# Please do not upload this copyright pdf document to any other website. Breach of copyright may result in a criminal conviction.

This document was generated by me Colin Hinson from a document held at Henlow Signals Museum. It is presented here (for free) and this version of the document is my copyright (along with the Signals Museum) in much the same way as a photograph would be. Be aware that breach of copyright can result in a criminal record.

The document should have been downloaded from my website <u>https://blunham.com/Radar</u>, if you downloaded it from elsewhere, please let me know (particularly if you were charged for it). You can contact me via my Genuki email page: https://www.genuki.org.uk/big/eng/YKS/various?recipient=colin

**You may not** copy the file for onward transmission of the data nor attempt to make monetary gain by the use of these files. If you want someone else to have a copy of the file, please point them at the website (<u>https://blunham.com/Radar</u>).

Please do not point them at the file itself as the file may move or be updated.

I put a lot of time into producing these files which is why you are met with this page when you open the file.

In order to generate this file, I need to scan the pages, split the double pages and remove any edge marks such as punch holes, clean up the pages, set the relevant pages to be all the same size and alignment. I then run Omnipage (OCR) to generate the searchable text and then generate the pdf file.

Hopefully after all that, I end up with a presentable file. If you find missing pages, pages in the wrong order, anything else wrong with the file or simply want to make a comment, please drop me a line (see above).

It is my hope that you find the file of use to you personally – I know that I would have liked to have found some of these files years ago – they would have saved me a lot of time !

Colin Hinson In the village of Blunham, Bedfordshire.

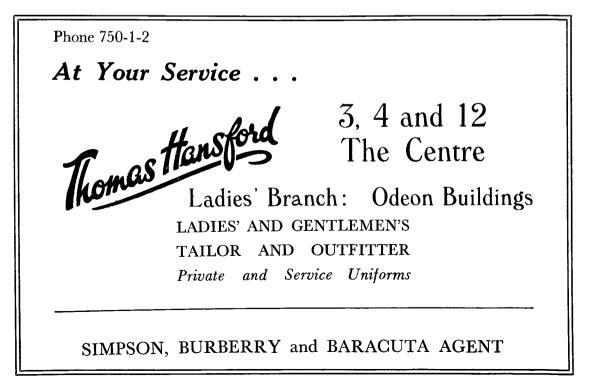


# ROYAL AIR FORCE LOCKING SOMERSET

VOLUME I NUMBER 2

1956





 Pasteurised T.T. Milk – Processing and Hygienic Dairy
 Deliveries Everywhere – Suppliers to Hospitals Hotels Schools H.M. Forces etc.
 WESTON FARMERS
 (D. R. Thomas Dairies Ltd.)
 Severn House, Locking Road East WESTON-SUPER-MARE
 Telephone: Weston-super-Mare 3520

# BIRD & SONS (WINSCOMBE) LTD. WINSCOMBE

Bakers Confectioners Caterers

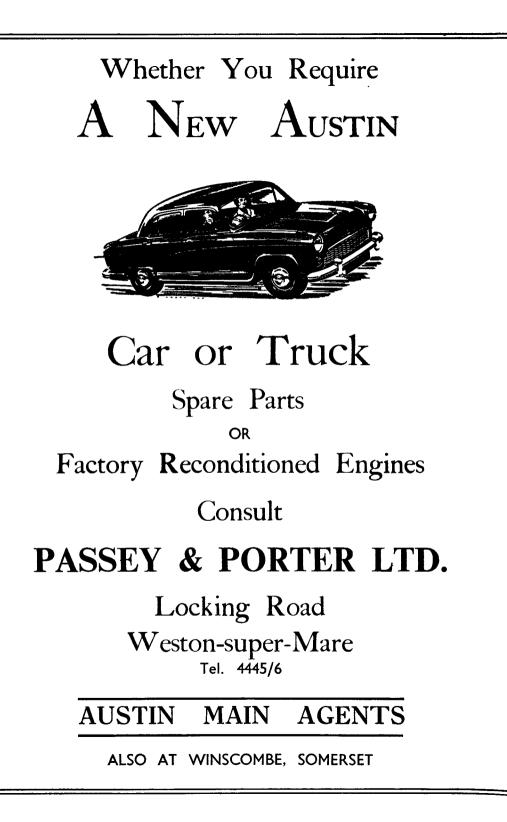
Under the same management-

BIRD'S RESTAURANT

also

THE ASSEMBLY ROOMS, WINSCOMBE

Available for Club Reunions, Dinners, Concerts, Badminton, etc. Telephone : Winscombe 2210



By Appointment to Her Majesty



Queen Elizabeth II-Wine Merchants



THE WINE MERCHANTS WITH OVER 150 YEARS' EXPERIENCE



"Bright to the Last Drop"

Their Sherries, Ports and Table Wines are all characterized by unfailing high quality. Harveys' Retail List, available for the asking, offers 450 varieties of Wines and Spirits and your selection can be guided by experts who visit the Wine growing countries every year.

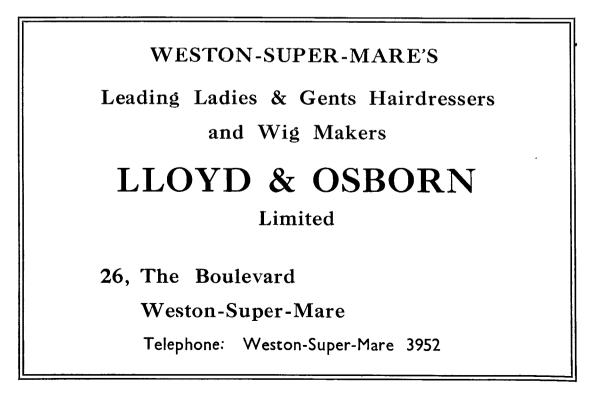
### JOHN HARVEY & SONS LIMITED

Founded 1796

12 DENMARK STREET, BRISTOL, I. Bristol 2-7661 LONDON OFFICE: 40 KING STREET, ST. JAMES'S, S.W.I. TRAfalgar 4436







h to Restaurants

From

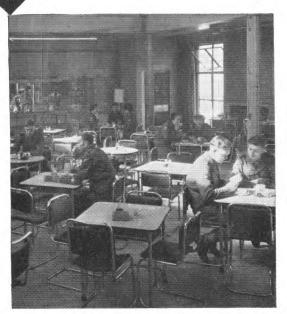
Researc



As the official caterers to Her Majesty's Forces Naafi meets many of the daily needs of Service men and women the world over.

To supply their requirements through its clubs, canteens and restaurants, Naafi must necessarily maintain a large buying organisation; but equally important is the maintenance of a consistently high standard of quality in its supplies. In Naafi laboratories, therefore, scientific analysis by experts is a daily task. It is one that involves not only stringent laboratory tests of purchases, but also constant research into improved methods of food production, storage and preservation.

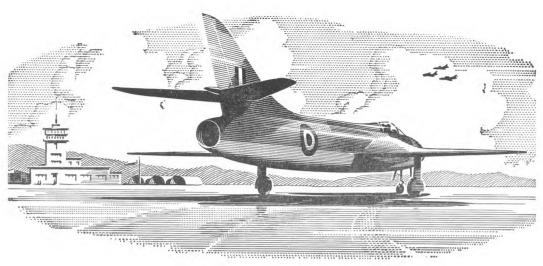
These "behind the scenes" activities ensure that Naafi restaurants serve goods of a proven quality and excellence; while, between the research and the restaurant, is a long chain of skilled processes traditional to ...







The official canteen organisation for H.M. Forces, Imperial Court, Kennington, London, S.E.II.



We know the drill

IF A LONG-SERVICE MEDAL were awarded for civilian service to the Royal Air Force, our Cox's and King's branch would undoubtedly qualify.

As Official Agents to the Royal Air Force since its inception, Cox's and King's branch has provided many thousands of Officers-and their familieswith banking facilities at home and overseas.

There is a widespread appreciation of the advantages of having a personal banking account with the Agents responsible for issuing pay and allowances. Furthermore Officers who are customers of the Bank enjoy the advantage of being able to cash their cheques at any of our 1,700 offices in England and Wales, and at the branches of the National Bank of Scotland.

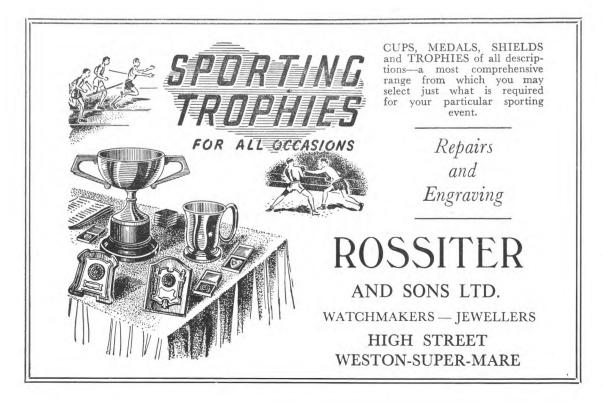
# LLOYDS BANK LIMITED Cox's and King's Branch

Officially appointed Agents to the Royal Air Force

PALL MALL · LONDON S.W.1 6

OFFICES AT OR NEAR ALL ROYAL AIR FORCE CENTRES IN ENGLAND AND WALES.









BLAZER Navy blue double-breasted, £13.0.0 and as admirably cut as you would expect from **STABLISHED** 1785 Outfitters to the Royal Air Force

27 OLD BOND STREET LONDON W. I. Telephone HYDe Park 2276 Bath — Bournemouth — Chatham — Edinburgh — Gibraltar — Liverpool — Londonderry Weymouth — Plymouth — Malta — Portsmouth — Southampton — Dartmouth



AIR MARSHAL SIR GEORGE R. BEAMISH, K.C.B., C.B.E.

#### FOREWORD

#### By AIR MARSHAL SIR GEORGE R. BEAMISH, K.C.B., C.B.E.

#### Air Officer Commanding-in-Chief Technical Training Command

I write this foreword for The Locking Review with much pleasure.

Locking stands in a proud position in Technical Training Command with both its fine training achievement, and its splendid specialist contribution to the Royal Air Force.

In its pages, I hope the *Review* will reflect the grand spirit which lies so firmly behind this enviable situation; doubtless, it will, and so provide an inspiring message reaching far beyond the boundaries of the Station, alongside the record of contemporary life and thought at the Station itself.

I wish The Locking Review every success.

G. R. BEAMISH, Air Officer Commanding-in-Chief Technical Training Command.

11th January, 1956.

#### FOREWORD

## BY GROUP CAPTAIN D. N. K. BLAIR-OLIPHANT, O.B.E., B.A. Officer Commanding No. 1 Radio School

THIS second issue of *The Locking Review* goes out at a time when we are on the threshold of new and interesting events: new pay rates that offer substantial improvements in the conditions of service for regular officers and airmen; new building marking the continuation of improvement in our living conditions at Locking; new and important tasks in training apprentices and airmen in skills and techniques that, in an electronic age, are basic to our national security.

The Editors have increased the size and scope of this issue of the magazine which describes and illustrates many of our interests and activities at Locking. To all past members of No. 1 Radio School and of the Electrical and Wireless School who would like to see for themselves, I extend a warm invitation to come and visit us. A welcome also awaits parents of apprentices and of airmen under training and on the permanent staff whenever they like to visit the School and, if we know in advance, we shall be glad to meet them and to provide them with refreshment during their visit.

The Locking Review provides an admirable means of keeping in touch with all our friends whose interest and support we so greatly value. I hope that as many as possible will become regular subscribers and contributors and so enhance still further the attractiveness of future issues. Finally, I should like to thank the Editor and his assistants for all they have done to ensure the continued success of the magazine.

							P AGE
Editorial	-	-	-	-	-	-	13
Princess Margaret at Locking	-	-	-	-	-	-	14
"M.O.Q."	-	-	-	-	-	-	18
A Low Power Three Band Amate	ur Trai	nsmitter	-	-	-	-	19
And Then There Were Five	-	-	-	-	-	-	24
Fitters Descend Long Wood Swa	llet	~	-	-	-	-	25
71st Entry Passing-Out Parade	-	-	-	-	-	-	2 <b>7</b>
Apprentice Amateur Radio Club	-	-	-	**	-	-	29
Fitters Miscellany	-	-	-	-	-	-	30
Pictures in the Fire	-	-	-	-	-	-	32
M.T. Efficiency Competition	-	-	-	-	-	-	36
Locking Rover Crew -	-	-	-		-	-	36
La Survie Des Plus Aptes -	-	-	-	-	-	-	37
The Rock	-	-	-	-	-	-	39
Noise in Radar Receivers -	-	-	-	-	-	-	41
Three Wing Notes	-	-	-	-	-	_	44
The Music Square	-	-	-	-	-	-	46
Ted	-	-	-	-	-	-	47
Station Voluntary Band -	-	-	-	-	-	_	49
Royal Tournament Impressions	-	-	-	-	-	-	50
The Magic Circle	-	-	-	-	-	-	52
Hypnosis	-	-	-		-	-	53
Come to the Cookhouse Door Boys	-	-	-	-	_	-	55
"And Chaos Was Upon Us"	-	-	-	-	-	_	56
73rd Entry Passing-Out Parade	-	-	-	-	-	-	57
Time on Your Hands? -	_	-	_	-	_	-	59
Group Captain Robinson -	-	_	-	-	-	-	61
Locking Golfing Society -	_	-	-	-	_	_	62
Royal Air Force Riding Club	-	-	-	-	-	_	$\tilde{64}$
Journey With Iris	-	-	_	-	_	_	66
What is This Thing Called Jazz	-	-	_	-	-	-	69
Rhineland Rendezvous -	_	_	-	_	-	_	70
Scopology	_	-	-	_	-	_	71
Moon-Madness	-	_	-	_	-	_	71
Mechanic Close-Up -	_	_	_	_	-	-	72
Hamish		_		_	_	_	73
The Disappearance of Africa	-	_	-	_		-	73 74
Fitter Close-Up	-	_	_		_	-	75
The Geophysical Year -	-	-	-	-	-	-	76
Personalities of No. 1 Radio Scho	-	-	-	-	-	-	77
Scattered Community -	01	-	-	-	-	-	78
	-	-	-	-	-	-	79
St. George's Sunday School	-	-	-	-	-	-	79 80
Church Notes To Make You Think -	-	-	-	-	-	-	80 83
	-	-	-	-	-	-	
Sports Reports	-	-	-	-	-	-	85

### No. 1 RADIO SCHOOL, LOCKING

Vol. 1

{

#### EDITORIAL BOARD

No. 2

President: Group Captain D. N. K. BLAIR-OLIPHANT, O.B.E. Chairman: Squadron Leader B. L. CRONIN Editor: Flying Officer J. J. EVANS Business Manager: Squadron Leader A. S. HAWRYLOWICZ Sports Editor: Flying Officer T. J. GRISEWOOD Photographs: Flight Lieutenant G. W. BARNETT Cartoons: Sergeant WAGHORN AC/2 P. SKERTCHLY AC/2 W. G. HATTON

> The moving finger writes and having writ Moves on.

L IKEWISE the second copy of *The Locking Review* is thrust upon you, the unsuspecting reader, and whatever its deficiencies, and we trust that they are few, neither blood, tears nor influence, can turn back the wheels of the press to alter the half-line or so that may displease you.

The success of last year's edition, reflected in the artistic rather than the financial field, leads to this second edition, where again, we hope to mirror, as accurately as space will allow, the various aspects of life at Locking. Overwhelmed with contributions, we have been able to widen our scope considerably, thus producing what we believe to be, a better balanced and perhaps, a more interesting magazine. Not only will the *Review* present the history of the past twelve months, a colourful and memorable period indeed, which included a Royal visit, the departure of Group Captain B. Robinson, C.B.E., and the arrival of his successor, Group Captain D. N. K. Blair-Oliphant, O.B.E., to say nothing of our outstanding sporting record, but by virtue of the numerous articles on non-Service and non-Locking topics, we hope to have created a pitcure of the interests and pursuits of our Station personnel outside normal working hours and outside the normal facilities organised by the Service. Topics as varied as "Pot-holing in the Mendips," and "Experiments in Amateur Hypnosis," are flanked by highly technical pieces of research in Radar and Radio, or by diatribes on Jazz or Archaeology.

No editorial comment would be complete without some word of thanks to the large number of people who have contributed written material, photographs and captions, and to the countless others who have given valuable time and support, thus making the task of the Editorial board so much easier.

Finally, on a mundane, but none the less important note, let it be said that *The Locking Review* is to be sold at 2/- per copy and that the future of the magazine will depend upon the support you give it. One need hardly mention increased pay. . .

# THE VISIT OF HER ROYAL HIGHNESS THE PRINCESS MARGARET TO REVIEW THE PASSING OUT PARADE OF 72nd ENTRY A.A.

A S the Royal Standard broke from the masthead overlooking the parade ground, a hush fell over the excited crowd and all turned to face the flag. A fanfare of trumpets resounded through the air; Princess Margaret had arrived at Royal Air Force, Locking. In brilliant sunshine Her Royal Highness stepped from the car Twelve minutes previously, Her Royal Highness had alighted from a Viking of the Queen's Flight that had flown her from Marham in Norfolk. At Weston Airport the Princess, accompanied by her Lady-in-Waiting, Miss Iris Peake, and her Equerry, was greeted by the Lord Lieutenant of the County, Lt.-Col. The Right



Princess Margaret makes the acquaintance of Hamish McCrackers, the Mascot of the Apprentices

that had brought her from Weston airport, to be greeted by Mr. George Ward, Parliamentary Under Secretary for Air, and escorted on to the reviewing platform by Air Marshal Sir Victor Groom, K.C.V.O., K.B.E., C.B., D.F.C., Air Officer Commanding in Chief Technical Training Command, Air Commodore L. Philips., C.B., C.B.E., Air Officer Commanding No. 27 Group and Group Captain Robinson, C.B.E., Station Commander. Hon. Lord Heylton, K.St.J. Also waiting at the airport, to be presented to Her Royal Highness, were Lady Heylton, Mr. K. W. L. Steele, the Chief Constable of Somerset, and Mr. L. A. Lisle, the Airport manager.

The day became a station event, for all training was cancelled in the morning. Civilian and Service staff alike took up their positions, some on the parade ground, some along the roads within the camp, others lining the main road



Princess Margaret leaving the Parade Ground, accompanied by Air Marshal Sir Victor Groom

from the airport. For about 800 Airmen trainees of No. 3 Wing, the Royal visit was but a fleeting moment of glory, for as they stood, silent sentinels, lining the route from the main gate to the parade ground, their only view of the whole occasion was a glimpse of the procession of cars bringing Her Royal Highness and the other distinguished visitors as it passed between them on the way to the parade ground.

The Passing-Out ceremony was performed with Guardsman-like precision and perfection. Princess Margaret spoke to several of the Apprentices but paid particular attention to the Apprentice Mascot Hamish McCrackers, the small Shetland pony that stood proudly to attention as Her Royal Highness patted his forehead. The parade commander, 19-year-old F/S A. A. Clements, must indeed have felt keenly, the responsibility resting on his shoulders, but he carried out his task flawlessly with confidence and smartness. It was a particularly great day for him, since he figured prominently among the prize-winners who came forward to the greencanopied dais to receive their prizes from the Princess. The Air Radio Fitters Prize, the prize for the Highest Educational Marks, and also the prize for the highest aggregate marks went to F/S. A.A. Clements. The Ground Wireless Fitter Prize was won by A.A. Green, the Ground Radar Fitter's Prize by A.A. Rider, and the General Service Subjects prize by A.A. Revell. The Victor Ludorum Trophy was presented to L.A.A. Furneaux. From the entry F/S. A.A. Clements has been awarded a Technical Cadetship to Henlow, and S.A.A. Jewell a cadetship to R.A.F. Cranwell.

As the 72nd Entry marched off the parade ground in slow time to the tune of Auld Lang Syne, played by their own pipe and drum band, the remainder of the Wing presented arms in tribute. This marked their final act as Aircraft Apprentices before they became Junior Technicians in the Radio and Radar trades, and concluded three years training that had begun in September, 1952, at Cranwell. Instructors and Apprentices alike, must indeed have felt great pride and satisfaction, as the occasion symbolised the culmination of hours of labs., lectures, drill and "BULL." All was now a success; a fine job had been done, and among those watching, few must have experienced a keener sense of pride than the Entry's own Flight Commander Flying Officer T. A. Rippon, D.F.C., who was later presented to the Princess.

The Parade concluded, Her Royal Highness was conducted to one of the main training blocks to see some of the radar and radio equipment and lecture rooms and labs used by the Apprentices and Airmen during their training. At about 12.30 p.m. Princess Margaret arrived at the Officers' Mess. As her car pulled up, the Princess stepped out on to a red carpet beneath a green and white awning covering an avenue of colourful flowers and greenery that led to the main entrance of the Mess. In the ante-room of the mess, awaiting presentation to Her Royal Highness, were a number of distinguished guests, among them the Bishop of Bath and Wells, Sir Ian Orr-Ewing, M.P., Lady Orr-Ewing, the Mayor of Weston, Councillor R. Ivens, and Officers of the Radio School accompanied by their wives.

The Royal retiring room, especially refurnished and decorated for the occasion, the ante-room and the dining-room, were all gaily decked with flowers in finely blended pastel shades. After lunch the Princess signed the Visitors' Book, and then went outside to join some of the officers who had assembled on the lawn in front of the mess for a group photograph.



Her visit at an end, Her Royal Highness leaves the Officers Mess

The visit seemed all too short, for as Princess Margaret drove from the Officers' Mess between two lines of officers bidding her farewell, she had been on the station under three hours. Just before getting into her car, the Princess was presented with a bouquet of flowers by the eight and a half year old daughter of Squadron Leader Uprichard, Squadron Commander of the Passing-Out Entry.

As the Royal procession of cars drove down the main road from the station all was presumed over, but a last minute episode of excitement was to follow. Princess Margaret had suddenly discovered that she had left behind a small organdie scarf, and within seconds a police car roared back to the Officers' Mess to retrieve the lost garment. A few minutes later the Viking aircraft took off and flew over station taking the Princess home to Sandringham; the occasion was now over.

The Passing-out ceremony of any entry is a great occasion; anticipated with longing, performed with enthusiastic triumph, it becomes a long cherished memory. For the 72nd Entry, July 26th, 1955, was the great day. It was a pass-out parade above all others; a Royal Occasion. Not one of the 93 Apprentices who stood erect, motionless and immaculate in the centre of the parade ground as Her Royal Highness carried out the inspection, is likely to forget this great moment, nor will the station easily forget the honour bestowed upon it by this Royal visit.

M.B.W.

#### 72nd ENTRY

- Air Ministry Prize for Highest Aggregate of Marks
- Air Ministry Prize for Highest Educational Marks
- Air Ministry Prize for Highest Marks in Technical Subjects (Air Radio) 588120 S/A Clements, M. F.
- Air Ministry Prize for Highest Marks in Technical Subjects (Ground Radar) 588138 A/A Rider, P.
- Air Ministry Prize for Highest Marks in Technical Subjects (Ground Wireless) 588214 A/A Green, B. J.

Air Ministry Prize for General Service Efficiency 588124 A/A Revell, J. W.

Victor Ludorum L/A/A Furneaux, P.

Cadetships-

Technical College, Henlow S/A Clements, M. F.

> R.A.F. College, Cranwell S/A Jewell, A. J.

GENTLEMEN, at some time in your career it is possible you may be fortunate enough to be allotted a MOQ (pronounced MOK). Now a MOQ is undoubtedly the greatest single morale puffer-uppering stroke made in recent Royal Air Force years. That being so, it is important that those who "march in" shall know how fully to exploit the joy of life in a MOQ. It is with this in mind that the following notes have been prepared.

First, we must be clear on nomenclature. Post-war MOQ's are of six "Types." Type I is merely a name, but an interesting thought; Type II appears vaguely in plans, but, like guided missiles, is a bit behind in production. Type III's, on the other hand, are common; they are usually found in clutches of three or four, and in these cases the clutch is frequently termed a "Snobs' Alley." Type IV is a desirable residence, frequently seen; it has one fewer bathrooms than a Type III, and usually looks the better for it. Types V and VI are the lower-class dwellings available for junior officers who have no business to be married anyway.

Now, in the matter of MOQ, as in all military matters, principles are of importance. All postwar MOQ are designed to accord with one overriding, or "master," principle—the "All-Through" principle. This principle was first evolved in flying training, and no doubt, was adopted for domestic training generally, and MOQ in particular, with a view to preserving an Air Force air in MOQ.

The "All-Through" principle is applied to MOQ aerodynamically, visually, acoustically, vis-a-vis fittings, and of course horticulturally.

First then, for our full enjoyment of MOO we must study the aerodynamic "all-through" application. As far as possible all external and internal doors are in line; this arrangement combined with a lining up of fireplaces gives a steady fifteen knot breeze fore and aft. Next a cross-wind is built in from windows to french windows at either end of a given room. We therefore at some point find a " centre of pressure." Now, gentlemen, it is no good asking the Clerk of Works (C.O.W., for short), where the C.P. of your MOQ is. You must call in the Station Education Officer, with his slide-rule and text-book on Heat. Obviously there is a C.P. for the whole MOQ, but the vital C.P. is that located in the sitting-room (sitzzimmer, for German students).

Should you be unfortunate to find that your "Sitzzimmer C.P." is where one normally sits the problem arises of moving it to a less inconvenient spot, e.g. in one corner or underneath the bureau. There are many ways of doing this, ranging from calling in a draught-proofing specialist firm, who may quote up to £30 for doing the room, to sealing up yourself the various intakes with Selotape, Elastoplast, Bostick or whatnot. This is an interesting exercise in itself, calling for much judgment. It must not, for instance, be forgotten that the fire will require some air, so if 100% sealing of air-intakes is adopted some leak must be allowed, by way of, say, an external orifice connected by under-floor tubing to the grate. Then again, if sealing is too complete there is the danger that when the door is closed the suction effect is so great that the whole fire is sucked from the grate and deposited in the centre of the room. If after some months of trial and error, involving theoretical calculations as well as "Suck it and see" methods, one's C.P. is still awkward, the worst conditions can be alleviated by wearing a duffle coat with the hood up in the sitzzimmer. This is then very cosv.

The visual application of the "All-Through" principle lends itself to more positive treatment. Most MOQ are aligned so that one can see right through the MOQ immediately opposite. Curtains help, and of course, a woven-board fencing around the garden perimeter works wonders. But trouble of a more serious sort arises upstairs. Here, with "all doors and hatches closed "-remember the old Lanc. Vital Actions?-we still have a visual "All-Through" factor, to wit plug 'oles. The keen student of design will early appreciate that when sitting in his bath he can see through the overflow, through to the opposite MOO. Truly-aligned MOQ have matching plug 'oles and therefore, offer an exceptional vista on clear nights. It will be appreciated that this particular visual application of the All-Through principle has a concomitant aerodynamic effect which, according to the prevailing wind, can be uncomfortable. In MOQ having two bathrooms, one on each side of the house, it is simple to note the wind direction before bathing and select the bathroom on the down-wind side. (Here again we see the sense of airmanship preserved in MOQ). On balance the most effective vital action for visual aerodynamic overflow plug 'oles is to tape them

up with Elastoplast or some other reliable adhesive. If such crude measures offend the eye then an alternative is to keep the hot water tap running so that the level is always above the overflow plug.

The study of acoustics is not everybody's cup of tea, but in MOQ the subject should not be disregarded. First it must be noted that the All-Through principle again applies. Everything can be heard except the front door bell. Some noises which occur fairly regularly seem to be exaggerated—others not so. This is an interesting field for experiment, so far unexplored.

Now vis-a-vis Fittings. Here the All-Through principle is closely followed and with much effect. Labour-saving drawers beneath a servery between kitchen and dining-room pull through from both sides. If Mum is getting something out of the kitchen drawer on one side, while little Willie is laying the table next door and pulls the drawer through, it is likely that Mum's fingers will appear on the dining-room table. Then again, all-through cupboards similarly placed between kitchen and dining-room are liable, under certain aerodynamic conditions, to blow open and catch the unsuspecting kitchen worker on the head.

Finally, the horticultural "All-Through." Here the principle is radically applied at the outset. Before a MOQ takes shape the area is reduced to scorched earth. Bull-dozers and other weapons of mass destruction descend on the area and go all through it tearing up old-established hedges and trees, thus leaving a nice cleanshaven aspect to the terrain. After a proper admixture of builders' rubble in place of top soil, the area is dotted with white concrete posts. The resultant horticultural effect is that slugs, weeds, wind, smalls-on-the-line and competing gardeners have an all-through, uninterrupted vista and field of activity.

Now, gentlemen, it may be thought that MOQ comes badly out of these little tips for those lucky enough to occupy one. That was not the intention. MOQ are magnificent. The greatest single morale puff . . . but we've said all that before.

March in, gentlemen; remember your All-Through training and be grateful.

B.R.

### A LOW POWER THREE BAND AMATEUR TRANSMITTER

#### The Design for an 80/40/20 Metre Transmitter

By F. B. Arrowsmith

THE need for a self-contained amateur station was felt by the writer, and several weeks experimenting resulted in the completion of the equipment described below.

The equipment is built into two American Tuning Units (the TU series), but there is no reason why the circuit should not be adapted to fit into some other chassis arrangement. The advantage of using the TU Unit is that the solid construction lends itself readily to the construction of a stable V.F.O., and the variable condensers with their associated controls are used in the circuit described.

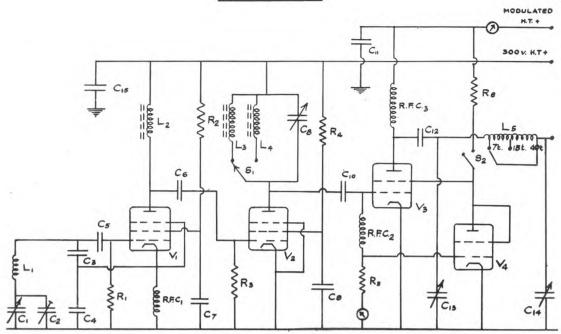
#### The R.F. Circuit.

An E.F. 50 connected as a Clapp V.F.O. drives a second E.F. 50 connected as a buffer doubler. Output from this stage is coupled into an 807 power amplifier working as a straight amplifier on 80 metres and 40 metres, and as a power doubler on 20 metres. The 807 power amplifier is protected during the non-transmission periods by a 6 BW 6, triode connected, as a clamper tube on the screen of the 807. The Modulator Circuit.

The modulator consists of a simple 4-valve circuit. A high gain pentode (VR 65) is connected to a triode connected E.F. 50, the E.F. 50 being transformer coupled to the grids of a pair of push-pull 6L6's, biased in class A B. The Power Unit.

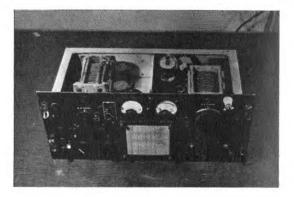
The power unit consists of a 450-0-450 v. /300 m A transformer with a 5U4G—and the usual filter circuit. The transformer supplies all the H.T., L.T. and relay supplies required by the transmitter.

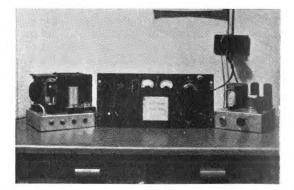
# R.F. UNIT

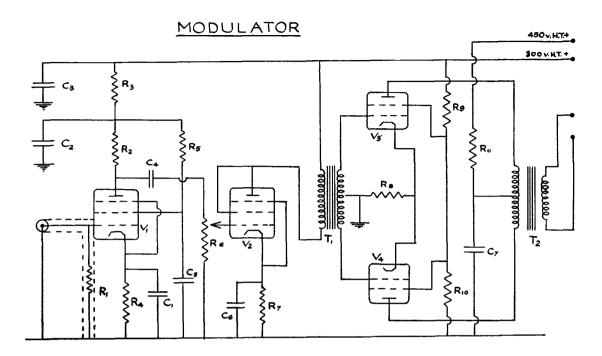


#### R.F. UNIT COMPONENT VALUES

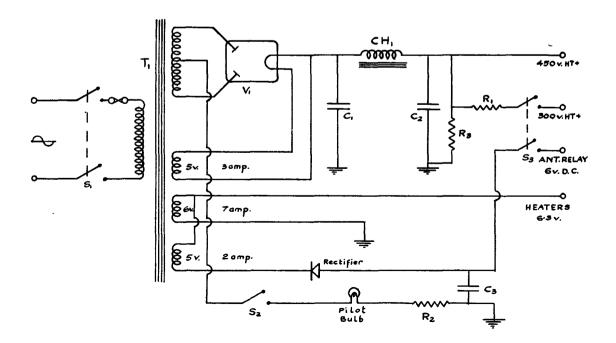
C,	SOPE VE O TUNING	R,	47KA 1/2 WATT		
-/	CONDENSER	Ra	33KA YEWATT		
C2	100 pF. V.F.O TUNING CONDENGER	Rs	100KA '2 WATT		
C.	0 001 N Fd (MICA)	R4	2.7Ka VEWATT		
$C_4$	O OOINEd (MICA)	Rs	22KA YOWATT		
Cs	100 pF. (MRA)	Re	SOKA IOWATTE		
Ce	100 pr (MICA)	RFG	25 MH RF CHOKE		
С,	O OINEd (MICA)	RFC2	2 5 mH RF. CHOKE		
C8	200PF VARIABLE	R.F.C.	25 MH RF CHOKE		
Co	O. OILED (MICA)	4,	30 TURNE, 20 SWE CLOSE WOUND, I"DIA FORMER 86 TURNS 29 SWE CLOSE WOUND ON "16" DIA SLUG TUNED FORMER		
Cio	100pf (MICA)				
C,,	O OI LEA (MICA)	42			
C12	0005 HFd (2500 WKG.)				
C,5	100PE VARIABLE CONDENSER	43	46 TURNS 248.W.G.		
C14	1000 PF VARIABLE		DIA SLUG TUNED FORMER		
Cia	CONDENSER O.OLUFA (MICA)	4	26 TURNS 24 S.W.C. CLOSE WOUND ON 1/2 DA SLUG TUNED FORMER		
V,	VR 91 (EF 50)	Le	CLOSE WOUND ON 13/4" DIA FORMER TAPPED AT 7th AND		
Va	VRBI (EF 30)				
Va	807	Ι			
V4	EBWE	1	18th TURN		
5,	BAND CHANGE SWITCH				
52	TUNE SWITCH				







POWER UNIT



C,	50,4Fd 50V WKG	$R_3$	47KA IWATT
$C_2$	Bufd 500 WKG	R4	470 2 1/2 WATT
C3	Fd 500 WKG	R <sub>5</sub>	100K A 1/2 WATT
C4	0.01,4Fd 400v(poper)	Re	IMA VOL CONTROL
Cs	OluFd 250v(poper)	R7	500 Q IWATT
Co	50 u Fd 50 + WKG	Rs	250 A IOWATTS
C7	002 µ Fd 1000 WKG	Ro	2000 10 WATTS
	INTER STAGE AUDIO	Ria.	33KA IOWATTS
	TRANSFORMER, SINCLE PLATE TO PUSH-PULL	R"	500 D. IO WATTS
	GRIDS, RATIO 3.1	V.	VR 65. (SP 61)
72	MODULATION TRANS-	Va	VR 51 (EF 50)
		$V_3$	646
$\frac{R_1}{R_2}$	1 M.D. 1/4 WATT 22 KL 1/2 WATT	V4	646

#### MODULATOR COMPONENT VALUES

Construction.

#### R.F. Unit

The R.F. unit was built directly into a T.U. unit. Initially all the components in the unit were removed save the master oscillator and power amplifier tuning condensers, and their associated controls. Two small chassis were constructed, one measuring 7in. x 7in., to carry the V.F.O. and buffer doubler valves and components, the second measuring  $2\frac{1}{2}$  in. x 7 in. to carry the P.A. valve and the clamper tube. The front panel of the T.U. unit was drilled to take two 2in. meters, the one to the left measuring the grid drive to the 807, the one to the right measuring the P.A. annode current. Additional holes were made in the front panel to locate (reading from left to right):-

(1) The tune switch, (2) the buffer amplifier anode switch, (3) the buffer amplifier tuning condenser, (4) the P.A. inductance switch, and (5) the aerial loading condenser control. The output from the tank circuit of the P.A. is taken out via the insulated terminal to the upper right of the P.A. tuning control.

The placement of the components is clearly seen from the photograph. Underneath the chassis the only metal work necessary is to fit a small screen between the oscillator and the buffer amplifier; the oscillator is placed at the rear of the T.U. unit as this allows the tuning controls, switch, etc., of the buffer amplifier to be brought out conveniently to the front panel.

The power amplifier is a convention circuit, the only points worthy of note are that the R.F.

Τ,	230, TRANGFORMER OUT PUTS" 460 - 0-450, 300 m a 5, 30mpg	R, R2 R3	4KA 10 WATTS 15A I WATT 470KA 3WATTS
	6 Tamps Sv Zamps	5	DOUBLE POLE SINGLE THROW SWITCH
СН,	IOHENRY BOOM Q SMOOTHING CHOKE	52	SINGLE POLE SINGLE THROW SWITCH
V; C,	504G 4µFd 500v (PAPER)	59	DOUBLE POLE SINGLE THROW SWITCH
Cz	40Fd 500V (PAPER)	RECT	IZVOLT ZAMP
്ദ	50 uFd 124 WKG ELECTROLYTIC		HALF WAVE RECTIFIER
PILOT BULD	Or osomp		

#### POWER UNIT COMPONENT VALUES

choke and the anode condenser are mounted along the rear wall of the unit. A small harmonic trap is connected in the anode lead immediately adjacent to the anode top cap itself. A small screen around the lower half 807 prevents any feed back between anode and grid circuits. The clamper tube fits neatly at the side of the 807 and there is room in front of this for the P.A. inductance. The loading condenser is larger than normally specified, but by using it, the need for switchbed fixed condensers in parallel with a small variable condenser is avoided. The power connections for the units are taken out of the rear of the unit via an octal socket.

#### Modulator Unit.

This is built on a 7in. x 7in. x 2in. steel chassis. The placement of the components are as shown in the photograph. The only point to watch in construction is that A.C. pick up is avoided by careful screening of the grid lead and that the heater leads are kept as far away as possible from the grids of the earlier valves. The only controls along the front panel are the microphone input connecter and the volume control. In conjunction with a crystal micriphone, the output is more than adequate to fully modulate 30 watts D.C. input to the class C P.A. stage. Power supplies, and the modulator output, are fed out via a six-way Jones socket.

#### The Power Unit.

This is built on a 7in. x 8in. x 2in. steel chassis, and in addition to housing the main power supply components, it also supports the control switches and a small rectifier and condenser supplying a 6v. D.C. relay voltage. Along the front panel of this unit (reading from left to right), are the pilot light, the send/receive switch, the H.T. on/off switch and the mains on/off switch. The pilot light is connected in series with the centre tap of the transformer and in addition to acting as an H.T. safety fuse, it also serves as a rough indicator as to the amount of H.T. current the transmitter is consuming. The output to the modulator from the power unit is fed via a six-way Jones plug, the connections to the R.F. unit being made by an octal plug set in the rear wall of the unit. This octal plug carries the oscillator and buffer amplifier H.T. supplies, the modulated H.T. to the P.A., the filament supplies and the 6v. D.C. supply to the aerial relay.

#### Switching.

The send/receive switch is connected in the low voltage H.T. line; this H.T. line feeds the oscillator and buffer amplifier of the R.F. unit, the first two stages of the modulator, and the screens of the 6L6's. When tuning up, the P.A. can be switched off by operating the tune switch, thus avoiding an annoying carrier swishing across the amateur band.

#### Meter Settings and Final Notes.

On 3.5 mc/s the P.A. grid drive is approximately 3 m.a., and on 7.0 mc/s the grid drive is at least 5 m.a. On 14 mc/s the P.A. doubles from the 7 mc/s input. On all bands the P.A. input power can be adjusted to at least 25 watts, the transmitter can be modulated satisfactorily at this power and reports as to the modulation quality indicate that it leaves little to be desired.

The transmitter is housed in black crackle cases (dust cases from the T.U. units). Two of these bolted together form a convenient small rack. Screening lids are fitted to the top and bottom of the R.F. unit and these are recommended in the interests of television interference suppression.

The transmitter has been in use for over three months and has given no trouble whatsoever during this time the distance and frequency of stations contacted have been quite pleasing. In conclusion the writer wishes to thank the Aircraft Apprentices' Photographic Club for their work in preparing the photographs used in this article.

F.B.A.

~





Remember our picture of last year showing the "Progress of Apprentices"? Well, here we are again to let you know how they are.

Alas! A/A Avery, at the time of going to press, is in hospital, so we couldn't photograph him.

To show briefly how they are doing—reading from left to right in this year's picture :

A/A Warren has moved back to the 80th Entry and unfortunately still finds the technical side rather tough. So best foot forward Warren!

A/A Pearse is still in the 79th and managing quite well thank you. Plays basket ball for his Entry.

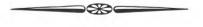
A/A Chapman stays in the 79th and is very near the top of his Entry this term. Good show, Chapman.

A/A Tipler stays with the 79th Entry and is top of his Entry this term. Plays hockey for his Squadron. Bully for you, Tipler!

A/A Dennis, last but not least, has been sick and has retired honourably to the 80th, where he is holding his own. . . . Just keep at it next year Dennis!

They all said they were happier now than when they arrived a year ago—the wrench from home—they like the food, and were delighted with the new pay which will make them richer than their boy friends at home.

G.B.



#### FITTERS

#### A Descent of Long Wood Swallet

L ONG WOOD SWALLET is situated in Long Wood Valley, approximately  $2\frac{1}{2}$  miles N.E. of Cheddar Village and about 100 yards below Lower Farm, Charterhouse. This Swallet was formed by a stream which, long ago, helped to form Cheddar Gorge and which now, after a subterranean passage, is believed to form a small part of water which rises by numerous powerful springs at the head of Cheddar Village, close to the entrance to the celebrated Gough's cave.

The pothole itself was first entered in 1945 after a considerable amount of excavation at the point where the water sank. This old entrance is now closed and entry to the cave system is made by a vertical shaft which has been sunk through a mass of boulders. The stream has been diverted so as not to pass down the shaft, but now disappears underground via an older swallet a few yards further down the valley.

One Sunday in autumn saw the arrival at Lower Farm of a party of seven Fitters from Locking; bicycles, motor bikes and a car being the means of transport used. Thanks to the hospitality of the farmer, we were allowed to change into old clothes, reserved solely for caving and potholing, under the shelter of a barn. Suitably equipped with illumination such as acetylene lamps or electric torches, and carrying three ropes (two for climbing purposes and one as a life-line) we made our way to the cave entrance through a farmyard which must be one of the muddiest in Somerset. The track through the Long Wood, where the mud was ankle deep, was even worse.

On arrival at the entrance to the pothole, it was found that a tree had been felled across the stream and had caused a partial blockage. The stream, swollen by heavy rain, was once more descending by the entrance shaft through which we had hoped to climb. Half an hour's hard work reduced the volume of this water but it was found impossible to stop the flow of water completely, and we were obliged to resign ourselves to getting wet at the outset.

The entrance shaft was extremely constricted and some of our members found the descent unpleasant and decidedly hard on knees and elbows. The cascading water down the 40ft. shaft was even more unpleasant however, and accordingly the descents were fairly rapid. The shaft led to a narrow vertical rift, distressing for those of ample build, and when the rift led, after a few yards, to a full-length crawl through a pool of mud, several of our party were beginning to regret the visit. After a few yards, the passage turned at right angles at a point where a choked subsidiary passage entered and the way divided. One passage consisted of a slide, only possible when stretched full out, and the other was narrow with an awkward corner and both soon reunited at the head of a pitch approximately 10ft. deep. This point was reached with sighs of relief as at last the passages were roomy in all directions.

An easy climb by means of a rope belayed to a large boulder led, after a few yards, to a second pitch of similar height but which could be descended without the aid of tackle. We were now in a long vertical passage which



Entrance to one of the many pot-holes on the Mendips

stretched both from right to left. To the right came the ominous sound of a waterfall dropping from a considerable height into a pool far below. Were we then to face a waterfall with its inevitable drenching? Fortunately our guide informed us that our way was to the left, the passage to the right leading to the August hole, a notoriously wet place, inadvisable after the wet weather which had recently been our lot. The stream was the one which sank just below the entrance to the swallet.

The rift to the left was dry and of a good height, reaching at its farthest extremity to about 90 feet, at a point where a tributary entered, filling the cave with spray. Normally a trickle, this stream provided us with a shower bath through which we dashed with vigour, collecting a considerable amount of moisture on the way. We did not stay to admire the features which at this point are very fine although hardly visible at the time due to the spray and mist.

The stream fortunately sank to the bottom of the rift, which at this point took yet another right-angled turn, and traversing along the portions of the rift we avoided having to travel in the stream until the stream suddenly plunged over a drop into a large chamber of which our lamps were unable to reveal the full extent. The stream fell down a 30ft. drop as a waterfall, and there was no apparent way of descending the pitch except by rope. This was belayed to a large boulder and we prepared to descend on the life-line. The climb looked unpleasantly wet and no one seemed keen to make the first move until our leader volunteered and rapidly descended to the bottom, being quite successful in avoiding all but spray. Others were not so skilful and one at least made the descent with the water literally entering the neckband of his shirt and leaving via his ankles. The party descended rapidly.

Being now thoroughly soaked, we found it was possible to keep quite warm provided we kept on the move. The chamber was rapidly explored and was found to contain a fine grotto full of stalactites and stalagmites, though none were particularly large. The stream sank beneath a pile of boulders, but the stream passage could be entered easily at another point and we pushed on quickly into the stream (splashed) merrily along a stream passage which fluctuated frequently in height. At times we had to stoop and occasionally to crawl, but being now already wet nobody minded in the least. Unlike the upper portions of the cave, the passages no longer had a pronounced slope and so it remained, until a drop of several feet was met. One of our party went down to report that the passage divided, one way being wet and the other dry, but we decided to pursue the cave no further and the return journey was commenced; at that point we were some 200 feet beneath the entrance. The return was more fatiguing and the thoughts uppermost in our minds centred around the constrictions in the upper portions of the cave. Several of the party managed to avoid the waterfall leading into the main chamber by means of a climb up the side of the fall, but one member spent an unpleasant five minutes standing at the base of the fall



We all thoroughly enjoyed ourselves . . .

whilst his helmet and lamp, which he had lost, were recovered from the bottom of the chamber. Once again the showerbath had to be passed, and thus we arrived at the upper reaches and the crawls that lay ahead. With wet and heavy clothing, these crawls seemed to take an eternity; two members of the party were stuck in the crawl and had to be helped through the tightest places.

Lady luck was on our side at the end, for the flow of water down the entrance shaft had much diminished and the climb was hence much easier. Once out into the colder atmosphere we hurriedly made our way to Lower Farm to change into dry clothes and to cook a meal, a welcome end to a most exhilarating journey underground. A.C.2 Peckhem.

Of the above, only three had previously experienced the rigours of potholing.

B.H.T.

#### 71st Entry REVIEWING OFFICER : Air Vice-Marshal A. F. HUTTON, C.B., C.B.E., D.F.C.

Address of Air Vice-Marshal A. F. Hutton, C.B., C.B.E., D.F.C., on the occasion of the Graduation of the 71st Entry of Aircraft Apprentices from Royal Air Force Station, Locking, on the 5th April, 1955.

Air Vice-Marshal A. F. Hutton said :--

"Group Captain Robinson, Air Commodore Phillips, Air Vice-Marshal Franks, Ladies and Gentlemen, and of course, Apprentices:

" I am just going to talk to you three different classes of people, and I am going to start first of all with the parents. Not a lecture. I think first of all, I can say on behalf of the Commandant and his staff, and the rest of us, how pleased we are to see the parents here today. I am certain it goes without saying that your sons are also glad to see you here, whether they will be afterwards remains to be seen. But we are particularly pleased because it gives you, I hope, an opportunity this afternoon of being able to see for yourselves something of the facilities that are provided here for the technical and character training of your boys whilst they have lived here for the past three years. You saw a little of the results in the parade this morning, I think it gives you cause for justifiable pride, and it does show, I am sure that you noticed it

as I did, the differencee between your boys who are leaving today and the boys who were on parade for probably the first time, the difference is the result of three years' training here. However, you can be certain that the ability and the enthusiasm of the staff have done quite a lot in the moulding of your boy's character and technical ability.

"The timing of this parade was, I under-



Air Vice Marshal A. F. Hutton inspecting members of the 71st Entry of Apprentices on the occasion of their passing-out parade

stand, changed this time from taking place in the afternoon to taking place in the morning. I know it is probably difficult for parents and I know it means staying two nights in this part of the world, but we do feel that you have the advantage of this opportunity of looking at Locking. We are only rather sorry you look at it the day your boys are leaving, perhaps it would be better if you could look at it the day they arrived. However, I would finally like to say to you that we of the Royal Air Force are extremely grateful to you for agreeing that your boys shall, at any rate, make their start in life in the Royal Air Force. We are often reminded that one of our greatest handicaps to recruiting lies in the mothers. Obviously it doesn't in the mothers that are here today, and I would on that note like to thank you parents very much indeed.

"Next to the Apprentices. You have, during your three years here, listened to several Reviewing Officers' speeches and I haven't the slightest doubt that you think you know by now exactly what is going to be said, and have already decided that it is going to follow the standard pattern. In a minute you will see whether you are right. Perhaps you are.

"I am not going to waste time telling you to work hard and to remind you that on your future ability will rest to a very large extent the efficiency of the maintenance of the Electronics side of the Royal Air Force. I am sure that is being drummed into you regularly and daily by the Commandant and his staff here, but what they have not done here, will be done, with further effort and emphasis, by your N.C.O.s when you first commence work at your new Unit.

"I am going to tell you something else. My bit of advice to you is to be curious. I find, or it is my impression perhaps, that people today, and young people particularly, are never curious enough, they take far too much for granted, they don't want to know why, or how, or what for?

"When I was a little boy there used to be a saying that 'curiosity killed the cat.' I could never find out which cat, perhaps I wasn't curious enough then, but if curiosity killed a particular cat, the vast majority of cats were a jolly sight better off for being curious. I am still curious, and I always have been. I am particularly curious about three things, the first one is why some pigs were painted white and not blue, the second one is why a newspaper kiosk had to move its site in Weston-super-Mare, and the third is why some people seem to like star plates. However, I don't propose, having told you that, to satisfy my curiosity any further on these three problems, it is just to remind you that at least I am curious.

"You know it really is very important that people are curious. If the famous Watt had not been curious when he saw the kettle boiling, and if Newton had not been curious as to why the apple had fallen off the tree, if these and other famous people had not been curious about the natural order of things, perhaps today we should not have our aeroplanes, or our electronics, and a lot of other things which we are now starting to take for granted.

"When you come to the more important task of maintaining this equipment of ours in the Royal Air Force, we already have a number of people who are guite capable of telling us that the thing doesn't work; there are also quite a number of people who can tell us which particular part doesn't work, but we are very, very short of people who will take the trouble to be sufficiently curious to find out why and for what reason the particular part in question has failed to work. What we always want to know if we are ever going to get things right, is not only that something doesn't work, but why? The only way for people to do that, is to be curious, and I can only say to you all, the more curious you are the better, and don't worry about the cat!

"And now finally to the Passing-Out Entry, I would just like to add my personal congratulations to A/A Wailling who made quite a habit of coming up here, and trust he will go on further to greater successes. Also deserving of mention is A/A Mazumder from Pakistan, who achieved the top place in technical and mathematics, struggling with a language which is not his own and everything else, this is extremely creditable, and the rest of them, they have all done very well.

"Their parade, I thought, today, went very well. I have been here in the past on these parades on several occasions, but I have always been an Attending Officer, and I have had ample time to just stand and watch. I think today's parade was as good as any I have seen, but of course, as Reviewing Officer I was rather busy myself, so perhaps I didn't notice all the faults.

"Well, there it is, you have had three years here now and you are now off into the Royal Air Force. I expect today, and for the next week or two, rather as I did many years ago, you will probably think you know everything. You don't know everything, although I am sure you know quite a lot, and there is still a lot to learn, so go on learning; if you do the ladder is there to climb, and the top of the ladder is miles and miles away. I am sure you will enjoy Service life, you have obviously enjoyed it here, and you have learnt one good thing, the art of getting into mischief without being found out, and believe me, it is very useful, and so I think that all I can add is to wish you the very best, a jolly good Service life, and all the successes and promotions, not that you wish, but that you deserve."

#### PRIZE WINNERS

#### 71st ENTRY

Air Ministry Prize for Highest Aggregate of Marks

Air Ministry Prize for Highest Educational Marks

Air Ministry Prize for Highest Marks in Technical Subjects (Air Radio) 587794 A/A Wailling, J. T.

Air Ministry Prize for General Service Efficiency 587796 C/A Newsham, J.

### AIRCRAFT APPRENTICES AMATEUR RADIO CLUB

#### G3IDZ

Activity at the Aircraft Apprentices Amateur Radio Club continues to be encouraging. The membership numbers twenty-five, of which about ten members are keenly interested in the amateur transmitting side of the Club's activities. Three present members of the club hold their own amateur transmitting licences.

The club station, operating under the callsign G 3 I D Z, is on the air every night, transmitting on the amateur frequency bands of 3.5 megacycles. The frequency and distance of the contacts established on 14 megacycles, using a quarter wave grand plane autumna and a power input to the final amplifier of twenty-five



Air Ministry Prize for Highest Marks in Technical Subjects (Ground Radar) P/85353 A/A Mazumder, A.

Air Ministry Prize for Highest Marks in Technical Subjects (Ground Wireless) 587778 A/A Lewis, L. A. Victor Ludorum 587812 A/A Donald, D. M.

watts, are particularly good. Communication with amateur stations in the United States of America being a nightly occurrence. Interesting stations contacted during the past six months include:

JA 5 AB	Takamastu City	Japan
<b>VE 4 DB</b>	Winnipeg	Canada
ZL 2FI	Nelson	New Zealand
CN 8 FL	French Morocco	
LU 3 CS	<b>Buenos Aires</b>	Argentine
PY 7 ADJ	Brazil	0
TF 3 Z 7	Rykjavik	Iceland
ZS 5 KA	Durban	South Africa
KP4TF	Sanduan	West Indies
K 6 DCE	California	
457 KH	Colombo	Ceylon
DU 1 FC	Manila	Philippines
CO 7 AH	Pan American	Cuba
	Airways	
3 7 1	0 5	

Nearer home on 3.5 megacycles the club has contacted many of the apprentices now serving on R.A.F. stations in England, these exapprentices having obtained their transmitting licences while under training at Locking.

Through the medium of this magazine, the writer would like to ask ex-members of the Apprentices Radio Club to give the club a call on either W/T or R/T whenever they hear the club station on the air. To all old members, the club sends its greetings, and we look forward to hearing from you.

# FITTERS MISCELLANY



Squadron Leader B. Hooper, D.F.C., O.C. "C" Squadron, casting a benevolent eye over some of the members of his squadron of Fitters



Genial Geordie, Ray Storey, Leader of a working(?) Class



Our ex-Naval Sparks, Peter Brown ... "When I was in Jamaica ... "



Head in the clouds—Peter "Neddy" Treadaway



Electronics and dancing wizard . . . Ron Burrows . . . other interests, a Ford and a fiddle



Cockney capers on a motor bike with John Harper and Ron Johnson



"Joe" Jackson, drill and parade expert ... staunch advocator of two pay parades a week

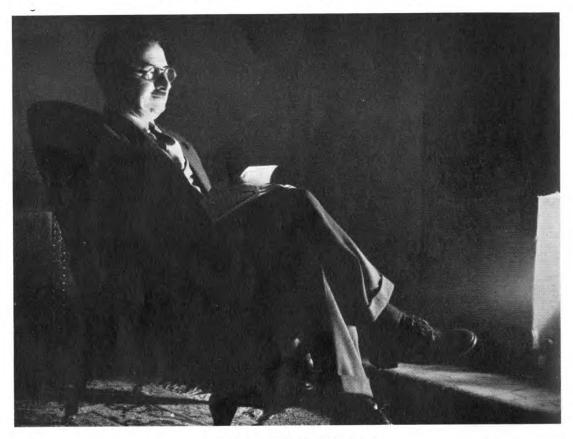


Peter Barge and Alan Edgar, consultants on wines, liqueurs and billet warfare



"Hugo" Gilpin ... very modest about blowing his own trumpet

## RADIO EX-APPRENTICE CORNER PICTURES IN THE FIRE By Air Commodore Cooper, C.B.E. (Retd.)



AIR COMMODORE COOPER, C.B.E.

SUNDAY evening and I've just finished a jolly good book. Written by a senior officer -a very senior officer of the R.A.F. Thoroughly enjoyed every page of it not only because it brought back so vividly a life that used to be, but because he has written most of it from a bird's eye view and I saw much of it with the eyes of a worm. Funny how that sort of thing captures and holds your interest in a book. Wonder if it's because you are always on the look-out for the chance to say "He's wrong-I know he is because I was one of the worms!"

For instance, in this book he talks about the Halton apprentices as if they were the only apprentices the R.A.F. ever had or has. He Locking. I knew Flowerdown and the doesn't mention, and you'd think he'd never heard of Flowerdown, let alone Cranwell or



Flowerdown

"Hostel." I was there. Didn't call us "apprentices" though-called us "boy mechanics." Same thing, different label and different wrappings. Remember those "wrappings?" Khaki cap, tunic, slacks and overcoat. Blue ditto plus breeches and puttees. Plus, of course, overalls and the permutations and combinations old Buck Taylor could think up with that lot. You're in khaki complete and Buck says, "When I say dismiss I want you back here in ten minutes from then, fell in on your markers, in best blue-breeches and puttees-Dis-smiss." He must have been half way between sleeping and waking when I caught this one of Ginger Mace and Sammy Curtis-wonder where they are now?



Ginger Mace and Sammy Curtis

And then there was Bell Chambers the police corporal—the man with the million dollar legs.

C

"Come here; collar hook undone! You're on a charge." Answer—seven days' C.C. And Sergeant Pearson and Tubby Newman and Flight Sharnt Shay.

They were a good crowd and it was a good life by and large. Taught you that there are always other people as bad as, if not worse off than, yourself; that when you think you've got to the end of your tether, the rope has always got a bit more "give" in it; that "guts" is a matter of mentality and not physique. Yes, it was a good life—bags of fun and bags of sport.

Sport! Taffy (J. I. T.) Jones-"get on the b'b'b' . . .y ball, boy." Justice, McGinnis, and Hockey. Education Officer Lane, amateur centre-half for Queen's Park Rangers and his F.A. Cup medal. Then our own lads-Johnny Noble and Nobby Clarke for example. Wonder where they are now? Wonder how many of this lot are around and what they are doing : Turner, Buckett, Armistead, Mace, Dean, Williams, Hogan and Richards. My gang, and what a gang-wireless and electrical mechanics, instrument makers and electricians. I know where two of 'em are, anyway-Ossy Osborne and John Dooley-here with me in a telephone factory in Beeston, Nottinghamshire. Good to have 'em too. At the very least it keeps our memories alive and that in itself is no mean thing, if only because it helps us to look all the way back along the road to our starting point.

Lots of water has flowed under a lot of bridges between that starting point and now, between 1922 and 1956. Then, in 1922, first "boy mechanics" at Flowerdown. Now 1956, No. 1 Radio School at Locking. Then, wireless telegraphy and a little, very little, wireless telephony—T21 Telephony Attachment. Now guided missiles. In between, radio telephony, high frequency, beam approach, radio controlled aircraft, very high frequency, a second World War and Radar. All of this shared, contributed to and directed, in no mean way, by the "apprentices" who wern't Halton, no, by jiminy—Flowerdown, then Cranwell, now Locking.

For me the bridges and the water haven't been without their moments. Cadet College Cranwell, No. 9 Squadron, Officers' Long Signals Course Cranwell, University of Cambridge, No. 13 Squadron, No. 84 Squadron, Air Headquarters Hinaidi. Queen Bees, A.A.E. Farnborough, Air Ministry, Ministry of Aircraft Production, Ministry of Supply, and for the past nine and a half years, a Factory Manager in Industry. To cap it all and to keep everything "in the party" I married the sister of "Spike" Hughes, another Flowerdown "apprentice." Good health and bad health. Good times and bad times. That awful period in 1936 when my eyes went back on me and I was told I'd got to give up as a pilot. That, in the days of the Trenchard policy, when as a General Duties Officer by and large, you were either a pilot or a civilian. No Technical Branch and few exceptions to the laws of the Medes and Persians. The relief to learn that because of my Signals background and qualifications they would let me stay on a basis of a few months' notice either way. The realisation then and for ever afterwards. if never before. what I owed to Signals and to those years at Flowerdown and the enormous value of "two strings to one's bow "-a theme that I have never tired of preaching ever since. Then the creation of the Technical Branch and the wonderful, almost inexpressible relief when the sword of Damocles no longer hung by a thread over my head.

Yet in spite of all that, here I am in Industry. Silly isn't it. How the devil did I get here? This isn't the realisation of the dream that I was dreaming twenty years not even ten years ago. That dream if anyone is interested was that one day I'd be Officer Commanding the wireless, or radio, or call it what you will School of the R.A.F. I'd given up my earlier dream of becoming Chief of the Air Staff; I'd begun to think there was only a faint chance of being Director General of Signals: anyway it seemed to me that the best route to that was in a sense to go right back to the beginning and once again "go through" the School. Didn't work out that way though. I'd have given a lot for the dream to go on and become a reality but it just didn't.

What did happen? Well—d'you remember Tubby Leedham? Lot of us came to love him as well as admire him, both as a brain and as a man. I "joined forces" with him in the Ministry of Aircraft Production in 1943 as his Deputy when he became Director of Communications Development. Few years later he retired to take up the job of a Managing Director in Industry. Six months later he asked me to join him as his Factory Manager and six months after that I did. Why? I know—I've asked myself that a hundred times since.

More money? Perhaps. Because I'd qualified already for retired pay? A bit of that too. Because I'd been told that another route had been planned and laid on for me and I must forget my dreams of the School? Yes, that certainly weighed pretty heavily. I think it was the segregation from the R.A.F. "proper" coupled with the apparently final awakening from my dream about the School that did it. Looking a bit deeper, the fact that as far as I could see, my immediate and possibly even long term future, was to be spent in dealing with "things" as opposed to people. To me, people have always been so much more important than things. Particularly young people with the future ahead of them. Oscar Wilde said. "Children begin by loving their parents, then they judge them; sometimes they forgive them." I believe my own best hope of forgiveness lies in doing what I can, whenever I can, for young people, for their minds, their bodies, and their spirit. At least, Tubby Leedham's offer contained the definite promise that part of my time would be spent in dealing every day with the problems of some thousands of people in a factory, and even more particularly and precisely, with the training and development of some hundreds of young people. Yes, that's why I accepted the offer; perhaps I wasn't as clear about it when I made the decision but I know now it was that which influenced me more than anything else.



Our Gang

And getting on for ten years later—the result? I got what I asked for if perhaps not what I expected! A well paid job with other interests apart from the principal one.

I reckon I've been lucky but, mark you, a price has to be paid. A never ceasing nostalgia for the life in the R.A.F. as I knew it between the two World Wars. I try to console myself sometimes that life in the R.A.F. today isn't the same as it was then but in my heart of hearts I suppose I doubt that. What I do not doubt in any way is that this industrial life of mine is, as an old R.A.F. friend put it to me the other day—"life in a jungle." A jungle in which loyalties, at least as we knew them in the R.A.F. are of a different size and nature. A life in which time and money matters more than most things, if not everything. A life far less codified than in the R.A.F., in which penalties though present are less precise and computable and rewards though there perhaps in greater measure, tend to be less subject to plan and purpose and the march of the years. A life above all calling for the daily exercise of guts and resilience more spiritual and mental than physical and of a higher order than the R.A.F. ever demanded from me save perhaps in the strain and stress of the war years-or am I just growing old? It probably is that you know-if not growing old, then getting middleaged and that's why I like looking at these "pictures in the fire."

Anyway the fire is getting low and it's time I was in bed. It's Monday tomorrow and Monday is always a bad day—full of problems. However, something might happen to lighten it up. Somebody who's been through the School might even write to see if there's a chance of joining Ossie and John Dooley and me-what a hope! If they did though what would I say to 'em? Stay in or come out? I don't know. It depends on them. The fire is beginning to burn a bit low for all of us and perhaps the resilience may be getting a bit dead. If that's the case, Industry will be a hard and maybe an unsatisfying grind for them. Perhaps they'd better "stay in" after all. Compulsory retirement facing you though! Um, that's more difficult if only because of the desire and maybe the need to add a bit to the old pension or retired pay. In that case don't expect too much from Industry and you won't be disappointed. Done twelve and thinking twice about signing on? Think twice more and while you're thinking make it a must to talk to some of us who've had a basin. After that perhaps you'll sign on again -or perhaps you won't, but at least you'll know what you're in for.

Come on, look at the time! I'm off to bed. Goodnight, the best of luck and God bless.



.

# ROYAL AIR FORCE M.T. EFFICIENCY COMPETITION

Although from time to time, every section on an R.A.F. Station may be tempted to exaggerate the importance of its work in relation to the smooth running of a station, people are usually quite willing to accept the fact that no section is completely self-sufficient, and that the foundation of a successful station lies in the co-operation between its sections.



Members of Locking's M.T. Section at work

At Royal Air Force Locking, however, one section may with some justification overemphasise its importance. It is the Motor Transport section, whose personnel have a universally acclaimed record for efficiency, as borne out by their recent outstanding achievements.

Last year's unique successes were surpassed in 1955, when Locking won the final of the Royal Air Force M.T. Competition, and were presented with the R.A.F. Cup, the Technical Training Command Shield and the R.A.F. Certificate of Merit, for organisation, maintenance, servicing, equipment procedure, accident prevention and procedure and documentation. In such a keenly contested competition, when the M.T. Section is carefully scrutinised by a team of Air Ministry experts, there can be no magic formula for success. Team spirit, cooperation and a high degree of responsibility towards the job, coupled with continuity of effort throughout the whole year, are the qualities which warrant recognition, qualities which have made the M.T. Section of Locking supreme in its own particular sphere.

We know that the section will maintain its high standards throughout the coming year, and trust that in next year's edition of the *Review*, we will again be able to report that Locking's M.T. personnel have received the recognition it so rightly deserves.

## LOCKING ROVER CREW

Like every club on the station the Rover crew has its ups and downs. In fact things looked quite black when the crew lost its leading lights from the 72nd Entry last summer. Rescue was at hand, however, in the form of a transfusion of fresh Rover blood from Yatesbury, such a large transfusion, in fact, that a newcomer to the meetings might easily have mistaken our crew for a branch of the Yatesbury parent crew. Gradually, of course, these trainees completed their courses, some quicker than others, so that now the crew are all Locking men born and bred. The new ideas which we acquired have been put into practice and once tried and proved successful, they persist. The most noticeable change has been the practice of inviting speakers from outside the Rover movement to address us on topics of general interest. As a result we have travelled to Spain by motor bike; to Africa to hear of the mysteries of witch-doctoring (no connection with Spiritualism in One Wing), to Nigeria, on missionary work; and to America for the origin of Jazz. The work of previous years in the field of Rover-Ranger co-operation, has been extended in response to invitations to several socials, and the reader is assured that we are by no means the bunch of misogynists that he might imagine.

Fortunately the concentration on indoor programmes has not caused a slump in outdoor training. On the contrary the crew has been very active and as the spring and summer advance, our camp-site behind Churchill will be busy at week-ends, as jaded airmen and apprentice hike, bike, and (shame on them) even bus, out to it. There sitting round the camp fire in the dusk, with the sighing of the pine trees for background music, they will be united in the brotherhood of the open air that is Rovering at its best.

A.B.

## LA SURVIE DES PLUS APTES

>EORGE STEPHENSON'S "Rocket" cer-J tainly started a train of events when it made the first public passenger-carrying journey in 1825. Since that date the railway spider has spun many threads of iron across the corners of the earth. But we are not concerned with the external development of railways, changes in design, the increase of efficiency nor the effect of the iron road on British economic and social evolution. We are concerned rather, with the evolution of the noble art of "trainmanship," which is well-nigh indispensable to that twovear cynical being, the National Serviceman. It is he, more than anyone, who is responsible for the continuance of British Railways. In his weekly escapes, it is he, more than anyone, who has recourse to the wiles of the "trainman."

Let us then examine the skill of the veteran traveller : let us see the more timid creatures in the railway jungle fall to his strength of mind and cunning joy.

As in most situations, a good start is highly prized by the "trainman." There are two types of good start and the choice made depends on the temperament of the individual concerned. The cautious will arrive at the station half an hour before his train is due to leave. He will select his corner seat, deploy his luggage and outer clothing strategically around the compartment, and adopt one of a variety of poses. He can pretend to be asleep, whence the timid will not bother to disturb him, and in which his recumbent form will occupy a large percentage of the seating space. Alternatively, he can assume a menacing facial expression, with which he fixes would-be intruders and which the elderly respectable type of invader has great difficulty in overcoming. Again he can use the old tactic of leaning out of the carriage window, but the effectiveness of this is limited to the noncorridor trains; otherwise the "trainman's" rear is insecure. There is even a case reported of a "trainman" displaying a conspicuously labelled gin bottle on the shelf opposite the entrance of the compartment. This, together with a glassyeved look, ensured an unmolested journey from Birmingham to Newcastle. The deception had the advantage of allowing him to slip into the recumbent position quite naturally, and so maintain the fiction. Such genius is rare!

The other type of good start is practised by the more adventurous "trainman" who arrives only a few minutes before the train's departure and proceeds to mould the various situations he finds to his required shape. His hatred of seat stealers is not so fierce as that of his brother : he is more of a craftsman. To him, "trainmanship" is an enjoyable activity, not merely a grim battle. A quick walk up the platform and he has a mental plan of every compartment worth considering. He quickly selects, moves in, and takes control, his job being, to use the people and objects inside to his best advantage. He is the chess-master, the occupants his pawns. By careful manipulation of his pieces he can engineer people sitting opposite anything up to nine and a half inches in either direction (see Trainman's Quarterly Review, pages 346-48, Incidence of of Passenger Shift 1945-48).

Thus a potential seat can often disappear and the journey be made more comfortable, especially for the "trainman." Similarly, a careful distribution of luggage (and this often necessitates a careful re-arrangement of all the travellers' effects) will discourage intrusion by a heavily laden passenger. For some "trainmen," it is advisable to be seated by the door, to control the situations en route, but this is a matter of individual preference, and, in the last analysis, depends on where his ability lies.

Nothing is more annoying to the "trainman" than to have established his occupational supremacy and then have his journey ruined by a witless conversation between stupid people with nothing in common but a desire to be sociable. It is, therefore, an essential compliment to the "trainman's art to quash any attempt at polite loquacity. Physical intervention between the culprits, on the pretext of opening or closing a window, or re-arranging one's luggage, will often destroy an incipient platitudinous dialogue. The most effective method, however, is to enter the conversational area oneself, early in the proceedings, and, with even more inane contributions than the initiators, destroy any potentially lengthy discussions on such absorbing topics as the surprising mildness of the season. the benefit which favourable weather bestows on agricultural capitalists, and the superfluity of certain train stoppages during the course of the journey. Travel, to the "trainman," affords an opportunity to leave the conscious world, snug in his corner seat and lulled by the locomotive's rhythmic revolutions, or in his own vernacular,

to "get some hours in" (quoted in Metcalf's "Choice Phrases for the Trainman"). To have his sleep disturbed by garrulous absurdities is tantamount to passing a journey on the rack.

So much for the "trainman" at work : what of him as the man, individual and social? It is an established fact that one true "trainman" will immediately recognise another and when this happens there is a mutual understanding to work together to secure their position. Not a word is spoken, no concerted plan of action is evolved, yet they co-operate with silent, ruthless, efficiency. One "trainman" does not pit his skill against another for compartmental supremacy; it is part of unwritten "trainman" lore, and should there be a breach of etiquette, the offender is immediately reported to the National Association of Trainmen, and his case is investigated.

What of the permanent body? It is organised on a regional basis, each district having a working committee, and sending two delegates to the annual convention, held at Crewe. The national body is responsible for publications, week-end instruction in "trainmanship," and correspondence courses—" You too can have a carriage like mine." It is the sole examining body and holds theoretical and practical tests, awarding first and third class diplomas to successful candidates. The Association, too, negotiates for better conditions of travel for its members, and is currently engaged in a bitter dispute concerning the thickness of arm-rest upholstery. Let us hope, for the sake of the footplate men, that strike action is not necessitated by the travelling public.

And so, my friends, I urge you to become a "trainman," and the next time we travel, we will do so in comfort; if not, then we shall be enemies and when our eyes meet, prepare for battle.

P.P.



Mechanics Class Leaders A.C.2 Smith A.C.2 Wear A.C.2 Garberry A.C.2 Green G.R.M. C.17 G.W.M. (C) 254 G.R.M. R.22 R.21 A.C.2 McPhail A.C.2 Jones A.C.2 Madray L.T.M. 6 G.R.M. (C) 16 A.C.2 Freeman A.C.2 Dent A.C.2 Traynor Cpl. Mapleton G.W.M. (C) 255 G.R.M. G.C.A. 34 G.W.M. (C) 253 G.W.M. (C) 252

## THE ROCK

A S the cold grey mist, on this dismal January morning, folds itself around the bleak inhospitable island of Steep Holme, it is difficult to imagine that any form of life could survive there. This massive rock, ugly in its bleak nakedness, remains undisturbed today, its sheer sides swept only by the ebb and flow of the Channel tides, its broken stony soil with its stunted bushes and nettle patches, echoing only with the eerie shriek and screech of the turbulent sea-gull.

Unlike its sparkling neighbour, the picturesque Lundy Island, Steep Holme has rarely been an inspiration for poet or painter; it lacks even the rugged grandeur, the primeval ugliness which some have found so fascinating in other lonely islands. It is a colourless, unpleasant island, and although latterly, distinguished ornithologists have made it the object of week-end visits during the summer months, to study the habits of the sea-gull, one can but sympathise with the various people, who from time to time throughout the centuries, have been forced to inhabit the island.

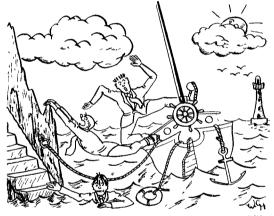
Reinforced gun emplacements, accompanied by the inevitable tumble-down Nissen huts, bear witness to the defensive role of the island during the last war, while dismembered solid iron cannons tell of an earlier but no less turbulent era. An unpretentious barrack block on top of the cliffs housed troops in 1867, and during more recent years, dangerous war criminals were held there.

Indeed, the privacy of this desolate rock, has often been disturbed by strange intruders; Danes, 18th century pirates, soldiers; all have left traces of their stay.

Perhaps the strangest horde that has ever landed on its inhospitable shores, was that group of intrepid adventurers from Royal Air Force, Locking, who, during last summer's unusual warm spell, threw caution to the winds, hired a small boat, and set sail for the Rock. Ostensibly, the trip was to have been a fishing expedition, Flying Officer Rippon assuring us that conger eels and like pleasant creatures, were to be found in abundance around the island. However, several of the non-fishers, including Messrs. Grisewood, Proud, Wainwright, Evans, Perkins and Rippon, to say nothing of the ship's boy, thin and silent, who appeared uninvited and remained with us throughout the day, forsook the pleasures of

the hook, and in a moment of madness, persuaded the aged boatman to bring his craft alongside a cluster of rocks, on to which we clambered. With the enthusiasm, born of intrepid pioneers, we scaled the cliff-face, determined to make a Grand Tour of the island. The boat pushed off, leaving us to the tender mercies of the "Rock."

Our early fervour quickly evaporated, and the horrible truth dawned upon us. Preconceived ideas of sun-bathing on grassy slopes or golden sands were shattered. Beds of nettles and beaches of jagged stones were all that the island could offer in the way of comfort, while the hideous, incessant clamouring of the seagull, to say nothing of the overpowering smell, made it all too apparent that we were in for several hours of purgatory.



The landing was accomplished with great skill

The sun, high in the sky, its rays heavy in the cloudless afternoon, added to our discomfort, and as we trudged wearily along the west coast of the island, we gazed longingly at the cool dark hills of Wales, hazy in the distance.

By mid-afternoon, our skin pitted with nettle stings and raw red with the fury of the sun, we decided to discard the warnings of the boatman, and made our way to a small shingled beach, which shelved alarmingly, and flung ourselves into the murky sea. At any other time the dead sea-gull which floated rakishly to and fro before our noses, might have deterred us.

Our swimming stalwarts, Perkins and Grisewood, heartily fed up with the island, made a desperate effort to swim out to the boat which was some three hundred yards out to sea. Tide and current made the going difficult, and although Perky reached the boat in good time, his companion, aware of his deficiencies under these conditions, turned back; five exhausting minutes passed before he reached the safety of the beach. During this time, we learned that the fishers were having as little success as ourselves, which was small consolation to us, since they had the beer on board.

The day passed painfully on; corned beef and lukewarm Coca Cola was consumed without relish. However all was not misery, and our day was made, when we came across a staid and stolid group of bird-watchers, who gazed in horrified amazement at "Ripp," as he clambered across the rocks, wearing a very long, very off-white woollen pullover, as trousersto complete the bizarre effect, he wore a woollen skull-cap, basket-ball boots, and had covered his chest and arms with imitation tattoo marks, all of a piratical nature. He looked like a cross between a mountain goat, Man Friday and Captain Kidd. The astonishment of the onlookers was increased as the apparition approached, conversing with Wainwright in a peculiar gibberish which they invent for such occasions. Some few minutes elapsed before we

were able to convince the studious group that this was not the "wild man of the island."... Slowly the alarm in their faces gave way to suspicion. Their calm had been shattered, and they hastened away, muttering darkly.

Meanwhile, our boat had pulled in. We made the perilous descent towards the rocks, and one by one clumped aboard, the last one to be hauled in being the boat-boy, thin and silent, who had followed us at a distance the whole afternoon, unsmiling and unspeaking, like an unfamiliar shadow. To this day we do not know his name.

The boat pulled away; slowly the hard outline of the island softened, and in the haze of the evening sun it lost its ugliness, its harshness, and for a brief moment we felt a little sad at leaving the "Rock."

The moment passed, and within an hour we were safely ashore and heading for the "Ship" at Uphill.

In the merciless heat of the afternoon, I had vowed never to set foot on the island again, but I have a feeling that if a similar expedition is planned this year, I shall be first into the boat.

#### J. J. E.

MENDIP conjug	gation of the	verb "TO BE" Present				
Present Tense	Past Tense	Negative Interrogative				
I be	I were	B'ain't I?				
Thee beest	Thee wert	B'isn't thee?				
He, she, it be	He, she, it					
	were	Banner?				
We'm	We was	B'ain't us?				
You'm	You was	B'ain't 'ee?				
They'm	They was	B'ain't 'em?				

## NOISE IN RADAR RECEIVERS

#### Fit.-Lt. M. W. Capewell and Fg. Off. D. M. Jones

**O**<sup>NE</sup> reliable dictionary defines "noise" as "a loud or harsh sound of any kind, a din" and to most people a loud noise is indeed an undesirable thing whether it be street noise or the crackle, squeal and hiss which sometimes mars the reception of a radio programme.

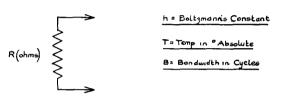
In radar, the counterpart of this "noise" appears not as an audible, but as a visual effect, and its consequence can be sufficiently serious to prevent the efficient working of the equipment. It is to our advantage to pay particular attention to the causes and possible means of elimination of this inconvenience, since the application of relatively simple principles to receiver construction and design can often do much more to increase efficiency than can expensive transmitter modifications.

"Noise" may be defined as any random electrical disturbance which tends to obscure a desired signal. As such, it appears in radar displays as unpredictable variations in electron beam intensity or displacement. In theory the maximum range at which a target can be detected could be extended almost indefinitely since very weak echoes from distant objects could be amplified by the receiver to almost any desired level. The existence of background noise prevents this in practice since a limit is reached when the level of the echo signal falls below this noise level and becomes obscured by it. Increasing the receiver gain cannot solve the problem since both signal and noise will be amplified equally, the signal/noise ratio remaining unchanged at a low value. It is therefore essential to keep the noise level of a radar receiver as low as possible if optimum results are required.

The total noise is derived from two main sources: an external one consisting of manmade static atmospherics and galactic noise from radio stars, and an internal one caused by faulty components, thermal effects and valve noise. External noise imposes a practical limit upon receiver sensitivity at frequencies below 30 m/cs. At higher frequencies it can be minimised, but not eliminated, by careful siting of the equipment and the use of as narrow a bandwidth as possible. Internal noise can be very considerably reduced by careful receiver design and merits further consideration. It is convenient to examine the various sources of internal noise individually.

1. Thermal Noise (Johnson Effect) caused by random electron movement due to thermal agitation. It is present in all conductors and gives rise to a "noise" voltage of mean square value

v2 = 4hTBR volts



across the ends of the conductor. The value of this voltage is independent of the physical nature of the conductor and R can represent such things as an ohmic resistor, the radiation resistance of an aerial or the dynamic resistance of parallel tuned circuits. The latter in particular can give rise to noise voltages of a high order of magnitude because of their large dynamic resistance at resonance.

Amplitude variations of thermal noise with time are completely random and its frequency distribution is uniform throughout the radio spectrum. It can be minimised by choosing the lowest possible values for resistors and tuned circut Q factors and by restricting receiver bandwidth as much as is compatible with the preservation of good pulse shape.

2. Value Noise. Generally speaking, this is derived from three sources :--

(a) Shot noise—due to random emission of electrons from the cathode surface. This irregularity in emission causes variations in the velocity and hence in the transit time of the electrons so that the resulting fluctuations in anode current give rise to noise voltages across the anode load. Every valve produces a mean square noise current due to this effect. Its main investigator compared the electron stream to a rain of shot ("schroteffekt").

(b) Partition noise—due to random partition of the electron stream between the positive electrodes of a valve. It is of course absent in the case of diodes and triodes. For a tetrode or pentode the mean square noise current produced by this effect is given by

$$i^2=2e$$
  $Ia-Is$   $Ia=anode$  current.  
 $Ia + Is$   $Is=screen$  current.  
 $e=electronic$  charge.

so that for minimum noise either Ia or Is should tend to zero. Since the load is normally in the anode circuit this reduction of noise is brought about by making Is much less than Ia. This is achieved by designing valves in which a narrow gauge, widely spaced screen grid is placed in the "shadow" of the control grid. Both shot and partition noise are proportional to bandwidth but practically independent of frequency.

(c) Induced grid noise—due to the movement of induced charges in the grid circuit. These charges are set up by variations in the total electron stream flowing past the control grid and the resultant mean square noise current is given by

$$\frac{2 = 20 \text{hTB}}{\text{Rin}}$$

Rin=input resistance

The effect only becomes pronounced at extremely high frequencies, since Rin falls as frequency is increased and the effect is often neglected unless the time for one input cycle is comparable with the electron transit times.

Secondary valve noise arises from ionisation due to a valve going soft, heavy electrode bombardment by primary electrons and slow random changes in parts of the surface of oxide coated cathodes. This latter imperfection gives rise to the "flicker effect" consisting of a noise voltage which fluctuates so slowly that it is troublesome only in audio frequency amplifiers. These secondary effects will not be discussed further in this article.

(d) The equivalent noise resistance of a valve. It is convenient to express the total noise produced by a valve in terms of an equivalent "noisy" resistor, which when placed in the grid circuit of an ideal (noiseless) valve would produce the same amount of noise as is given by the noisy valve under examination. Thus

where Req=equivalent noise resistance

Rs = equivalent shot noise resistance Rp = equivalent partition noise

resistance. For modern valves Rs and Rp can be found from

Rs = 2.5	gm = mutual conductance
gm	Is=screen current

and 
$$Rp=20$$
 Is Ik=cathode current  
Ik gm

The lower the value of Req, the less noisy is the valve. Triodes are aften used as R.F. amplifiers at frequencies above 200 m/cs despite their high anode-grid capacitance, since their Req contains no Rp term. The Req value for tetrodes and pentodes depends upon the function of the valve and it is much higher in the case of mixers than in the case of R.F. amplifiers. Multigrid types of frequency changers suffer from extremely high Req values and cannot be used in radar receivers.

The concept of Req is very useful in determining the types of valve to be used in an equipment since the valve can be looked upon in terms of the noise it will develop under its working conditions. Typical values are given below :---

(i) R.F. Amplifiers.

Triodes (c	or triode connected)
6AC7	220 ohms
6AK5	385 ohms
6J6	470 ohms
6Č4	1140 ohms
Pentodes	
6AC7	720 ohms
6AK5	1880 ohms
6SH7	2850 ohms

(ii) Mixers.

6AC7 3500 ohms

6SA7 220000 ohms (Multigrid)

The Noise Factor of a Radar Receiver.

For a noiseless receiver the signal to noise (S/N) power ratio at its output would be the same as the signal to noise power ratio at its input and this would be determined only by the ratio of signal strength to external noise. In such a perfect hypothetical case the noise factor (F) of the receiver would be unity. In general therefore

F=S/N power ratio at input

S/N power ratio at output

It can be expressed either as a ratio (F) or in terms of decibels where

Noise Factor  $(dB)=10 \log_{10}F$ .

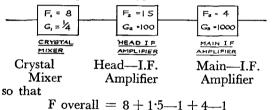
Typical values using modern valves and circuit techniques are  $F=1\cdot 1$ , 3 and 9 for 20 mcs., 200 mcs. and 10cm. receivers respectively. Halving the receiver noise factor is equivalent to doubling the transmitter power with its consequent improvement in radar performance.

Each unit in a radar receiver has its own values of noise factor (F) and gain (G) so that if

 $F_1$ ,  $F_2$ ,  $F_3$  etc. and  $G_1$ ,  $G_2$ ,  $G_3$  etc. are the noise factors and power gains of the first and successive stages it can be shown that

F overall = 
$$F_1 + F_2 - 1 + F_3 - 1 + F_4 - 1$$
 etc  
 $G_1 - G_1 - G_1 - G_2 + F_4 - 1$  etc

Thus provided that the first stage in the receiver has low noise factor and high power gain the noise factors of the succeeding stages are only of secondary importance. Special emphasis must therefore be placed on the design of radio frequency amplifiers of metric receivers. In the case of centimetric equipment no efficient R.F. amplifier valve is yet available, so the first stage consists of a crystal mixer, which has rather a high noise factor and also shows a power loss instead of a gain. This is closely followed by a head I.F. amplifier, a typical case being :—



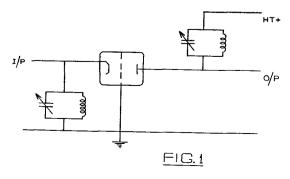
$$\begin{array}{l} \text{verall} = 8 + \underline{1 \cdot 5 - 1} + \underline{4 - 1} \\ = 10 \end{array}$$

Thus the noise factor and gain values of the head—I.F. amplifier in a michowave receiver are a vital consideration. If the value of  $F_2$  in the above instance rose to 3 the overall noise factor would rise to 16.

# Some Methods of Reducing Noise Factor in Receivers.

(a) Limitation of bandwith used—this reduces both thermal and valve noise. Too severe a restriction of bandwidth must be avoided so as to prevent excessive distortion of the pulse shape, but it is usual to compromise so as to obtain the best possible signal to noise ratio.

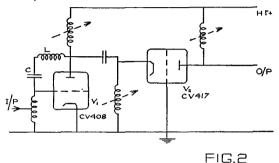
(b) The damping of tuned circuits so as to



lower their Q-factors, bringing about a substantial reduction in thermal noise.

(c) The use of triode valves in place of tetrodes and pentodes in the initial critical stages of a receiver whether it be the radio frequency or the head—I.F. amplifier. One such circuit, which requires no neutralisation involves the use of a grounded grid triode (Fig. 1)

suffers from the disadvantage of a low input impedance and the cascode circuit (Fig. 2) is widely used.



This consists of a grounded cathode triode followed by a grounded grid triode. Although  $V_1$  shows considerable power gain its voltage gain is unity so that it will be stable without neutralisation. The components L and C form a resonant tuned circuit with the anode-grid capacitance of the valve and reduces the loading effect of the anode tuned circuit on the grid tuned circuit. This maintains the input impedance at a high value and so limits induced grid noise.  $V_1$  is constructed so as to have high mutual conductance thus minimising shot noise (since Rs=2.5)

(d) The components used and the physical design and construction of all equipment must be beyond reproach. Resistors should be of high stability, soldering must be perfect and the layout suitably planned.

#### Measurement of Noise Factor.

A simple method for use in determining the noise factor of metric wavelength receivers consists of injecting the noise signal produced by a thermionic diode working under saturated conditions into the equipment. The output of the receiver with the noise generator connected, but switched off is first of all noted, then the diode is switched on and its anode current is varied until the output from the receiver is doubled.

Concluded on page 49.

## 3 WING NOTES-1955

VERY few things happen in 3 Wing which can lay claim to having what is usually called "news value." In fact, as I search my memory for Wing "news" in 1955 compared with 1954 and even 1953, I have to admit that only the following few points stand out in sharp focus.

Obviously the weather can stake a claim, and I wonder in how many different articles in this issue of the *Review* the avid reader will find a The Station highlight of the summer and of the year was without any doubt the visit of H.R.H. Princess Margaret at the end of July, an occasion when 3 Wing was entrusted with the responsibility for the safe conduct of Her Royal Highness within the Station precincts. There were hundreds of invisible dabs of paint on the roadsides for the 3 Wing Route Liners to stand on and how glad we were not to be bothered with wet weather ground sheets. The



A/C Lowers GWM 255, receiving a bottle of beer from Group Captain Robinson, 1st July, 1955, on the opening of new 3 Wing Dining Hall. Lowers was the first man in to lunch

reference to the unusual phenomenon of a long, fine English summer? The previous one in 1949 I remember very clearly. I spent it in Southern Florida, the start of a never-to-be-forgotten two-year attachment to the U.S.A.F., where for day after day and week after week the subtropical Florida heat was not doing all that much better than the English thermometer.

Anyway, enough for the glorious summer, though I often felt sorry for instructors and trainees in classrooms and labs during the long, hot afternoons. visit was an occasion when the weather could mean so much to hundreds if not thousands of people and we were grateful for a very lovely day.

At the other end of the scale and at the other end of the year, I remember the fortnight's snow and cold (and, of course, inevitable slush !) at the back end of the '54/55 winter, a repeat from the previous year.

One quite striking fact about 1955 is the increase in the size of the Wing and its turnover. Just under 4,000 trainees have joined the Wing during the year (though the writer can recall a wartime peak at another radio school of 400 per week!). These larger numbers in the Wing have meant more of everything on the domestic side, more space in the form of barrack huts, dining halls, N.A.A.F.I. and offices, and more staff.

Thirty-six rehabilitated barrack huts have been taken over from the contractors, twelve in June, twelve in July and twelve in December. The last batch of twelve is expected to be ready by the end of this January.

The kitchens serving this new area went into action in July, after a complete re-fit and redecoration. On the Catering Officer's side there are many modern features in the kitchen including (so he tells me) such almost-unheard-of items as "the very latest oil fuelled and fired Collins' Hot Air Ovens, electrically controlled; steamjacketed boilers and all-over stainless steel serveries." Seemingly all we need now are electrically controlled cooks and less hot air ! I am assured there is nothing new in the principle



The opening of 8 Area N.A.A.F.I., January, 1956. Group Captain D. N. K. Blair-Oliphant, O.B.E., is seen handing a chit for five shillings to A/C2 Jack Hall of G.R.F. R.22 on the opening day. A/C2 Hall was one of the first customers on this, his lucky day. He said, when approached by our reporter, "I was an Electrical Draughtsman before I came into the Service, and with a bit of luck I shall become J/T Ground Radar Fitter on the 28th of March. I am, however, looking forward to the day when I become an Electrical Draughtsman again." of being automatically "fired." This particular kitchen is now thought to be one of the most up-to-date set-ups in the R.A.F. at Home.

The "as new" N.A.A.F.I. for the extra barrack huts just eluded a 1955 opening by mere days but on 5th January, 1956, it was opened in the presence of the new Station Commander and N.A.A.F.I.'s Command Supervisor.

Two new trainee Squadrons have been formed, known as "C" and "D." Under some form of re-organisation of the Wing which the expansion compelled, all short-course trainees (Mechanics) are now in "A" and "B" Squadrons, whilst the Fitters and Post-Graduate trainees are in "C" and "D." The introduction of this scheme in mid-summer entailed quite a large-scale reshuffle of classes between huts, but with the weather on our side (again what a blessing) the move went through smoothly in phases and without a drop of rain.

Organised games activities now take place on two half-days, Wednesdays and Thursdays. These are reported on elsewhere by the P.F.O.

With new Squadrons forming, there have been postings "in" of Permanent Staff, not overlooking normal turbulence, and we would like, in conclusion, to record the following arrivals and departures.

Officers.

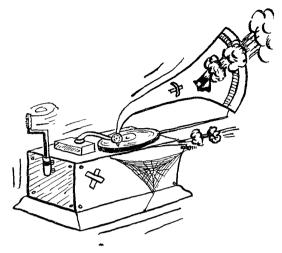
- OUT Sqn. Ldr. Williams—to retirement—lately O.C. "B" Squadron.
- IN Sqn. Ldr. Froud—to command "B" Squadron
  - Sqn. Ldr. Hooper—to command "C" Squadron
    - Sqn. Ldr. Haddon—to command "D" Squadron
    - Flt. Lt. Rose—to be Officer i/c a variety of jobs.
- Other Personnel.

- Flt. Sgt. Hill—on termination of service.
- IN Flt. Sgt. Bridson, Sgt. McClue, Sgt. Lavery, Cpl. Hurrell, Cpl. Wilson, Cpl. Brinkley, Cpl. Burt, ACs Antliff, Boalch, Cowling, Dawson, Porter. A. W. H. J. Cocks,

Wing Commander.

OUT Wt. Off. Webber-on promotion.

## THE MUSIC SQUARE



**X**/HAT is a Music Square? or strictly speaking, what is THE Music Square? for it is possible that no such organisation exists outside Royal Air Force Locking. The Square was founded at the end of 1954 to complement the very excellent work done by the long established Music Circle. This latter society confines its attention to that type of music which, for want of a better term, is called "classical." Requests for other types of music led eventually to the formation of a new music society, which, it was determined, would present record programmes of any and every type of music, other than classical. Traditional and modern jazz, swing, dance music, music from the theatre and from the films, anything in fact for which there was a demand. Record programmes would include a fabulous variety of famous names, Louis Armstrong rubbing shoulders with Dizzy Gillespie, Benny Goodman with Ted Heath, Fats Waller with George Shearing, Gilbert and Sullivan with Rogers and Hammerstein, Gershwyn with, dare one mention it, Bizet, whose music has indeed been played at a meeting of the Square in the sound-track of the film "Carmen Jones."

But why the name? The difficulty of finding a suitable title for a society which was to provide for such a wide variety of musical tastes may well be imagined. A number of suggestions were tried and found wanting. The "Jazz Club?" What would Sir Arthur Sullivan have thought of that? Worse, what would Gilbert have said? "The Light Music Society." Could the cacophony produced by Kenton's early bands, or the fantastic technique of Louis Bellson be termed light music? Despair was beginning to rear its head when the title "Music Square," in contra-distinction to that of the "Circle," was suggested in fun. Nobody liked it, but nobody could think of a better and the name stuck. Thus came into being the Music Square, which in its first year of existence has gone from strength to strength and is still expanding its frontiers.

The latest step forward by the Society came in fact just a year after its formation when the Square, under the auspices of the Station Entertainments Committee invited a live band, Ken Colyer and his jazzmen, to give a concert of traditional jazz in the Station Theatre. This initial venture was a great success in every way and preparations are being made to extend the scope of these concerts as there is obviously an audience for jazz concerts on the station.

Meanwhile the Square continues with its record programmes which take place every Monday evening in the Music Room of the Station Education Centre. Attendances vary according to the programmes. Swing is perhaps the most popular and the hundred mark has been topped for programmes combining the bands of Glenn Miller and Ted Heath, and for the recorded 1938 Benny Goodman Carnegie Hall concert. The jazz fans are divided fairly evenly, upwards of sixty attending when the evening is devoted to the traditional style and also when the modernists have their say. Fewer people attend the evenings devoted to music from the theatre, but Gilbert and Sullivan nights remain very popular, and the advent of the long-playing record has provided opportunities for many to renew their acquaintance with musical shows seen years before, with the entertainment provided once again by the original artists. A popular evening is that devoted to a light-hearted analysis of American type humour, as typified in the records of Danny Kaye, Jimmy Durante and Stan Freberg, inter alia. One would like to be able to do the same for British humorists, but alas, where are the records? A point here surely for record companies.

Programme preparation and presentation is a communal effort. All suggestions are noted and acted upon, as far as record supplies will allow. While on this subject, the organisers would like to pass a big vote of thanks to the many people who have come forward quite voluntarily in this first year to provide records and to help put on programmes. The work done by Sgt. McConnell, Cpl. Humphries and A.C. Taylor in this direction has been invaluable. Many of the best programmes have been introduced by airmen whose enthusiasm has led them to offer their services and their records. Our thanks to all. May they keep coming forward.

And what of the audience? What people attend meetings of the Square. In the first place, they are knowledgeable, particularly in the case of jazz fans. Details of performance, date of recording, line-up, sequence of solos, are always received with interest. They are critical of performance and the new artist receives a close hearing and is judged. They can be intolerant, but the intolerance of the Bechet fan who cannot take to Brubeck, is surely only akin to the intolerance of the lover of Beethoven who dislikes Bartok. To the jazz fan, then, jazz is worthy of serious attention and study. But perhaps most important of all, they enjoy their music, be it boogie, blues, bebop or "Brigadoon."

Evenings at the Music Square are enjoyed by all and sundry, by the organiser, the announcer, the man who puts on the records and the people who come to listen. Why not come along to a meeting and see if you too might not enjoy it? In the words of the heroine of "Guys and Dolls," why not "come and join us?"

J.N.B.



TED

"THAT i'n't no good argyfying," Ted would insist: "You'll never find a Naval man that cin sail a boat... They're all the same." Ted was a well-weathered fisherman not overmatured in years, and undoubtedly a most experienced helmsman of small sailing craft. Yet I could not help wondering what had brought him to utter this heretical condemnation of this prized pastime of our Senior Service.

I pursued the point further. Ted admitted freely that Nelson knew his job but, "that ain't sailing." To him 150 square feet of canvas provided the test, and the three-masted monsters of the open seas sailed themselves.

Ted was the proud possessor of a 16ft. Norfolk canoe, Bermuda rig. Much of his sailing past had been spent with the old lug sail, but whatever the rig, it was widely held that what Ted did not know about sailing wasn't worth knowing. The quaint little Norfolk seaport that was Ted's home, had seen a real transformation since pre-war days. Sailing here, just as elsewhere, had gained a new look. The locally owned lug—sails that dominated the regatta scenes of the 1930's were now replaced by a fleet of newly designed National and International classes, many of which were brought from hundreds of miles away just for the season's competitions.

All this Ted accepted. He was not a reactionary and never missed an opportunity of singing the praises and demonstrating the superiority of performance of the modern dinghies, particularly when sailing close to the wind. His attitude to the Navy, however, remained uncompromised, and I finally extracted from him an account of the incident that had so profoundly coloured his outlook.

Locally Ted was a popular and respected

helmsman, so it was not surprising that any newcomer would seek his company and advice. In making a trip up the channel with Ted, the Commodore had certainly achieved the first of these motives, but it was doubtful if he had any interest in the second, for the Commodore was out to impress. He 'afted' sheets, where Ted just 'hauled in.' He 'checked' the jib, where Ted 'paid it out !' He 'wheared 'where Ted would say 'gybe.' The terminology perhaps didn't matter, but it did to Ted. Anyhow, the wind freshened and they came about into a broad reach as the ripples grew to small waves across the estuary. Normally Ted loved this, but already the Naval terms had made him uneasy. The boat got well under way and began to heel over steeply, as they both clambered up to windward.

"Ease her up a bit, sir," Ted advised, but the Commodore remained unmoved. Ted stretched



Members of the Locking Sailing Club

out instinctively for the tiller to nurse it gently and safely as the wind momentarily dropped. He glanced anxiously at the mainsheet held tightly looped around the Commodore's hand and hauled right in. "Let fly, sir, and trim up." But the earnest cry was ignored, and the fate that Ted had so oddly sensed when they first set out, was now an inevitable reality.

The Commodore sat perched on the port gunwale with his legs stretched out stiffly before him. His hands grasped the main sheet with ferocious tenacity. His wide open eyes stared hypnotically straight ahead with a glassy lifelessness. He was petrified, rigid, speechless, every limb and movement paralysed in a sudden fit of bewildered terror. All was over too quickly for Ted to reach for his knife to cut the sheets free, and the last desperate tug had sheared the skin from the Commodore's raw and lifeless hands.

A nearby motor boat soon picked them up, the Commodore still unable to speak. Once ashore, the Commodore regained sensibility and at the 'local' a liberal tot of seaman's rum loosened his tongue. His excuses were pointless.

Ted doesn't often form opinions, but once made they stick. . . . "A naval man can't sail a boat."

M.B.W.



## THE STATION VOLUNTARY BAND

The origins of this worthy institution are shrouded in the mists of obscurity, but apparently it was formed from Station personnel during the 1939-45 war, and did a herculean task on and around the station. With the advent of peace it was decided that this organisation should become a permanent feature of Locking activities, playing in concerts, church services and parades. The first bandmaster was F/S McCutcheon, and the band was given the title of Three Wing Voluntary Band, and equipped with brass instruments.

When Warrant Officer Garnham took over in October, 1954, the scope of the band was enlarged and it became the 'Station Voluntary Band,' and at the moment there is an endeavour to develop a nucleus of reed players to introduce a softer quality to mellow the overwhelming brass tone of the band. The membership fluctuates considerably between fifteen and thirty, and the band plays regularly for Three Wing Parades at present. It is the aim, however, that the organisation should be able to accept outside engagements, but since the bulk of the membership comes from Three Wing trainees, it is a very difficult proposition when one considers the traffic of trainees on this station, like too many ships passing in the night.

To demonstrate the loyalty of the bandsmen to the public, a little anecdote comes to mind. Last summer they were asked to play for the Station Sports Day on the arena, and at the stated time, duly presented themselves. This was a signal for the heavens to open, although in all fairness to the Meteorological Office, there were intermittent patches of blue sky and sunshine. The band, in fact, did as much run-



The Station Voluntary Band under their Director, W.O. Garnham

ning as the competitors between their chairs and the shelter of nearby tents, until, exhausted, they decided to weather the storm and stay put, playing marches without music. The crowning blow came when, enticed by prizes (which were not forthcoming) they held a band race along the slippery, tortuous course, carrying their instruments. This gargantuan task performed, they patiently waited, sitting in the pools of water, and in saturated clothes, for the National Anthem, and only then were they allowed to "Fold their tents and steal away."

W/O G.



#### NOISE IN RADAR RECEIVERS

Continued from page 43.

The available signal power under these conditions is FhTB watts and this is equal to  $\frac{1}{2}e$ ·Ia·B Ro watts where Ia. is the diode current and Ro its output impedance. Thus F can be calculated, and the anode meter calibrated directly in N.F. values if necessary. For microwave receivers a low pressure gas discharge tube is used as a noise source in conjunction with a suitable attenuator. Both the theory and practice of these methods are treated in several standard texts, for example, "Radio and Television Engineer's Reference Book" by Molloy and Pannett.

## MY 1955 ROYAL TOURNAMENT IMPRESSIONS

### By Flying Officer T. A. Rippon, D.F.C. Band President

A FTER five months of sweat, swear and toil, renovating the old school drums in No. 1 Wing, I eagerly awaited the arrival of the light summer nights when I could start the band on the Royal Tournament rehearsals. As in previous years I was forced to combat the usual chain of snags, such as, bandsmen required for sports, extra tech. and instruction and the thousand and one things which seem to come along, including the never-ending excusemaking and chit-writing.

However, with the arrival of the summer, we started the rehearsals, which were spread over many weeks, and having satisfied myself by the beginning of June, I informed the Station Commander that the Band was ready for a full-dress rehearsal. The importance of this occasion warranted the surprise visit of Air Commodore and Mrs. Philips, both of whom expressed their pleasure at the high standard achieved at this rehearsal which went according to plan with no last-minute hitches.

On June 13th, this being our departure morning, the casual observer would have seen a fourvehicle convoy standing nose to tail in the "C" Squadron lines, consisting of one horsebox with prime mover (for Hamish not for the Band President), a three-tonner and two service 32seaters (one borrowed?). With suitcase and best blue on a hanger, I staggered from the Mess to the lines, depositing my load on the first coach, and after checking that my 74 Apprentices were aboard, I signalled the convoy to move off.

Yes! We were away for the second time in the history of the school, bound for Uxbridge and Earls Court. With much excitement and with feelings running high, raucous songs from youthful undeveloped Apprentice throats leaked out through the coach windows, to the surprise and astonishment of villagers and townsmen en route, and countless inquiring glances were cast on the proud and hurriedly designed banners displayed from the coaches. We arrived at the R.A.F. Depot at Uxbridge after an uneventful trip, to be told that the accommodation would be in the gymnasium away out in the "Bundo." At this information many a fine hairy Apprentice nape was seen to bristle. However, they settled in, had lunch, and within one and a half hours of arrival were on the famous Uxbridge parade ground, surrounded by its majestic chestnut trees, rehearsing to an audience of U.T. drill instructors and two Royal Guard of Honour Flights who had stopped to watch, either from musical interest or from amazement. Whatever the reason, when the show was over they displayed their appreciation in the usual manner.



The Band President

That evening, after I had administered a fatherly warning against the pitfalls which threatened the unsuspecting youth in the suburbs of the Metropolis, I allowed them out until 23.00 hours, and I should imagine that many a greybanded "cheese-cutter" found its way into all kinds of places. The next day I was asked whether the Pipe Band would oblige with a little music to assist a practice Guard of Honour, but alas, I'm afraid that these highly trained Airmen found it a little difficult to maintain a good cadence, having had little experience in marching to these Scottish wind instruments. The Thursday afternoon, prior to the evening of the performance, was spent cleaning equipment and "bulling" everything which could be "bulled," but I turned down the bright suggestion that Hamish should have a little mascara applied to organisation and timing of my show. SHOCK NUMBER ONE—Instead of a beautiful open space, I espied various horse jumps placed in all kinds of inconvenient positions. SHOCK NUM-BER TWO—A large "Road-Up" sign, placed in the position I was to have taken in front of the Royal Box. Nevertheless, flexibility being a major principle of war, I held a quick consultation with the Drum Majors and revised the show to meet this last-minute emergency.

At precisely 18.55 hours, the fanfare trumpeters entered the arena and I took up my position by the "Road-Up" sign hurdle beneath the Royal Box, amidst feeble and spasmodic applause, boosted by a noticeable hand clap



The Great Day

his eyelashes, which I am told could have been supplied by a member of the W.R.A.F. Band. However, at 16.30 hours we embussed for Earls Court, and after travelling for a short while I was informed that a trumpeter had forgotten his fanfare trumpet. With a quick indrawn breath and with voice box under control. I swallowed hard and in a steady monotone voice, I ordered the offending Apprentice to return by bus to collect the forgotten instrument. After that incident all went well and eventually we arrived at Earls Court, and unloaded the equipment on to our allotted position in the rear of the arena, where Hamish renewed for the second time his acquaintance with his Royal Horse Guard friends.

Everything seemed to be going well, until the arena master casually informed me of a change in the size of the arena which would affect the from O.C. Wing and wife, Wing Commander and Mrs. Linnard. The strident notes of the fanfare died away, the trumpet band made its appearance and after completing their tenminute preliminary curtain-raiser, a second fanfare heralded the entry of the Pipe Band led by Hamish in all his ceremonial finery (compliments to T. Hansford). The stirring notes of the "Pipers Polka" brought the show to a grand climax, when I took the salute in front of the Royal Box, which was returned by Sir Francis Foggarty, Air Member for Personnel. We left the arena amidst thunderous applause, which was taken up outside the arena by the full complement of the Pakistan Police Pipe Band. Before the clapping had died away, I was summoned to appear at the Royal Box, with my two drum majors, and was introduced to Sir Francis Foggarty in the presence of Lord Tedder. After many questions and congratulations regarding the Band and its performance, we took our leave, our chests visibly swelling, counterbalancing the size of our heads. A view of the entire Royal Tournament from the best reserved seats rounded off this exciting evening for us.

So here's to the 1956 Royal Tournament and to a bigger and better Radio Apprentices Band show, which I hope to be privileged to design once more, and so further enhance the prestige of Royal Air Force Locking, the home of the No. 1 Wing Radio Apprentices.



THE MAGIC CIRCLE

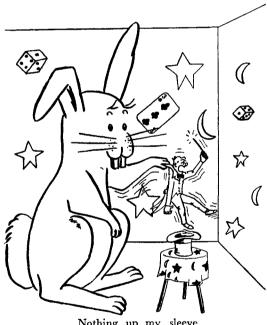
The Magic Circle is an innovation amongst the fraternity of clubs and societies at Locking.

The practising of the fine art of visual deception became a part of evening activities at Locking entirely through the efforts and enthusiasm of a small group of airmen who now form the hard core of this active society. Apart from the weekly meeting in the Education Centre, the group was represented during the Christmas season at the Officers Children's Party and the R.A.O.B. social.

The weekly Monday evening meetings continue to attract both the casually interested and the amateur wizards. Among the invited visitors to the circle, has been a representative from the local Magic Society at Weston. He brought his own particular brand of magic and information, to expand still further the stock of mysterious happenings which can be produced to order by many members of the Magic Circle.

Those who find their curiosity stirred by this account should not attend this weekly evening rendezvous unless they feel themselves capable of resisting the attraction of further attendance.

E.E.



Nothing up my sleeve

## HYPNOSIS

(The popularity of experimental hypnosis among the fitters of Class G.R.F. R.24, created a demand for a more detailed analysis of the type of experiment which, without danger to either party, could be conducted by beginners.)

YOU may be interested in, sceptical of, or frightened by some pictorial description of hypnosis, unconsciously collected at some time in your life. This short article will, I am sure, cultivate your interest and eradicate any scepticism or fear for all time.

The main and underlying cause of the various prejudices to hypnosis, is fear. It is perhaps, a good policy to retain some measure of fear whilst dealing with or practising the use of this power, for it is nonsense to suggest that under hypnosis no harm may be done to or by the subject. Safety, your safety, lies therefore in infinite care and discretion. You must know what you are doing, in this case, controlling to an indefinable extent, the action of the human brain. The way to success is through knowledge, and to self-confidence through the correct application of your knowledge.

Consider first the brain as being in two parts, the conscious and the sub-conscious. The conscious being the sifter of all things seen, heard, or felt, and the sub-conscious, the highly sensitive organ of automatic reaction to the orders of the conscious mind. It is possible to by-pass the conscious mind, thereby putting oneself, to a large extent, under the control of the subconscious. We achieve this in trance-state hypnosis, but partial by-pass is possible without recourse to anaesthesia of the conscious mind. You are subjected to varying degrees of this partial hypnosis technique every day, by certain types of advertising, headed in this country by a certain brewery.

You will realise, therefore, that you have to give the conscious mind something it does not need to think about, in order to put the suggestion you want to implant into the subconscious. Another method of implanting a suggestion in the sub-conscious is to distract the conscious mind, but this is more difficult and is best learned, as is public speaking, by careful planning and practice.

The above explanation should, I hope, give you the very necessary self-confidence which under no account must be lost when doing the following demonstrations. Lastly, always give positive suggestions to your subjects and respect them for being, and I stress this, completely willing volunteers. These few experiments are quick, easy and completely safe, but for anything more advanced than this, very careful study is an absolute necessity.

Stand behind your subject, ask him to relax, and test for relaxation by lifting one of his arms and quickly dropping it; if relaxed the arm will flop down to his side. The volunteer must now close his eyes. Tell him to fall backwards so that you catch him by putting your arms underneath his. Now increase the distance of the fall before you catch him. You have now given the conscious some measure of confidence in you. Repeat the above, but tell the subject to concentrate on standing upright. Slowly repeat, "You are beginning to sway . . . you will sway forwards and backwards, forwards and backwards." Continue this in time with his swaying, however slight, until he is swaying fairly considerably. It is now your own judgment to decide when to give quick positive orders of, "Forwards and backwards; right back this time . . . right back HERE !" Snap your fingers at the word "HERE," and raise your voice a little to add emphasis. He falls backwards and you catch him, having by-passed his conscious mind by making him concentrate on standing upright.



Another demonstration of this technique is to have a volunteer sitting down. Ask him to clasp his hands together with the fingers interwoven. You now start giving quick and constantly repeated orders to the effect that the hands are getting tighter and tighter together.

When the hands show the normal signs of physical effort tell him to raise them slowly from his knees where they were resting at the start. You are now occupying his conscious mind with the simple slow raising of his hands. Continue the tighter and tighter suggestion then, about eye level, suddenly raise your voice slightly and repeat three or four times, "Your hands are locked together, locked tightly together. . . They will remain locked together until I tell you to relax them." His hands will remain firmly fixed until you take hold of them and shake them slightly saying, "Relax, relax, relax them now," several times.

Similarly, the subject sits on a chair and grips the seat with both hands. You tell him to cross his legs at the ankles. Now use the same suggestion as before for his ankles, the idea being to occupy his conscious mind. Suddenly raise your voice, and tell him his hands are locked tightly to the chair which he has automatically been holding tighter and tighter to exert pressure upon his ankles. You use the same method to release his hands from the chair as in the previous experiment.

With some subjects, it is possible to lock further muscles whilst they are actually struggling to unlock their hands or take them off the chair. Remember to unlock the muscles, and also remember that three minutes is quite sufficient for this experiment if you wish to keep the subject's confidence in your fairness and ability.

Hypnosis, in its true sense, follows on from these simple experiments, but as it is not a thing to be practised without much careful study, I do not propose to give any further information about the various methods of inducing hypnosis in this short article, though a summary of its potentialities may prove interesting.

There are to my experience three states of hypnotic sleep, though these have been further split up by various authorities. To simplify the numerous and ill-defined categories, I will take these three main states of light, deep and exceptionally deep sleep. In the first state, the subject may get drunk on water, make love to a broom or go fishing in the middle of a room, and when he wakes, remember nothing save having a wonderful party, making love to someone and going fishing. This is the state into which the majority of people fall when being hypnotised for the first time.

The second state is when all the experiments of the first state may be gone through, but when wakened, the subject has only the faintest recollection of what has taken place. Anaesthesia of all the organs may be brought about and it is in this state that operations, both serious and simple as the extraction of a milk tooth, have been performed. The subject may also be told to do something when he wakes up, and he will not realise why he does it; such is the cure for cigarette smoking. . . . This is known as post-hypnotic suggestion.

The third state has had far less investigation and exploration of its potentialities. It entails the use of the infinite sensibility of the subconscious mind. This leads us to telepathy and astral projection, the former having been scientifically proved without resort to hypnosis, the latter still shrouded in uncertainty. We have here a boundary to be pushed back with care, and it is not for me to predict what lies behind it, only, to point the way to further untapped knowledge and power.

There is also the rather obscure practice of self-hypnosis, wherein one can reap the benefit of deep sleep and relaxation at any place and time for any given period. This is perhaps the most beneficial of all hypnotic phenomena, for one can increase mental capacity and character to one's own advantage. Similarly, it is equally dangerous to make use of this method of hypnosis without careful study and preparation. You have probably tried to fix a time to wake in the morning before going to sleep; this will always work if you are in the right semiconscious condition for reception of the suggestion by the sub-conscious. Try suggesting that you jump out of bed as soon as you wake up, especially if you know that it will be frosty. Hypnosis provides a never-ending method of enjoyment. You will be AMAZED.

LECKIE.

## "COME TO THE COOKHOUSE DOOR BOYS"

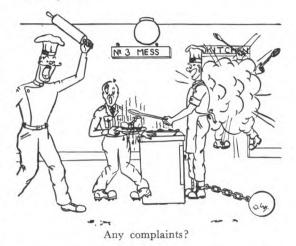
 $\mathbf{I}^{\mathrm{T}}$  is surprising how many of our pleasant memories are associated with food and feeding, and one feels it would not be inappropriate to write a little on the important subject of catering at Locking with its large commitment of providing for well over ten thousand meals daily.

We are fortunate at Locking in having, in the main, modern kitchens with up-to-date equipment; in fact, the No. 8 Area Kitchen could be described as one of the most modern kitchens in the Royal Air Force; one of its many prominent features being the electrically controlled oil fuelled oven, with thermostatic control, certainly the last word in oven equipment. It is true to say that the general standard of comfort in dining rooms has risen appreciably during the post war years. Assisted by purchases from the By-products and P.S.I. Funds, many amenities are provided to add to the comfort of personnel using the dining rooms. One such amenity at Locking is the provision of a refrigeration and cooling plant in each kitchen. This ensures such items as cold meat, butter and cheese always being stored in ideal conditions and further ensures hygienic control of left-over foodstuffs. The aesthetic side of the dining rooms has not been forgotten and at the time of writing hyacinths are bursting their buds in attractive pots on the tables of all dining rooms; hanging baskets and fresh cut flowers from Locking's own greenhouses, are provided to add to the homeliness of the atmosphere.

So much for where we eat, now a little of how we eat at Locking. It should be stated for the benefit of the uninitiated that the standard of supplies from all the sources are of high quality, and in the case of the Royal Army Service Corps, supplies are controlled by high standard of specification and warranty which are rigidly enforced. Contracts are placed for supplies of meat, bread and sugar, with the very best suppliers in the country who, by reason of the vast orders, see to it that every attention is paid to quality. In order to give readers an idea of the quantities consumed at Locking, we give some figures of just four items of foodstuffs that were consumed during the year 1955, and represents a very small part of the whole of the food consumed.

Meat	 	120	tons	
Potatoes	 	400	tons	
Flour	 	70	tons	

The supplies of foodstuffs for 1955 consumed at Locking, without consideration of labour, cooking, or equipment, involved an expenditure of  $\pounds 146,000$ .



Now a word on cooking and presentation. The Royal Air Force train all their recruit cooks in one of their two Schools of Cookery, the syllabus of training is taken over a period of 14 weeks. It is a comprehensive course and when finally passed out as a Cook II an airman is capable of performing reasonable cooking duties under supervision.

Obviously the big type of kitchen and diningroom calls for mass-produced food, and such products lack the finish of the food produced in the smaller type kitchen such as the S.H.O and Admin. Wing Kitchen where it is generally agreed that Sgt. Ellis and his staff produce a high standard of cooking, far higher than the normal Royal Air Force kitchens or industrial canteens.

We Caterers of Locking are very conscious of our responsibilities and aims and our desire to serve efficiently the hungry mouths of our many personnel. To conclude we quote that famous 17th Century gourmet Brillat Savarin—

"He who repairs his loss with due judgment and discretion may perform incredible feats of endurance."

Bread ... 140 tons

R.H.P.

# "AND CHAOS WAS UPON US ...."

A COMMUNIQUE received from our "lurking" correspondent in S.H.Q. billets, told of strange comings and goings throughout the night when, and we quote, "... all self-respecting airmen should have hit the pit."

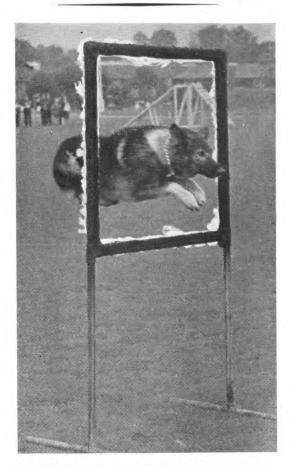
Our suspicions thoroughly aroused, we sent out a special team of outside roving correspondents to uncover the murky details. Weeks went by before news of the nefarious midnight prowlers filtered through to the headquarters of the *Locking Review*, hub of the journalistic world.

The Executive Editor received the startling news with his customary poise; he snarled playfully in the direction of the Editor, took up his opium pipe, and returned to his colourful daydream, where film directors were looking for new scripts. The Editor removed his purple wig and bit his nails. The Assistant Editor coughed discreetly and blushed; the office boy laughed hysterically. (Readers, who shall be nameless, will appreciate that office boys are hard to come by nowadays . . . so are Editors, but who cares.)

The secret was out. Slowly the gigantic wheels of the press moved into action. Throughout the length and breadth of the literate world banner headlines screamed forth the awful truth. From the impenetrable depths of the Zambesi came the frenzied beat of the drum, mysterious and sensuous; along the sewers of the underworld, the echoing cry reverberated. Ouestions were raised in the House and football pools were suspended for the week. Two N.A.A.F.I. managers were relieved of their portfolios; a Tech. Sigs. officer remustered as an Educator, to the profound relief of the Admin. wallahs. From America came the cataclysmic flash-"Wall Street collapses." The world was stunned. Messages of condolence and commiseration were received from the four corners; extra postal services were laid on for the Locking post, while the Atlantic cable between Weston-super-Mare melted as the wave of telegraphic messages flooded across it.

But what of those glorious newspaper hounds, those intrepid interlopers whose duty it was to expose the iniquities of the 'night prowlers' of S.H.Q. billet area? Little did those who perpetrated this fiendish act imagine that the seagull who watched them from the top of the flag pole one wintry night was a reporter disguised as a figurehead. Against such courage and initiative, the guilty ones were doomed. Photographs of the desperate villains, caught in the act were procured, but the culprits have yet to be identified. Armed to the teeth, the moon hidden behind a cloud ravaged sky, the vandals had struck. In one devastating sweep of the arm, the flag pole halyard had been cut, and chaos reigned at Locking.

In the light of future events, it can now be categorically affirmed that the elaborate security arrangements, fictitiously believed to be a precautionary measure against the I.?.A., are intended to safeguard the station from further acts of violence which might be perpetrated against the flag-pole. I.E.



Police Dog jumping through a blazing stand. This was but one of the many exciting spectacles which were witnessed at Locking's Battle of Britain Week "At Home"

# 73rd Entry REVIEWING OFFICER : Air Marshal Sir OWEN JONES, K.B.E., C.B., A.F.C.

Address of Air Marshal Sir Owen Jones, K.B.E., C.B., A.F.C., on the occasion of the Graduation of the 73rd Entry of Aircraft Apprentices from Royal Air Force Station, Locking, on the 20th December, 1955.

Air Marshal Sir Owen Jones said :---

"Commandant, Airmen of the 73rd Entry, Ladies and Gentlemen:

"I am very pleased to be asked to take this Passing-Out Parade and particularly pleased to see the parents of the 81st Entry as well as those of the 73rd, and despite the weather I think you have turned up in most creditable numbers. I hope the parents of the 81st Entry will take considerable note of how we endeavour to train your boys and how well they are fed and cared for. When I hear about 8 tons of meat, 8,000 gallons of milk and 4ft, in height, it seems to me as though a mathematician could prove something from that, but I don't know quite what. However, you have seen, and will see, the results of our efforts and of the training schemes, and I trust that you will be reasonably satisfied that you have put your boys into good hands.



Air Marshal Sir Owen Jones, K.B.E., C.B., A.F.C., inspecting members of the 73rd Entry of Apprentices during their Passing-Out Parade

"Now then, turning to the reports, I think that phrase 'above average in enthusiasm, behaviour and attainment' is an extremely fine comment to have earned and I really congratulate the Entry on it. I would, however, really endorse the comment the Commandant made to you about not easing off in the second year. It can make a tremendous difference if you can keep up with work in the second year, it makes a tremendous difference in the end. Nevertheless, I am pleased to see such a number of potential near Sergeants. Now the technical education was spoken of as showing keenness, and I think really, having seen around the workshops a few moments ago, that you will appreciate that you now have some simply magnificent equipment, and I think the parents too will be really satisfied with the type of gear on which their boys are trained in a most important trade, a vitally important trade to the Service.

"From the angle of General Service everything seems to be pretty good. I can only judge myself, really, on the results of the parade and I say, that having seen a lot of them, I have seen forty-two Passing-Out Parades in my time, that this one was jolly good, it was well up to standard, and better still, well up to Locking standard. Jolly good parade.

Now you 73rd Entry are going out into the Service to look after the electronic equipment of the Royal Air Force. That equipment is becoming almost, I think, the most vital part of our defence. It is particularly wonderful equipment which is being made and being fitted into the aircraft and also the ground stations, and it is really that which makes our bomber and other aircraft really efficient. I see a lot of this new equipment in my job and I am responsible that it is maintained in first-class order. It is very fine stuff, the results are just coming through, the early results, both the ground equipment and the air equipment, and they are really a little better than I had hoped for. Now I said I had the responsibility of maintaining the equipment, it is really you chaps who will do the job, and I keep you supplied with the tools, spares and manuals to do it. I think together we will make a pretty good job of it. Remember there is nothing more vital than this electronic equipment to the Service.

"I said I had seen a number of Passing-Out Parades, so I have listened to a number of speeches and nothing I have heard has more impressed me than a simile or a figure of speech or a picture which was once made from a similar platform by a former Commander-in-Chief of Technical Training Command, and I would like to repeat that picture of what your future holds in the Service. He said, 'I am nearly towards the end of my service in the Royal Air Force, I have done something over thirty years, you are just going out into the Service, and I hope you too will do something over thirty years' service. Now cast your minds forward over those thirty years which I trust you will be in the Service. You will be progressing, you will be married, you will have children, you will be very senior, you will be very well versed in your profession, and your eldest daughter will probably be married by now, and in all probability she has married someone settled in Australia and probably she will have children. By the aid of modern, that is thirty years hence modern, aircraft and modern equipment, she comes home to see you and your wife at Christmas, and being of Scotch extraction with relatives in Australia. she tries to make New Year in both places and she succeeds in thirty years time.' This may sound outlandish but there is no reason why it shouldn't be true.

"Well this gear you are going to look after is vital, everyone tells you that, and it cannot be said too often that it is really vital, and as you go through your Service life looking after this equipment, remember it is vital. It is a very important part of our deterrent force which will prevent war. You have a very great load of responsibility, but you have been trained for it and you are going to do it, and be very efficient

# at it. You keep that well in mind and all will be well and we won't have a war.

"I have said a lot and I think that really nothing remains but for me to say to the staff who have all helped to look after you, that they deserve yours and our very, very grateful thanks and hope that they will carry on the fine work to help you along with your great work.

"Finally, I should like to give to you all, and the 73rd Entry in particular, my wish for a very Merry Christmas and a very Happy New Year."

#### 73rd ENTRY

- Air Ministry Prize for Highest Aggregate of Marks
- Air Ministry Prize for Highest Educational Marks
- Air Ministry Prize for Highest Marks in Technical Subjects (Air Radio) 588431 C/A Ball, K.
  - Air Ministry Prize for General Service Efficiency Victor Ludorum

588462 F/S/A Baker, M. E.

- Air Ministry Prize for Highest Marks in Technical Subjects (Ground Radar) 588451 A/A Harrison, T.
- Air Ministry Prize for Highest Marks in Technical Subjects (Ground Wireless) 588433 C/A Artus, C.



## TO MAKE YOU THINK

The following problems were set in our last edition.

- (a) If it takes 3 days for 6 cows to eat a certain field of grass and 7 days for 3 cows to eat it, how long would it take 1 cow to eat it, assuming that all cows have the same appetite?
- (b) In the following addition sum, each letter represents a figure. Where a letter is used more than once the same figure is represented each time. Deduce the figures to be assigned to the letters.



How many readers spotted the answers? For the correct solutions see Page 83.



Is it really all mine?

## TIME ON YOUR HANDS?

**E**VERYBODY tires of going to the pictures, or perhaps to a dance, and wasting away the rest of the week-end. That may be all right for the first three or four months at R.A.F. Locking, but after that, amusement is sought elsewhere. For those who have cars, motor bikes, or even push bikes, there is quite a lot to see around Weston. Then again, when out strolling with one's girl-friend, conversation often lags and embarrassing silences may ensue. Thus the following can be called a guide for the embarrassed lover.

If you have an opportunity to walk along the top of Worlebury Hill, you will find on the west end, above the Old Pier, a heap of stones. If you are unwary, you will also find yourself at the bottom of a six foot hole, cut down into the solid rock. Be not deterred ! This is Worlebury camp. It is all that remains of a camp, inhabited by Celtic people (now called the Welsh) some thousand years ago. As a ruin, it is particularly uninspiring, although with a little imagination, and with the aid of the maps on the boards set up at intervals around the camp, you can distinguish the remains of the three ramparts and ditches which constituted the camp's outer defensive system. The deep holes clustered about were used by these people for food storage; they were cultivators, and hunters of wild deer, and they had to contend with much colder winters than the one we have just experienced. Probably the people who settled here were outcasts, a group which had broken away from the more advanced peoples living at that time on the Kent and Sussex Downs, and moved out west, in much the same way that the Pilgrim Fathers left England to make a new life for themselves in America.

Certainly of more interest, although much further away, are the ruins at Glastonbury. Glastonbury has been populated for well over fifteen hundred years, at one time by a people who, instead of building ramparts and ditches to defend themselves, or isolating themselves on a hill-top, built villages in the middle of a lake. This they accomplished by building up mounds of clay and brushwood until they were just above the level of the water, then erecting a wooden platform on which the house was built. If after a while the clay began to settle, they would take up the floor of the house put more clay and brushwood on, relay the floor and then build the house anew on the new floor. All the land has now been reclaimed, but these mounds remain in the middle of flat fields to be seen today. A one inch ordnance map will give you the exact location of two such lake villages near Glastonbury.

Quite apart from the lake villages there are the remains of a magnificent Abbey which may be seen on paying one shilling entrance fee. Many say that Glastonbury is disappointing, but I do not find it so. The abbey is built near the first Christian church ever built above ground in the British Isles, attributed to St. Joseph of Arimathea. He is supposed to have struck his staff in the ground on Wirril Hill from whence grew a tree which flowered only on Christmas Day; the magic thorn. The original tree was hewn down by a fanatic, but cuttings of what remained were sent far and wide and a tree from such a cutting may be found in the Abbey grounds today, and it naturally flowers regularly on Christmas Day. The Abbey must have been comparable in size with any of our present day cathedrals. To the south is the Chapel of St. Mary which was built near the site of the original daub and wattle church, destroyed by fire in 1171. Henry II was responsible for its construction and from what remains he must have built a beautiful abbey. Certainly it was a prosperous one, as records remaining show that the power of the Abbot of Glastonbury was far-reaching and extended over Abbots thirty or forty miles away, who had to ride in on mules once a week to bring wine and meat and such produce as the Abbot required of them. A later relative, Henry VIII, made an equally thorough job of destroying the abbey, and the resultant rubble has since been pillaged and used in local building. Also at the abbey is the accredited burial place of the mythical King Arthur. The district is known as Avalon, and Tennyson has probably given a better description than any, of King Arthur and his searches for the Holy Grail. This is said to have been buried by St. Joseph on Chalice Hill, not far from the abbey grounds.

Wells, of course, must be known to all, and certainly if you go there, you will be impressed by the magnificent grace of so large a building. It caters for the sightseers, so no guide is necessary for the intending visitor. Bath also has a fine cathedral, with perhaps one of the most austere interiors imaginable. If one visits Wells, then one must visit Bath and compare them. The outstanding cathedral is Wells and that being the case, I cannot understand why so much wrangling occurred two centuries ago between the two Bishops, resulting in the compromise title of the Bishop of Bath and Wells, the only Bishopric in the Church of England with two cathedrals.

The natural features of the district attract as much attention as those man-made. The caves at Cheddar are world known, and those at Wookey Hole, although less well known, are equally spectacular. I have no shares in either of the companies responsible for these caves, so without prejudice, I can say that Wookey Hole is far more interesting. The legend of the Witch of Wookey, whose features are moulded with remarkable human likeness on the rock inside the cave, is long and also will be told to the visitor. The underground caves are breathtaking in size and splendour, to the point of being frightening if you consider the thousand feet of rock above your head. Most amusing perhaps is the story about the entrance to the Wookey cave, which was visited by the poet

Pope, in 1745. So enraptured was he by the stalactites, that he fired his blunderbuss in the confined space, thus shooting them all down. He collected the remains, and built himself an artificial grotto in his own home at Twickenham, which may still be seen today. The entrance is therefore rather bare of stalactites of any size, but the cave as a whole has not suffered greatly from this act of folly.

Naturally there are many other interesting places to visit around Weston, and indeed around Locking. There is a Roman amphitheatre not far from Burrington Coombe, where will be found the Rock of Ages. Certainly this must be reckoned, also, as one of the most beautiful spots of England, untouched as it is by the cafes and street vendors which tend to spoil Cheddar Gorge as a beauty spot. Perhaps best of all is the inscription over the gate leading to Banwell Castle which carries a reminder to all who roam around the countryside :

"Banwell Castle is of no historic interest whatsoever . . . remember, an Englishman's home is his castle."

E.F.



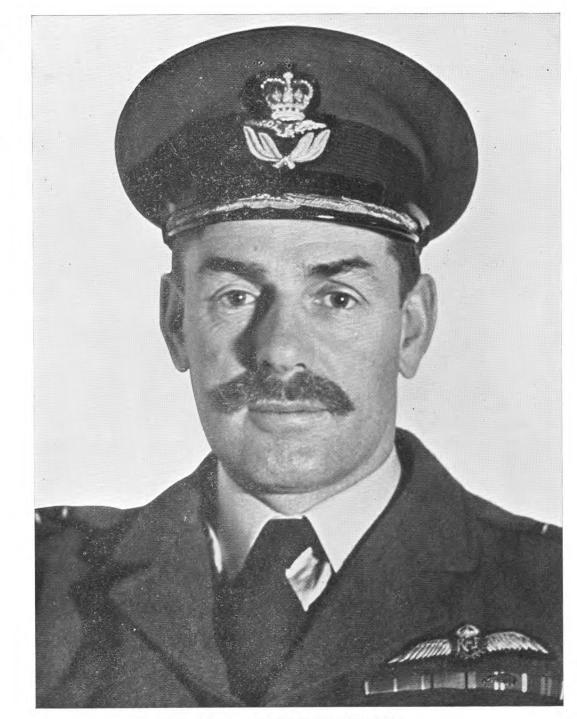
### STATION DRAMATIC SOCIETY

Unfortunately the Station Dramatic Society has been dormant since the last issue of the magazine. However, as this is being written, there are signs of its re-awakening, and by the time these words appear in print, you may have been privileged to witness *Ten Little Niggers*, the prospective next production. It was intended to enter this play for the Command Drama Competition, but the illness of Pilot Officer Leys, the producer, has forced us to withdraw almost before we had started.

The Society has lost most of its former members—veterans of *I Killed the Count*, and *See How They Run*. Members still at Locking include Yvonne Nash, John Blake and John Goddard.

## THE MUSIC CIRCLE

As one of the most thriving station clubs, the Music Circle continues to hold meetings in the Music Room throughout the year. Attendances have been well up to expectations, even beyond them. Equipment is loaned from the Aircraft Apprentices' Music Circle who share the Music Room. The record library has been extended considerably and now boasts over fifty longplaying records, with a much larger number readily available from other sources. Committee members who have now returned to civilian life include Cpl. Badman, Cpl. Ross, and Cpl. Thomas and the Society's weekly meetings are now in the capable hands of Cpl. Browning.



GROUP CAPTAIN BRUCE ROBINSON, C.B.E.

## Group Captain B. ROBINSON, C.B.E.

Since the last issue of *The Locking Review* we have said *au revoir*, last November, to Group Captain Bruce Robinson, C.B.E., as our Station Commander. He has left us to take up an appointment as Deputy Director of Technical Services at the Air Ministry.

Group Captain Robinson took over the command of Locking in July, 1953, on completing a tour of duty in Pakistan. He arrived here at a time when the reorganisation and partial rehabilitation of the station for undertaking an enlarged programme to include both apprentices and airman training, was in progress. Although substantial constructional alterations had been completed on the three large training blocks—the lynch pins of the training machine—much remained to be done in getting them fully operational, in providing adequate sports and other welfare activities amenities and in knitting the station into a unified training school.

Some of the apprentices who had started their training at No. 6 Radio School at Cranwell were still here, and with them, naturally, remained a certain amount of the Cranwell tradition. Group Captain Robinson set us the lead in fostering a Locking tradition and to use a current phrase, engendered the foundations for the "peaceful co-existence" of apprentice and airmen trainees. The last of the Cranwell apprentices passed out at Locking in 1955, so that those who are now here, are, in the Group Captain's own words, "pure Locking thoroughbreds."

The last two or three years have undoubtedly been years of great opportunity for the Radio School and today, although the expansion is still going on, one can look back with the thought that during those years Locking has been put on the map as a place where the School's motto of "Thorough" applies alike to technical training, games, welfare and relations with the general public.

Life at Locking is not a static affair. The presence of an apprentice wing adds an annual round of sporting and social activities to a normal station programme. And of course the wing provides occasionally other unusual activities (who painted the pigs and how did Hamish get on holy ground?). Some of the more recent events have already been chronicled in the first number of *The Locking Review* and others are described in this issue. But amongst those that are not so recorded there are many that we are sure remind us of the debt of gratitude we owe to Group Captain Robinson—and Mrs. Robinson—for the inspiration they brought to bear on our work and on our play. All of us retain very happy memories of the time they .

He was fortunate in being able to watch a large measure of eminence being achieved by the apprentices and by the Station in a variety of ways, where his personal eagerness was well in the foreground and an example to others, as was his own capacity for hard work in workaday and social activities.

## LOCKING GOLFING SOCIETY

THE publication of our second Locking Review, affords the opportunity of reminding readers that the Station has a strong and flourishing Golfing Society.

The Locking Golfing Society is almost as old as the Station itself. It was first formed in 1940 and during the war years a number of outstanding players were members. Indeed the Society was able to raise a team of first class players and fixtures were played with the majority of the leading clubs in the area, including Burnham and Berrow, Long Ashton and the Mendip club.

The Worlebury Club very kindly permitted the members of the Society to play on its course, which is so delightfully situated. On a clear day players on the Worlebury Course can see across the Severn estuary to the Welsh coast and the hills beyond, and from the other side there is a spectacular view over the Mendip range.

Friendly rivalry has existed between the Society and the Worlebury Club from the earliest days. The P.S.I. presented a cup to be played for quarterly by the Club and the Society. There were a number of enjoyable battles for the cup until in 1942 the Worlebury clubhouse was burned down and the cup lost for ever.

After the war, interest waned but the Society kept alive. With the arrival of Gp. Capt. B. Robinson, C.B.E., our late Station Commander, and Wg. Cdr. J. S. McLean, O.B.E., D.F.C., there was a golf revival on the Station due in the main to their enthusiasm and it is in no small way due to their efforts that the Locking Society is so flourishing at the present time. The Society also owes much to W.O. McGivern, who as Secretary worked so very hard organising the monthly competitions, and attending to the general running of the Society.

Through the efforts of Wg. Cdr. McLean,

who unfortunately is no longer with us, the Worlebury Golf Club generously granted full membership rights to our Society's members. A new cup was presented by the P.S.I. to be competed for annually in a foursomes competition whilst the Worlebury Club presented a cup for competition in the Autumn in a singles match, thus renewing the friendly rivalry of earlier days. At the time of going to the press Locking hold the singles cup but the foursomes cup is held by Worlebury.

Three cups were also presented to the Society for annual competition between the members. One for a medal competition, one for a bogey competition and one for a match play knockout competition.

Appropriately up to the time of leaving the Station, the match play knock-out was held by Gp. Capt. B. Robinson and in memory of his aid to the Society the cup is now named the Bruce Robinson Cup.

In appreciation of Wg. Cdr. J. S. McLean's outstanding efforts to put the Society back on its feet he was granted Honorary Life Membership of the Society when the time came for him to leave Locking.

In 1955 the 27 Group Annual Golf Championship Meeting was held on the Westonsuper-Mare course and the players enjoyed some very pleasant golf.

Locking players were well to the fore and both Inter-Unit competitions were won by Locking whilst in the individual championships Wg. Cdr. J. S. McLean won the Bogey competition cup.

Facing this page is a photo of the competitors and the cups, which were very kindly presented by Mrs. Bruce Robinson.

The Society has a warm greeting for all new members and the rabbit whose golf is not all he would wish, is as welcome as the low handicap player.



27 Group Annual Golf Championship Meeting



Fitter Class LeadersS.A.C. KnightA.C.2 CharlsonA.C.2 GardnerS.A.C. FinchG.R.F. (C)29G.R.F. R.3R.26R.28A.C.2 KnowlesS.A.C. CrumplerA.C.2 HollandS.A.C. HervyA.C.2 GerraidG.W.F. (R)1G.R.F. R.29G.R.F. (CH)4G.R.F. C.31C32S.A.C. NicholsL.A.C. GammieS.A.C. BrookG.R.F. (C)30C.27R.30

## ROYAL AIR FORCE RIDING CLUB-

THE R.A.F. Equitation Association was started after the war to foster riding among all ranks of the R.A.F., has many branches throughout the world and the one at Locking has progressed steadily during recent years.

The Club has a contract with a riding stable in Weston and with the help of P.S.I. very attractive rates for riding are offered. Instruction for beginners is included and the string of horses includes everything from a few quiet cobs and ponies to some seasoned hunters which will satisfy the keenest rider. Breeches are available free on loan.



Meeting of the Weston Harriers Hunt in front of the Officers Mess

The Weston Harriers Hunt have their kennels at Wolvershill, which adjoins the camp, and they have generously allowed the club a block subscription to cover members who wish to hunt. They hunt hares on Tuesdays and Saturdays and foxes on Thursdays, and most meets are within hacking distance or if further afield can be easily reached with the double horse box which is available.

The Harriers hunt a very sporting piece of country extending from Weston to Axbridge and about fifteen miles in length. Hares and foxes are always to be found, and as long as the rider is not deterred by the numerous "rhynes"—a local term for a ditch, anything up to six feet wide, six feet deep and full of dirty water some really good sport can be enjoyed.

During the last season the R.A.F. has been well represented and also some members have been regularly "up in front." It is sad to relate that almost all of us at times have ended up sitting in a muddy rhyne wondering exactly why the horse didn't jump quite far enough.

Five members turned out with the Mendip Hunt at their opening meet and tried their luck with stone walls. In all cases the horses jumped the walls but the riders seemed loathe to arrive at the other side at the same split second as their mount. However, apart from lost caps and muddy uniforms no harm resulted.

The club decided to put on its first Annual Gymkhana in April, 1955, and with a well laid out field and lots of enthusiasm a good afternoon's sport resulted. The large crowd may not have been offered expert horsemanship but the many novices among the riders provided lots of entertainment and showed that their lack of skill was well compensated by plenty of "guts." One airman proved really adept at mounting on the left and dismounting on the right without even touching the saddle. The six novelty races for R.A.F. personnel produced several neck to neck results and the tote paid off some hand-some dividends.

To add to the afternoon's enjoyment we included the "Locking Maiden Chase" a crosscountry race with twelve jumps, run individually on time. Eighteen local damsels entered and the final result, which was jumped off between three close competitors, went very popularly on Stardust who did a terrific double circuit in real Grand National style in 1 min., 34 secs. The children's race was also very well supported and the two heats resulted in an exciting run-off between two horses in Derby fashion, and Miss Susan Fincher came down the straight a length ahead for a very popular win.



Locking Gymghana. Musical chairs

The most disappointed rider was the apprentice in the Musical Chairs Race who tried to persuade his horse to sit on a chair when the music stopped.

The club has continued a very successful year and proposes to hold another Gymkhana in the Spring. Riders or potential riders who are interested should contact the Officer i/c the club, Flt. Lt. A. Jenkins, in S.H.Q. **Tailpiece** 

Two trainees were out riding with the Hunt

when a fox went to ground on Hutton Hill just overlooking the Camp. After twenty minutes energetic digging in two holes about nine feet apart, the one trainee suddenly shouted, "Hold everything I can see his head"—to which the other firmly replied, "Well is must be a damn long fox because I've got hold of his tail."

During the ensuing laughter one fox bolted from each hole and departed north and south at record speed.



# RADIO EX-APPRENTICES SOCIETY SECRETARY'S NOTES

OUR Society is beginning to emerge from the chrysalis stage but before getting its wings and becoming supersonic more of our potential members should break the sound barrier and make their whereabouts known.

Most of the members have had a letter from the circulation manager with regard to ordering the magazine, and from the Secretary asking for articles for future issues. For one section of the magazine any item of interest to the Society would be welcomed, ideally the article should be :---

- (a) A technical article of 1,500-2,000 words.
- (b) A humorous article of the same length.
- (c) An interesting or historical photograph (which we undertake to return).
- (d) A black and white cartoon.
- (e) Any article of interest to past or present Radio Apprentices.

In succeeding issues of the magazine, we hope to print a register of Radio Ex-Apprentices. In order to be comprehensive the list should show :

- (a) Name and initials.
- (b) Present rank.
- (c) Apprentice number.

- (d) Apprentice entry and year.
- (e) Where apprenticeship completed; Flowersdown, Cranwell or Locking.
- (f) Present Command and Station.

So, if you would like to be included in the register, please let the Secretary have these details.

The Society Tie has been in great demand recently and several gross have been sold; unfortunately because of a recent rise (What again !!) in the cost of production and increase of purchase tax, the cost has risen to 11/-. A scarf of the same design and in the same material as the tie is available. It costs 25/- and, like the tie, can be obtained from :--

Messrs. Thomas Hansford,

The Centre,

Weston-super-Mare.

Since the wearing of the tie and the scarf is confined to ex-Apprentices, a certificate of authority to purchase should be obtained from :

The Training Officer,

Royal Air Force, Locking.

E. C. HARGEST, Flt./Lt.

# JOURNEY WITH IRIS

#### STORÝ OF AN EPIC FLIGHT— THIRTY THOUSAND MILES OF AMATEUR RADIO F. IOHNSTONE (G3IDC)

(Royal Air Force Amateur Radio Society) From press and broadcast, many readers will already know something of the great journey recently undertaken by a Hastings aircraft of the Royal Air Force for the purpose of surveying Signals facilities on the R.A.F. longdistance routes to Australasia and the Far East. Some will also be members of the R.A.F. Amateur Radio Society, and will know that it has affiliated groups consisting of locally-licensed amateurs serving with the R.A.F. at home and overseas. What will not be so well known is that Amateur Radio in the R.A.F. has the full backing and active support of those in authority at the Air Ministry-so much so, in fact, that it was possible for G3IDC, officially representing the R.A.F.A.R.S., to accompany "Iris II" on her recent signals surveyflight, in his capacity first as a licensed amateur and secondly as an R.A.F. member of the crew. The head of the Signals Branch of the Royal Air Force is the Assistant Chief of the Air Staff (Signals), an appointment now held by Air Vice-Marshal L. Dalton-Morris, C.B., C.B.E., who has himself taken the keenest personal interest in the Amateur Radio results and experiences discussed in this article. All who read it will agree that G3IDC made full use of his opportunity.-EDITOR.

SHORTLY after last Christmas, it was arranged that the writer should join the party of the Inspector of Radio Services (G/Capt. C. C. Morton, C.B.E.) on his tour of the Far East, Australia and New Zealand. Needless to say, a chance like this comes but once in a lifetime!

The official purpose of the flight—made in Hastings Iris II—was to check all Signals facilities and radio navigational aids on R.A.F. Transport Command routes, and this particular survey trip was the longest yet organised for that purpose. The crew duty assigned to your correspondent was that of assistant signaller and, whilst on the ground, there was the additional and very pleasant responsibility of making personal contact with the local amateurs at our stopping-places. The intention underlying this was to form branches of the Royal Air Force Amateur Radio Society at all the main R.A.F. stations we visited.

#### R.A.F. Amateur Radio Society

The purpose behind this idea of forming local R.A.F. Amateur Radio clubs is threefold : A licensed operator who joins the Service and finds himself posted abroad has no "weight allowance" enabling him to take his gear with him; if, when he arrives at his overseas station. he finds a flourishing local group, he can start up straight away under the club call-sign using the equipment already there; in the meantime, he can apply for his own local licence and arrange for his gear to be sent out to him. Secondly, such active groups encourage recruits to Amateur Radio itself from among the locals, with the advantage of the help and facilities the Service can provide. Thirdly, it would certainly be agreed that a man who has a hobby closely allied to his Service "trade" will be far better at his job than a man who works simply because he must.

It can be said here that as a direct result of this trip, local clubs were started at no less than ten R.A.F. stations overseas, with all the benefit that will ultimately accrue to the individuals concerned, the R.A.F. Amateur Radio Society and the Service itself.

#### **Itinerary and Formalities**

Permission to carry the G3IDC transportable station on the trip was readily granted; arising from this, a secondary objective became that of endeavouring to keep in touch, by Amateur Radio, with G8FC, the Hq. station of the R.A.F.A.R.S. at Locking, Somerset. The most important "chit"-without which the trip would have lost some of its savour-was, of course, the permission to use the G3IDC callsign followed by the prefix of the country in which we happened to be; this came from the Commonwealth Telecommunications Board. London, through the good offices of W/Cdr. W. E. Dunn, O.B.E. (G2LR) and actually arrived just before Iris II was due to roll down the runway at R.A.F. station, Benson, Oxfordshire, on the first stage of our long journey.

Taking off on February 12, the first night stop was at Malta; next day, on to Cyprus, where G3IDC went on the air with ZC4 as the suffix. It is truly amazing how people can live together on the same station and not know each other's interests or hobbies; even chaps working together in the same section had no idea that the man next to him was a radio amateur! This extraordinary state of affairs was encountered throughout the trip, and one wonders whether all amateurs are as shy! After Cyprus, on to Aden, where we found it pleasantly warm—perhaps with a twinge of conscience for those at home, shivering in the February weather of the U.K. It was your correspondent's good fortune to be invited to broadcast on the "Aden Forces Network"; the response to an appeal for potential amateurs was very heartening indeed. Here, as at other places, accommodation for establishing an amateur station is at a premium. But amateurs the world over have an eye perpetually open for a "good site"; no matter how small the building, or even the room, invariably it is chosen for convenient aerial erection.

The next calling points were Riyan, Salalah and Masirah Islands-no more than small staging posts on our route but perfect examples of an amateur paradise. None of the time and money-wasting distractions of a town; just working, swimming and Amateur Radio-who could ask for anything more! Eastwards again, and our next landing, the fabulous gem of the Indian Ocean, Ceylon. There 'midst waving palms, silver sand and to the tune of crashing breakers and dazzling lines of surf G3IDC/4S7 was on the air for a few days. The outstanding local personality was 4S7YL. Suma, who could charm any man from beach or sailing club. Penang was our next call, where at R.A.F. station Butterworth we were welcomed by VS1BP (G8PF), who was to join Iris on the trip through to Singapore. Within an hour or so of arrival we were on the air, thanks mainly to VS1BP's foresight in having a 250ft. aerial erected ready.

The following day, a Sunday, we broke in on the Malay Amateur Radio Society's 40-metre phone net, at 10.30 a.m. local time (0330 GMT). VS2DQ, our first contact, had quite a lot to say about "using a G call out here"—until the appropriate document was read out to him! Two hours later, he collected your correspondent and VS1BP in his car for a run out to his rubber plantation at Kuala Ketil, near Kedah.

#### The Far East

The next leg of the flight was to VS6; having been warned of the difficulties in getting out from Hong-Kong, the approach to it is calculated to make one even less optimistic, for the final circuit at R.A.F. station Kai-Tak merely tends to heighten foreboding. Mountains surround Kai-Tak on practically all sides, with no opening in the direction of the U.K. With low power and a mediocre aerial only 15ft. high, chances with G31DC/VS6 were not of the best. However, all this was more than made up for by the welcome from the local amateurs; VS6AE, one of the founder-members of the Hong-Kong group, gave full details of the local organisation, and the R.A.F. lads from Little Sai Wan and Sek Kong, VS6CT and VS6CW, came over for the week-end. It was a great pity that VS6GC—often worked from G31DC and G8FC—was not able to get along for the meeting.

Business concluded, we changed direction and were heading south, via Saigon, to Singapore; there, most of the local amateurs seemed to be away on odd jobs. However, G31DC/VS1 raised G8FC again after a break of eight days. As time was short at Singapore, very little could be done towards forming clubs at Changi, Tengah and Seletar, but the ground work was laid.

#### Australasia

Leaving Singapore very early one morning, we took the long leg over the Timor Sea---in which so many aircraft have been lost without trace-for Darwin, Australia, there to be sprayed, fumigated and generally disinfected until we were nearly asphixiated. Having had no rest to speak of for nearly 48 hours, your correspondent slept peacefully through a tropical thunderstorm that broke just as we arrived. Two days later found Iris II touching down at the Royal New Zealand Air Force station at Whenurpai, Auckland, in the North Island of New Zealand. An overnight stop, and we were on our way to visit the Thermal Region of the North Island, in transport kindly provided by the R.N.Z.A.F. for the Iris party. The magnificent sights of Rotarua, with its fantastic scenery, the boiling pools and geysers, set in a majestic mountain landscape with fir forests dropping down to crystal-clear lakes, is something never to be forgotten.

From Whenurpai, we were on our way to R.N.Z.A.F. station Wigram (Christchurch), and from there to Ohakea, near Wellington. Here, personal contact was made with ZL21Y, an official of the N.Z. Amateur Radio organisation, who took your correspondent under his hospitable wing, and arranged introductions to many of the amateurs in Wellington. At Ohakea, the one active club station of the R.N.Z.A.F., signing ZL2WP, is kept on the air by ZL1AJW, ZL2APK and ZL2WM; at the moment, operation is confined to 80 and 40 metres, but it is planned to be on Twenty very soon. Two days with them and we returned to Whenurpai before leaving to visit the Royal Australian Air Force. The countries raised by G3IDC/ZL2 while at Whenurpai were DL, EA, G, GM, HB, I, JA, LA, ON, OZ, PY, VE, W, YJ, ZP and ZS. This reflects more credit on those who could find the small signal from G3IDC/ZL2 than on the 25 watts and odd length of wire used.

The next time Iris II touched down it was at the R.A.A.F. station at Richmond, 60 miles from Sydney. The R.A.A.F. had arranged for the party to spend Easter as near Sydney as possible; this was at Bankstown, a suburb of the city, and no sooner had we settled in than the phone was ringing; VK2QL and VK2YC were making themselves known. The next three days were spent very pleasantly, meeting a good many of Sydney's amateur population and seeing all the local places of interest. One of the highlights of this occasion was meeting VK2APO, who specialises in two-metre operation. He suggested a call on Two, signing G3IDC/VK2-never has such a commotion been heard on the two-metre band!

By Easter Tuesday, we were at R.A.A.F. station Laverton, near Melbourne; there G3IDC/VK3 was on the end of an extended "Lazy-H" system on 70ft. self-supporting wooden poles; that aerial certainly did the 25 watts proud.

#### Homeward Bound

With the end of the Australian tour nearly in sight, we flew back to Darwin, and the next day were in Singapore again, to find that G3IBW had arrived from the U.K. and was coming on the air with a VS1 call. From Singapore, the route was homeward to England, overnight stops at Bangkok, and Calcutta bringing us to Karachi. Pakistan was the last country from which permission to operate had been given, and also the last from which G8FC was worked; even though our stay was short, many stations were raised by G3IDC/AP2. The R.A.F. station at Habbaniya, with its well-known amateur call-sign Y12AM, was our next touchdown, and we left the lads there in fine fettle, even though their 866's are a little the worse for wear!

Forty-eight hours later, at 14.45 B.S.T. on April 28, *Iris II* landed back at R.A.F. Station Benson with a good 30,000 miles covered since our departure ten weeks earlier. It says much for her crew, the ground personnel on the many legs of our route, and the aircraft herself, that not once was her take-off delayed by any fault or failure.

It is of interest to add that an important task during the trip was the making, professionally, of the colour film, "A Date with Iris," and for this we were carrying a unit of Pathè Films. Apart from providing a record of the flight, the intention of the film is to show the public the conditions under which R.A.F. personnel, men and women, serve in overseas establishments and the sort of places to which sons, husbands and daughters are posted during their service with the Royal Air Force. As such, it should be of great interest, and in due course you will be able to "see it at your local cinema."

#### In Conclusion

On a personal note, perhaps I should apologise to many G's who found I was not on the air very long at each session. The reasons for this were that my first consideration was to work G8FC, our own "base station"; secondly, to make personal contact with as many local amateurs as possible wherever we happened to be; and thirdly, to do all I could towards forming an R.A.F. Amateur Radio Club and see it firmly established before we left. This did not leave me a great deal of time for going on the air, though I usually managed two or three hours most evenings. I must also acknowledge the co-operation, which was deeply appreciated, of many amateurs who, hearing my tiny signal endeavouring to raise G8FC, moved off the frequency to make things a little easier for G3GNS, who did most of the operating in G8FC.

Finally, my abiding impression of this trip is, as ever, the fine bond of fellowship between radio amateurs all over the world. It was always in evidence; the hospitality was overwhelming and generous to a degree. Indeed, it was of a kind that we should be glad to reciprocate a little more freely whenever the opportunity occurs.

This wonderful hobby of ours, combined with this particular flight as a member of the *Iris* team, gave your correspondent the unique opportunity of meeting in person many amateurs who before had only been known as "fist or voice." What an experience !

#### WHAT IS THIS THING CALLED JAZZ?

"TURN that — horrible noise off!" How often have you heard those words when a jazz programme comes over the radio? But have you ever tried to discover what all the "noise" is about?

What is jazz? This question has never been really satisfactorily answered. There are two essential qualities; improvisation and rhythm. Music consists of MELODY, HARMONY, and RHYTHM. Melody is the tune; harmony is the playing of two or more notes together; and rhythm, which should not be confused with beat, is the pattern of notes in time, or what you might get if you were to clap a tune, whilst beat is a regular time period or what you would obtain if your feet were to tap to a number.

If you go to a piano, you will find that if certain notes are played together the resulting chord will probably remind you of the beginning of certain numbers (e.g. A. C. and E.-Lullaby of Birdland). Subsequent chords may also follow those of Lullaby of Birdland. This is what is meant by a chord sequence. In addition, you will find that when played with these chords, some notes produce a pleasant sound whilst others do not. Thus not even the jazzman can play any notes he pleases, but must fit in with the demands of the chord structure. There are, however, fashions in jazz as in most other things, and certain chords can be said to pertain to a given era so that they do not sound correct in any other.

This all seems to make things very difficult for the jazz musician since his work is mainly impromptu, but after a while, however, he feels the chords and selects his notes instinctively. Sometimes, notably in New Orleans jazz, the instinct has been there all the while and the musicians do not even know the separate notes.

How does the jazzman know his place in a number? In jazz a bar is usually the time for four beats, or that time on paper. A jazz number normally contains thirty-two bars consisting of an eight bar chorus which is repeated, followed by a further eight bars known as the release, and finishing with the chorus again. After a while the musician senses his position in the chorus instinctively. Not only is this essential for playing jazz, but also for the appreciation of jazz. It is probably the main reason why jazz is to many people such a horrible and pointless noise. A jazz fan can probably say where each chorus starts without counting out the bars whilst other people probably cannot. If they cannot automatically follow the choruses they cannot appreciate the improvisations which can occur in the melody, harmony and rhythm.

So far only jazz in general has been mentioned. There are, fortunately or unfortunately, depending on individual views, many different forms of jazz. Perhaps these can be broadly classified into two main categories; modern and traditional.

In the traditional style, which improvises chiefly on the melody, the band usually consists of a rhythm section of piano, bass, drums and guitar, whose main duty is to lay down a steady beat; and a front line usually made up of



. . . and this kind of music is played by quite ordinary people

trumpet or cornet, clarinet and trombone. The Trumpet leads the line whilst the clarinet and trombone weave their own melodic variations above and below the trumpet respectively. The early swing band was based on the same principles but with a much greater instrumentation.

Modern jazz has no standard instrumentation and many varied combinations are in common use. The improvisations here are in both the harmonic and the melodies which makes it more difficult to understand for most people. In the rhythm section the bass plays the basic beat whilst the drums and piano weave around with their own rhythmic variations. The piano also supplies the chords upon which the soloists improvise.

We cannot hope to cover fully the whole subject of jazz here. We have, however, tried to give an outline of the processes by which jazz is produced and can be enjoyed. The ear will tell you when you are listening to jazz, just as it will tell you anything else about music until such time as you set out to study it in detail. This article will have served its purpose if just one more person begins to understand jazz.

R.M.T.



#### FITTERS ABROAD RHINELAND RENDEZVOUS

SERVICE life abroad . . . so many facets spring to mind. It becomes impossible to marshal them all into a self-contained article. Having no wish to produce a diary of daily happenings, I shall confine myself to some of the more pleasant recollections of the days which I spent in and around that delightful city, Cologne.

The first thing that one notices on arrival in Cologne by train, is the entrance hall of the station; it is a massive place with a picturesque map of the Rhineland suspended over the entrance. Emerging from the station, one is immediately confronted by the barbarous majesty of the medieval cathedral, its Gothic lines a landmark, famous throughout the world. From the top of the tower there is a breath-



taking view of the Rhine twisting away into the distance, through the wooded valleys, past the seven mountains and the famed Drachenfells, where Wagner was inspired to some of his greatest music, and on to Koblensk where the waters of the Moselle tumble into the Rhine. I realised that the cathedral had been very close indeed to being bombed, as some eighty per cent of the city has been either rebuilt or refaced.

On the other side of the river is the large 4711 works and the exhibition ground. In the gardens there is a dance floor which is in a most beautiful setting. There is a large round pond, and the circular dance floor is surrounded by clusters of sparkling fountains. The band is in a grandstand position on the river side of the gardens. On the perimeter are to be found the inevitable beer-gardens, ranging from the smallest to the splendidly ornate ones with the pretty beer maids, who wait on the customers, amazing the strangers by their dexterity in carrying large numbers of glasses.

It was with great regret that I had to leave this enchanting place, but my last train to camp left at 10.30, sorry, that should read, 22.30 hrs.

The next outing I had was to the Nurnburgh Ring Race Course. Here we spent a glorious afternoon; the excitement of the car and motor cycle races, coupled with that of the crowds and the vendors selling all manner of gifts and souvenirs produced a Bank Holiday atmosphere which was a welcome change from the tedium of station routine. The race course is well worth a visit, and although much of the national fervour has disappeared now that the Mercedes team no longer races there, one can be assured of an afternoon's entertainment "par excellence." On the return to camp in a hired coach, we passed through some of the most wonderful countryside that I have ever seen. The road from Nurnburgh, through Bonn and on to Cologne, passes through some of the finest scenery that the Rhineland can boast of, and although I could spend all my time describing it, I could never really do justice to it. The feelings that one experiences on such occasions defy description.

My next trip took me to Liege, a city in Belgium. It was a very interesting journey, which I would have thoroughly enjoyed had it not been for the fact that I was driving in convoy and that it rained all the way there. When we arrived I was struck by the fact that the city appears to be built on the side of a steep valley with the river running through the centre. I cannot say much about the city as such, but I can recommend the night life. It is possible to dance, drink, or, happy combination, do both. I recollect an amusing incident as we went in search of a dance hall called 'Maxims.' As we meandered down the neon-lit streets, the commissionaires from the various rival dance halls attempted to invite us inside saying, "There are nice girls here, very cheap." Needless to say we by-passed all these places. 'Maxims' lived up to its reputation and we spent a more than enjoyable evening there.

Well this is just a very quick insight into what Service life can offer you abroad, and although in the last analysis "There's no place like home," a tour abroad can be a very enjoyable and enlightening experience.

E.H.

#### MOON-MADNESS

It strikes and I awake, Silent moon has touched my soul With icy fingers, and I am Nothing in its clutch.

With empty eyes I go Where the moon directs my steps, Where the eerie music leads me Through the mystic night.

It commands and I obey: Rushing clouds and I are one, Stirred by a silent crushing force That o'erpowers my will.

The moon is full and round; Kneeling in her light, we slaves A thousand prayers in hideous shout Send heavenward.

Demented souls, we shriek Our wild ecstasy of love To the pitiless golden queen, The serpent veiled.

At grey of dawn she leaves; Freedom for a month is ours, To sleep in peaceful hush again, Our secrets hidden.

#### SCOPOLOGY

Electrons scream and scramble, Green lines fluoresce Wriggle, writhe, capitulate, to become Quite still.

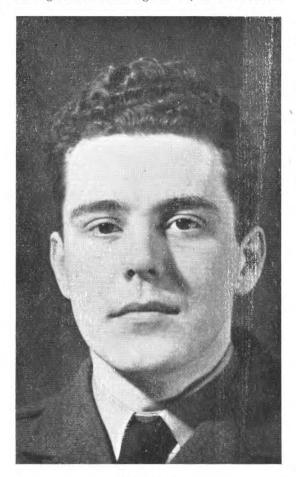
Scope Sawtooth, Scope Intergrate, X shift, Yshift, Knobs turning, switches clicking, probes probing, For what?

Knowledge ! Science ! Seek ! further, further, remorseless, Unending, on, on, never stopping, Till stopped.

P.T.K.

#### MECHANIC CLOSE-UP

Ian Alexander Dawson, aged 22, is a member of Class 261, engaged on a Ground Wireless Mechanic course. Born in Westmorland, one of the most beautiful counties in England, he was educated at that historic 17th century Grammar School at Haversham, where he gained a G.C.E. in English literature, Maths. and Art. On leaving school at the age of 16, he was articled

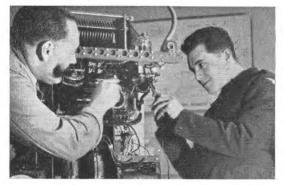


A/C Dawson

to a firm of Auctioneers, Surveyors and Estate Agents. Although much of his work was confined to routine office work, he often performed minor roles at the auction sales, and on one particular occasion, when he was left holding the hammer, he had to contend with an irate female buyer who thought that she had bought a washing machine for 2/6d, when in fact he had sold her a rusty zinc bath.

After a week at Cardington, he weathered the rigours of ten weeks square bashing at Wilmslow before being posted to Locking, which he thinks is "a very pleasant station where the food is better than I had expected." On completion of his present training, he hopes to transfer to a Fitter's course, before being posted abroad for the rest of his five year engagement.

His major hobby is car-building, a pastime which he maintains is not as costly as it may sound. It is his ambition to build a car which will compete successfully in county hill climbing rallies.



A/C Dawson under the supervision of his instructor, Mr. Pittman (alias James Edwards)

#### THE LOCKING REVIEW

## HAMISH



An eventful day in the life of Hamish. It is the occasion of his birthday, and the Station Commander opens the formal celebrations by presenting Hamish with a juicy carrot. Readers will be interested to learn that, after a strenuous probationary period, Hamish has been promoted to L.A.A. Now that the new conditions of service have been announced, it is felt in official circles that Hamish's future promotion may well be more rapid



#### THE DISAPPEARANCE OF AFRICA By The Stranger

THE Captain of H.M.S. Windrush was worried; he should have reached Tripoli, his destination, eleven hours ago. There were women and children aboard and if they did not reach port soon, food and drink would be running short.

He paced up and down as he always did when he was worried. He walked over to the voice pipe and asked for the First Lieutenant who quickly arrived.

The Captain said, "Ah! At last. I'm worried, Number Ône."

"So am I. sir."

"We appear to be lost, Number One," said the Captain in a depreciating tone.

"I know, sir," replied Number One sadly.

There was a long pause, and then the Captain said, "All right, you can go, Number One."

The First Lieutenant walked out, closing the door quietly behind him. The Captain started pacing up and down again. Suddenly he stopped in his tracks, with a loud exclamation of "Thomson !" burst out of his cabin, slammed the door behind him, and stormed into the navigation room.

"Where's Thompson, the blithering idiot?"

The whole room appeared to shake-but Thompson was unruffled.

"Here, sir," he answered.

"We're lost, Thompson !"

"Yes, sir," he said meekly.

"Then what the devil are you playing at?" Thompson himself was growing impatient. "Marbles," he muttered.

"What was that?"

"Nothing, sir," he stammered hurriedly.

"Then, for Pete's sake, do something! Calculate our position. Surely you can do that."

Thompson went over to the map and said, "I calculate our position to be here, sir."

He marked a cross. It was in the middle of the Sahara Desert.

"My creeping Teddy Boys!" the Captain muttered. "Am I seeing things?"

"No, sir," said Thompson.

"Hell's bells, it can't be man. You're mad, STARK RAVING MAD! Wireless Cairo or something."

Thompson answered, "I have, sir. There was no answer." \*

The headlines in some of the newspapers were: "The Vanishing Continent," "Africa Disappears," "Was it Houdini?" and one paper's cartoonist put a notice saying, "Will the person who has stolen Africa or any person finding it, please return it to the nearest post office.'

One person in Britain who did not believe the headlines was Colonel Flabbkinsy; he was positively exasperated. He found the story utterly fantastic and told Freeman, his butler, in no uncertain terms, that he couldn't believe a word of it.

"It could never have happened. It just damn well couldn't have happened. Do you mean to tell me that I fought in the Boer War; returned for game hunting; shot these elephants and the large cats on a land that's disappeared?"

The butler answered in an austere voice, "Quite probably, sir."

Quite prob . . . quite prob . . ." The Colonel's face was becoming red. "Do vou actually believe this infernal tripe?"

"Yes, sir."

"Yes, yes?" the Colonel was flabbergasted. "Hang it all, man," he went on. "Do you think the sea swallowed it?"

Freeman answered, "That's a reasonable explanation, sir."

"A reasonable explanation! A reasonable explanation ... !" His face was going purple and his moustache was quivering vigorously. "You're crazy, man! Plumb crazy! Put the wireless on, it's coming up to 9 o'clock. At least the B.B.C. news is accurate !"

Freeman said, "I heard the 8 o'clock news, They announced that Africa had dissir. appeared."

At the Air Ministry, plans were being made. Summing up, the Air Marshal said, "Right, we will send out aircraft with supplies for ships, and others for reconnaissance over where Africa should be."

A bored listener muttered, "That's a good idea, son."

Squadron Leader Poole was flying a reconnaissance Anson over the Equator. His second pilot, Flying Officer Dobson, was very bored.

"I say, Jackie, old boy," he said, "if we go any lower our tootsies will be wet."

"Don't be so damned stupid," the Squadron Leader said fiercely. "We're at fifty feet and we've got to find any remains of the ruddy place. If we were much higher up we'd probably miss the beastly thing."

There was a pause and then the Flying Officer remarked, "Shocking crate, isn't it?"

The first pilot was rapidly becoming annoyed. He said patiently, "A P.I. certainly wouldn't be any good for this kind of reconnaissance, and all the amphibious aircraft are being used . . ." He would have gone on but something below caught his eye. "What's that?" he asked.

"Mother Grumble and her baby crocodile." Squadron Leader Poole ignored the remark. "It looks suspiciously like a tree. I'm going down to fifteen feet."

Flying Officer Dobson murmured, "Millie, hand me my bathing costume."

In other places similar wreckage was found.

The submarine H.M.S. *Prince* was submerged and situated round about Cairo. The skipper called his First Lieutenant.

"Number One."

"Yes, sir."

"We should be above Cairo now, tell them to keep their eves . . ."

Before he could finish, a rating shouted, "What's that? Surely they're houses."

The following passage appeared on the second page of the Mongolian Review and Echo:

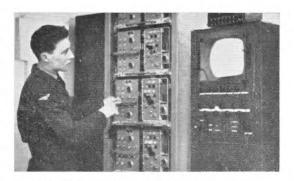
"Africa, one of the five continents, was yesterday established to have become submerged. The ocean now situated between South America and India has yet to be named."

> G. E. OAKES, 80th Entry, "B" Squadron, Apprentice Wing.

#### FITTER CLOSE-UP

Alan Thomas Waterworth, aged 18, a North country man, was educated at Nelson Grammar School, Burnley, where he gained a G.C.E. in Maths., Physics, Chemistry, Biology, and English language. He gained a regular place in his school 2nd XI Soccer team. At the age of 16, with a decided bias towards scientific subjects, he applied successfully for a post as an assistant in the research development laboratory of an atomic energy factory in Sellafield, Cumberland. His work entailed the construction of simple electronic devices, such as "square wave generators," and "level indicators." Situated in the heart of the country, 20 miles from the nearest town, he was obliged to live in the "all male" hostel attached to the factory. Here he developed an interest in Bridge, an interest which he has not lost. Before coming into the forces, he gained his First Year Intermediate B.Sc.(London).

After volunteering unsuccessfully for "Air-Crew," and after the usual trials and tribulations of recruit training, he found his way to Locking, where he is now engaged on a Ground Radar Fitter course. Arriving at the Station in the middle of the cold spell, his first impressions of



A/C Waterworth working in the laboratory

Locking were hardly favourable, but, and we quote, "I shall keep an open mind about things until the Summer," which only goes to prove that Fitters are brighter than ever now that the pay increases have been announced.

His hobbies apart from Bridge, are concerned with wireless construction. He has recently built an ordinary T.R.F. Unit, and a 5-valve push-pull amplifier.

# THE GEOPHYSICAL YEAR OR THE CASE OF THE SHOOTING-STAR

5-4-3-... The seconds were being counted out by base controllers at the Interplanetary launching site in the heart of the wastelands of the West country, and the crew of the world's most up-to-date space ship lay on their couches, ready for take-off. As they lay there, one thought was uppermost in their minds, "Would they be in time?"... 2-1, the voice continued and Captain Morgandare calmly checked the forecast which had been included in the sealed instructions... Arsenal v Walsall ... away win, Scunthorpe v Manchester Utd... Home win ... yes it certainly looked as if these results were a foregone conclusion.

... Zero. ... Immediately the air outside was filled with vivid green, red and yellow flames as the new super-tomic power units burst into life. Inside the craft the silence was unbroken by the rising crescendo outside, for this was the famous planetoid which had been designed on the spur of the moment by Professor Growmore of the Ministry of Research (biological Department). No effort or expense had been spared to make interplanetary flight as comfortable as possible. For example, the cinema changed its programme twice nightly, and incorporated the latest revolutionary idea, 'audible sound.' Beside each chair was a switch which automatically turned off commercial television between the adverts, and meals were served in the old world way, which was rapidly becoming popular again, 'home cooked.'

But these luxuries did not detract this handpicked crew's mind from the importance of their mission. Astronomers had observed strange periodic phenomena in that region of the sky which lies between the orbits of Mars and Jupiter, and it was because of these oddities that the Planetoid was carrying an important specialist to a secret rendezvous in that region.

During the flight every eye was focused on the radar-viewer as it scanned space ahead of them. Would they arrive in time or would those strange occurrences have started again? Apart from being held up by a violet ray, being piloted by a woman which was cruising along at a mere mach 2, in the middle of the space way, and having abruptly to avoid collision with two cosmic rays which had failed to observe a halt sign, the flight was uneventful.

As they neared their rendezvous they realised that they were in time for in front of them appeared a large neon sign :

INTERPLANETARY CUP FINAL (By sunlight) \*

MARS v JUPITER

Introducing the new football kindly sent by the United States of Venus to celebrate

The Geophysical Year.

Yes, the big match was about to begin, and who could imagine a big game without our specialist—a British referee?

A.B.

#### APPRENTICES : MUSIC CIRCLE

The Music Circle, during the last year, has continued to add to its stock of L.P. records of standard works. At the same time, many less popular composers now figure in our catalogue, since it is felt that musical appreciation should be extended and not merely satisfied by an unvarying repetition of well remembered favourites.

New records added include Brückner's Ninth and Mahler's First Symphonies, Nielson's Fifth Symphony and Frank Martin's Harpsichord Concerto; together with, more conventionally, Brahm's First Symphony, Beethoven's First Piano Concerto and Grieg's Peer Gynt Suites Nos. 1 and 2.

Members of the Music Circle have made several concert visits over the last twelve months. At the Colston Hall, Bristol, we have heard the Hallé Orchestra and the Symphony Orchestras of Birmingham and Bournemouth. More recently a small group of 'aesthetes' enjoyed a programme, mostly of works by Bach, performed by the Stuttgart Chamber Orchestra.

Finally, might it be pointed out that the facilities offered by the music circle could be more extensively used by Apprentices, who would at least incur no obligations and at most derive much benefit doing so.

#### PERSONALITIES OF No. 1 RADIO SCHOOL OFFICER COMMANDING THREE WING

This year will see the retirement from the R.A.F. of a notable figure from the station. There must be very few who have not at some time been confronted with the initials A.H.W.J.C., and wondered what lay behind this formidable array.

Born in 1904, Adrian Harry William James Cocks entered St. Peter's College, Westminster, at the age of fourteen, and in 1922 was head of his Entry on leaving the College. He went up to the Royal Air Force Cadet College Cranwell, in 1923, where he was again placed head of the Entry and was also nominated Prize Cadet. On leaving Cranwell in 1924 he won the Arbdy



Gerard Fellowes Memorial prize in science and maths,

For the next five years Adrian Cocks had various flying appointments which took him as far afield as Virginia, with Vickers Vimy 7 Squadron, and with 99 Squadron, Avis Aldershot, at Hyderabad.

From 1929-30 he passed through the Long Service Course for Officers and on completion of this went up to Cambridge University where he gained a B.A. in Engineering; then followed the Royal Air Force Advanced Signals Course, and service with 13 Army Co-operation Squadron. From 1933-7 A.H.W.J.C. was posted to the Royal Aircraft Establishment at Farnborough on special duties (Wireless Liaison).

For the first two years of the war, he was responsible for supervising the technical training of R.A.F. Wireless Operators at Yatesbury, and in 1941 went over to Canada to supervise the building-up of a ground Radar Training School. Returning to U.K. in 1943 he took command of several different Coastal Radar Chains, until in 1947 he was appointed Deputy Chief Signals Officer, British Air Forces of Occupation, Germany.

From 1947-49 he held various positions supervising Technical Training at Yatesbury and Signals Officers Course at Debden. In 1949 he went over to the U.S.A. on special liaison duties with U.S.A.F. on Guided Missiles on behalf of the Ministry of Supply. Returning to the United Kingdom in 1951, he went to H.Q. 90 Group as a Staff Officer (Telecommunication) and then on posting to Yatesbury and finally Locking, where he took command of a Wing with over 1,000 airmen trainees engaged on Radio and Radar Courses.

Wing Commander A. H. W. J. Cocks

#### PERSONALITIES OF No. 1 RADIO SCHOOL

#### SENIOR SUPERVISOR AIRCRAFT APPRENTICES

MR. FISH, B.E.M.

Born in the uneasy period prior to the First World War, Mr. Fish served an apprenticeship as an Electrical Engineer, before joining the Army as a Signaller in 1915. Wounded in France, he found himself transferred to No. 1 Wireless Training School, R.F.C., Farnborough, as a Wireless Mechanic, becoming a workshop instructor in June, 1917. April 1st, 1918, for R.F.C. read R.A.F., and for Wireless Mechanic, read Wireless Operator Mechanic, with a morse speed of 18 w.p.m. He quickly became a Morse Instructor, but that was not to last. By the end of the year he moved to Flowerdown as a Wireless Telephony Instructor. April, 1919, demobbed, and for several years he worked in his own radio factory, which unfortunately crashed in 1923, due to a combination of economic depression and, "no head for business." Rejoined the R.A.F. in 1923 as an L.A.C.

Electrician. Flowerdown re-visited. Offered civvy job with experimental firm at Farnborough, but, financially impoverished, was unable to buy himself out. Soldiered on.

In 1923, the Apprentice scheme began at Flowerdown and Mr. Fish, as an instructor there, trained many present day V.I.P.'s, including the present A.O.C. of 27 Group, Air Commodore R. L. Phillips, C.B.E., in the use of A.C. and D.C. machinery. 1926 promoted to Corporal. Spent two years in Baghdad and one in Karachi. Demobbed in 1931, he took up a post at Cranwell as a civilian instructor. F/S. 1942-45, to be promoted to Civilian Instructors Supervisor in 1946, and in 1952 was moved to Locking.

Mr. Fish is 61, and hopes to retire in four years' time. He can be assured that our best wishes will go with him.

#### SCATTERED COMMUNITY

Some folk frankly think it impossible, others consider it to be an improbable but intriguing way of life, but a third group are convinced that life in a caravan is the only truly interesting mode of existence. This third group of people is a small percentage of the United Kingdom's population but is rapidly increasing in numbers.

The planned comfort of the modern trailer caravan has, since the war, lured more and more people from conventional brick built houses to this age-old, yet ultra modern type of abode. Among the advantages claimed for the caravan are those of mobility and warmth. It is of course an eternal surprise for strangers to note that in bitterly cold weather the relatively small caravan space is easily kept warmed to the comfort zone of a steady 60° room temperature. The convenience of mobility is of great importance to many whose calling requires constant or occasional moves. This has been a prime factor in the steady increase of caravanners as knowledge of the situation spreads. For the serviceman and family prone to posting, the trailer caravan has provided a very reasonable alternative to endless successions of flats and apartments. Whilst this is of course, limited by the size of family, the disadvantage of enforced compactness can often be offset by the considerable advantage of low overhead domestic expenses.

Whilst the attractions of caravan living diminishes as family numbers increase and as provision of official married quarters becomes more liberal, there will remain a solid core of caravan dwellers. Among these latter folk one feels unspoken content and a conviction that static conventional homes have, other factors remaining unchanged, been relegated by them to a definite and poor second choice.

The humour, originality, and rough vigour of life has not for them become attached to one small community but to a wider one with no fixed horizon, a scattered community linked by a common way of life.

#### ST. GEORGE'S SUNDAY SCHOOL

Anyone going near the church just before 11.00 hrs. on any Sunday morning will be tempted to alter course and head in the opposite direction; the Sunday School are preparing to go into church. The noise dies away once the children are inside and the teachers have taken charge. Sunday by Sunday they come to worship Almighty God and to be instructed in the Christian Faith. The devoted band of teachers take their work very seriously, and quite rightly so, for their job is to train and shape the faithful members of tomorrow's church.

There is no doubt that the high spot of the year for Sunday School members was the Nativity Play. About eight weeks before Christmas we announced that rehearsals would start. Straight away there were cries of, "Can I be Our Lady?"... "Can I be St. Elizabeth?" ... even, "I'm going to be an angel!" This last from a four-year-old. Once the cast was picked there were more cries, there were threats, even blackmail in the form of, "I don't think I am going to come any more."



#### Scene from the Nativity Play

The idea was to have the great story of Christmas told by children reading from the text of the New Testament. After each reading, the scene would be acted in mime to the accompaniment of carols sung by a children's choir. The whole play was to be offered as an act of devotion and not put on as an entertainment.

As the Sundays rolled by we saw the idea taking shape; at times one was touched by the spirit of devotion among the children, but there were also Sundays when things were less inspired leaving only the memory of a "Goon-

like" chaos. Before we realised it there were only two Sundays to go, but our troubles were just beginning. One of the leading actors took to his bed with chicken-pox; within a few days the malady had struck a few of the minor characters and one or two of the choir. After a little more chaos, and extra rehearsals, substitutes took their places. Flt. Lt. Wood battled with his choir, while the rest of us rushed round in ever decreasing circles trying to dress small girls and boys in Biblical costume. The dress rehearsal, scheduled to take an hour and a half, lasted nearly three hours, while our able assistants dealt with minor panics and a few tears; "My beard has come off " . . . "So-andso has pulled my veil off." . . . "I've lost my shoes." . . . "Can I have some of that red stuff on my mouth?" . . . In one corner of the crowded vestry two shepherds were trying to have a duel with their crooks.

At the last minute we needed another angel and I approached a small girl.

"Would you like to be an angel?"

After a long pause came the inspired reply, "No."

"It is only for the play, not a real angel."

"Oh-well, if it's not a real angel-yes."

We could do no more as far as human agency was concerned. Each of us commended the venture to God in our prayers and waited for the first performance. On the night before the great day my door bell rang; on opening the door I was greeted by a loud blast on the last trump. There stood a certain well-known officer, trumpet at his lips, his head surrounded by a magnificent halo for the angel Gabriel. The final properties had arrived.

It can only be said of the play itself that the children excelled themselves. Gone was any trace of chaos and in its place we saw the Christmas story being offered as an act of worship, reverent, moving and most certainly a lesson to all who were present.

In thanking the children for the pleasure that they gave us it would not be fair to single out anyone for special praise, but we would like to extend our thanks to all those who worked so hard in the background. Especially Flt. Lt. and Mrs. Wood, Flt. Lt. Goddard and F/O Taylor. Miss Parkes, who, by the way, needs special praise for all the work that she has done with the younger children, Sqd. Ldr.

and Mrs. Uprichard and Mrs. Gardner. Together with countless others who helped.

We would also like to thank St. Margaret's Home for Children who so kindly lent us a thurible and incense. The collection for the two performances, which amounted to  $\pounds 3$  was handed over as a donation to this Home. J.E.G.

#### ROMAN CATHOLIC CHURCH

- Church—South East wing of the Station Educacation Centre.
- Club—Hut 305 (beside the Central Bedding Store). Open daily from 18.30 hours. Saturdays and Sundays from 12.00 hrs. until 22.00 hrs. for private study, indoor games, etc.

Chaplain's Office-In the Club.

Interviews—In the Sacristy daily at 18.15 hrs., or in the Chaplain's Office by appointment.

SERVICES :

Mass----

Sundays at 08.00 and 09.00 hrs. Holydays at 07.00 and 18.15 hrs. Weekdays at 07.00 hrs.

Benediction—

Sundays after the 09.00 hrs. Mass. Tuesdays at 18.15 hrs.

Confessions-Saturdays at 18.15 hrs.

Night Prayers—

#### NOTES

It is proposed to hold a Mission on this Station from 27th May to 1st June, 1956.

The idea of holding Missions for Service personnel is comparatively new. The first such Mission was held towards the end of 1950 on the larger Stations in the United Kingdom. This was necessarily in the nature of an experiment. The results, however, were highly encouraging, and consequently, since that time Missions have been held periodically, both at home and in all Overseas Commands. The last Mission on this Station was in the autumn of 1953.

Although it is not possible to impose the pattern of the civilian parish on Service life, because of the manifestly different conditions of each, nevertheless, it is desirable to keep as close as we can to all those practices and observances which parishes use to foster and maintain the growth of religion. Hence the coming Mission on this Station. It is hoped that attendance at all the Mission Services will be even better than they were on the occasion of the 1953 Mission.

#### ST. ANDREW'S CHURCH

#### Presbyterian, Methodist and United Board

St. Andrew's has had a happy year, of which the most significant feature has been the influence of the Billy Graham campaign in Glasgow. Morning congregations continue to fill the church, and the evening congregations vary. Special events and outings to village churches attract larger numbers than the standard evening service. Sunday School has thrived under the leadership of Flying Officer Forster and Pilot Officer Baker. The Bible Study Fellowship keeps up its good attendance, though the popularity of the Thursday Clubnight and the Monday Youth Club has waned.

Padre Fugler was posted to Hereford early in the summer, and has not yet been replaced. The writer leaves for Germany shortly, and will take with him lasting memories of that very happy church, St. Andrew's, R.A.F. Locking.

Every evening at 18.15 hrs.

#### CHURCH OF ENGLAND

#### CHURCH

S. GEORGE THE MARTYR.

#### Sunday Services :

Holy Communion		•••	08.00 hrs.
Morning Service			10.00 hrs.
Sunday School			11.00 hrs.
Evensong		•••	18.30 hrs.
Weekday Services :			
Holy Communion	•••		07.00 hrs.
(Tuesday to Frid	ay, and	d	
Red Letter Days	)		
Chaplains :			

The Rev. E. W. L. May, R.A.F., M.A.

The Rev. J. E. Gardner, R.A.F., M.A.

#### PASSING-OUT SERVICES

The past year has seen the introduction of a combined Anglican and Free Church Service for the Passing-Out of the Senior Entry. At the inaugural service, held on 3rd April, on the occasion of the Passing-Out of the 71st Entry, the service was conducted by the Principal Presbyterian Chaplain, the Reverend T. Madoc-Jones, O.B.E., B.A., Q.H.C., and the preacher was the Chaplain-in-Chief, the Reverend Canon A. S. Giles, C.B.E., M.A., Q.H.C. The arrangement is that the special preacher shall be provided by the denominations in turn.

#### CHURCH OF ENGLAND MEN'S SOCIETY

Locking was the first Station in the Royal Air Force to form a branch of the Society. It was appropriate, therefore, that for the first time in its history the annual conference of the Bath and Wells Diocesan Union should have been held on the Station, on Saturday, September 24th. 1955. The chairman was the Right Reverend Harold William Bradfield, D.D., Lord Bishop of Bath and Wells. The Report was presented by Brigadier A. de L. Cazenove, C.B.E., D.S.O., M.V.O. Over three hundred diocesan members were present. The speakers were Prebendary J. du B. Lance, M.C., M.A., of Taunton, and E. H. C. Leather, Esq., Member of Parliament for North Somerset. The forthright and hard-hitting witness for Christ given by Mr. "Ted" Leather on this occasion will be remembered by numbers of people for years to come. Those of us who sometimes wonder if there is any truth today in Shakespeare's condemnation of the "scurvy politician" must inevitably take comfort from the thought that with Mr. Leather in Parliament are to be found a number of other keen Christians. Let us strengthen this hard core at the centre of the Government of this land with our constant prayers.

We take this opportunity of expressing our admiration of the way in which the manageress of the N.A.A.F.I. Club (Miss Griffin) and her staff provided refreshment for the visitors.

The conference closed with Evensong, the preacher being the Rector of Weston-super-Mare, the Reverend G. W. Battersbury, O.B.E. (Mil.), B.A., B.D.

#### THE FELLOWSHIPS

There are two Church of England Fellowships on the Station, one for families, officers and airmen, and the other for aircraft apprentices. Meetings are held each week. By the time the *Locking Review* appears in print it is expected that the Fellowships will have moved into new premises, which are at present being decorated. Hitherto the social side of church life has been handicapped through lack of suitable accommodation.

#### **BIBLE STUDY CIRCLE**

A small but devoted group of people meet weekly to study the different books of the Bible in turn. The aim of the group is to obtain a bird's eye view of the Scriptures as a whole rather than to pay such microscopic attention to a limited field that we fail to discern the overall picture of the plan of redemption contained in the sacred narrative.

#### SPECIAL CONFIRMATION SERVICES

It is our custom to take our Confirmation candidates to the parish churches of the diocese for their Confirmation. It sometimes happens, however, that owing to imminent postings, especially overseas, they cannot wait for the next conveniently timed Confirmation. In such cases Bishop Fabian Jackson, Assistant Bishop of the diocese and Rector of Batcombe with Upton Noble, is always kind enough to give us a special service in his church at Batcombe, despite the fact that he is exceedingly busy in the diocese and in his parishes. We gratefully express our deep sense of obligation to him for his willingness to help us in this manner.

#### THE LORD BISHOP OF THE DIOCESE

It is with pleasure and satisfaction that we refer to the keen interest which Dr. Bradfield takes in the Station and its church life. Three times within six weeks he found time to visit us, on one occasion to take a special Confirmation for us. Both the Chaplains have cause to be grateful to him for his guidance in the past. It is not, perhaps, generally known, that he holds the rank of Honorary Air Commodore in the Service. Many will recall that he was the Bishop in attendance on the left hand of Her Majesty the Queen at her Coronation.

#### HAIL AND FAREWELL

During the past year we said goodbye to Padre Rushton upon his posting to Colerne. He had been with us for just over 12 months. It will not be long now before he and his wife and little Anne return to their native land of Australia on finishing his service in the Chaplains' Branch. We wish them Godspeed for the future. He knows that he takes with him our appreciation of the many months of hard work he gave to S. George's Church during his sojourn here.

In their places we welcomed the Reverend J. E. and Mrs. Gardner. Padre Gardner was an officer in the Royal Marines at the end of the war. On demobilisation he went up to S. John's College, Cambridge, where he took his degree. He then, very wisely, came across to Oxford for his theological training at S. Stephen's House. Subsequently he became assistant curate at Christchurch, Frome.

At the end of the year we lost our Lay Reader, Flight Lieutenant K. Wood, M.B.E., A.R.C.M. He was also organist, choirmaster, superintendent of the Sunday School, and branch secretary of the Church of England Men's Society at Locking. It is difficult to thank him adequately for his five years of unremitting service to the church here in his different capacities. We thank Mrs. Wood, too, for her earlier work in the Sunday School, for the time and energy she expended upon running the Brownies, and for her leadership of the Young Wives' Group of the Mothers' Union-the only Forces branch in the diocese. We commend them and their children to Debden with our warm good wishes.

E.W.L.M.

#### S.A.S.R.A.

#### (Soldiers' and Airmen's Scripture Readers' Association.)

#### "The Word of God and the testimony of Jesus Christ "-Rev. i, 2.

Every Wednesday at eight o'clock there may be heard from the C.D. Clubroom the sound of fifty or so voices joining together in well-known hymns. This is the beginning of the S.A.S.R.A. meeting. The bond which draws together each week this group of Officers, Airmen and Apprentices of all denominations to sing praises to God and to hear His Word is the love of God which makes "all one in Christ Jesus."

During the past six months the meetings, always centring round the Bible, have included missionaries from the Red Sea area, Algiers, South Brazil and the West Amazon. Also it has been a pleasure to have Colonel Thompson, late of the Foreign Office, and Pastor Pokorny, a converted Nazi, to speak of their experiences. The missionary interest of the S.A.S.R.A. has not stopped at the hearing of God's work abroad but Scripture portions in Chinese have been bought and sent out; gifts have been made to various missionary societies and individual members are praying regularly for missionaries, while others are preparing to go should the Lord call.

Many letters are received from those posted abroad from Locking now serving in Malaya, Cyprus and Germany, which again enlarges our view of missionary work.

Meanwhile, nearer Locking, teams from S.A.S.R.A. have had the privilege of taking services and young people's meetings as far afield as Bristol and Wells and as close at hand as Weston beach during the summer.

On the Camp many have come to a real experience of the Lord Jesus Christ as Saviour; young Christians have received the desire for daily Bible reading, while some are learning the secret and power of prayer through the daily; prayer meetings. All have been challenged and stimulated by the personal example of the S.S.R.A. Scripture Reader, Mr. W. Scott, in his love for the Saviour, his consistent life and his boldness to speak the Gospel in all parts of the Camp.

All personnel are welcome to the weekly meeting when an informal gathering is conducted by different members after which tea and biscuits are provided, giving opportunity for further discussion.

R.T.F.

ii.

#### TO MAKE YOU THINK

#### Solutions to the Problems given in the last issue

(a) 6 cows eat a field of grass in 3 days ...(1)
3 cows eat the field of grass in 7 days ...(2)
1 cow eats the field of grass in ? days

Clearly, account has to be taken of the growth

of the grass. Assuming it increases by the same amount each day, one calculation is as follows :

Let V be the volume of grass at the start Let v be the volume of grass grown each day Then the amount eaten by 1 cow per day is

from statement (1) above 
$$\frac{V+3v}{18}$$
 (3)

from statement (2) above  $\frac{V + 7v}{21}$  (4)

Equating (3) and (4) gives

$$v = \frac{1}{21} V$$
 i.e.  $\frac{3}{63} V$ 

Substituting in either (3) or (4),

one cow eats per day  $\frac{1}{63}$  V

But as the grass grows  $\frac{3}{-63}$  V each day, it eats  $\frac{1}{-63}$  of the original volume per day. Thus it can do the job in 63 days.

(b) The numbers to be assigned to the letters in the addition sum

#### SEND MORE MONEY

can be deduced without ambiguity, by mathematical reasoning. They are 9567 1085

## 10652

The value of M

This must be 1 as the greatest total of S and M is 9 plus 8 and not more than 1 can be carried from a previous column.

The value of letter O

As M is 1, S must be 8 or 9 and there may

or may not be 1 carried over from the previous column. This gives four possibilities for letter O

- Case 1 S 8 and no carrying from previous column. This is not acceptable as it would not provide a carrying of 1 into the last column.
- Case 2 S is 8 and a 1 is carried in from previous column.

This is possible and would make letter O figure nought.

- Case 3 S is 9 and there is no carrying from previous column.
  - This is possible and would make letter O the figure nought.
- Case 4 S is 9 and a 1 is carried in from previous column. This would make letter O equal to

1 which is already assigned to M.

The letter O is therefore established as the figure nought.

The Value of S

- Case 1 S can be 8 if a 1 is carried in from previous column. But this would make E be 9 and a 1 would have to be carried over from the addition of the N and R. But N, in the bottom line, would then be nought. This is inadmissable as letter O is nought.
- Case 2 S is 9 and there is no carry over from previous column. This is possible.

The value of R

To find this, note that the number represented by EN becomes NE by the addition of OR. Now if the digits of a number are reversed by adding another number to it, the number added must be a 9 or a multiple of 9 (this is seen by algebra for the difference between 10a b and 10b a is 9(a b))

Since the letter O is nought, then  $\hat{R}$  must be either 8 with a 1 carried over from the previous column, or 9 with no carry in. It cannot be 9 however as this has been assigned to S.

R is therefore 8 and 1 is carried over from the first column.

The values of D, E, N and  $\Upsilon$ 

N must be one more than E

The figures left are 2, 3, 4. 5, 6 and 7.

D	plus	E must b	e g	reater than 11.
				for D and E are
				making Y
5	7	0	8	2
				not admissible as R is 8
7	5		6	2
6	7		8	3
				not admissible as R is 8
7	6		7	3
				not admissible as two
				letters are not to have
				the same value.

Thus D must be 7, E must be 5, N must be 6 and Y is left as 2.



You have it; you saw it first. . .

#### TO KEEP YOU THINKING

(a) A glass is half filled with water and a similar glass is half filled with wine. From the second a teaspoonful of wine is taken and put into the water. From the mixture a teaspoonful is taken and poured into the wine.

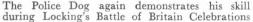
Is the quantity of wine removed from the glass of wine greater or less than the quantity of water taken from the glass of water?

(b) A magic square consists of a set of integers arranged in a square so that each row, column and diagonal adds up to the same total. Thus the following is such a square

4	9	2
3	5	7
8	1	6

Can you prove that for a magic square using the numbers 1 to 9 the central figure must be 5?







#### SPORTS EDITORIAL

A<sup>T</sup> the time of writing, the Station has been singularly successful in most of its sporting ventures, and we have put Locking on the sporting map throughout the R.A.F. and the locality.

In the winter sports our success has been outstanding. At Soccer, although we were knocked out of the R.A.F. Cup by St. Athans, and the Group Cup which we held 1954-5, by Compton Bassett, our position in the local league and cup competitions is very strong, and the outlook for the rest of the season is highly promising. At Rugger, the position is even more encouraging; we are at present holders of the Somerset Seven-a-Side Trophy and have reached the quarter finals of the R.A.F. Cup. In addition a number of our players have represented the R.A.F., Combined Services and Technical Training Command. At Hockey, also, our prospects are very sunny, for our team has reached the semi-finals of the R.A.F. Cup, unobtrusively, but none the less, effectively. This team also has its share of representatives.

The other winter sports are progressing favourably and are enhancing the reputation in their various spheres.

With regard to the Summer of 1955, our teams did not do as well as anticipated, for the cricket team lost the R.A.F. Cup which they had won the previous season. Nevertheless they had a highly successful season led by Padre Cooke, who has now departed for Germany. The Tennis team had a series of delightful fixtures against civilian clubs, thus establishing a number of important social contacts in the area. The Athletics team had a full season assisted by the wonderful weather and although not spectacular maintained a steady performance.

So in the sporting sphere Locking is now well known, and it is up to the sportsman to maintain this proud position, and also that of the R.A.F. throughout the country, and in the immortal words of *Vitae Lampada*,

"Play up, play up, and play the game."

#### STATION CRICKET—1955

By any normal standards the 1955 season would have seemed a very good one, and it suffered only by comparison with the previous year. Having collected the two Weston-super-Mare trophies for several seasons, we decided to enter a Second XI for those competitions, following the policy of giving more cricket to more players. The Second XI had a good season, but failed to clinch the trophies.

The Station XI was again a good, strong side, weaker than the 1954 side in one particular only; we had no second pace bowler of real aggression. This handicap did not seem to matter for most of the season, as Garner, Birtles and Wicks all had their inspired spells of bowling in one game after another. It told in the end, however, and we lost to Melksham in the semi-final of the R.A.F. "A" Cup competition simply because we had not the bowling reserves to take advantage of a favourable situation.

Before we reached the semi-final we beat Yatesbury by a fair margin, defeated the weakened St. Athan side by nine wickets, and best game of all, won by nine wickets against Shawbury.

We met Melksham on the Lansdown ground at Bath, and could make only 125 runs all out. Melksham's opening pair saw the fifty up before they were parted, and then we really took a grip on the game, and reached the hopeful situation of 86 for 6. Thereafter we only took one further wicket, and after several narrow escapes Melksham ran out winners by three wickets. As expected, they went on to win the cup.

The batting strength was again a happy problem, and good batsmen had of necessity to go in late in the order. The fielding was good, the spirit keen, the wickets generally hard; all in all, a good season.

The new square has been laid, the "Sanderson" pavilion is in full use, and all seems set for the maintenance of the high standard of cricket on which we pride ourselves at Locking. A.E.C.



Station Cricket Team

W.O. Pattison, A.C. Peters, Sgt. Howell, Cpl. Garmer, M. E. Kennedy, Flt. Lt. Clarke, J/T Maitland, Padre Cooke, Group Captain Robinson, Sgt. Rose, Fg. Off. Blane, Fg. Off. Shuttleworth

#### STATION ATHLETICS

THE Station Athletics team had a reasonably successful season. It opened in May with the Station Sports Meeting at which the following records were broken :—

Long Jump

	A/A Reynolds	
100	Yards	

20ft. 10ins.

Cpl. Holmes

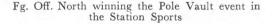
10.3 secs.

The Victor Ludorum was A/A Furneaux. In the 27 Group championships, the Locking team came second to Yatesbury and for the first time won two Group cups, the  $4 \times 110$  yards relay and the Inter-Station Tug-o-War.

The only other team event which the Station entered was a three-cornered contest at Yeovilton against the R.N.A.S. and an Army team, which we won.

We are looking forward to the day when we have our own permanent running arena and can hold important athletic meetings here. Our aim is to stimulate interest with a view to winning the Group championship, but we cannot do so without support. Training will commence after the Easter grant and we hope that anyone interested will make themselves known to Athletics Officer and the Gymnasium.





#### STATION SWIMMING

The 1955 swimming season must have been one of the best on record, and in fact, the Pool, Weston, had the record for attendance broken, showing figures for admission of 10,700 one weekend. This is not surprising since the Pool is one of the best in Britain and diving facilities rank with any in Europe. The Station Swimming Team had few fixtures during 1955, but it is hoped that, after joining the South Western A.S.A., the team will be able to compete against local teams in 1956. The highlight of the season was in June when the 27 Group Swimming and Diving Championships were held. Locking won the Diving Championships and came second to Yatesbury in the Swimming and Water Polo. It is hoped that in the coming season the Knightstone indoor baths will be available to the team for one evening per fortnight to allow for swimming fixtures and practices.

There is a great deal of enthusiasm shown by swimmers in the Station, and it is felt that by having plenty of practice and at least one fixture per week, one home followed by one away, 1956 should prove a satisfying season.

E.C.H.

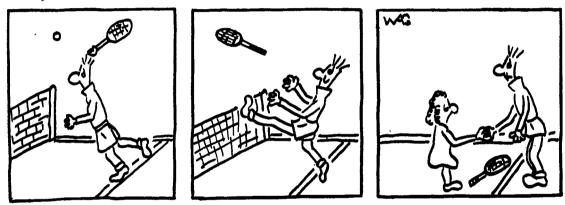
#### STATION TENNIS

The Station Tennis team completed a successful season having won the greater majority of matches played. Losses were sustained against Yatesbury, Melksham and the Avenue L.T.C. (Burnham).

A feature of the season was perhaps the affiliation of R.A.F. Locking to the Somerset L.T.A., and the corresponding appearance of civilian clubs, of the calibre of Burnham, Clevedon and the Atlantic L.T.C. in the fixture list.

A resounding 7—2 victory against Netheravon in the first round of the R.A.F. Cup was unfortunately followed by a dismal 8—1 defeat at Yatesbury—the eventual "runners-up" for the cup. Indications at present are that the team will be considerably stronger this coming season and may well improve on last year's performance, at least in the cup matches. All personnel interested in representing the Station should contact Flying Officer Mitchell immediately after the Easter Grant. The following represented the station in last season's matches :---Flt. Lt. Clarke, Fg. Off. Mitchell, L.A.C. Newman, A/C2 Walker, A/C2 Coker, Cpl. Hendrie, A/C2 Panniers, A/C2 Jenkinson, AC2 Wright, Fg. Off. Dunning, Fg. Off. Grisewood, S.A.C. Withnell, A/C2 Mills, Fg. Off. Harris.

G.D.M.



#### STATION CROSS-COUNTRY RUNNING

The 1955-56 season has been a successful one for the Station team, which has won seven out of eleven matches. In the 27 Group Championships, Locking (107 points) came second to Yatesbury (24 points), followed closely by Compton Bassett and Catterick.

Recently in the Area Eliminating Race of the R.A.F. Championship, Locking came fifth out of a field of 21 teams, being narrowly beaten to fourth place by Innsworth by one point. Although the team failed to qualify for the final, A/C. Lee, who came in ninth, will represent Locking at R.A.F. Cardington as an individual.

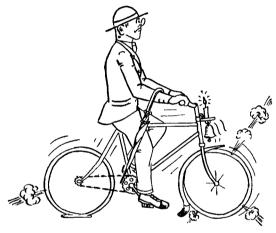
Prominent in the team throughout the season have been S.A.C. Wade, S.A.C. Blackwell, A/C.

Weaver and A/C. Hiscock. For shorter periods we have had several runners of note, A/C. Cobner, A/C. Davies and of course S.A.C. Ibbotson, who during his stay set up a course record of 24 mins. 53 secs. Also representing the Station in the 27 Group and and R.A.F. Championships were three Apprentices, A/As Saunders, Gregory and Stout.

The Station team is now using the much improved course, and thanks are due to the P.T. staff and all volunteers from 3 Wing who have marked the course during the season; their excellent work has been greatly appreciated by all visiting teams.

#### STATION CYCLING

When the present writer took over cycling at R.A.F. Locking at the beginning of 1955, his acquaintance with a bicycle was of the strictly utilitarian, sit up and beg variety. If he had to travel from point A to point B, and no other form of wheeled vehicle was available, he would reluctantly take to his ancient machine and laboriously undergo the physical pain of pedalling his autocrat of the road along the flat stretches, pushing it up the hills, and regaining his breath free-wheeling luxuriously down the other side.



Before . . .

By the beginning of 1956, his attitude towards cycling had been revolutionised. Such jargon as "Time trials," "Mass starts," "Turn marshals," "R.T.T.C.," "B.L.R.C.," flow from his lips as smoothly as a well-oiled machine sweeps down a steep slope. What chain of events has brought about this transformation? What snags did the club meet? What success did Locking's cyclists achieve?

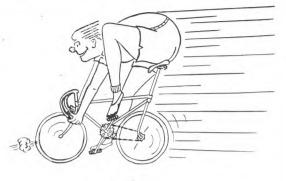
The main interest in the sport came from the mechanics of Three Wing. Should the same be true this season, then it may be worth postulating whether there is any scientific correlation between one's occupational aptitude and the sport one follows. The mechanically minded person applies himself to a mechanically biased sport. Certainly the successful cyclist must wed himself to his machine, and the loving care which he lavishes on it before a big race, would often do credit to more conventional unions. To carry the analogy further might be dangerous.

The events in which Locking participated can

be divided into R.A.F., station or Services promotions, and local civilian club meetings. Continual incomings and outgoings to and from Three Wing made it difficult to weld together a permanent team. In mass start events this is a considerable handicap, since tactics play an important part in team placings. In time trials two riders are racing against the stop watch primarily, and as such, are individuals rather than one of a group. Of a variety of performances, two of A/C.2 Hetherington, now in Bomber Command, deserve mention. In the Royal Air Force Cycling Association 100 mile time trial, Hetherington was tenth out of 96 starters, only 67 of whom finished the course. A/C.2 Drewitt, also of Three Wing, was fiftyfifth. Hetherington's best performance, however, was in the Three Counties Cycling Association and Royal Air Force Cycling Association 12 hours time trial, when the Locking man took third place of the R.A.F. riders, covering a distance of 228 miles, 1 furlong and 184 yards. Of the fifty starters, only twenty-two rode for twelve hours and in his effort. Hetherington was assisted by Drewitt who dropped out of the race and concentrated on refreshing his team mate. To ride from six in the morning to six in the evening on an exceptionally hot day, is no mean achievement and the Station Commander's congratulations to Hetherington were well deserved.

Locking took part in many local cycling events, including the Somerset Club's Open 50 mile handicap, scratch and time trial, the Bristol Cycling Club's Redhill Road Race, and the more picturesque-sounding circuit of the Nine Hills, promoted by The Blackdown Coureurs. While not winning any of these events, Locking was usually represented in the first six. For these meetings the riders would generally cycle to the district concerned on the Saturday afternoon, stay at a Youth Hostel overnight, ride in the event on the Sunday morning and be back to camp by Sunday evening.

Perhaps the highlight of the Royal Air Force Cycling calendar, was the R.A.F. tour which was a five day race competed on a Command basis. Locking was host to the teams, with their retinues of trainers, mechanics and officials, at the end of the first stage. The Station provided markers for the last few miles and again for the beginning of the second leg out of Weston-super-Mare the following morning. A considerable number of holiday makers braved a sullen Weston morning to see the start of the second stage, complete with yellow-jersied leader in true Tour de France tradition. In all, the riders covered 475 miles, the winners being Maintenance Command, with Technical Training Command coming fourth.



#### After . . .

Thus has the Officer i/c Cycling been introduced to another world. A world of sweat, muscle, oil and comradeship. It is perhaps this last element in cycling which has impressed him most. Cyclists are a happy bunch of people and are noted for their 'good Samaritan" behaviour to their fellows who may be punctured on the roadside. The reason for this large mindedness may stem from the nature of the sport, which allows for no bodily contact and little playing to the gallery, the origins of much pettiness in other sports, including track-cycling.

The Locking cyclists are essentially men of the roads, and their arena is anywhere those roads may lead.

P.P.

#### LOCKING .303 SHOOTING

The Station shooting team had several successes during the season. The No. 27 Gp. Annual Postal Shoot was held in March, 1955. R.A.F. Locking and R.A.F. Watchet shot off this competition, shoulder to shoulder, at Yoxter Range. The following positions were gained by Locking :

S.R.(a) 2nd with a score of 984.

S.R.(b) 1st with a score of 517.

Sub-Machine Gun 2nd with a score of 208. L.M.G. 5th with a score of 79.

Flight Lieutenant R. Bobart was first in the individual S.R.(a), with a score of 154.

At the T.T.C. shoot at Altcar, the Station fired well but did not gain any noticeable successes.

The Bisley shoot was delayed, due to the rail strike, and eventually took pace in July, 1955. Once again, although the team fired well, no outstanding scores were returned. After this shoot, F/Lt. F. Cook and F/Sgt. Hathaway, B.E.M., were chosen for the Command Sub-Machine Gun team.



Station .303 Shooting Team

The Station teams entered the Somerset County Shoot, once again held on the now familiar Yoxter range. This was an extremely successful shoot fired against civilian clubs, as well as teams from the Somerset Light Infantry. The most creditable performance of the day was contributed by A.A. Cresswell, who at the end of the day's shoot held the highest individual aggregrate, thus winning the Lord Lieutenant's trophy. Locking's S.R.(a) team won the Somerset Light Infantry Challenge Cup, and F/Sgt. J. W. Craig, B.E.M., took the highest individual aggregate, S.R.(a).

The following officers, N.C.Os. and Airmen have represented the Station in the above com-

petitions :---Sqdn. Ldr. D. Jeffrey, F/Lt. F. Cook, F/Lt. R. Bobart, F/Sgt. H. Hathaway, B.E.M., F/Sgt. J. Craig, B.E.M., F/Sgt. R. Murphy, Senior Tech. R. Franklin, L.A.C. A. D. Sadler, L.A.C. G. Deale, S.A.C. B. Jolliffe. F.C.



#### STATION BASKETBALL

Basketball originated in America and, like other games which are now styled "national," it started in a humble way. In 1891 Dr. James Naisemith conceived the idea of the game when he was a student at the Y.M.C.A. Training College, Mass., U.S.A. A peach-basket was erected at each end of the gymnasium and two teams were selected. The object was to get the football that was used into the basket of the opponent; using only the hands, the possibilities of the game were soon realised and experience led to a code of rules for the good conduct of the game.

Basketball was included in the 1936 Olympiad and has maintained its place ever since. It is now played in over 60 countries, and although not so well known in this country at present, it is fast approaching that end.

The Locking team plays in the Weston-super-Mare League, has friendly matches with other local civilian clubs and competes with other units of the three Services on Wednesday afternoons. It is hoped that next season, Somerset will have its county leagues in operation, on a zone basis. Sgt. Thomas. P.T.I., who was recently selected to represent the R.A.F., is the County Secretary. Locking is therefore the centre of this embryonic organisation and already one county coaching course, attended by officers, airmen and apprentices, has been held on the Station.

Basketball, like soccer, is a product of the town, where the cooped-up emotions of players and spectators can be released in a healthy way. In civilian fixtures, Locking's activities are centred around Weston, Bristol and Bath. The team is easily the best in the Weston League and its presence has undoubtedly improved the standard of local play, though this value is often forgotten by the town clubs when the Station scores a hundred points against them, conceding twenty, a not infrequent occurrence. The Bristol and Bath clubs offer better competition, but again generally have their colours lowered by a full-strength Locking team.

So far this season Locking has only been beaten twice by Service sides. Unfortunately one of these matches was in the second round of the R.A.F. Basketball Cup, when Colaton Cross beat the home side by three points. There were never more than three baskets between the teams and the struggle could have gone either way. Service basketball is a sport which the P.T.I. Branch tends to monopolise and at Locking the nucleus of the team comes from the gymnasium staff in the persons of Sgt. Thomas, Sgt. Hill-Jones, Cpl. Garner and Cpl. Lester. There is, however, considerable talent outside the gymnasium, a fact well proven when a Three Wing team gave a good display against Bath Y.M.C.A., one of the better sides of Somerset.

It is hoped that Locking will run two teams next season, although the problem of playing area is becoming more acute every week. It will take some time before the English temperament adapts itself to the game, but the popularity and knowledge of the sport is fast increasing. In many counties it has superseded the traditional national game and whether Britain will fall to its particular spell remains to be seen.

#### STATION RUGBY CLUB



#### Rugby Club

A.C. Anderson, A.C. Prosser, A.C. Thwaite, Cpl. Davies, A.C. Hewlett, Fg. Off. Roberts, S.A.C. McDermott,
Fg. Off. P. R. Jones, Fg. Off. Collard, Fg. Off. Blake, Gp. Capt. D. N. K. Blair-Oliphant, Sq. Ldr. Davies, Fg. Off. Gray, Fg. Off. Shuttleworth,
A.C. Rollinson, Fg. Off. H. Jones, J/T. Winfield, A.C. Keen, A.C. Johnson, Sgt. Howell

Season 1955-56 is proving the best ever for the Station XV. Although Squadron-Leader Davies has retired from the arena he still remains an ever-present vociferous supporter from the touch-line, while several new players have come to take his place, moulding the team into a highly mobile force.

At the time of writing the team has reached the quarter final of the R.A.F. Cup and the next round game with Henlow is eagerly awaited by all, because on current form, supporters are of the opinion that the team has a good chance of winning the cup this year. Five players, Fg. Offs. Blake, Collard, Shuttleworth, D. R. Jones and A/C. Williams, have been selected for R.A.F. representative games; Collard, Blake and Shuttleworth went to France with the Combined Services team while Collard had two trials for England and was reserve for the Wales-England match.

A most encouraging feature this season has been the running of three teams, but even then we could not include all those who would like to play.

In the cup, the results have been as follows: 1st Round : Locking 38 points, Melksham nil a very one-sided game with the Locking back division in sparkling form, and the forwards overcoming their bigger opponents.

2nd Round: Yatesbury 3 points, Locking 6. This was a most stirring game played in a high wind on a very narrow pitch which completely cut our wing three-quarters out of the game. In the first half the tackling was fierce and no ground was given by either side. Yatesbury opened the score with a penalty from the centre of the field by Walsh from a long way out. Then slowly but surely the Locking forwards gained the upper hand, and when close to the Yatesbury line we were awarded a penalty, which Shuttleworth converted in the teeth of the gale. The second half opened with Locking piling on the pressure—a notable feature being the good line-out work by Gray and Winfield who submerged Hankins, the Yatesbury jumper. Shuttleworth and Collard went close with kicks at goal and there were some breathtaking runs by Keen, Williams, Upritchard and Blake. Locking could not be denied for long, and from a scrum close to the line Shuttleworth dropped a neat goal to win the game. The match was noticeable for the strength, stamina and mobility of the Locking pack, a well-drilled eight, which did much to make victory certain. *3rd Round*: Locking 14 points, Innsworth nil. This was rather an anti-climax after the thriller at Yatesbury, but nevertheless, victory was well deserved. Since that game we have lost Cpl. Davies, an ever-present prop-forward for two seasons, and we wish him well in civilian life.

While waiting for the much postponed game with Henlow the team has been training very hard, and are quietly confident of the result.

Thanks are also tendered to F/Lt. Butcher, W.O. Stacey and C/T. Barker for their competent and enthusiastic refereeing throughout the year.

C.T.B.

#### STATION HOCKEY

The season has been a successful one from all points of view; the interest in the game is increasing and it has been difficult to find places for all those who would like a game.

The strength of the team has been in defence. The two full-backs, Haines and Brailey, being very quick to tackle and the strong half-back line of Mills, Clarke and Mason (captain), forming an effective link with the attack. The attack presented problems at the beginning of the season, but the present line-up of Mitchell, Folland, Mitchell, Aldred and Nash has proved most successful and has carried the side through to the semi-finals of the R.A.F. Cup.

The progress in the R.A.F. Cup has been most encouraging. We received a walk-over against Pucklechurch in the first round, and then beat Watchet 5—0 in a game, at first dominated by defences, but then by the Locking attack which scored four times in the second half. In the next round we were drawn against St. Eval at home. The game was played on a hard ground in very cold conditions; as it transpired this was a one-sided game which we won 8—0. Then came Upavon away—this was not a good game, with the conditions all against constructive hockey, for the ground had a light covering of snow. However, after a struggle, we emerged victors, 3—1. After this the vital game at St. Athan. The ground was very hard and it was bitterly cold; St. Athan scored first and our attack could not pierce their strong defence. However, in the second half the tables were turned, and the opposition's defence cracked up to leave us winners 3 goals to 1.

In conclusion, thanks must be tendered to all those who have helped in the organisation of hockey throughout the season, and to all our umpires who have braved the elements for the benefit of those who play.

F/Lt. Clarke represented England in all internationals last season and has played in two Olympic trials during the current one; he has played for Combined Services and the R.A.F. regularly, where he has been joined by Haines on several occasions. Clarke, Haines and Aldred have represented T.T.C. in all games and have been chosen for the Inter-Command Final.

Playing record : Played 14, won 12, lost 1, drawn 1.



Station Hockey F.S. Muchall, J/T. Haines, F.S. Brailey, W.O. Nash, A.C. Booth, F.O. Folland, F.O. Mason (capt.), Gp. Capt. Blair-Oliphant, F.L. Clarke, A.C. Owen, A.C. Aldred, F.O. Mitchell, A.C. Binks, A.C. Turrell.

#### STATION FENCING

The Station Fencing Team is perhaps the only club where Apprentices, Trainees and Permanent Staff join forces to compete in outside matches and competitions, and during the past year it has proved a highly successful combination.

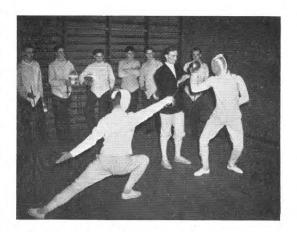
Competing in both Service and civilian competitions, the Station has acquitted itself admirably, and is now a force to be reckoned with. In this year's Inter-Unit competition we reached the semi-finals, where we lost to Halton after a grim battle. In the R.A.F. Junior Championship (Birch Shield) Locking fencers swept all before them, S/A/A/ Baker, who has subsequently passed out, winning the Junior Master-at-Arms, with Fg. Off. Holt in second place and L/A/A/ Smith showing up well in the Sabre event. In last year's R.A.F. Foil Championship, Fg. Off. Evans came second, and was subsequently placed third in the Inter-Services Royal Tournament.

In county and West of England competitions we have again been well to the fore, and here the Apprentices in particular have been making a name for themselves, with Smith, Coucher, Gentry, Horne, Downs, Horry and Putnam improving with every match. Smith fenced for the Junior County team at foils against Devon, where he won three out of five matches.

In the Somerset Individual Championships Evans, Holt and Smith gained 1st, 3rd and 6th places respectively at Foil, while Holt won the Epee.

More recently the club was pleased to welcome Group-Captain Blair-Oliphant, O.B.E., into its ranks and in his first match he helped the Station Sabre team to win the Somerset Team Championship. Mrs. Blair-Oliphant kindly agreed to present the cup and medals.

In all, we can look back with considerable satisfaction at our record so far this season, while the prospect for the Command and R.A.F. Championships are bright to say the least.



Members of the Station Fencing Team at practice



Station Soccer. 1st XI Standing: Sgt. Smith, A.C. Ward, Cpl. McCaffery, A.C. Evans, Sgt. Waghorn, F.S. Bridson, Middle: A.C. Clapperton, Sgt. Rose, Gp. Capt. Blair-Oliphant, A.C. Thompson,, A.C. Kelly, Sitting: Cpl. Garner, A.C. Green, A.C. Lee.

#### STATION SOCCER

The Station football teams are now about halfway through the season's programme. This year the Station entered the 1st XI in the Somerset Senior League, Div. I, the 2nd XI in Somerset Senior League, Div. II, and the 3rd XI in the Weston-super-Mare and District League. Due to the heavy cost of transport, it was decided not to enter the Bristol Mid-Week League this season.

Once again the football is being run by F/Lt. Cook, ably supported by a committeee of F/Lt. Ellis, Fg. Off. Grisewood, F/Sgt. Bridson, Sgt. Smith and F/Sgt. Turvey.

The 1st XI has had a very successful season so far, players coming mainly from No. 3 Wing trainees. Captain of the 1st XI is Sgt. Rose who unfortunately, due to professional status, cannot play in some of the Cup competitions; on such occasions, the task is undertaken by his able deputy, Cpl. Garner. The only other regular player from the permament staff is the very capable keeper, Cpl. McCaffrey. What a season he has had! The supporters have lost count of the times he has "saved the day"; to say nothing of five saved penalties out of six. Locking's cry is now, "It's all right . . . Mc-Caffrey's got it covered."

The 1st XI are at present top of the League, having played 14, won 10, drawn 3, lost 1, collecting 23 points from a possible 28. In addition the team are in the quarter finals of the following cup competitions :—

Somerset Senior Cup,

Somerset Charity Cup,

Somerset Subsidiary Cup.

The 2nd XI are in a much stronger position in Div. II than they were at this stage last year. They are at present fifth in the League table. Cpl. Lester captains this 2nd XI which contains a large nucleus of P.T.Is. The inevitable drawback concerning the 2nd XI is that immediately they produce a good player, he is promoted to the 1st XI.

The 3rd XI are once again in a commanding position, following their success in winning the League Cup last season. Records so far, played 13, won 11, drawn 0, lost 2, collecting 22 points out of a possible 26. They are also through to the third round of the Weston-super-Mare Charity Cup. Once again, Cpl. Duncan captains the 3rd XI which includes the following permanent staff : Fg. Off. Grisewood, Fg. Off. Barrett and Cpl. Buxton.

Space does not permit our mentioning all the Three Wing trainees who have played for all three teams this season. Without them we should not be in such a creditable position. The enthusiasm with which all have turned out on Saturdays when they could have been away on pass, more than repays the committee for their hard work. A special word of thanks to F/Sgt. Bridson and Sgt. Smith for all their hard work and to our most ardent supporter, F/Lt. Perkins, and of course we must not lose sight of the enthusiastic work of Mr. (Paddy) Gillam.

F.C.



#### APPRENTICE WING ATHLETICS— Season 1955

Season 1955 has provided a full and varied succession of fixtures for our athletes. The revival of the McEwan Trophy meeting, between Aircraft Apprentices and Boy Entrants from Cosford, Locking, Halton, Hereford in 1954 has done much to stimulate interest in athletics in the wing.

In the McEwan, youths (under 17 years of age) play an equal part in scoring with the over 17's. This youth competition is ideal for discovering, encouraging and developing potentially good performers early in their career and should pay dividends eventually in the form of higher standards.

The annual Inter-Squadron Athletics meeting was held on Tuesday, May 10th, 1955.

All squadrons fielded a full team for all events. The following Wing records were broken and the competitors are to be congratulated on such a fine achievement which can only be done by hard training usually in the evenings.

Junior Hammer : A/A. Farmer, C Squadron with a record throw of 106ft. 6ins.

2 Miles Walk : A/A. Clarke, C Squadron with a record time of 16 mins. 28.2 secs.

Long Jump : A/A. Reynolds, A Squadron with a record jump of 20ft. 5<sup>1</sup>/<sub>2</sub>ins.

The final position at the conclusion of the meeting was as follows:

A	В	C	
187 pts.	198 pts.	235 pts.	



A/A Disanyaka winning the 120 yds. Hurdles in the Apprentices and Boy Entrants Inter-School Individual Athletic Championships

"C" Squadron are to be congratulated on winning the meeting by such a large number of points. The march past of athletes led by the Wing Band started the meeting which went off with clockwork precision to the presentation of the individual winners' prizes. Inter-Squadron Trophy and Victor Ludorum to A/A. Furneaux and A/A. Reynolds by Mrs. Linnard.

The Station sports, held on May 18th, were contested on an inter-squadron basis, the Apprentice Wing providing three squadrons, Three Wing two squadrons, and Admin. and Training Wings one combined squadron team.

"C" Squadron Apprentices won the intersquadron championships in appalling weather conditions which were against good performances. The following are the Apprentice winners:

Furneaux 72nd. 1st Mile and Three Miles, Station Victor Ludorum. Reynolds 76th. 1st Long Jump. Farmer 72nd. 1st Hammer. Wiston 72nd. 1st Javelin. Clarke 75th. 1st Two Mile Walk.



L.A.A. Furneaux and A.A. Tooth winners of the Mile in the Apprentice Wing Sports. Furneaux was Victor Ludorum of his Entry

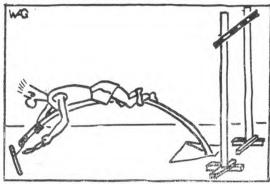
#### No. 27 Group Inter-Station Championships, June 8th

The Apprentices who were placed in the Station sports were chosen to represent the Station at the Group Championships at Netheravon.

The weather was again unkind, but in spite of this Reynolds achieved 43 feet in winning the Hop-Step and Jump, which set up a new Wing record. He was narrowly beaten into second place in the Long Jump, and Batey ran a very fine 440 hurdles to gain second place. By winning the relay, Locking came runners-up to Yatesbury. Reynolds and Batey were selected to represent No. 27 Group in the T.T.C. Championships at Halton, where Reynolds was third in the Hop-Step and Jump and Batey third in the 440 hurdles.

#### Aborfield, June 4th

Two double victories were gained for Locking, Reynolds with 41ft. 4ins. in the Hop-Step and Jump, and 20ft.  $2\frac{1}{2}$ ins. in the Long Jump in the Junior events, and Wilson 79th with 2 mins. 13 secs. in the Half Mile, and 5 mins. 1 sec. in the Mile in the Youth events.



#### McEwan Trophy

1 Wing Locking, the holders, were set a more difficult task this season in having to compete against Halton, three wings strong, with Cosford and Hereford also in the fight. This competition included Youth and Junior events.

In the Youth section standards continued to rise. Although Locking only had two wins, several second places were closely contested and two new Wing records (Youth) were set up. McKenzie, 78th, cleared 9ft. 3ins. in the pole vault, and Tyler, 78th, leapt 5ft. in the high jump. Wilson was there again, winning in the half and the mile at his leisure.

In the Junior section two events will live long in the memories of many. First the pole vaulting of Furneaux. In this meeting he took up his pole against Hallam of Halton, already a Command champion at 11ft., but undaunted proceeded to leap up to 9ft. 6ins., his best to date, but he could rise no further than 10ft. 6ins., and Hallam went on to win at 10ft. 9ins. Well done, Furneaux, a new Wing record! With only the relay remaining, Locking had to win, with Halton in second place to tie. If Locking could win with Cosford second, Locking would win the match. The start of the relay began in complete silence, Locking and Halton running neck and neck for the first three legs; at the final change it was anybody's race, with Chepstow still in the running. Dyssanayke took over and went away like a gazelle leaving the opposition standing. What a finish! Halton second, a tie on points; a very satisfactory end to a great day's sport.



Locking and Halton team captains receiving the McEwan Trophy. Both teams scored the same number of points

#### APPRENTICE CROSS-COUNTRY

Although the results do not show a large number of wins, the season so far has been encouraging. Since most of last year's team has left the Station, the team has required rebuilding and most present team members should be available next year.

Also encouraging has been the keen support from the more recent entries, 77th-81st, which augurs well for the future.

It has been possible to run two teams of eight

for most matches, so doubling the number of regular runners. Thanks are due to members of the 81st Entry who have assisted in marking the course for home matches, not always an interesting task. Also to Warrant Officer Stacey, M.T. Section, and the Apprentice Wing N.A.A.F.I., who have each played an important part in running the teams and the making of the necessary arrangements.

Opposition has varied in strength since it has

been difficult to obtain many under 18 fixtures, but all experience has been useful in building up the teams.

Bristol A.C. have proved particularly strong opponents, while interesting matches were enjoyed against Aborfield, Yatesbury and Bristol South Harriers. The visit to Fry's club proved a very pleasant trip if only from the point of view of the palate! The teams ran with credit in the Gloucester League match and an interesting match was anticipated with Halton.

The Squadron Cup competition in the autumn term was well supported and resulted in a win for "C" Squadron with 60 points, from "B" 105 points and "A" Squadron with 151 points.

M.W.

#### APPRENTICES CRICKET

The Season started well with a very fine match against Weston Grammar School, who dismissed the Wing XI for 35 runs. A very fine display of bowling and fielding enabled us to gain a commanding position of 22—8 and the Grammar School were all out for 25.

A match of quite a different calibre was played against St. George Grammar School at Bristol on the following Saturday. We won the toss and batted on a good wicket, scoring 120—3 when the innings was declared, Walters giving a fine display for 63 not out. St. George Grammar were unable to pass this score and wisely played for a draw, which they just managed to obtain, their final score being 64—9.

A local Derby against the Station XI produced some fine cricket and although the Wing side was somewhat depleted through illness, a good seventy runs were scored. This did not however prove sufficient and a stalwart innings by Padre Cook took the Station side to victory by 3 wickets.

The annual struggle with Halton was again unsuccessful—a fine chance of victory being thrown away when Halton were allowed to proceed from 60—8 to 105 all out, against which demoralising total we only produced 40 runs.

One of the best games of the season was against Taunton School. This keenly fought annual fixture gave a fine afternoon's entertainment to those watching. Taunton won the toss and scored 102, leaving the Wing side only  $1\frac{1}{2}$  hours in which to get the runs. With ten minutes to go, the score stood at 96–8 and then at 98–9. The last pair managed to get the five runs needed and win this keenly fought contest.

#### Weston League

In the Weston League the Wing side played some excellent games in Division I to which it was promoted after last year's victory in Division II, but the stronger opposition prevented any repetition of past successes. There were however some spectacular victories and defeats, the best of these being against Y.M.C.A. who could only manage 42 against 123 in 20 overs which the Wing side scored, Amerasingle making 45 of these.

The Y.M.C.A. had previously dismissed us for 18 runs and romped to victory with 22–1, including one 6 and two 4's in one over.

The following Colours were re-awarded : Lawrence 74 Palmer 75 New Colours were awarded to :---Amerasingle 74 Farrington 76 Henderson 73 (capt.) Jarrett 74 Phillips 77 Walter 77 Weech 72

			1101 1	
			Wing V	<i>lisitors</i>
May	7	Weston	0	
		Grammar School	Won 35	25
May	14	R.A.F. Watchet	Lost 61	62 - 5
May	21	St. George Grammar	Draw 120-3	64-9
June	11	R.A.F. Locking	Lost 70	717
June	18	Millfield School	Won 59	52
June	25	Dr. Morgans School	Draw 40-5	98-8
July	2	Halton	Lost 40	105
July	9	Taunton School	Won 102–9	101
July	16	Chepstow	Won 60-4	59

D.M.

No. 1

#### APPRENTICE TENNIS NOTES

The Apprentice Tennis Club ran one team in the 1955 season, and the club can look back on a satisfactory Summer when reasonable successes were gained.

The programme was only slightly curtailed by rain, and then only at the beginning of the season. Thereafter only three matches were lost, and these to senior sides in the district.

Our outstanding success was gained at the expense of R.A.F. Halton in the Inter-School Summer Games held at Halton. For this match we had what was probably our strongest combination, and it was thanks to our first pair, L.A.A. Furneaux (72nd Entry) and A.A. Jones (78th Entry), who won all their matches, that we emerged victorious. The other two pairs, A.A. Revell with C.A.A. Cannon, and L.A.A. Emerson with A.A. Pockham, contributed one match each to our total, to make it a five-four win for Locking. This was an especially good performance, for we were the only Summer club to beat our traditional rivals.

Congratulations go to the entire team on gaining their Wing colours, and in particular to L.A.A. Furneaux who was awarded the Victor Ludorum prize. L.G.

#### APPRENTICES RUGBY-1955-56

THE 1st XV improved tremendously from January onwards. This was largely due to regular team training and good team spirit. Indeed, in the latter half of the season they



Locking Apprentices, Somerset Seven-a-side Champions, 1955 Venning, Sqd. Ldr. Upritchard, Jonson, Reynolds, Clements, Jewell, Dartnall, Mark. were a force to be reckoned with, which their record clearly shows.

Notable victories were recorded against Bristol Grammar and Taunton Schools. Unfortunately, the eagerly awaited fixture with R.A.F. Halton Apprentices was cancelled, the ground being unplayable owing to frost. This was unfortunate as we have yet to record a victory over our worthy opponents, and we rather fancied our chances.

The most important achievement so far in the history of apprentices Rugby at R.A.F. Locking was the winning of the Somerset Junior Sevena-Side competition at the end of the season. This was a particularly fine achievement considering there were 16 teams in the competition and the apprentices, besides being the youngsters of the competition, played in every round. The Somerset Rugby Football Union presented a handsome trophy to the winners of this competition, and quite naturally we hope it will remain with the apprentices for some seasons to come.

Before Christmas the side played some very good Rugby and their sole object was to open up every game regardless of result. This they did to good effect, particularly against Chepstow and Aborfield our traditional rivals. The defeat of these two Army Apprentices schools has raised our hopes for next month's annual match against Halton. Alas, however, the day is not always ours, and our record this year to date is seven wins and eight victories for the opposition. Nevertheless, whether in defeat or victory, the fun and enjoyment of the game is shared by all, and this surely is the "spirit" of this wonderful game. R.J.H.U.

#### **APPRENTICE ARCHERY**

The Club, prior to this year, has existed in name only, but now it is a flourishing concern with a number of enthusiastic supporters.

An innovation this year has been the indoor range situated on Four Site, which facilitates practice when the weather is inclement.

Archery is now established on the Locking map, and to keep it there we need support from No. 1 Wing, so if there are any budding Robin Hoods, or William Tells, who wish to try their luck at this absorbing sport, come along on sports afternoons. D.B.

#### APPRENTICE SOCCER

So far this season the Wing teams have had rather a poor time owing to a certain element of bad luck perhaps, and they lost to Aborfield and Chepstow in inter-service games. At the time of writing the "A" team has won the Weston-super-Mare Youth League, with the "B" team in fourth position, while both teams have shown up reasonably well in cup matches.

The team captains are :--

Wing team C/A/A. Lawrence, 74th Entry.

"A" team A/A. Hunter, 77th Entry.

"B" team A/A. Francis, 79th Entry.

In addition there is a possibility of a few players being chosen to represent the County Youth Team. A.R.

#### APPRENTICE BASKETBALL—1955-56

The Wing team has played regularly in the Weston-super-Mare Y.M.C.A. Basketball League. After losing the first three matches the team lost only one other, that to the Station team.

The strongest opposition came from two challenge matches. The first, against a team of American Missionaries, the Wing team lost by ten baskets. The second, against Bath Y.M.C.A., the County champions, saw Bath the winners after extra time.

In the regular sports matches with Aborfield and Chepstow the Wing Basketball team were successful each time, beating Aborfield by 53 points to 30 and Chepstow by 49 points to 38.

C.A.A. Farrington captained the team throughout the season and was the highest



Basket-Ball Team

scorer. L.A.A. Cornforth and A.A. McKintosh scored well in League matches. A.A. Gress and A.A. Ridley of the 79th Entry played well and it is hoped that they will form the backbone of the future Wing team. The following Apprentices represented the Wing in the Basketball team during the season :—

C.A.A.	Farrington	76th	Entry
S.A.A.	Baker	73rd	,,
C.A.A.	Henderson	73rd	,,
L.A.A.	Baxendale	73rd	"
A.A.	Burrell	73rd	,,
A.A.	Ridley	79th	"
L.A.A.	Cornforth	76th	"
A.A.	Gress	79th	"
A.A.	McKintosh	75th	"
A.A.	Farmer	77th	"
L.A.A.	Morley	76th	,,
S.A.A.	Cull	74th	"

The team would like to record their appreciation of the services rendered by Sgt. Thomas, who was of great help during the matches as referee and during practices as coach.

W.R.

#### APPRENTICES SWIMMING

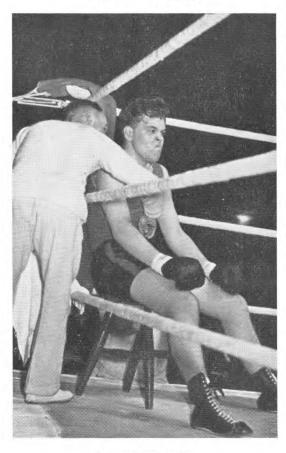
The annual Inter-Squadron Gala was held on the 7th June, 1955. There was a close fight for first place between 'A' and 'C' Squadrons-'C' Squadron eventually winning the Inter-Squadron Cup. Final placings were: 'C' Squadron, 76 pts.; 'A' Squadron, 73 pts.; 'B' Squadron, 49 pts. Two swimmers from the Junior Entries showed promise, namely. Jackson (80B) who won the 100 yds. free style, and Bathurst (79C) who was second in the diving. For the first time there were four Junior events in the Gala which did not count towards the Squadron competition. It is hoped that in the next Gala in June, 1956, there will be Junior and Senior events and all will be awarded points. Robbins (77A) was the best all-round swimmer and became the individual champion with 14 points.

After the Gala the Wing team was chosen to swim against Halton. A few extra sessions of training were arranged, Mr. King, the baths superintendent, giving excellent coaching on one memorable occasion. Adams (80B) who did not swim in the Inter-Squadron Gala, proved later to be the Wing's outstanding swimmer. He won the 100 yds. free style in the Halton match. Bathurst distinguished himself in the diving, gaining first place, with Weston (72) taking the second place. The match result was : Halton, 42 pts.; Locking, 28 pts.

Three Apprentices represented the Station in the Inter-Station Gala. Day (73) the Wing captain, swam well in the 100 yds. breast stroke to be placed third. Adams was one of the free style relay team which won the event, and Bathurst won the diving. Bathurst is to be congratulated on being chosen to represent the Group and Command.

The standard of swimming in the Wing is improving and if we get down to serious training we will surprise Halton during the summer term. H.B.J.

#### APPRENTICE WING BOXING SIGRIST TROPHY



There were seven teams competing in this year's Sigrist Trophy Competition, three from Halton, and one each from Cosford, St. Athan, Hereford and Locking. During the preliminaries, the Locking team gained 30 points, a four point lead over Halton 1 Wing, our nearest rivals. We were left with five finalists.

In the flyweight group C/A/A. A. De Soyza had a very easy win over A/A. Burns, of Halton, by a technical knock-out in the second round when the referee stopped the bout. Bantamweight A/A. K. De Silva boxed cleverly and won by a good margin from A/A. Boustead, of Halton. Featherweight A/A. Appleton had a clean bout with A/A. Taylor and emerged a worthy winner. Lightweight A/A. (Tiger) Wilson had an interesting contest in the slugging style with L/A/A. Uttom, of Halton, and was clearly the victor. Heavyweight L/A/A. Martin won quite decisively against A/A. Brightwell, from Halton. The accompanying music was not, as reported elsewhere, "The Elephant Tango."

So after a very interesting and entertaining evening, Locking emerged as winners of the Sigrist Trophy by 45—36 (Halton 2 Wing), and were presented with their richly deserved shield by Sir George Beamish, K.C.B., C.B.E., C.-in-C. of Technical Training Command, who also gave tribute to the efforts of W/O. Parkes in training the Locking team. G.B.

#### APPRENTICE BADMINTON

Under the captaincy of L/A/A. Barry, the Apprentice Wing Badminton team has acquitted itself well. Although their record is not altogether impressive, the scores offer no true reflection of the standard of their play. A steady improvement has been observed throughout the season largely owing to the coaching of Sgt. Hall, whose services are ever available.

Unfortunately the eagerly awaited clash with Halton was cancelled, but the team won the R.A.F. Apprentice Team Championship, played at Halton. The following usually represent the team during the season :—

Barry, Watts, Purves, Dyssanayake, Mc-Kintosh, Edwards and Waite. D.R.J.

Let me get at 'im

# FOR ALL SPORTS GOODS<br/>COME TO A SPORTSMANBILL ANDREWSOFFICIAL SUPPLIER TO BRISTOL ROVERS FOOTBALL CLUBUPHILL SPORTS STORETe: Weston 6485Service and Satisfaction

Telephone : Banwell 52

# LEONARD JONES

#### F.R.H.S.

Member of Interflora (We Telegraph Flowers)

#### GLADIOLI

#### DAHLIAS

#### CHRYSANTHEMUMS

a Speciality

CHOICE FLOWERS POT PLANTS WREATHS WEDDING BOUQUETS

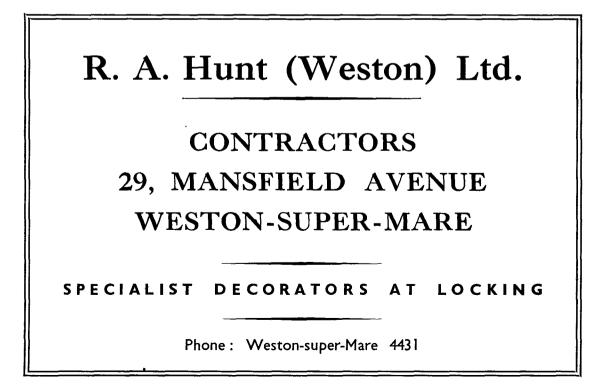
#### SPRINGFIELD NURSERIES KNIGHTCOTT, BANWELL, SOMERSET

# THE ROYAL AIR FORCE CINEMA CORPORATION

PRESENTS AT YOUR

# ASTRA CINEMA

THE BEST IN FILM ENTERTAINMENT



# EVERYONE'S CHOICE!

# WADWORTH'S

GREEN LABEL

# BEST ALE IN BOTTLE

#### **TELEVISION**

#### PIANOS

#### RECORDS

Agents for Murphy, Phillips, Pye, H.M.V., etc. Our engineers hold manufacturers' certificates and a full maintenance scheme is available.

ALL Second-hand Pianos are reconditioned in our own workshops and carry a ten year guarantee. We carry large stocks of standard and long playing records. Also Electric Gramophones and Radiograms.

# MILLIERS

**Opposite Odeon** 

Tel.: Weston-super-Mare 475

# FOR TE'S Soda Fountain and Ice Cream Parlour

Everything of the Finest Open all the year round. Ice Cream and Soda Fountain Products. Milk Shakes, Coffee, etc.

4 ぎ 5 Beach Road 50a Knightstone Road 14 The Centre Weston-super-Mare

Telephone No. 1789

RADIO BETTERIDGE BROS LTD RADIOGRAMS WESTON-SUPER-MARE **TELEVISION** (Tel. 638) RECORDS AND RECORD PLAYERS RADIO DEPT.: 1 & 2 MAGDALA BUILDINGS **CYCLES** (Opposite Odeon) BABY CARRIAGES CYCLE & PRAM DEPTS .: 51/53 OXFORD ST. TOYS AND GAMES AGENTS FOR ALL LEADING MAKES FULL MAINTENANCE SERVICE WE HIRE RADIO RECEIVERS, PRAMS, COTS, Etc.

# The Station Newsagency— R. W. & D. M. TUCKER Royal Air Force, Locking

At Your Service for-

NEWSPAPERS : MAGAZINES STATIONERY : BIRTHDAY CARDS : SEASONAL CARDS TOYS AND OTHER GOODS

In addition our Services are offered to all Messes and Institutes for the bulk supply of Books, Toys, etc., on which a Discount is allowed









WESTON-SUPER-MARE



### TRAVEL BY ..... RAMBLER COACHES W.S.M. Phone 133 EMPRESS COACHES BRISTOL Phone 20650 1 LOCKING ROAD WESTON-SUPER-MARE Special Quotations For Private Parties Tours Daily to— CHEDDAR CAVES TORQUAY LYNTON AND LYNMOUTH WEYMOUTH BOURNEMOUTH, Etc. Send P.C. for List of ALL TOURS

CONTRACTORS TO MINISTRY OF WORKS, MINISTRY OF SUPPLY, AIR MINISTRY, ADMIRALTY, WAR OFFICE & U.K.A.E.A.

## W. E. CHIVERS & SONS LTD DEVIZES Wilts

CONTRACTORS for all types of BUILDING & CIVIL ENGINEERING WORKS IN REINFORCED AND GUARANTEED STRENGTH CONCRETE

REGISTERED OFFICE **D E V I Z E S** TELEGRAMS: CHIVERS DEVIZES 121 TELEPHONE: 121 (5 Lines)

LONDON OFFICE BRISTOL OFFICE SOUTHAMPTON OFFICE SOUTH WALES OFFICE 34 BROADWAY 59 PARK STREET 7 PORTLAND STREET WESTERN AVENUE, WESTMINSTER, S.W.1 BRISTOL 1 SOUTHAMPTON LLANDAFF, CARDIFF TEL. TRAFALGAR 7120 TEL. BRISTOL 24734 TEL. SO'TON 22449 TEL. CARDIFF 71332 ROMSEY GRAVEL PITS 3312 BULFORD CAMP 2147 (2 Lines) Tel.: Weston-super-Mare 142

# HYSSETT & SON, LTD.

Printers

**Stationers** 

Paper & Paper Bag Merchants

# 3a HIGH STREET WESTON-SUPER-MARE

