls considering the exacting nature of their daytime duties.

<u>Dorothy Desjardins</u> recently on the Library staff who returned home to Brisbane in December has announced her engagement and plans to marry in a few months time.

<u>That Holiday</u>. All those who spent their holidays fixing the back fence and "gophering" - you can go for the milk now and go for the paper afterwards, can envy young Elizabeth and

Virginia Wells (Elizabeth in the Library and Virginia in the Store) who got as far as Honolulu over Christmas and had to put up with being stranded in Fiji for three days on the way back.

Alan Anderson, Technical Assistant in the Polymer Division has completed the academic part of his Diploma of Applied Chemistry by passing Matriculation English - good work Alan.

Technical Assistant, Julian Ophel of the Physics Division, undaunted by last year's venture into the mountains, found an equally uninhabited spot somewhere between Lakes Entrance and Mallacoota Inlet this holiday but got out unaided.

Bob Cornish of Metallurgy Division successfully obtained personal reclassification from Technical Assistant, Grade 2, to Technical Officer, Grade 1.

Bob Kam, Technical Assistant, Grade 2, Chemistry Division, recently took out Naturalization papers while Bruce Chisholm, Technical Officer, Grade 1, of the same Division, has an interest in the next National Service Lottery.

L.M. Harris Award. A capacity attendance of professional staff in the F.P. O'Grady Reading Room of the Research Laboratories' Library on Friday, 13th January, saw F.A.D.G. Planning and Research, Mr. Len Harris, present his own endowed award, a cheque and trophy, to Alan Gibbs, as the junior engineer whose published papers during the period July 1964-July 1966 were considered to have most enhanced the research standing of the Laboratories. Alan received the award on the basis of five papers published in Australia and abroad during the two year period on the adjudication of Professor Karbowiak of the University of New South Wales, the sole Professor of Communications in Australia, from nine other entrants, the Professor in making the award commenting favourably on the high standard of publications submitted. In extending a welcome to visitors and to the Donor, S.A.D.G. Research, Mr. Brett, conveyed the thanks of the Research Laboratories' staff generally for the way in which Mr. Harris has continued to identify himself with the Laboratories. Mr. Harris in reply left no doubt in the minds of the audience that the welfare and work of the Laboratories will always be close to his heart and that the standard

of published papers submitted for the award was satisfaction indeed, coming as they did from men busily engaged, not in theory or academic argument, but in the very down to earth job of getting things done.

Alan in accepting the award paid graceful tribute to the guidance afforded him over the last four years by his colleague and friend Dr. Ernie Rumpelt. Alan of course is by now at the University of Wisconsin pursuing his three year P.S.B. scholarship and the award came at a time to act as a fitting farewell from the Laboratories.

Fully Fledged. Dave Duckworth, Brian Booth, Brian Johnson and Neil Chandler have successfully completed their five year Technician-in-Training course to qualify as Technicians and bring much needed support to their appointed Divisions. Dave is with Telephonometry, Brian Booth with Pulse Techniques, Brian Johnson with Frequency Standards and Neil with Electronic Switching.

Jim Frood, Technical Assistant, Grade 2, Laboratory Equipment Division, who has been lately arriving at work tired and bearded is now a changed man. Jim, who lives in the area where the Box Hill "firebug" has been active, has been getting up at 2.00 a.m. to sit outside in his car watching and waiting. Now that the bug has been caught the alarm can be set for a much later time in the morning.

A welcome back is extended to <u>Dave Cleary</u> of Multichannel Division after a lengthy illness. It's nice to see your smiling face again Dave!

Johnny Hughes is home again after his six months L.W.O.P. trip around New Zealand and from the stories he tells the grass is lush over there and racehorses are not the only thoroughbreds in the Islands.

The Thing! We don't know what the gadget is supposed to do, something about measuring cable irregularities - what intrigues most people is the name it has been given - "Svend Dossing's Black Box".

Chance. Amongst the girls of the Cleaning Staff are Thelma and Norma who regularly every Friday after pay-day seek out a certain Sub-Sectional Clerk to cough up 20 cents each for payment to the St Kilda Branch of the Postal Institute. It's been so long since either has collected a prize that they have doubts as to whether their number is going into the barrel. Never mind girls, the Clerk concerned has his doubts too but it is a big barrel with an awful lot of numbers, maybe one of us will crack it yet (First prize \$130).

## YOUR AAGHE =

New arrivals in the Physics Division at Watkins Building are causing accommodation problems for Senior Physicist,
Don McKelvie, who has been awarded first prize for furniture shifting. Not only did he have to cope with Physicists, Claude Mele and John Stoddart and T.A., Sandra Charles, late last year, but he now has Physicist, Ian Dew, newly arrived from Canberra's Patent Office, with Technical Assistants, Ray Carter, Russell Cooper and Jenny Kett, arriving in the near future. Consequently, all rumours of new accommodation are treated with great respect on the second floor at Watkins.

Ray McIntosh, Instrument Maker with Laboratory Equipment Division, has received an appointment as Technical Assistant, Grade 2, with Army Design Establishment, Maribyrnong, and will be leaving the Labs. shortly.

A special welcome is extended to <u>Paul Chin</u> from Singapore who has been working as a vacation student with Laboratory Equipment Division. Paul has completed his 3rd year for the Degree of Electrical Engineering at Melbourne University.

Bruce McEwen and Jim Blake are congratulated on being appointed Technical Assistants, Grade 2, in Laboratory Equipment Division.

A cordial welcome is extended also to recent additions to the Transmission Group. Each fresh from the University with high hopes for the future are Engineers, Class 1, Dave Blackwell, Radio Systems Division, John Semple, Pulse Systems Division and John Macleod, Multichannel.

It's a great pity to see our Engineers go and a great loss to the Department, but to Don Creighton, Engineer, Class 2, who has accepted an appointment at the University of Adelaide in the Mawson Institute we wish every success. With the Labs. for 18 months fresh from a stint in the Antarctic he leaves his friends with a healthy regard for his ability.

Farewell also to Graeme Wilson of the Labs. Drafting Section who was ever-ready to oblige with presentation cards and other work beyond his normal duties including "headings" for this particular journal. Graeme has received a promotion to the Meteorological Bureau.

Also to Dianne Linnell formerly Stenographer at Cheneys and lately acting Typist-in-Charge during Kaye Jones' absence on vacation and other duties. Dianne is now a Typist-in-Charge with the Naval Dockyards, Williamstown. (Not a bad effort for a girl of seventeen.)

Farewell also to Graeme Read, Acting Information Officer, on promotion to Long Line Equipment, John Little, Technical Assistant, Grade 2, and Bob Allerding, J.P.O.

Miss Marie Moye. It may not be generally known that Merl Cuzens, Senior Librarian, has on her staff, girls rarely seen around the library. Such a one is trim dark haired Marie Moye outposted to the branch library at Radio Section, which unit she virtually built from scratch after joining the staff from the C.R.B. Library in 1965. Such a success has been this library with such demands for the service by Engineers that it is hoped to obtain a position of Clerical Assistant to help Marie out. Marie incidentally drives a blue Renault and it is breathtaking to watch her taking those steep Parkade ramps with all the aplomb in the world.

Miss Sandra Russell joined the library staff as Librarian on 9th December and is extended a warm welcome. Due to the acute shortage of trained librarians this is the first time since the creation of the position in 1962 that it has been filled. Sandra, an Arts graduate from Monash University was one of twenty graduates selected to do the Diploma of Librarianship at the University of New South Wales under the Public Service Board Training Scheme. Incidentally Sandra who obtained her Diploma with high distinction will be engaged on Reference/Information work with the aim of eventual expansion of this aspect of the service and can be readily identified by her trusting blue eyes.

It is with regret that the Library has lost two more of its staff, Kay O'Keeffe and Faye Adams. Both girls have been pillars of strength for about three years and assisted greatly in the hard work of re-organising the Library. Kay has joined Australian Volunteers Abroad, to be stationed at Noumea as a Librarian, while Faye has returned to the medical field of librarianship. Best of luck to both of you - we miss you.

Misses Vicki Moses and Angela Holt have assisted in the library during the summer vacation in order to gain in-service training in their work. These lasses were among those selected by the Public Service Board in 1966 for the Library Officer-intraining scheme and both have successfully completed the first year of study towards the R.M.I.T. Diploma of Librarianship. At the end of the year on completion of the Diploma, Angela hopes to be posted to Repatriation General Hospital, Heidelberg, and Vicki to the National Library, Canberra. We wish both were coming to the P.M.G. but best wishes girls!

Some tender scenes were witnessed at Taubmans when George Koscharzkij, Engineer, Class 1, Telephone Standards, was farewelled on 3rd February on his transfer to New South Wales. To make the occasion more memorable somebody inadvertently spelled his name correctly for the first time.

A welcome is also extended to the following Techniciansin-Training who have commenced with the Labs. namely, Francis Dalman, Raymond Maurer, Mario Verruso, John Loftus, Robert Findley, Howard Anders, Michael Crarey, to Technical Assistant, Grade 1's, Miss Lum, Ray Horne, Colin Barling, Michael Duthie, Miss Jeannette Noot and Ross O'Loghlen and to Technical Assistant, Grade 2, Mark Vines, Apprentice Fitters and Turners, Murray McGaffin, Wilhelmin Kuys, Robert Crantor, Steven Mihajlovic and Richard Brown, to Physicist, Peter McDonnell and Engineers, Class 1, Laurie MacKechnie, Peter Gerrand, Nguyen Truyen and Gregory The.

## WHAT'S NEW ?

Redfern Mail Exchange. Bryan McMahon, Divisional Engineer, Semiconductors, and Don Sheridan, Engineer, Class 2, Equipment Development, have been shuttling back and forth to Sydney as members of the committee appointed to assess maintenance aspects of the automatic electronic letter sorting equipment now installed at the Redfern Mail Exchange. To paraphrase an earlier report by the committee the plant represents a unique combination of electronic mechanical and electrical equipment which has been brought together to form a large and complex mail handling system. The electronic section alone represents the largest single electronics equipment existing in Australia and is larger than the normal large scale digital computers by at least one order of magnitude. The extent of the plant will be on a scale unprecedented so far in Post Office engineering equipment in terms of both quantity of equipment and diversity of techniques employed in the electro-mechanical and electronic switching areas. All staff join in wishing it well and are keeping their fingers crossed.

Deaf Aid Telephones. Bob Kett, Divisional Engineer, Telephonometry, helped by his Class 2, Alan O'Rourke, and Class 1, Bill Menzenthen, has been working on the development of an instrument for the assistance of people hard of hearing. Having made some experimental telephones and tested them on out-patients of the Alfred Hospital and children from the school for deaf children at Kew (Glen Donald), results to date have

been most encouraging. One aspect to come out of the investigations is that a hearing aid used in conjunction with a telephone causes too much distortion to be helpful and that the answer lies with the amplified phone alone. Particularly for the aged, it was found necessary to increase the low tones rather than the high which in any event tend to howl. However, as some deaf people cannot receive the low frequencies while others, like the aged generally, cannot hear the high tones of a bell, another feature of the phone will be the alternative build-in of a bell or a howler.

Chemistry Division housed at Watkins under Principal Officer, Dick Slade, with Gordon Walker as Chief Chemist performs a variety of work ranging from routine testing of Commonwealth Tender Board samples of inks, floor polishes, etc., to the more interesting investigations of paints, corrosion chemistry and the analysis of foreign liquids and gases found in manholes. Joe Der, Chemist, Class 2, is at present conducting tests on the corrosive nature of a spray proposed for use in controlling the undergrowth along aerial trunk routes in the northern parts of Australia. One of the Division's newest arrivals, Irv Cederholm who came to the Labs. in March 1966 is involved with C.T.B. samples of stamp-pad ink which have to be assessed for colour, fadability and clarity of stamp. The ink should be non-tacky and not dry up in the pad. To this end Irv has made some reversible stamp pads to allow a variety of tests to be carried out.

Mike Subocz and Arthur Buls, Engineer, Class 2, and Technical Assistant, Grade 2, of Pulse Techniques, at Taubmans have been working on a project, the result of which you will shortly be able to see for yourself - on your own TV screens. This is a white bar inserter, a micro-circuit job, to be inserted out of sight on the top left hand corner of the picture tube to provide a reference signal to determine correct picture brightness. To see it, all you will have to do is to use the vertical hold knob to compress the picture and hey presto - Mike's and Arthur's signal will appear.

Broadcast Time Signal Service. Many people in Australia, working in such fields as astronomical surveying, geophysical and seismic surveying, observatories, university research and defence establishments, need to have access to a very accurate

time service.

During the last two years the Frequency Standards Division has operated equipment to supply suitable time signals for this purpose. The signals are broadcast from station VNG, using two of the high frequency transmitters at Lyndhurst. The time signals consist of a continuous series of impulses at one second intervals, each impulse being 100 milliseconds of 1,000 cycles per second tone. These "pips" are interrupted only for one second to denote the end of each minute and also for one minute to denote the end of each hour. The one minute gap is used for a spoken station-identification message.

Gradual improvements to the service are being made. Its present accuracy is within  $\pm$  1 millisecond of the U.T.C. (Universal Time Co-ordinated) Time Scale maintained by the Frequency Standards Division by reference to both local and overseas Atomic Frequency Standards.

World TV. Of particular interest is the announcement that on Monday morning, 26th June, 1967, Australia is to participate in the first global "live" television show by means of satellites over the Pacific, the Atlantic and Russia. Our immediate link will be the new Pacific Satellite Intelsat II recently launched from Cape Kennedy for the Apollo Man-on-Moon project support communications. On the question of satellite communications, Brian Perkins of Satellite Division, at present representing the Department on the A.T.S. project being conducted by N.A.S.A. at Cooby Creek, Queensland, has intimated that he will let this journal have a short account of what goes on, in the near future.

# overseas Scholarships & INVESTIGATIONS

Roger Smith, Divisional Engineer, Pulse Systems, arrived back from his overseas visit looking gaunt and haggard. Roger had quite a worrying time in getting back from Tokyo because of the Qantas strike. It is said that he took up a position on the Qantas representative's doorstep until the latter arranged

alternative travel. Sub-Sectional Clerk, Neil Walker (ex Navy of course) says he would have settled for a slow boat from China.

Gerry Flatau, Principal Officer, Physics and Polymer, was another caught off guard by the strike, Gerry being offloaded in Auckland. Gerry however effected a more dramatic return occasioned by his frantic instructions to Mrs. Flatau in Melbourne to stir things up at this end towards his repatriation. Nothing loth Mrs. Flatau spoke not only to Qantas and other Airlines but also to the Editor of the Age who sensing a story assigned an over assiduous reporter to the job. To Gerry's consternation he subsequently appeared in print in the guise of spokesman for the oppressed and defrauded victims of an autocratic and unsympathetic airline.

Michael Hunter, Engineer, Class 1, Pulse Systems, at present abroad on an eight months scholarship organised by the French Administration of Post Offices and Telecommunications (A.S.T.E.F. Scholarship) after a two months language course at the Phonetics Institute, Grenoble, in both conversational and technical vocabulary (Mrs. Hunter also taking a conversational course) and a good look around France is now well advanced with his switching course during which he is successively attached to various sections of the French P.T.T. Michael will spend the last six weeks of the course with C.N.E.T. in the particular section concerned with research and development of electronic switching and I.S.T. networks. Before returning home in May, Michael is also scheduled to make an individual study visit of L.C.T., C.I.T. and A.O.I.P., being the major manufacturing organisations in France involved in manufacture of electronic switching and I.S.T. systems.