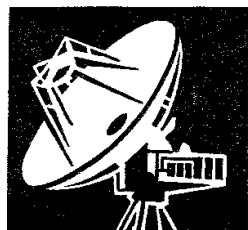


RESEARCH LAB REPORTER



PRODUCED BY RESEARCH LABORATORIES, 59 LITTLE COLLINS STREET, MELBOURNE

Vol. 4 Issue 1

February 1970

"RESEARCH LAB REPORTER"

LABORATORIES' SUPPER BALL

FRIDAY 3rd JULY

AYLESBURY COURT, BRIGHTON

DANCING 8.30 p.m. - 2.00 a.m.

DRESS OPTIONAL

\$4.00 per single (excluding liquid refreshment)

WATCH YOUR NOTICE BOARD

FOR FURTHER DETAILS

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Our Accident Record

Recent statistics for 1968/69 show that our record in the Laboratories for accidents whilst on duty compares more than favourably with other Sections of the Department.

However, do not be too complacent about this comparison since there is always room for improvement while there is an accident to be entered as a statistic.

We had only three "lost-time" (or serious) accidents in a total of 67 accidents reported. In this category, we have done well in comparison with others.

But for our size, we are on a par with other similar organisations in having about 20 minor accidents per 100 staff in 1968/69.

These minor accidents did not result in the need for more than minor medical attention, but in these cases, the cause of the accident can generally be blamed on the carelessness of the victim.

Are you one of the victims who:

- (i) did not wear safety goggles when you got grit in your eyes?
- (ii) did not exercise care when using sharp or otherwise "bitey" hand tools?
- (iii) got your fingers too close to a rotating machine part?
- (iv) fell, tripped, or bumped into an obstruction because you did not keep your eyes open for a hazard, or moved about carelessly fast?
- (v) received an electric shock sufficiently strong to make you report it?
- (vi) picked up or touched something too hot to handle?
- (vii) lifted a heavy object the incorrect way?

There are more than a few who cannot answer "no" to all the above questions, in spite of the circulars and posters and other ruses which are used from time to time to keep you alive to hazardous situations.

It could be said that, in the Laboratories, our record is reasonably good since we do not run the risks faced by other Sections. Our most potentially dangerous situation in our every day work is probably the chance of an electric shock. Do not let your familiarity breed contempt. Treat any potential source of electric power with caution whether it is a mains supply outlet on the wall or an exposed metal contact in equipment you are constructing or delving into. Take time off to remove these hazards before you switch on the power. Remember that, in the right conditions, a supply voltage (a.c. or d.c.) of about 50V is enough to send the 5mA through your body which will contract your muscles so that you cannot let go and start to perspire. As you perspire, your resistance can drop and the current can rise to the 20mA level sufficient to stop your heart action permanently within a few tens of milliseconds.

What do you do about accidents? The rules below are common sense!

1. Most importantly - avoid them.
2. If involved in one as a victim, seek prompt help and medical assistance as necessary. Your Sub-Sectional Clerk can show you the nearest First Aid Kit or get you prompt and more specialist medical attention if it is required. He also requires you to fill in an accident report - for your own good.

These latter details are covered more completely in the "House Rules" and "Electrical Safety" circulars circulated to all staff less than 12 months ago. Did you read them?

Perhaps, a second (?) reading, now, would be timely.

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Overseas

Assignments

Ed Sandbach and Eric Craig were in New Delhi from 18/1/70 to 12/2/70 to attend the XIIth Plenary Assembly of the C.C.I.R. Ed was again leader of the Australian Delegation having led the previous delegation to the XIth Plenary Assembly at Oslo. He has been directly concerned with the activities of Study Group IV (Space Systems and Radio Astronomy) and Study Group VII (Standard Frequency and Time Signals).

Eric was deputy leader of the delegation and is concerned particularly with Study Group IV and Study Group V (Tropospheric Propagation).

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Brian Perkins (ex-Cooby Creek) paid a brief but most welcome visit to the Labs for about five weeks recently. Brian was recalled from his duties at the Goddard Space Flight Centre, Maryland, U.S.A. to take over the post of Project Leader of the satellite experiments during Eric Craig's absence in New Delhi.

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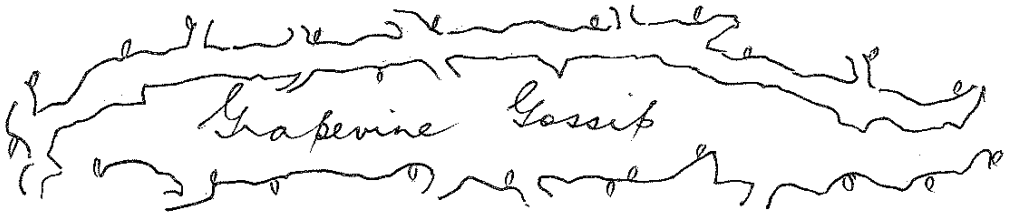
Greg Crew departed for Geneva on 2/2/70 to represent Australia at meetings of Study Groups of the C.C.I.T.T. Greg was the representative at the two previous meetings of Working Party XI/I at which the detailed design of System No.6 was completed. This Working Party met in Florence (1967) and Geneva (1968) and detailed a small group of seven international signalling experts to perform the necessary detailed design.

Greg was a member of this "group of seven". He carries the prime responsibility for the design and construction of the equipment required for the A.P.O. portion of the joint A.P.O./O.T.C.(A) participation in the System No.6 field trial and is responsible for the National trials preceding the international trials.

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Dick Slade has been involved in a very strenuous overseas programme since 23/1/70 and is expected to return on 14/3/70. He has attended a meeting of C.C.I.T.T. Study Group VI in Geneva for one week and is at present visiting Italy, Sweden, Denmark, Holland, the U.K. and the U.S.A. to investigate overseas advances in chemical and metallurgical research work as applied to telecommunications.

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Once again, due to the efficient organisation of Ray Jepson, the 1969 Christmas Party was an outstanding success. It was fortunate that the Southern Motors' Building was acquired just at that convenient time as it provided a most suitable location for the occasion. The catering was excellent and the innovation of the dance music provided enjoyable entertainment for the young and several of the not-so-young.

Despite the fact that Ash Conroy misread his instructions and mislaid 19 dozen glasses, nobody suffered from dehydration.

Congratulations, Ray, for your efforts and, also, to those who assisted you in providing this function.

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Many of the "oldtimers" will remember Adrianus Korpel, a former member of the Laboratories from 1955-1960. Well, Adrianus presented his thesis for a Doctor's Degree at the University of Delft on the 17th December, 1969. The title of the thesis is "Optical Imaging of Ultrasonic Fields by Acoustic Bragg Diffraction".

Those who wish to know more about the topic may obtain a copy on loan from the Library, Block A.

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Interviews for this year's intake of technical assistants were conducted during January by Dave Geldard, Max Warner, Bill Williamson and Keith Guilliard.

The interviewees were welcomed by Pat Cooke, with camera at the ready, who emphasized that she was taking the photographs purely for record purposes. She denied the suggestion that her preliminary interview had anything to do with the selection of the most eligible candidate.

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A very proud grandfather (first occasion) is our Equipment Officer, Ed Scates, whose eldest daughter, Judy, presented the family with Robin James on the 5th January. Ed is now the possessor of the Labs "Staff of Office" - a very fine piece of workmanship, suitably inscribed with the names of new grandfathers.

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For some unknown reason, some maintenance is required to the lighting fixtures in the typing pool every time a new lass commences duty. Apparently, Doug Wilson is most keen to ensure that the girls do not suffer with unnecessary eye strain.

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It's a great pity to see our experienced Administrative staff leave us but to Brian Christensen who has taken up duty in his promoted position with the Education and Science Department in Canberra, we wish every success. A very large group gathered in Block A on 19/2/70 to hear Ray Coath farewell Brian and, on our behalf, present him with an electric deep frier to remind him of his experience in the Laboratories.

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This issue also reluctantly farewells Sandra Russell who departs on 13/3/70 for an indefinite period overseas. Library users have been most appreciative of the assistance given by Sandra for the past three years. Bon voyage, Sandra, from all in the Labs.

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These fish stories get bigger and better. Bruce McEwen recently took his family for a holiday to Apollo Bay. According to Bruce, whilst wandering along one of the inland streams, he spied a 16 inch trout in a small pool. As he jumped in to grab the fish, it jumped out onto the bank. Result: trout for tea. What would Mr. Ripley say about this?

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Welcome back to Heather Durrant (nee Bentley - ex Lab. Equipment) who left us in November on the occasion of her marriage. Heather is now with the Voice/Ear team at Block T.

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Congratulations to the genial giant of Block W - Lurch James, who has successfully completed his apprenticeship as an Instrument Maker. Also, to Dave Cleary, Multichannel Systems, in gaining Third Division status by obtaining his Leaving Certificate.

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And to DOCTOR John Hullett, Pulse Techniques, for receiving his Ph.D. from the University of W.A. John's thesis was titled "Noise Vulnerability of Differentially Quantized Television Transmission".

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Latest additions to the Bearded Brigade are Block C stalwarts Don Sheridan and Ian Macfarlane. A little less daring is "Commodore" Murfett with those very distinguished grey side-whiskers.

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Kevin Bartlett, Lab. Equipment, has just returned from an enjoyable holiday in Japan. This trip was the one of the many football awards he has won over the previous sporting seasons.

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You just can't please these Bananalanders! Robyn Hollindale, Library, arrived back from the Gold Coast sporting her usual annual golden tan which, she complains, cannot be maintained in this Melbourne climate.

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FOR SALE

London Baby Carriage, lift-out pram, good condition. \$20.00 or best offer.

Tim Keogh 7895W

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"Convair" Briquette Heater, complete, good order. \$30.00

Tim Keogh 7895W

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Tennis Racquets

1 - Dunlop "Maxply" Junior (with press)	\$8.00
1 - Chesterfield Senior (with press)	\$10.00

Pat Cooke 7914T

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ENGAGEMENTS

Typing Pool	<u>Vickie Nitschke</u> to Lindsay Ellis (Planning Branch)
Equipment Development	<u>Adele Jabour</u> to Neville Parsons (Tel. Exch. Equipment)
Lab. Equipment	<u>Richard Brown</u> to Jenny Kells

Environmental Physics Graham Rogers to Marilyn Manks.

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MARRIAGES

Electronic Switching Richard Salomon to Rachael Goldberg

Metallurgy Lindsay Alford to Lorraine.

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BIRTHS

Electronic Switching to Neil and Dianne Chandler -
a daughter - Peta.

Environmental Physics to Basil and Kathy Listopad -
a daughter - Laura.

Material Physics to Axel and Carol Bauer -
a son - Brett, Anthony.

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Welcome to:

Emma Tomsons)	Typing Pool
Vivienne Lang)	" "
Jo-ann Hollins		Steno-Secretary
Patricia Fields)	Procurement Group
Chris Dunn)	" "
Sylvia Thomas)	Junior Assistants
Linda Napier)	" "
John van der Vreede)	Technical Assistants Gde 1
Ross French)	" " "
Garry Hay)	" " "
Nicholas Demytko)	Engineer
Stephen Howard)	"
Jim Vizard)	"
Ros Heath)	Library

Welcome to:

Dave Clutterbuck)	Clerical Assistant
John Hayden)	" "

and to all the others who have joined our ranks since the last issue.

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LABORATORIES' GOLF DAY

WHITTLESEA COUNTRY CLUB (LICENCED)

SATURDAY 14th MARCH

GREEN FEES \$1.50

ORGANIZER : ALVA ALLEN 7964

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DOG LOVERS

Diane Ellard, Typist-in-Charge, Block A, is leaving for Canberra on 20/3/70. She^{is} forced to leave behind "Buddy", her faithful little male dog, which will have to be put to sleep if we can't find a home for him. He would make a wonderful pet for any children. Diane's telephone number is 630 7931.

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Did You Know?

Satellite Communication to Remote Areas. Following a systems study by our engineers and several of our Planning colleagues late in 1968, the Labs were given approval to conduct a series of experiments using the National Aeronautic and Space Administration's ATS-1 satellite and the Cooby Creek (Queensland) earth station, and an experimental prototype subscribers' earth station was constructed in the Laboratories.

Early in December 1969, the experimental prototype subscribers' earth station was set up at Cooby Creek for system checks. Every experimental configuration was tested successfully and on 22nd December, a one-way delta-modulated speech path was established through the spacecraft.

During early February, the small station was moved to our Antenna Test Range at Mt. Cothell, 15 miles west of Melbourne.

On the 19th February, the transmission of digitally-coded speech through the satellite was demonstrated successfully to a number of interested people including representatives of other Departments and members of the Press. Subsequently, several of our staff were fortunate to witness a similar demonstration.

The most important part of the experimental programme, the study of the three-channel situation, is now in progress. One channel is used as a measuring channel and, by variation of relative spacings to the other two channels, engineering data applicable to a multi-channel system are being derived.

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