

THE LOCKING REVIEW



ROYAL AIR FORCE LOCKING SOMERSET

VOLUME I

NUMBER 3

1957

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NO. 1 RADIO SCHOOL, LOCKING

Vol. 1

No. 3

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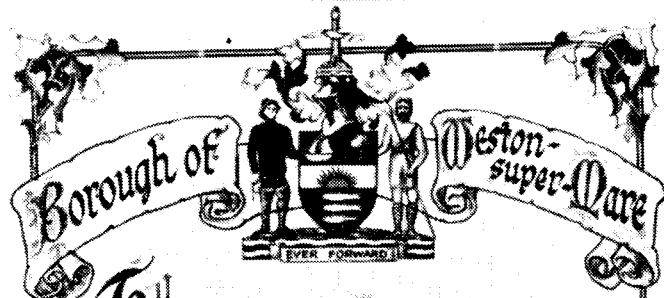
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Correspondence, contributions and Orders should be addressed to:—

The Editor,
The Locking Review,
Royal Air Force,
Locking, Somerset.



To the Officer Commanding,
and the Officers, Warrant Officers,
Non-Commissioned Officers,
Aircraftmen and Apprentices
of the
Royal Air Force Station,
LOCKING

GREETINGS

Whereas we the MAYOR, ALDERMEN
and BURGESSES of the
BOROUGH OF WESTON-SUPER-MARE
fully realising and appreciating the worthy
record and traditions of the Royal Air Force
Station, Locking during many years of service
to our beloved Queen and Her Royal Predecessors
and Country and desiring to accord due recog-
nition thereto and to foster the friendly
co-operation and intimate association of our
Townpeople with the Royal Air Force, Locking.

Do by these presents confer upon the

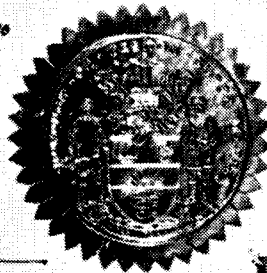


the liberty, honour, distinction and freedom
henceforth and for ever of marching through
the Borough of Weston-Super-Mare on
ceremonial occasions with swords
drawn, bayonets fixed, colours flying, *drums*
beating and bands playing.

IN WITNESS whereof we have
caused the
Common Seal of the Borough
to be hereunto affixed this
19th day of October, 1958
in the presence of:-

H. J. Holcombe
MAYOR

A. S. [Signature]
TOWN CLERK



The Scroll Granting the Freedom of Entry into
Weston-Super-Mare to Royal Air Force Locking

F O R E W O R D

by

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

This has been a memorable year for Locking as the record of events chronicled in this issue of our magazine so clearly shows. I am grateful for the spirit of unity and sense of purpose that has made possible so many fine achievements in training and in sport and which characterises so many of our activities.

I must make particular mention of the historic occasion last October when the happy relationship that has for so long existed between the Station and our friends and neighbours in Weston-Super-Mare was strengthened and cemented by the grant of freedom of entry to the Borough. This is an honour of which we are all justly grateful and proud.

We deeply regret the untimely death of Air Commodore Phillips which has deprived Locking of a real and very true friend to whom the *Locking Review* was always of particular interest. We welcome his successor, Air Commodore J. B. M. Wallis, O.B.E.

My thanks go once again to the Editor and his staff for all they give in making the *Review* such a fine record of life at Locking.

EDITORIAL

With our customary modesty we present our third issue. Editorial boards are seldom completely satisfied with the finished product of their joint labours, and we are no exception; nevertheless, so far from hoping to disarm criticism, we will welcome your correspondence and comments, whether favourable or otherwise; we really hope one day to print a lively section of readers' views: it will be a most healthy sign for our future.

It has been gratifying in the past year to hear from visitors to the Station that they have seen our first issues and think we are on the right lines: the *Locking Review* appears to have penetrated into the higher echelons to a quite remarkable degree, and we hope this infiltration will continue, since we are convinced it can do us at Locking nothing but good. On second thoughts that seems hardly a modest conviction.

This has been a full and varied year in all spheres of activity, as you will read in the pages that follow; there is plenty of enterprise on the Station, but the difficulty for us has been sometimes to find willing souls to record their affairs and interests: there has been the usual difficulty in getting contributors on to the starting line — this appears likely to be an annual lament.

In keeping with the current financial fashion we have been forced to cut our coat a little less grandly than we would have liked, but our aim must be solvency and we have economised wherever possible, but not, we hope, at the cost of readability.

Eccentric though it may seem, we are even now thinking remotely about our issue for 1958; when you have read this current number we hope you will react strongly and deluge us with offerings: you have our assurance that we will (and can) read everything.

Our private dream is that one day we will double our print figure. You can make that possible.

Your Editor.

THE FREEDOM OF ENTRY INTO WESTON SUPER-MARE

On October 12th, 1956, the "Freedom of Entry into Weston-Super-Mare" was conferred upon Royal Air Force, Locking. It is an honour which entitles the Station, amongst other things, to march through the Borough, "with swords drawn, bayonets fixed, colours flying, drums beating and bands playing." A stirring phrase, which quite rightly evokes a surge of martial splendour. Yet behind the gleam of sword and

to the Parade. The Parade Ground became the approach to Weston Railway-station where the Parade was to form; the Equipment Section and Gymnasium assumed temporary municipal grandeur, while the members of 'C' Squadron, Three Wing, perfected their sentinel stances from 3 Block to 2 Block. Thus prepared, did representatives of all Units from R.A.F. Locking journey to Weston-Super-Mare on a dull October morning.



Group-Captain D. N. K. Blair-Oliphant, O.B.E. receiving the Scroll from Mr. H. J. Holcombe, Mayor of Weston-super-Mare.

bayonet and the swirl of banner and flag, there lies a deeper meaning, of which, we at Locking should always be mindful, as we were when the pageant was first enacted last October.

A privilege, graciously given, demands a courteous and dignified acceptance; and so Locking was obliged to prepare carefully for her part of the ceremony. Reflexes for sword and rifle drill had to be sharpened; a formation ground and route had to be simulated on the Station: music had to be rehearsed and applied

While the Parade was in process of formation, the ceremony, conferring on the Station, "The Freedom of Entry to the Borough," was taking place in the Town Hall. The gathering included Dr. H. W. Bradfield, (Bishop of Bath and Wells), Air Marshall Sir George Beamish, (Air Officer Commanding-in-Chief Technical Training Command), Sir Ian Orr-Ewing, M.P., the late Air Commodore R. Philipps, and Mr. H. J. Barclay, an Honorary Freeman. The Mayor of Weston, Mr. H. J. Holcombe, spoke of the dis-

tinct local nature and meaning of the Honour. Alderman A. J. Heybryne proposed the resolution granting the Freedom of the Borough, having previously given an appreciation of the work of the No. 1 Radio School. The resolution was seconded by Mrs. M. J. Grey, the senior Councillor, who emphasised the relative youthfulness of the two communities and the value of the newly formed link between them. The Scroll, having been read and duly signed, was received on behalf of the Station, by the Officer Commanding, Group Captain D. N. K. Blair-Oliphant, O.B.E., who acknowledged the honour bestowed upon R.A.F. Locking and indicated how the present ceremony would foster the unity between the R.A.F. and the civilian population, which was necessary today if we were to preserve what we believed to be right, as it had been during the Battle of Britain. Flight Lieutenant J. Hobbs, escorted by two Sergeants, then conveyed the scroll to the assembled Parade for their inspection.

The route-lining Squadron, commanded by Squadron Leader B. J. Hooper, D.F.C., took up its position in front and to either side of the Town Hall, where the Mayor of Weston, flanked by various dignitaries, prepared to take the salute. The Parade, led by Wing Commander J. P. Adams, approached the saluting base as the Town Hall clock sounded noon. And the sun was shining.

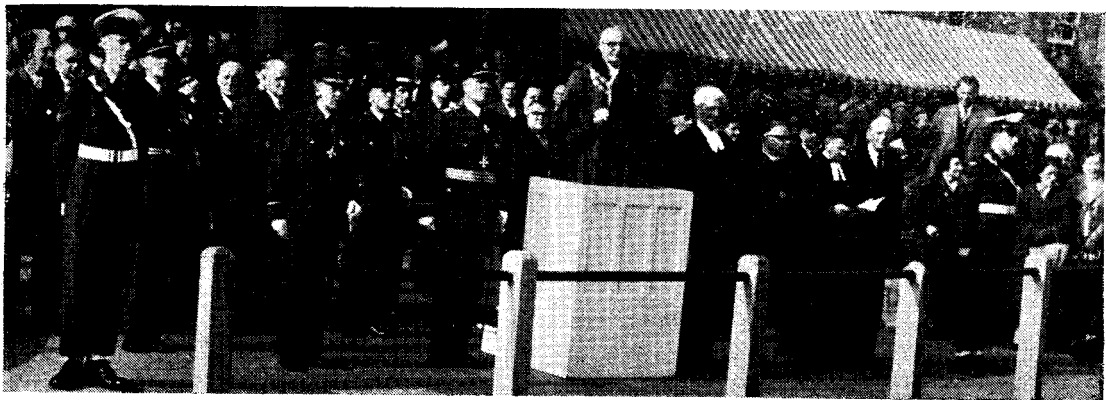
No. 5 Regional Band, directed by Flying Officer Hutchinson, played the Parade past the Town Hall. The Queen's Colour for the Royal Air Force in the United Kingdom, was escorted by a Squadron from the permanent staff from Locking, commanded by Squadron

Leader Fincher. No. 2 Squadron, was commanded by Squadron Leader Haddon, and No. 3 Squadron of Aircraft Apprentices by Squadron Leader Uprichard. The Apprentice Wing band was a centre of much attraction for the considerable crowd watching the procession, largely on account of the charm of its four-legged, non-playing, member. The Parade made its way by a circuitous route to Marine Parade, where it stood down in readiness for the return to Locking.

A luncheon in the Winter Gardens Pavilion followed for over four hundred representatives of Town and Station. Having wine and dined well, the guests were then entertained to some excellent speeches. An after-luncheon speech on such an occasion, demands a degree of seriousness, leavened with a touch of humour; all the speakers blended their ingredients well. The Mayor proposed a toast to the R.A.F. to which Air Marshall Beamish responded; Group-Captain Blair-Oliphant proposed a toast to the Borough of Weston-Super-Mare to which Alderman R. W. Brown, the Deputy Mayor replied. The whole occasion was characterised by a pleasant informal dignity.

The more serious aspects of the day were now over. Cinemas were free; a fireworks display was organised for the evening, followed by a dance, at which the airmen were guests of the Borough. As always, Locking enjoyed the amenities to the full.

For one memorable day, Locking and Weston were brought together in all aspects of their various lives, ceremonious and social. Yet it was but a concentration of what is constantly happening; a perpetual intercourse between the



Service and Civilian Dignitaries at the saluting base during the March Past.

civic and military communities. The granting of the 'Freedom of Entry' not only made us realise more fully the value of this association, but it also strengthened it immeasurably, giving it a new and mature quality.

We thank Weston and honour their trust.

P.P.



The Queen's Colour escorted through Weston-super-Mare.

THE TRIAL OF GRID TRIODE

At the Pre. Amplifier today, the trial of Grid Triode opened. He was accused of the murder of Flip.

Grid Triode, aged μ Secs. was said to have been convicted before because of unstableness, for which he was sentenced to be grounded, but this was quashed due to a dry joint in the circuit. Since then he has become a well known multivibe player.

Eddy Current prosecuting, said that Flip was well loved and his death was deeply laminated in the iron core. Continuing, Eddy Current called upon an armature to explain the cause of death. He said it was due to a heavy negative current pulse.

The armature left the witness box and was replaced by a private detector. The detector said he was hired by Grid Triode's wife, a real humdinger, because she suspected low fidelity. Continuing, the detector said that on the 8th pip he followed Grid Triode in the circuit for 2 periods. He seemed worried and was scared of using the blocking escalators. He left the circuit shortly after the 10th pip and went to watch CRTV.

There was a play presented by the makers of the Harpic Generator, about 'Trans.' It was so fantastic that Grid Triode grabbed the Electron gun, pulled the Schmitt trigger, and cut off Flip. The detector then arrested Grid Triode with the help of Overswing Diode, a boxer. His resistance was low and when charged he broke down and began to ring.

The detector then stepped down and the prosecution rested its case.

Sir Hartley Colpitt, O.Sc., defending, said that Grid Triode admitted this, but had a sore tooth due to Miller run-down disease. The play on CRTV caused the unstableness to re-occur. The defence then placed Grid Triode at the mercy of the jury.

The judge, Mr. Justice, in summing up, said it was a crystal clear case of cumulative action.

The 12 electrode jury then retired into class C for 10 μ Secs. to consider their verdict. When they returned the foreman said they had reached a verdict of guilty but unstable.

The judge then sentenced Grid Triode to 99 μ Secs. hard conduction.

986 A. A. TUCKER D. K. (80)

HAVE YOU HEARD . . .

That an Airman in Three Wing, who wanted a Home Posting, applied for an Overseas Posting, working on the theory that, "they never give you what you want." He was posted to Singapore.

THE LOCKING ROMAN SITE

R. E. Linnington

J. Rogers

SKELETON UNCOVERED IN AIRMAN'S MARRIED QUARTERS

The great interest aroused by recent newspaper reports of our archaeological excavations led to the idea that we should write an article for the *Review*, outlining our activities and results to date. Unfortunately however, Sgt. Rogers is unavoidably absent, and thus, although we have been equally responsible for the excavations, I have had to write this report, and must apologise in advance, for any mistakes or omissions.

The Roman site at Airmen's Married Quarters was first discovered when building operations began, the various trenches bringing quantities of Roman pottery to the surface. At the time, unfortunately, there was nobody sufficiently interested or qualified to undertake any excavations and thus large areas of the site were destroyed or permanently buried under the houses and roads. The few finds that were salvaged were taken to the Museum in Weston-Super-Mare and a short note stating existence of the site was published in the Proceedings of the Somerset Archaeological Society.

When Sgt. Rogers arrived on the station at the beginning of last year, it seemed as though the site had been completely destroyed and all he was able to do was to collect whatever pottery and other evidence which the builders trenches would allow. However, by the time I arrived on the station in August 1956, pottery had been found over a very wide area and we decided that some further effort was needed, and so, after preliminary arrangements had been completed, we commenced work at the end of November.

Our choice of site was extremely limited since only those areas still being used by the builders were available, and of course, we could not disturb those areas already grassed over. Also, although very important results can be obtained from test holes in private gardens they are not suitable for larger excavations. Thus for our first excavations, we had to choose a site at the cor-

ner of two roads, where Roman pottery had been found and which was still being used as a builder's dump — surprisingly enough, this forced choice of site has proved well worth while.

Directly on commencing excavations, we began to uncover evidence of occupation and so far we have managed to clear a fairly large area despite several cable trenches. The most interesting portion is undoubtedly the remains of a primitive hut of late second century date. This hut had a simple floor of stones pressed into the natural green clay. The floor had obviously lasted for several years, as it had been relaid, the total deposit being over six inches in thickness. Amongst the stones and earth of this floor we found a large amount of pottery as well as two whetstones and a green bead of glass paste. The topmost portions of this floor were full of ash and contained several large pottery fragments dating the destruction and desertion of the site. Above this, we encountered no further structures, only a gradual accumulation of earth, topped by a rough walking surface such as one would expect to find in a farmyard. Finally, in one place, we found a ditch which had been cut through the earlier deposits and contained fourth century pottery.

Thus the history of our site is not difficult to interpret; firstly, about the middle of the second century A.D., a local native farmer built himself a primitive hut with a rough floor and probably timber walls. This building remained in use for several years under relatively squalid conditions with broken pottery, food, bones and other articles being dropped and trodden into the floor. It must not be thought that the owners were very poor, for pottery is abundant and some is of a good quality. Also the green glass-paste bead was an expensive luxury imported from the Eastern Mediterranean region. Finally some time early in the 3rd century the hut was destroyed; it seems to have been deliberately dismantled and burned. The area was then left

as an open space, with occupation continuing in the vicinity. About fifty yards from this site, the builders uncovered traces of stone walling with some third century pottery. Thus it could easily have happened that the owners of the primitive hut, became dissatisfied with their living conditions, built themselves a new stone building in a more Roman fashion and then destroyed their old hut.

To the North East of the hut site and slightly downhill, we made our most spectacular single discovery. This was in one of the gardens of Married Quarters; the occupant had previously found several bones while digging a flower bed and on hearing about these discoveries we decided to put down a few test holes. The third test hole revealed the remains of a human skull, so we extended the excavation until we recovered an almost complete skeleton; unfortu-

nately the legs were missing, and they had probably been dug away previously. The skeleton was lying on its back with one hand across its body as can be seen in the photograph. Also with the skeleton were several food bones, not visible in the photograph, and the remains of a pottery vessel lying by the hip of the body. We found enough of the vessel to enable us to reconstruct it almost completely, and it is thus of very great interest for it can be used to date the burial. It is a mug of typical Roman shape and was originally decorated with a lattice pattern drawn on the vessel before firing, as can be seen in the photograph.

Thus here we have a simple grave, cut into the natural clay with no traces of a coffin; however the person had not been neglected for the pottery mug probably contained ale and some joints of meat had been placed in the



Ancient Burial in Airman's Married Quarter.

grave — it must have been a simple, but none the less sincere occasion. The pottery vessel can be safely dated to about the year 200 A.D. and thus it is very likely that here we have one of the occupants of our hut. It will be noticed that



Roman Pottery Vessel found with the Skeleton

we have been fairly cautious of the dating and history of the site. This is because, not only are we still in the process of excavation, but also so

far we have found no coin evidence, and thus our dating relies on the pottery. This evidence, although accurate enough, cannot give us very exact dates. However, despite this note of caution, we are confident about the general history and of the dating, as it is given above.

The finds from the site are at present being studied, but it is hoped to hold an exhibition some time in the future. Then we hope that it will be possible to send the finds to Weston-Super-Mare Museum for permanent display.

It only remains to thank all those who have helped us. The Station commander for permission to excavate; the builders for as much co-operation as their building programme will allow; all those people who have visited the site, helped us with tools, and offered their gardens for trial excavations, especially Sgt. Beilby in whose garden we discovered the skeleton; also we must thank Mr. Worts for photographing the skeleton at extremely short notice and Mr. Pye of the Borough Museum for his valuable help, especially in connection with the skeleton. Last but not least, all the willing helpers who have given up their weekends, for without them so little could have been achieved. They include :

Cpl. D. Allam
L.A.C. R. Campell
A.C.2. G. Rouse
J.T. D. Busk
A.C.1. P. Gillett

Finally, as far as our future plans are concerned, we hope that it will be possible to continue excavations, and recover more evidence of the hut and then of the stone building. Then, if the results prove worthwhile, a further report will be published in the next issue of the Review.

R. E. L.

AIRCRAFT APPRENTICES AMATEUR RADIO CLUB

The active membership of the club has increased during the last twelve months and the facilities of the club have been well used.

A new club transmitter is in the course of construction; this is to replace the two stalwarts that has given such good service over the last five years.

The number of Apprentices who have obtained the Post Master General Amateur Transmitting Licence has increased, and this, coupled with the enthusiasm shown by members of the Junior Entries, indicates that the call sign G 3 I D Z is likely to be heard frequently on the Amateur bands during the next twelve months.

F.B.A.

THE DAY THE HOUNDS CAME

On a pleasantly warm December afternoon, Locking was invaded. Those who witnessed the extraordinary spectacle claim that it is unprecedented in the history of the Royal Air Force, though whether the event will be recorded in the future annals it to be doubted. Certainly, we at Locking, who are well acquainted with the extraordinary, (Who cut the halyard on the flagpole? . . . Who painted the pigs? . . . Who stole the A.O.C's standard?) could scarcely believe our eyes when a pack of Fox hounds thundered through the main gate in pursuit of a service-minded fox who eventually went to ground beneath one of the S.H.Q. billets (generally believed to be a fate worse than death).

The Huntsman, perspiring and apologetic, trotted uncomfortably onto the Parade Ground, blowing his horn in a belated attempt to rally the erring hounds. All to no avail. The fox by this time had disappeared but the fun was just beginning. Hamish McCrackers, the pride and joy of the local press, had been interrupted in his sedate afternoon stroll along the green bank of the Parade Ground by the childish antics of the canines, and, anxious to establish his proud right of ownership, galloped towards them in a distinctly ominous fashion. The Hounds, glad of a diversion now that the fox had eluded them, took it all in good part, snapping, yelping, and biting at the irate Hamish who charged this way and that across the square to the delight of the dumbfounded spectators.

Eventually, our noble mascot was secured and led away to the great relief of the Huntsman

who hoped to re-establish control over his pack. But the end was not yet in sight. His confusion was complete when he saw his now thoroughly disobedient charges dashing wildly towards the P.S.I. Pig farm. The resident porkers, at first alarmed by this unexpected intrusion, rallied



After the Fray

behind the electrified fence, beating off the attack with commendable esprit de Pig Farm.

Completely routed, the Hounds continued their escapade in a final scamper across the Arena playing fields, disrupting a hockey match, and finally disappearing in the neighbourhood of Station Sick Quarters.

A rather pathetic Huntsman ambled resignedly after them, still breathing fruitless recriminations into his steaming horn. The enthralled crowd dispersed, leaving the Parade Ground to the sea-gulls.



PERSONALITIES OF NO. 1 RADIO SCHOOL

Squadron Leader Harry Fincher

Squadron Leader Fincher enlisted in the R.A.F. in May 1931; he was trained at Cranwell as a Wireless operator and subsequently remustered as W.E.M.

In February 1933 he passed out from Cranwell and was posted for duty with 503 Night Bomber Squadron, flying as a W/Opp. in Hyderabad. At the end of 1933 he was posted for a tour of duty to Hinaidi Wireless Station in Iraq;



Squadron Leader Harry Fincher

he went to India in May 1936 and joined No. 28 Army Corps Squadron at Ambaba. Later in 1936 he was selected for special duty at the Imperial Secretariat, New Delhi, and was promoted to the acting rank of Sergeant. Then followed a period of secondment to the Indian Army Provisionings Branch, and repatriation to the U.K. in 1939. He was posted to R.A.F. Benson where 150 Squadron were forming up as components of the Advanced Air Striking Force.

He went to France on 2nd September 1939 and was evacuated from Brest on 19th June, 1940 with the rear party of 150 Squadron.

He was commissioned on the 11th December 1941, and remained with Bomber Command throughout the war; he served with No. 22 Canadian O.T.U. and with 12 and 626 Squadrons; he was twice mentioned in despatches.

After the war, he served in West Africa, Ceylon, India, Rhodesia, and did the Signals Staff course and Radar Course at Debden. After a term of duty at the Air Ministry he was posted to Locking in April 1954 as O.C. to A Squadron, No. 1 Wing; subsequently he was Training Officer (Aircraft Apprentices) and Training Officer (Men). He is an enthusiastic golfer, and he took an active part in the social life of the station and officers mess.

We wish him all good fortune on his posting to H.Q. Technical Training Command. Harry Fincher will always be most welcome here at Locking.

THE MUSIC CIRCLE

A number of new long-playing records have been added to the collection, and meetings have been held regularly every week. In spite of the apparent attractions of good equipment for record reproduction, comfortable chairs and central heating, the support given to the Music Circle has in general been meagre, and we would welcome more lovers of good music.

During the past year, many visits to concerts in Bristol were arranged, and these, perhaps naturally, were more popular than recorded music meetings. The most successful of these outings was undoubtedly in May 1956 when the Vienna Philharmonic Orchestra visited Bristol; about thirty of our group made the journey and had a most enjoyable evening.

D. J. G.

50 YEARS ON THE ROAD

REMINISCENCES OF A VETERAN DRIVER

I was born in 1886, at East Harptree, a little village in the Mendips about twenty miles from Weston.

At the age of fourteen I was apprenticed to an engineering firm as a fitter and turner and it was at this time that I made my first acquaintance with engines; the son of my boss took up car and cycle repairing as a sideline and I spent much of my spare time in his workshop.

Among the motor-cycles popular at that time was the 'Rex'; this held the Land's End to John o' Groats record for a number of years. It was belt-driven with accumulator ignition, and no clutch or gear box; the only control was a switch on the handle-bar.

Other popular makes were the 'Quadrant,' the 'Chase,' the 'Humber' and the 'Singer'—this latter had the engine in the back wheel.

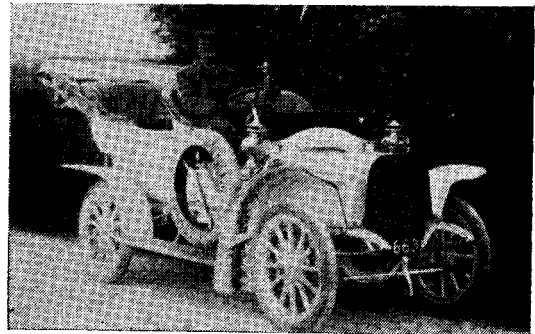
We had no number plates or driving licences in those days; I had my first licence in 1906. It was a paper document signed by the Clerk to the Somerset County Council, and it covered both motor-cycles and cars. The first motor-cycle I owned myself, was a $3\frac{1}{2}$ h.p. Humber, fitted with a wicker side-car like an enormous clothes basket; it had a two-speed gear in the back wheel and it was belt-driven, which was difficult in wet weather; it had a nasty habit of over-heating on long hills, when one would be forced to dismount and wait for the engine to cool off. I paid £26 for it, and after storing it during the First World War, resold it in 1919 for £36 so I felt I hadn't been robbed.

In 1906 I entered private service in the household of Sir Henry Berryman; after one hour's tuition, I was allowed to drive his car, a 10 - 12 H.P. Argyll. This had a twin-cylinder engine with outside timing gears (very noisy when running dry), and a three-speed gear box with a triangular gate change; tyre pressure was 60 lbs in the front and 70 lbs in the rear and the rear tyres were fitted with steel studs.

In those days, wheels were fixed, so if you had a puncture you had to remove the inner tube, no small job. Lamps were oil or acetylene, and the rear one normally went out owing to back draught.

About 1910 a spare wheel came onto the market; it was called a 'stepney' and was really a spare rim which you fixed by chips.

Later I worked for a man whose name is linked with bananas: Fyffe. For him I drove a 18 - 24 H.P. Minerva, a fast Belgian model. I frequently climbed steep hills in reverse when I couldn't take them in a forward gear. To stop running backwards on a steep hill we had a 'sprag'—a pointed steel bar which stuck into the surface of the road when released. The throttle was hand controlled on the steering wheel, and the same for the ignition; there were no self-starters of course and when you used the handle you had to be very careful about back-fires.



The author at the wheel of 10-12 h.p. Argyll in 1910.

In 1914 I joined the A.S.C. (now the R.A.S.C.). I was in the M.T. section attached to an anti-aircraft searchlight section. I drove a 15 H.P. Talbot which was to be, in effect, my home for the next four years; I slept in it and never used a train during the whole war. I drove from London to Southampton, by boat to Le Havre, then drove through Northern France and into Belgium and was as far as Cologne on the Rhine by the end of the war.

When I was attached to H.Q. I took over a Sunbeam— I drove it from Cologne to Dunkirk, then onto the train ferry, home to England and then across to Portsmouth by road where I was demobilised.

During the second World War I was employed in an Engineering Workshop and in 1947 I came to Locking: I have a connection with the R.A.F. for my son was a Halton Apprentice in 1936, and in 1939 broadcast on Halton life in a feature programme on the B.B.C.

I think the oddest car I have ever driven was the Adams-Hewitt; it had pedal controls — two for the forward gear and one for reverse, and the footbrake. It was disastrously easy to go into reverse by accident.

I once drove 250 miles non-stop, which may not seem much now, but which 40 years ago was no mean achievement — there were no white lines or cat's eyes on the road; I had oil lamps and no windscreen wipers. The car that gave me the most trouble was a very old Daimler that I drove for a prospective M.P. on his election campaign. I am proud of the fact that in all my driving career I was never involved in a serious accident: I think I have driven 2,000,000 miles in all. I am still driving to work, in a Triumph Mayflower, and I still enjoy it, although heavy traffic nowadays is definitely to be avoided.

A. M. WHITEHEAD.

FITTER CLOSE-UP

S.A.C. Colin Osborne, aged 21, class leader of class Nav.B. F.A.M. 2, is a recent arrival at Locking.

Born in Marlow, on the Thames, Osborne was educated at the Sir William Borlase Grammar School, where he obtained a G.C.E. at Ordinary level in five subjects: Maths, Physics, Chemistry, Geography and Religious Knowledge. While at School, he became a keen rower, gaining his colours; he rowed for his senior eight when the School won the Junior Maidenhead Regatta in 1952. He also played the violin in his School orchestra. On leaving school at the age of 16, he took up a post with the British Telecommunications Research Laboratories, in Taplow, where he was engaged in the research and development of line and radio communication. He continued his studies at the Technical College Slough, and the Regent Street Polytechnic, and he eventually gained a Higher National Certificate in Electrical Engineering, with three distinctions. He is a Student Member of the Institute of Electrical Engineers, and will shortly

become a graduate member. In his spare time, he took an active interest in the Scout Movement, becoming Assistant Scout Master of the 3rd Marlow Air Scouts. On the only occasion when he had an opportunity to fly, the Anson, which was *taxi-ing* across the runway, developed engine trouble, and that was that. Osborne represented his District at the 7th World Scout Jamboree in Austria in 1951. He later returned to Austria on holiday in 1955, making short trips into Italy and Germany.



S.A.C. Osborne at work

He joined the R.A.F. in November 1956, and after unsuccessful attempts to get established in Air-Crew, completed his 'Square-bashing' at West Kirby, and later found himself at Locking. He had previously taken a Wireless Mechanic Trade Test and had been promoted to S.A.C. Life at Locking came as an agreeable surprise after Recruit Training, and we quote, "Food is good and plenty of it . . . the work is interesting and not too difficult . . . the camp is pleasantly laid out and the surrounding Mendip country offers lots of opportunities for walks and climbs," (to say nothing of the Freedom of Weston of course). He is more than pleased that his R.A.F. Trade corresponds with his civilian occupation.

As would be expected, he is interested in the construction of all kinds of electrical gadgets, and he has already produced his own Hi-Fi equipment, consisting of a F.M. receiver, a pre-amplifier and a power amplifier, as well as his own tape-recorder.

When Osborne's National Service Commitments are over, he intends to apply for one of the overseas posts which his firm has to offer. We wish him the best of luck.

UHF, SHF AND EHF

UHF = 300 - 3,000 Mc/s

SHF = 3,000 - 30,000 Mc/s

EHF = 30,000 - 300,000 Mc/s

1. *Current Condition.*

So much has been written in technical literature which gives the potential electronician the feeling that he was teethered on a transistor, is fed by semiconduction and will fade into oblivion as an empty hole.

For those of us who are longer in the tooth, that is at least, with memories reaching back to the 1939-45 war, it is as well to wonder what developments are happening, if any, in the field of ultra, super, and extremely high frequencies.

The capture and training of these untamed frequency regions seemed, and were, at times, the key technical objectives of scientists working for all combatants. Has this vast technical objective been captured and now lost in the overwhelming onslaught of transistor publicity, for little or no bloodshed? The following paragraphs are a brief attempt to spotlight these high frequency developments coming in the UHF, SHF, and EHF bands.

2. *Current Position.*

Needless to say, vast research is being carried on in tackling the problem of producing and amplifying considerable power at the frequencies mentioned. So far the future of the transistor in these realms is very remote, particularly in its present state of development.

In the United States, France, West Germany and Great Britain, results are available of years of microwave developments, and some of the end products are either widely known commercially, or if not, soon will be.

3. *Conventionalising the Microtubes.*

The major process here, on well known valve types, such as Klystron and Magnetron, is that they have been accepted and have simply become bigger and better. Greater understanding of the exact action of the electron under the complicated fields existing in cavities, has yielded greater efficiency and control in operation.

Typical of the process is the development of the power Klystrons of considerable physical size, some over four feet in height, producing up to 20 KW of continuous power output and 30 MW under pulsed conditions!

Certain of these valves are in operation for TV frequencies in the region 100 - 900 Mc/s. It is pleasing to note also that some of these bear the name 'Varian Bros.' the original American discoverers and applicers of the principle of velocity modulation.

Klystrons consisting of more than two resonant cavities, known as cascaded cavity Klystrons, are able to act as very stable amplifiers of high frequencies with gains running into thousands. The use of the other sorts of intermediate cavities between input and output points of such klystrons, with properly related resonant frequencies, can yield considerable increase in the bandwidth of operation.

Improvements in the design of reflex Klystrons, with specially shaped cavities, have resulted in greatly linearising the frequency US repeller voltage characteristics, and thus considerably enhancing their performance in F.M. microwave transmission.

A cousin to the Klystron is the Regnatron. It is a cylindrically arranged tetrode with cavities between cathode and control grid, and between screen grid and anode. The selected potentials on the grids cause the electrons to have large velocities with consequent reduction of transit time effects.

Cavity magnetrons have also been improved, although, for the types available the progress has not been so spectacular or obvious. One can easily assume that much of their performance is secret, particularly as they seem to be the only suitable generators of oscillation in the EHF region. The designers of the cavity magnetron (Boot and Randall), now devote their energies to other topics.

4. *Limitations of Microwave Conventionality.*

Funnily enough, it is still transit time effects which limit the operation of the well-tryed micro wave faithfuls. For Klystrons to be efficient at higher frequencies, the modulating field must be concentrated in time and space, from the point of view of the electrons. There are obvious physical limits to this. Considering the magnetron, in its conventional operation, we see it has

a multitude of electrons drifting in the interaction space and quite clogging the main stream with transit times of great variation. In its crude way, the magnetron is generally about three or four times more efficient than average klystrons, which perform at 5 - 15% efficiency. (Incidentally, only some very recent mathematical work, aided by some of the latest computers, has solved more fully the details of the complicated electron orbits in the cavity magnetron interaction space).

Noise is another great problem in existing current micro-wave valves, although recent work in connection with other developments gives rise to high hopes that a satisfactory solution is quite possible.

The gain-bandwidth product is still operative, in a modified way, at these higher frequencies, and generally, improvement in one factor is detrimental to the other and vice versa.

5 *The Transition Period.*

The search for some way of overcoming the fundamental stumbling block of transit time limitation has taken the fancy of many research institutions in post-war years, including the Naval Research Establishment (G.B.), and the Bell Telephone Laboratories (U.S.A.).

Kempfner, originally an architect, saw that the foundation of the solution was to get electrons and the modulating field to interact continuously and thus completely sidestep the bogey of transit time. He initiated the research into the development of the T.W.T. (Travelling wave tube), and from this has sprung a rich field of fresh ideas and a whole generation of allied valves.

6 *T.W.T. Fundamentals.*

It has been found that the most suitable velocities for electrons to travel at and to interact efficiently and continuously with a field, are between one tenth and one twentieth of the velocity of light. This means that it has to be the field which is slowed down to the electron velocity.

Kempfner's solution, neat and ingenious, was to set a wave travelling around the turns of a long wire helix, with the proviso that the wave travels at the correct speed in its helical journey, to keep up with the electron beam projected along the helix axis. (One of the original surprising factors for wave guide experts, is how well the micro-wave sits on the helix!) Suitable accelerating potentials for the electron beam along the helix axis, are of the order 1 to 3KV.

A quick recapitulation of the elementary properties of a wave will remind us that the wave is changing its phase regularly in its forward progress. Due to the path of the wave around the helix there are both axial and transverse field components, as for modes in a wave guide.

In the simpler tubes, only the axial components used in bunching electrons favourably sited in the helical slow-wave field. These electrons become velocity modulated continuously in their journeys. As is typical of the electron bunches in the klystron, a long time is spent in the decelerating fields, which thereby gain energy, and a short time in the accelerating fields, which thereby lose energy. The wave on the helix increases its amplitude exponentially under the above condition. Originally the transverse field component was viewed as a nuisance, producing extra unwanted waves and debunching. Later T.W.T.'s have used the transverse field to aid the amplification of the forward wave, or have used that component alone for amplification.

Defocussing also occurs as the distance from the injector electron gun increases. This is corrected by the use of focussing coils or permanent magnets. These latter additional items are somewhat disadvantageous to the physical construction, which is already cumbersome due to the length and delicate nature of the drift tube holding the spiral.

Another drawback is that the electron bunches induces a second, out of phase, wave on the helix, which thus has at least two travelling waves on it.

7 *T.W.T. Construction.*

In order to perform usefully in the various applications for which it has proved practical, the T.W.T. usually has conventionally designed broad band microwave input and output connections at the gun and the collection ends of the helix respectively.

Due to mismatch at the junctions of the wave guides and helix, reflections occur and these are liable to give rise to oscillations. An attenuator, often simply an Aquadag coating on the tube wall, absorbs the reflected waves, thus greatly reducing oscillation possibility. This attenuation also affects the forward waves, and must be allowed for when calculating overall gain, although it does not actually upset the bunch formation process.

Some form of cooling is generally necessary, and if convection is not enough, a forced air flow must be employed so that the helix container does not get too hot. The addition of focussing coils or magnets makes the physical mounting a bit cumbersome and some protection of the one or two foot long helix tube is needed.

8 Typical Performance.

	(a) British Type	(b) American Type
Voltage of gun accelerator and helix	2,500 V	2,300 V
Helix current	1 m.a.	2.5 m.a.
Collector current	20 m.a.	30 m.a.
Power output	4 W	3.1 W
Power Gain	19 d.b.	15 d.b.
Focus field strength	500 gauss	700 gauss
Operational frequency band	3,600 - 4,200 mc/s	6,400 - 7,200 mc/s
Both have forced air cooling		
Length (overall)	20"	15"
Diameter (Max)	2.6"	1.3"

9. Application of (Broad B.W.) T.W.T.

In the realm of conventional T.V., and multi-channel telephony, bandwidths of several megacycles are required. Colour T.V. may require some tens of megacycles and pulse modulated multi-channel links may incur some hundreds of megacycles, all of which are readily catered for by T.W.T.'s. The characteristic gain-bandwidth product still operates for T.W.T.'s; but due to their non-resonant properties, especially that of the helix, the bandwidth is very large and the gain high. Other slow wave structures have also been designed with similar broad-band characteristics.

10. Noise in T.W.T.'s

Initial work on Klystrons, showed them to have large noise factors, hence their use only as local oscillators in microwave receivers. The later cascaded varieties have improved performance and are quite suited as amplifiers and source oscillators. Yet even better noise reduction should be obtained as a result of the investigations carried out for T.W.T.'s. Some of this work, completed in 1950 showed that the noise pattern in a long drift space, followed a definite variation along the drift space; in other words there was a standing wave of noise voltage in this space. This has yet to be applied fully to Klystrons, but has produced significant improvements in T.W.T. performance.

Initial noise-reduction design, aimed at achieving critical distance setting of cathode,

injector, helix and output connector positions, yielded some improvement. A newer technique, using a concept called 'velocity jump,' has produced radical noise reduction, bettering any previous achievements for T.W.T.'s

11. 'Velocity Jump' Noise De-amplification.

Any sudden change of impedance on a transmission network will cause the wave passing to show abrupt velocity changes. Such sudden changes of impedance on slow-wave structures, produces 'velocity jumps.' These are in fact achieved by short lengths of accelerating fields on the helix. The noise S.W. pattern is considerably reduced after a velocity jump. More than one velocity jump, shows no startling improvement in noise de-amplification and may yield the opposite effect.

12. Periodic Focussing.

Even in the best performing T.W.T.'s, generally half the beam current is lost from start to finish in the helix, due to defocussing, despite improved focussing field design. Investigation of strong focussing methods (which have a lot in common with the large particle accelerator) shows that the best focussing is achieved by reversing magnetic fields, providing it is done suddenly enough and in correct relation to the electron direction and velocity.

This method, called periodic focussing, could be capable of greatly simplifying the auxiliary field supply feature of T.W.T., and easing its construction, but has only been applied experimentally.

13. Latest Developtron.

(a) O - Carcinotron.

This is not, as you may imagine, an appeal to a red hot boiler, but just one more of the 'tron' family. The most common experimental type is that having an electron beam fired down a channel, passing through the middle of a wave guide-type structure which has been folded, so that its long axis has a snake ripple pattern to it. The electrons enter, emerge and re-enter the corrugated guide many times. The wave must be 'backwardly' directed to the beam, and hence the name 'backward wave oscillators.' The cumulative bunching which occurs yields excellent output powers under oscillating conditions. The major advantage of such tube design, is that the velocity of the electron beam, controlled by a single voltage variation, yields exceptionally wide electronic tuning. A recently developed type has a (tuning) range of 45,000 mc/s to 63,000 mc/s, a variation of some 37%. Note

also that the actual range is about the same as the L.W., M.W. and S.W. bands put together.

(b) M - Carcinotrons.

These are basically similar to (a) but use crossed E and H fields, perpendicular to the electron motion, and in this fashion have a resemblance to T.W.'s in Magnetrons. Some of the consequent theory indicates that almost all conventional types of cavity magnetron structures are capable of yielding amplification under correct T.W. conditions.

(c) Double stream T.W.T. Amplifiers.

Here the cumulative bunching interaction takes place, not between an electron stream and a travelling wave, but between two streams of electrons of suitably different velocities. The great advantage resulting is that the removal of

the slow-wave structure, greatly reduces some of the criticality in synchronisation, input and output impedances and velocity control associated with the standard T.W.T. construction.

LAST WORDS.

For the real man of electron art, who reads B.S.T.J. and P.I.R.E. readily, and digests them with ease, these preceedings paragraphs are a very rough approximation of these pearl-like texts, and no detriment is intended to the engineers who have written and worked on these ideas. The errors of over-simplification, gross at times, are all attributable to the Locking author, who feels that he may have opened the mirror for other enquiring 'Alices' into the travelling wonderland of Uff, Shuf and Eff.

MACDUFF.

"LOCKINGBURY TALES"

1

When Chaucer walked through Countie Kente,
He gave we three a storie,
Of tales of Knightes and bad men bolde,
Of stories, Lockingbury.

2

The Boss of Camp is not contente
With one name or with twoe,
Our loyal greetings all we sende,
To D-N-K-B-O.

3

A Cavalier on a horse,
He rides in Locale Hunte,
In bowler hat he's pride of Mess,
In office, Adjutant.

4

An upright youth? . . . Yea hardly old!
He's Englishe bred and born,
His car runs far on diesel oil,
His name's a form of horn.

5

There is a Three Winge Officer,
A daring knight and bold,
He's got three bars; you want a clue?
He's worth his weight in golde.

6

A flying man, a G.D. type,
He stands out in a crowde,

Bar profits now must surely lapse,
'Cos it's farewell to Fr . . .

7

Workshoppes needs a strongishe hande,
To stop the wheels going rusty,
You couldn't use our M.T. trucks,
When they belonged to Du . . .

8

The T.O. (Men) is Far East bounde,
His luck in draws is high,
He's rugger mad, but we lost the Cup,
To Innsworth, Hard Luck D . .

9

The Apps will know this man who leads,
His discipline is steel hard,
But he runs his Wing like public school.
Its head? Why S Li

10

The man who guards the P.S.I.
In Church is one of the best,
But just you try and get some cash,
From the airmen's treasure chest.

11

We hope these tales have brought you joye,
And pleasant thoughtes not curses,
If you haven't guessed who's who herein,
Then YOU write easier verses.

74th ENTRY

Reviewing Officer :

AIR MARSHALL SIR G. R. BEAMISH, K.C.B., C.B.E.

A brief Summary of the Address of Air Marshall Sir George R. Beamish, K.C.B., C.B.E., on the occasion of the graduation of the 74th Entry of Aircraft Apprentices from the Royal Air Force Station, Locking, on 27th March, 1956.

Supporting the welcome given by the Station Commander to all parents, relatives and friends, the Reviewing Officer said that the influence of the home was as powerful as any other training measure and the parents' pride in the achievement of their sons made a very significant contribution to their progress.

The passing out entry showed quality rather than quantity, and there had been some splendid performances by the prize winners; it was particularly pleasing to see a member of the Royal New Zealand Air Force distinguish himself.

As to the future, there was no need to stress the fact that specialist trades were making great strides every day; the basic knowledge and grasp of theory gained at Locking were the foundations on which the technician would have to base his practical experience in a science that meant so much to the general community and the R.A.F. in particular.

The bond between the technician and the flying man was very close; the technician should never treat his responsibilities lightly: highly trained aircrew are valuable equipment in his hands, and a high proportion of fighting efficiency depended on him.

Responsibilities would come with promotion, and by taking pride in themselves and their work they would fit themselves for responsibility and be worthy of it.

By their heritage, the products of Locking were sportsmen with ideals of fair play and respect for physical fitness and teamwork.

Thanks were due to the instruction staff: theirs was a highly responsible task and worthy of the best of men, and it was an inspiration to them to see men they had trained taking their



Air Marshall Sir G. R. Beamish inspecting members of the 74th Entry.

part in the Service with confidence.

The Reviewing Officer finished by saying that Locking was fast establishing a most enviable reputation as a training establishment with splendid standards; a fine tradition had been inherited from Flowerdown and Cranwell; to the 74th Entry he sent his very best wishes for the future and hoped they would be a credit to Locking.

THE PRIZES

TECHNICAL SUBJECTS :

<i>Air Radio Fitters</i>	A.A. De Stigter, T. N.
<i>Ground Radar Fitters</i>	A.A. Elliott, D. J.
<i>Ground Wireless Fitters</i>	L.A.A. Charlton, B. J.
<i>Highest Educational Marks</i>	L.A.A. Charlton, B. J.
<i>General Service Subjects</i>	F.S.A.A. Marks, G. W.
<i>Highest Aggregate Marks</i>	A.A. De Stigter, T. N.

WING TROPHY :

<i>Victor Ludorum Trophy</i>	F.S.A.A. Marks, G. W.
<i>Wing Championship</i>	... 'C' Squadron

STATION PHOTOGRAPHIC SOCIETY

The Society at present has over thirty members, most of whom are fairly advanced workers, and is flourishing mightily. The darkroom is well equipped and in constant use, and now that winter is over the heating problem will not be so acute.

An example of the members' all round keenness has been the Exhibition held in March. There were 115 entries all of a very good standard. The first prize was shared by Mr. Hough

and F/S Salter and the 2nd by Flt. Lt. Barnett and Fg. Off. Armstrong.

A few lectures were organised and Flt. Lt. Barnett very entertainingly described his 35 mm technique of which the first essential was superlative photographic equipment. The prospect for the future of such lectures looks quite good and the club is hoping to organise a bi-monthly portfolio to give everyone a chance of showing off their latest efforts.



Exhibits from the Station Photographic Competition.

STATION DRAMATIC SOCIETY

After a long period of inactivity since the production of "Ten Little Niggers," the society made a fresh start at the beginning of 1957. The first choice of "Arms and the Man" proved to be unfeasible as the difficulties of filling female roles proved insurmountable. However, the keenness of the members, most of whom are new to the Station society, has been aroused and three one-act plays are now scheduled for performance on May 15th, 1957. These plays will be "The Avenger," a tragi-comedy on the eternal triangle theme, "The Twisted Dagger," a

gripping piece of police detection and "The Code of the West" a larger than life western drama incorporating a three man hill-billy band. "The Twisted Dagger" has been specially written for the occasion by Cpl. Longland and promises to be a very entertaining piece.

Very few of the former members are left and the present group intends to produce a more lively show than ever before; certainly if keenness to get going is any indication then the production is bound to be a success, for we have a most willing and eager team raring to start.

A DOLLAR FOR HIS T'OGHTS

I was in McQuirk's, most fashionable of Dublin's greengrocers, when he strode leisurely in and surveyed critically the terraced ranks of polished apples and carefully selected oranges. He wore a three day old stubble, a monocle attached by a string to the back of his dusty trilby, and a dirty evening jacket and waistcoat, the whole impression of grubby neglect being underlined by a pair of stench-stiff, pin-stripe trousers.

He fingered the produce with grimy hands, contaminating a pear here, a grapefruit there. At last, he selected a particularly worm-eaten cooking apple and in a thick Dublin brogue asked an assistant,

"How much would yer be wantin', now, for this voluptuous produce of nature?"

"It's rather worm-eaten sir; are you sure you wouldn't like to change it?"

"Not at all, not at all, foine man that y' are. Just look at those gleaming scarlet cheeks and tell me how much yer'd be wanting for 'em."

"Tuppence ha'penny, please sir."

"What was that yer said? Tuppence ha'penny for that rotten, worm-eaten windfall?"

"I can find you a cheaper one, sir, if you wish."

"I wouldn't dream of it. Y're a foine man and we all love yer and just to show yer we're all friends and there's no ill feeling, I'd like yer to weigh me this little apple, too."

"It's three ha'pence sir. I'm afraid that's fourpence altogether."

"Y're afraid it's fourpence altogether! Don't yer know that with John Joseph O'Toole expense is no object? Why, I'm rollin' in it. Just look at me rich and flowing garments and me silken breeches. Come on man, let's indulge in a bit o' social justice, a little long-overdue redistribution of income. Here y' are now: one, two, tree, four gleamin' brass examples of best legal tender, and don't squander't on feastin' and debauchery."

"Thank you ever so much sir. Your generosity touches me."

"Don't mention it, lovable fellow that y' are, don't mention it. Now it's a funny thing, but just as you and me was a-chattin' away just now, me eyes were a wanderin' over all yer beautiful produce so handsomely displayed and I'm after asking if yer could see yer way round to lettin' a luckless and poverty-struck old man

have a pound of potatoes without, as it were, the sordid unpleasantness of a monetary transaction."

"It's obliged I'd be if you'd scram, you old humbug!"

Turning to leave, he caught sight of me and approached, saying,

"I wonder now, noble and elegant sor that yer seem to be, if yer quuite appreciate the appalling and unspeakable lowliness of me present corcumstances."

I replied that I had no idea how dire were his straits, and was there any service I might render him?

"Well now, it's funny yer should mention it, but for the first, and I hope, the last time in my life, I consider it my duty to the community to seek some form of financial succour. Yer see, kind sor, last winter I lost me house, me money, me underpants, me everything in a catastrophic foire, and in fact, had I not the ultra-extraordinary good luck to win a fifty pound bet by catching a whale single-handed, I doubt if I'd've been here today; and it's sure I am that you'd agree 'twould be foolhardy to suppose the long arm of coincidence will continue to fondle me so charitably."

I informed him that before deciding whether or not he was deserving of assistance, I had to know why a man of his intelligence was deep in penury.

"A very fair question, sor, very fair indeed. Just lower yer oise a little sor, and y'll espy the cause of me impecuniosity; namely, me trousers. A man's whole porsonality is reflected in his trousers and ever to part with 'em is loike cuttin' off a piece of his soul. So these breeches have remained with me ever since I evolved this two-legged philosophy, as it wor, and that's thirty-four years ago."

Here he suddenly raised his hand,

"I know what y're thinkin'; don't say it sor, don't say it. Y're thinkin' to yerself how indescribably putrid and malodorous must be this ancient, double-shafted garment. But once a month sor, I strip to the waist, jump into the River Liffey, trousers and all, and scrub meself dohn with soap that filum-stars use, and tho' these breeches may have seen better days, sor, they've never seen cleaner. Which is what those responsible for my lucreless condition do not seem to grasp. Now yer may not believe me, sor,

but time was when I was engaged to marry a lovely and rich lady. My prospects were rosy, and me friends envious. Then one day she remarked to me, careless and off-hand loike, so to speak,

"I wonder now what style of trousers will yer be wearing when yer wed me, Mr. O'Toole?"

"Sure," says I, "I'll be wearin' the same as I've worn ever since the day I met yer. If they've



John Joseph O'Toole

endured a year's courtship, I can't imagine that they'll disintegrate durin' a marriage ceremony!"

"D'yer mean to say Mr. O'Toole," says she, "that yer'll be wearin' that filthy pair o' bags at our wedding?"

"Either that, or it won't be John Joseph yer'll be marryin' next Saturday!"

"And that, briefly, was how me trousers pulled me from under the very shadow of matrimony, and proved to me that on no account must I ever part with 'em. But a narrow escape from matrimony was not the only result of a high principled attachment to me breeches; many years ago, I was travelling representative for a firm of gentlemen's tailors and outfitters. I was a great success at the job, as you may imagine, sor, until one day the boss called me in and,

"O'Toole," says he, "yer make a very foine representative for a firm but yer breeches are a shockin' advert for a gentlemen's outfitters. Now, can yer not see yer way to lettin' us provide yer with the foineest pair of trousers that ever adorned a gentleman's shanks, free of charge as it were?"

"Well now," says I, "I'll let yer provide me with a pair right enough, but as to persuadin' me to wear 'em, yer might as well go shootin' fleas with a blunder-buss."

"And that, briefly sor, is how a man of high principles has sunk to a low but honest station."

I suggested that a man of his acumen and command of language ought to be able to secure some job wherein trouser orthodoxy was not essential.

"Ah, now don't let me deceive yer, sor," he replied, "Don't let me deceive yer; for a prolonged and conscientious application to dictionary learning, I have acquired a very subtle form of illiteracy. In short, I'm a man of few words, but many syllables."

I gave him a dollar for his thoughts, bought him a pound of potatoes and left him beneath a deluge of circumlocutious thanks.

Later that day, passing a second-hand clothing dealers' on the quay-side, I overheard a familiar voice saying,

"Come on now man: it's a fair bargain I'm after offerin' yer. Me breeches may be old, but if I give yer a pound o' spuds and a coupla' cooking apples to go with 'em, you can hardly begrudge me that pair o' flannel bags y've got hanging up there."

P. M.

3 WING NOTES

The Wing saw one or two major changes during 1956. Wing Commander Cocks left the Wing, retiring as a Group-Captain after years of service, and Wing Commander Stirling came from a posting in Canada to command the Wing. The organisation of the Wing into Fitter and Mechanic Squadrons became an established fact, and although all four squadrons belong to the same Wing, A and B (Mechs) and C and D (fitters) often go their separate ways. The splitting of Sports afternoons into Wednesday for Fitters, and Thursday for Mechanics, is an example of this, and has proved a very successful way of dealing with such a large number.

The Wing H.Q., which for several years had overlooked the Parade Ground from Lower Parade Road, was moved down into 8 area opposite the new N.A.A.F.I. The renovation and re-decoration of the barrack huts in 8 area was completed early in the year, and 'D' Squadron emerged as the fourth full and 'very much alive' Squadron. This increase in Fitter accommodation was followed in the Spring by a reduction within the Mechanics squadrons, with 'A' Squadron being reduced to 2 Flights, and 'B' Squadron to 3 Flights.

Two long-standing officers from the Wing left during the year. S/L P. Clarke, O.C. 'A' Squadron, now retired and living in the neighbourhood, and F/O Armstrong, Adjutant, who was posted to Germany last December. The Flight Commanders as usual, are almost entirely N.S. or S.S.C. officers and their posting movements are too numerous to mention.

Events of varied interest have occurred during the year. A very successful dance was held in the new 8 area N.A.A.F.I. in the Summer: several enthusiastic tug-o-war teams were formed: a group of keen motor cyclists converted an unused building, by self-help, into a much needed motor cycle garage: and of course, the Wing provided Ceremonial and Route lining flights for the Freedom of Weston Parade.

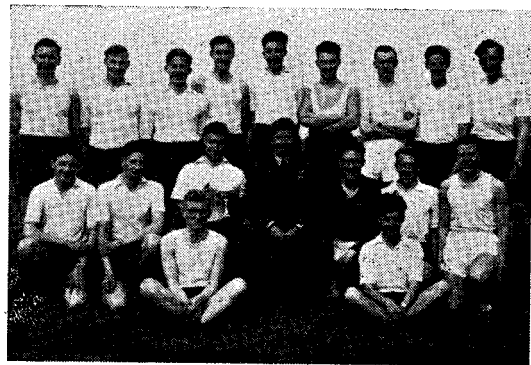
The support for Sporting events throughout the year has been energetic and successful. On several occasions the whole Wing has turned out to support cricket or soccer matches played Saturday mornings. The division of the Wing into Fitters and Mechanics has made it possible to have two distinct leagues which ran parallel to a third (the permanent staff league), for soccer and cricket. 16 Flight, 'D' Squadron emer-



Back Row. Fitter Class Leaders.
Thompson (Nav[C]D1) Palfreman (C47) Elton (R48). Slater (C48) Loxton (C49) Johnson (R46) Osborne (NavBFam2) Calgani (SR6)
Front Row.
Sawyer (R3) Wright (R49) Bolton (D/Fa)
Kemp (Nav[A]D2) Bond (Nav[C]D3) Glasgow (Nav[G]DI) Allwright (Nav[A]D3)

ged winners of the Wing Soccer league after beating 8 Flight, 'B' Squadron. In the cricket league, 8 flight came to the top of the Mechanic league and 9 flight, 'C' Squadron, top of the fitters. 8 flight then went on to complete a highly successful season defeating 9 flight thus taking the Wing championship and finally winning their match against the Sergeant's Mess, winners of the Permanent Staff League, and so becoming the champion Flight/Section on the Station.

The Wing held its sports' day on an inter-squadron basis, with 'D' Squadron winning



Sq. Ldr. Haddon, D.F.C., with the successful 'D' Squadron Athletics Team.

with 108 points, followed by 'C' with 100, 'B' with 79 and 'A' with 44. 'D' squadron put up a very fine show, not so much by having indivi-



Mechanic Class Leaders

dual stars but by consistently putting up points with good 2nd, 3rd and 4th places. The Mechanic squadrons were by no means as large as 'C' and 'D' and their teams had to be selected from a much smaller number.

Jordan, 'D'; Bullen, 'A'; Rice, 'A'; Harris, 'B'; Lee, 'C'; and Caute, 'D' each won two events, but only Jordan was successful in taking a 1st place in the Station sports.

On the Station sports day, 'D' Squadron came 4th, with 53 points and certain individuals showed good form. Jordan won the $\frac{1}{2}$ mile in 2 mins. 5.4 secs, the One mile in 4 mins. 46 secs, and the Three Miles in 16 mins 12.5 secs, and was followed by Lee in second place in both the Mile and Three Miles. Lee, Jordan, Rice and Harris all went forward to the 27 Group Sports.

M. B. W.

LOCKING PERSONALITIES

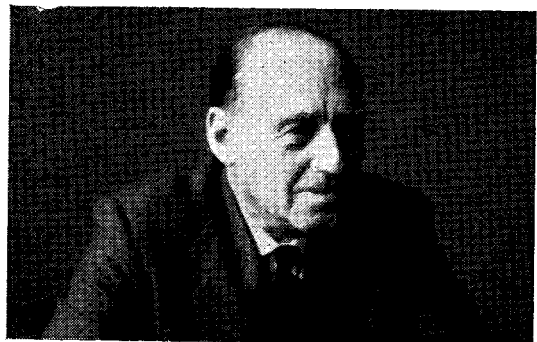
Mr. Murch Clerical Officer. P.2.

Mr. Murch's experience during the First World war would make an admirable adventure story in the Alan Ladd style. At the outbreak of the war in 1914, Mr. Murch joined the Hampshire Regiment and was sent to France shortly afterwards. He was wounded almost immediately and returned to U.K. in December 1914. He was sent back to the fray early the following year only to be wounded again and returned home. In January 1916, he was severely wounded in the Battle of the Somme in France.

After convalescence he was posted to India in February 1917. Misfortune, always near, he was torpedoed off the coast of Portuguese East Africa; after several hours in the water, he was picked up by a Dutch tramp steamer and eventually reached India in July 1917.

He joined the Machine Gun Corps, later to become the Tank Regiment, and was posted to the North West frontier for duty on the Khyber Pass. When a Medical officer and a Nursing sister were kidnapped by Warri tribesmen, Mr. Murch was a member of the rescue force that set out from Quetta; this expedition took three months and was equipped with motor cycles and machine guns in side-cars and Mr. Murch recalls the whole thing as an uncomfortable and unpleasant experience. The episode made newspaper headlines at the time, and both prisoners were eventually set free.

After a tour of duty on the Staff of the Adjutant General at Bombay Mr. Murch returned home and was demobilised. He was in business until 1938 when he joined the Civil Service for duty at the newly opened R.A.F. Station at Locking. After moving around the orderly rooms of the various Wings, in 1942, he reorganised the new W.A.A.F. Wing orderly room for training ex-balloon operators as flying mechanics. He was in the Central Drafting Office in S.H.Q. until February 1950 when he moved to the P.2 Office which he now administers.



Mr. Murch

ECHO-SOUNDING IN ANIMALS

It is generally known that bats possess a unique sense of sound enabling them to avoid obstacles when in flight, and probably to catch their flying insect prey. This has been dubbed 'bat radar,' but as ultrasonic waves are employed and not radio waves, the term 'bat sonar' would be preferable.

This echo-sounding device has only recently been demonstrated, so that it is surprising that it was hinted at as long ago as the late eighteenth century. Intrigued perhaps by the smallness of the bat's eye, an Italian naturalist, the Abbé Spallanzani, and a Frenchman M. Jurine carried out independent experiments since described as cruel. Having blinded some bats, they were able to show that their powers to avoid obstacles remained unimpaired. These results prompted wide speculation but no further experiments were attempted for over a hundred years. Casteret, the doyen of spelæologists, often watched bats flying in and out of caves and postulated a 'sixth sense.' Others suggested that some region of the wing or nose membrane was sensitive to small changes in atmospheric pressure.

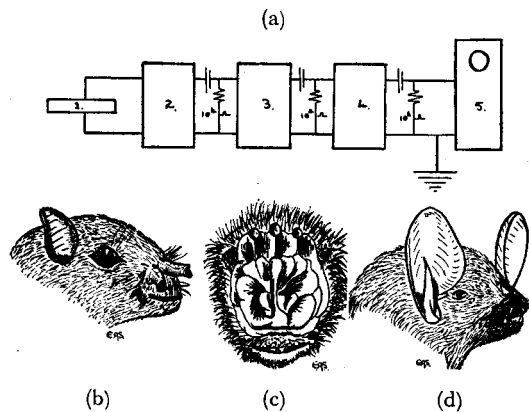
In 1920 a Cambridge professor interested in problems of vision studied the behaviour of bats in a totally lightproof room. The bats flew unerringly between large and small obstacles, and succeeded in alighting just as they did in daylight. By process of elimination he decided that bats must use the echoes of sounds too high for human ears for their orientation. The matter rested for a further twenty years before this theory was proved.

By 1940, the developments of radar and asdic may have prompted Drs. Griffin and Galambos at Harvard University to re-examine the problem. At first they repeated earlier experiments, this time with blindfolded bats. They then found that bats with or without a blindfold but with plugged ears failed to avoid objects in flight. They also failed if the mouth was covered, and to a certain extent if one ear only was plugged. With this strong evidence they went ahead to devise an ultrasonic analyser and soon proved the existence of these sounds.

Griffith's apparatus (fig 1a) consisted of a Western Electric condenser microphone -1, as the most sensitive transducer at the likely frequencies, a cathode follower stage -2, and two pre-

amplifier units (Ballantine 220) -3 and 4, providing an 80db gain. Their output was connected to the vertical amplifier of a cathode ray oscilloscope (Dumont 247) -5. To balance loss in microphone sensitivity — a decline of 12 db for successive octaves between 15 and 100 kc/sec. — filters were inserted to equalize the overall response and to suppress low frequency background noise. A cine record of the transient image on the oscilloscope screen was made. The whole apparatus was calibrated by introducing known voltages from an oscillator at the microphone terminals.

Fig. 1.



Griffin worked with the type of bat shown in Fig. 2 which possesses an inner flap to the ear called the tragus. These emitted squeaks of about 50 kc/sec. with the mouth open, between 10 and 50 times per second according to the distance between the bat and an obstacle. A rate of 200 per second was recorded for a bat diving after an insect. Each squeak lasted for 2 to 8 milliseconds, again according to the activity of the bat. The contraction of a minute ear muscle during squeaking closes the ear but it opens immediately to receive the echo. Thus the pattern of squeak 1 echo 1, squeak 2 echo 2, is maintained at a rate relative to the distance of the obstacle from the bat. Each squeak, if it were audible, would resemble a yelp as it drops about an octave from beginning to end. Thus

the bat orientates by means of the time lapse between sound emission and echo reception.

In Germany, Möhres, working with a different family of bats — the horseshoe bats — has a

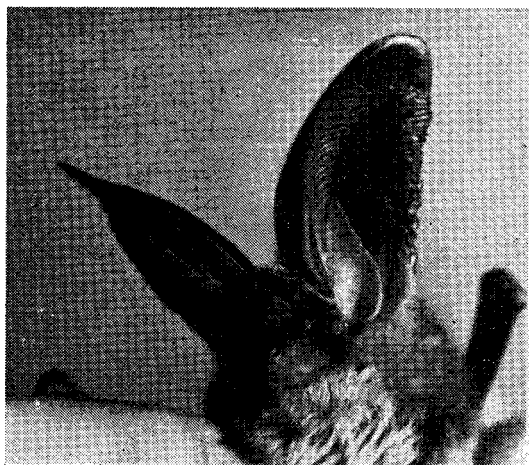


Fig. 2.

slightly different apparatus. A crystal microphone with a Seignette salt crystal suspended elastically in a perspex frame, is attached directly to a wide band amplifier enclosed in sorbo rubber to avoid response from ultrasonic waves reflected from walls, etc. The horseshoe bat, as in Fig. 3 has no tragus but possesses an elaborate horseshoe-shaped membrane on the nose. The squeaks of 80 to 100 kc/sec. are produced in the larynx but emitted via the nostrils with the mouth closed. The number of squeaks per second is less variable. At rest the bat emits four squeaks per second and in flight 5 - 6. There is evidence that it squeaks once for each breath taken. The actual horseshoe membrane is said by Möhres to enable these bats to transmit a cone of sound at a target. The nostrils lie at the base of the horse-shoe which in section is funnel-shaped and which when watched closely is seen to be in constant rhythmic motion while the bats are squeaking. The wavelength of an 80 kc/sec. squeak is 4.25 mm. while the distance between the nostrils is 2.1 mm. Thus the spherical wave from one nostril will overlap that from the other laterally with a phasic difference of half a wavelength, so that they laterally extinguish

each other. Each ear is thereby cut off from direct reception of the sound from the opposite nostril. Thus horseshoe bats orientate by means of the intensity of an echo from a directed beam.

It was at first thought that here were represented two distinct types of echo-location, seemingly isolated and with no intergrades. Recently however an Egyptian bat has been proved to have a mechanism involving both time lapse and intensity. As there are 400 species of bats the story can only be at its beginning. Some bats seem much better at echo-sounding than others. Is the size of the enormous ears of the long-eared bat, Fig. 2, a measure of its aerobic skill in plucking insects from the leaves of bushes? What part, if any, does the rest of the appendage in the horseshoe bat play, — and what of the grotesque nose membrane of the flower-nosed bat; Fig. 1c? Echo-sounding is of obvious value to cave-dwelling and insect-feeding bats but it is less likely to occur in the giant fruit-eating bats, Fig. 4. One of these, however, has an extraordinary nose, Fig 1b; does this emit directional sounds? Many South American bats including vampires have a horn-shaped nose-leaf, Fig. 5. Do these structures provide a surface on which sounds impinge to be conducted through the skull to the ear? Some Mexican bats feed on small fish — gaffing them just beneath the surface of quiet rivers with large hind feet. Evidence shows however that the fish are not located ultrasonically.

The production of sounds above the human range occurs in many groups of animals, and echo-sounding occurs in a few. The well known whirligig beetles skim jerkily over the surface of ponds. During their pauses, reflected surface waves from any solid objects are detected. The antennæ bears hairs which float in the surface film, and pick up these waves.

Many strange sounds have been recorded at depths of 10,000 feet in the Atlantic. Perhaps in these dark depths fish employ some echo-sounding device.

At least two species of birds nest in the complete darkness of caves, and fly at night in much the same way as bats. Dr. Griffin found that one of these, the oilbird of South America uses an echo-sounding device. Unlike bats however, the bird uses sounds of an audible frequency of 7 kc in clicks lasting only 1/2,000th of a second. Evidence shows that the cave-dwelling edible swiftlets of the East Indies have a similar mechanism

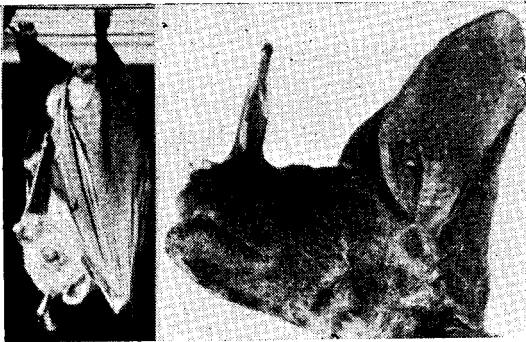


Fig. 4.

Fig. 5.

Sounds beyond human audibility are produced by marmosets, rats, many birds, grasshoppers, etc., etc. Quite apart from echo-sounding these sounds play a big part together with smell and touch in bringing members of a species or family together.

Finally, what of our own species? Experiments have shown that to a blind person hearing is the most important sense used to detect distant objects. Perhaps one day, encouraged by the oilbird, the blind will have a 'sonar torch' producing an audible signal on receipt of the echo from an ultrasonic beam.

Fig. 3 is from a photograph by Mr. John Hooper who has been leading ringing experiments which yield information about bat movements, numbers, and longevity. An aluminium ring can be seen on the bat's left wing. This bat 'took its own picture' by flying through a beam of light focussed on a photo-electric cell, thus releasing a $1/3,000$ th sec. exposure. I am very grateful to Flt. Lt. G. Barnett, Mr. Hans Kuhn, and Dr. Wallis of Guy's Hospital, for permission to reproduce the photographs in figs 2, 4 and 5 respectively.

E. A. SMITH.

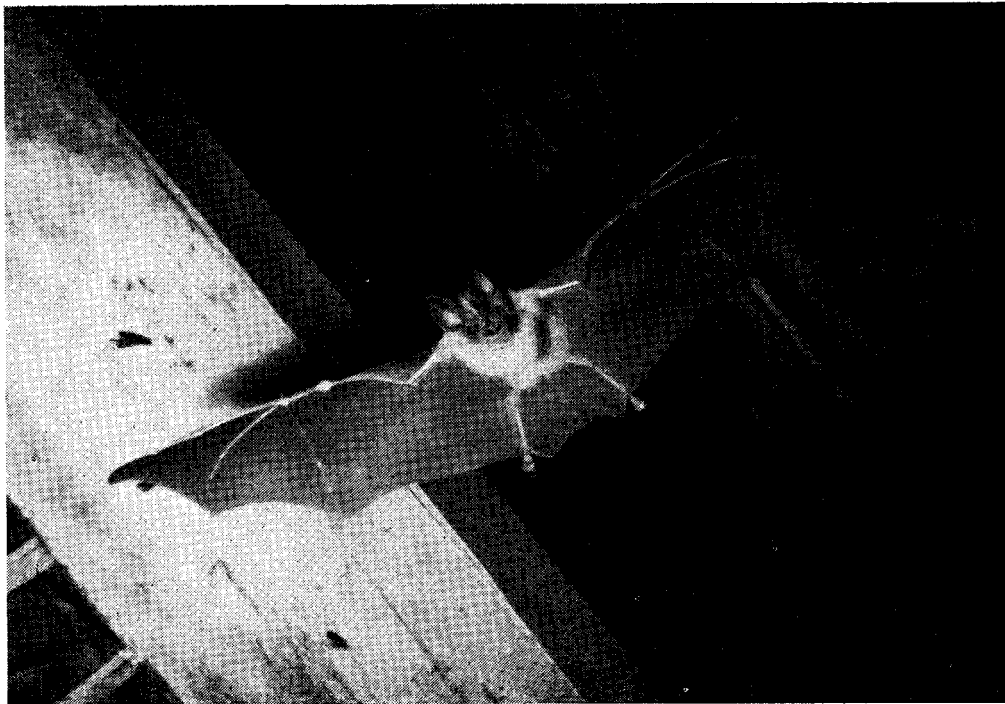


Fig. 3.

SPORTING PERSONALITIES

Flying Officer J. Blake

With the departure of Flying Officer John Blake from the Service in September of this year, much of the sparkle will go out of the Sporting life of R.A.F. Locking. Without question his career here has bordered on the unique, and from a Station point of view his major sporting triumph was his leadership of the Station Rugby team which won the R.A.F. Inter-Station Rugby Cup in such magnificent style last season. Anyone who witnessed the all important game against Yatesbury will recall Blake's almost superhuman efforts to break through their rugged defence, while in later games his determined running opened the way for some of the mammoth scores the team notched up on their triumphant rampage towards the Cup. His qualities as a Rugby player have never been questioned, as his regular appearance for Bristol and the R.A.F. will testify, but it was as a Captain that John Blake really made his mark. Under his supervision the Station Rugby team has trained consistently throughout the year building up a team spirit which is second to none on the station.

However, he did not limit his sporting activities to the Rugby field; indeed, he has been a prominent member of the Station Cricket team for the past three seasons, and played a major part in the side that won the R.A.F. cricket cup two years ago. Last year, after the departure of Padre Cooke, Blake took over the captaincy of the team, and although his efforts were not rewarded with the success that the Rugby club achieved, he was again a popular and intelligent captain. To the connoisseur the opening partnerships between Blake and Fl. Lt. 'Nobbie' Clarke may have left much to be desired, but for sheer entertainment they were priceless. On more than one occasion the score board read, Clarke 60 not out, Blake 3 not out, and all this in the first half-hour, though in fairness it must also be recorded that Blake was often in the fifties himself. Incidentally, he was a wicket-keeper of no mean ability, though he generally preferred to captain the side away from the wickets.

He was an outstanding 'Sportsman' in the real sense of the word, and although we all wish him well in his future civilian life, it is tempered by the knowledge that he will leave a gap at Locking which will be very difficult to fill.

NOW WE ARE THREE . . .



In the first issue of the magazine we were going to follow the careers of six Aircraft Apprentices of the newly arrived 79th Entry.

By the second issue, last year, their numbers had been reduced to five.

Now alas! We are three . . .

If A/A Paul Dennis, a member of 'B' Squadron .303 team, would only shoot a bit more of a line to his examiners, maybe we could have a picture of Three in the fourth edition. He has gone to the 80th Entry, and we hope that he manages to hold on.

C/A Rowland Tippler is a member of the Wing Hockey team; 'A' Squadron Hockey Captain, and now has to look after two huts of the new 85th Entry.

C/A Edward Chapman is doing very well in his Technical work; in fact both the C/A's are near the top of their classes; they both say how happy they are here and are glad they joined. (At least that is what they told our reporter, who sees no reason to doubt them.) Good show, both of you!

See you all next year.

G. B.

THE FINANCIAL CRISIS

Are you the thrifty type? Can you afford twenty (full-size) cigarettes on a Wednesday evening? Do you employ a flunkie to bear your load of sausage rolls away from the N.A.A.F.I.?

One can imagine the National Saving Campaign posters carrying some message such as the above, assuring the credulous stopper-and-gazer that "ninepence a day for one thousand years adds up to £11,700 and secures your future from want." Or words to that effect.

Thrifty habits are mighty fine and laudable. Take my friend A/A Nigel GeroffmyBedspace for example.

We find him one Wednesday morning on working parade, remonstrating, as usual, with Corporal I. A. M. Nemesis, who has just prodded him in the floating kidney and into his enraged earhole has whispered,

"Haircut!"

"But Corp," protests Nigel, "have a heart. This is Wednesday."

"Seven-thirty tonight!" is the ultimatum as Nemesis walks away and presents the better view of his charms.

"But that's impossible," argues our Nigel, heading the retreating figure off. One of the more unpleasant characteristics of the corporal breed is that they indulge in the habit of walking away to avoid logical argument. Nemesis is no exception and Nigel gets no change.

That evening, Nigel sits disconsolately bulling his boots out of long habit; he has refused offers of financial assistance on the quaint grounds that it is illegal for serving personnel to borrow money. Well, well . . .

He has decided not to report to Nemesis, but to keep out of his way, and get a haircut the next day; he will then assure Nemesis that he had reported to him as ordered but had found him out. One must develop a criminal type of mind when dealing with such nuisances as Nemesis.

Comes the dawn, and on the following morning a shifty-eyed unshaven character crawls over the surrounds of 358; Nigel picks his way between the normal litter of Vodka bottles, half-eaten Junior entries, ossified 'wads,' and reaches a dustbin, whence he tip-toes daintily to where the Squadron is forming up for the day's battle. At the opportune moment the dustbin erupts and A/A GeroffmyBedspace, N, is safely swallowed up in those stalwart marching files.



A/A Geroffmy Bedspace Emerges . . .

Midday. Nigel has spent ten minutes trying to find someone to change a florin to get sixpence for the coke machine: pay-parade is over and Nigel is temporarily loaded with spending stuff. Musing over his finances, he decides not to repay all that he owes, because that will leave him five bob in the red. He contemplates happier days, such as the time he will redeem his gold tooth — pawned during the slump last Christmas; he sucks the empty space in his upper incisors and thinks of the glad day when he will be able to whistle the blues again making life unbearable for contemporaries. But catastrophe falls on him, with the arrival of Corporal Nemesis in a very nasty and suspicious mood (as ever).

That evening, Nigel awaits the arrival of the Orderly Officer outside the Wing picquet post, and does some unhappy thinking. Apparently Nemesis had spent the whole of the previous evening in his bunk, for the very good reason that he had been unable to raise the bus-fare into 'Freedom.' Note for sociologists: Corporals also suffer from Wednesday night penury, which isn't such a bad thing after all.

Thus when our Nigel has failed to keep the rendez-vous, Nemesis has become more than ever anti-GeroffmyBedspace, which is indeed saying something.

So Justice is to be done. The Squadron Commander scans painfully through Nigel's inglorious records and finds little which makes enjoyable reading, in spite of the angelic Geroffmy-Bedspace countenance.

Nigel receives condign punishment to which he is no stranger. He knows money is his most

elusive and insidious enemy, and he makes a prodigious resolve that in future he will cast his cash into servitude by investing it in a P.O. savings account, which is also thought to be a good thing.

So perhaps there is a moral in this somewhere after all

B. S. GRIST,
81st Entry, 'C' Squadron.

76th ENTRY

Reviewing Officer :

AIR CHIEF MARSHALL SIR WALTER L. DAWSON,
K.C.B., C.B.E., D.S.O.

A brief summary of the Address of Air Chief Marshall Sir Walter Dawson, K.C.B., C.B.E., D.S.O., on the occasion of the graduation of the 76th Entry of Aircraft Apprentices from the Royal Air Force Station, Locking, on 18th December, 1956.

This was the Reviewing Officer's first visit to Locking, but not his first meeting with the School: just two weeks earlier he had had the pleasant task of presenting the 'Sigrist Boxing Trophy' to the Locking Apprentices; he thought they put up a very fine show of sportsmanship and temper control — qualities that would stand them in good stead throughout life.

He welcomed the parents and relatives and he wanted them to feel that their boys have joined a larger family without weakening their basic home ties.

Among those present were the Mayor and Mayoress of Weston-Super-Mare; Locking was proud of the honour that had recently been conferred on it, in being granted the freedom of the borough of Weston-Super-Mare; this gesture stressed the cordial relations that existed between Locking and the borough.

The Reviewing Officer endorsed the words of the Station Commander: those who were passing out could feel a real sense of achievement; some perhaps might have done better if they had done more regular private study — and he hoped the junior entries would take the hint.

In conclusion, Air Marshal Dawson reminded the audience that they were members of an



Air Chief Marshall Sir W. Dawson inspecting members of the 76th Entry.

organisation of which they could feel proud: it was worth the best they could give it.

THE PRIZES

TECHNICAL SUBJECTS :

Air Radio Fitters S.A.A. Jewson, P. J.

Ground Radar Fitters

C.A.A. Armstrong, C. V.

Ground Wireless Fitters

A.A. Davies, J. D. G.

Highest Educational Marks

C.A.A. Armstrong, C. V.

General Service Subjects

F.S.A.A. Farrington, R. C.

Highest Aggregate Marks

S.A.A. Jewson, P. J.

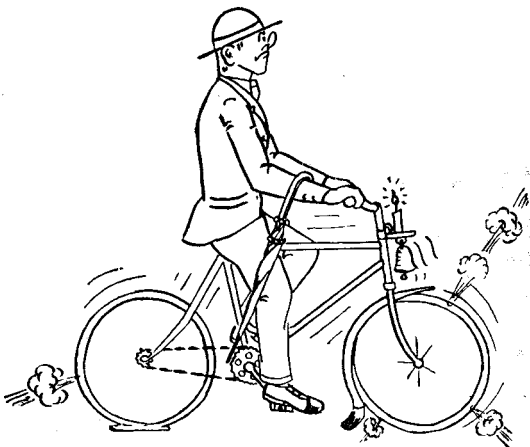
Victor Ludorum Trophy

F.S.A.A. Farrington, R. C.

Wing Championship ... 'A' Squadron.

SOME INTIMATIONS, RECOLLECTIONS AND REFLECTIONS ON EARLY MORNING CYCLING

I was recently obliged to cycle to camp every morning, for some five months, from Outer Weston-Superbia. My matinal pedal took me from the 9th Hole of Weston Golf Course, through Hutton, up the Bleadon Hill, curse it, down the Bleadon Hill, thank goodness, and so to Locking. During that time, I was introduced to a new world, which embraced a novel time concept, physical torture, spontaneous races, and newly-acquired friends going the other way.



Up the Bleadon Hill

My most important discovery has been that time is no longer a progression, e.g. from 00.00 to 23.59 hrs, repeated ad infinitum, but rather a series of concentric revolutions, which once begun, have no end. Thus mentally, each morning ride was but a continuation of the previous morning's, with no conventional gap. You know the feeling at half past seven in the morning; that great awareness that you are always doing this, getting up, getting dressed, getting shaved. You see, the mind is completely different at this phase of its daily existence, and so is time, which is but an elongation of the consciousness.

I have submitted my findings to International Geo-Temporal Institute, Milwaukee (I.G.I.M.). Their reply, to say the least, was circumspect, and I fancy that they will not publish my findings because it would certainly muck up all that.

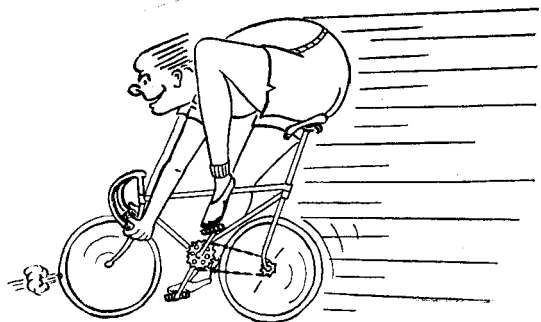
All time-pieces would have to be scrapped. Vested interests would be up in arms if clocks

and watches were fore-shortened. "Hickory-Dickory Dock" would lose its significance, and so on.

So much for the mind: What of the body? The flutter of the flag on the 9th Hole tells me whether the wind, that most helpful or hostile of elements to the cyclist, was for or agin' me. If it was 'for,' with the airy band at my back, my exertions were not over-laboured; if it was 'agin,' then sweat and tears, if not blood, would stream from me, as heat was generated beneath my great-coat and as the cold morning air battered against my defenceless eyes. On Parade mornings the wind was always at its 'Aginnest,' so I would arrive at Camp steaming (rapidly to condense and leave me cold), and hardly able to see through the lachrymose confluence coursing from my optic springs.

Added to this, I would probably have taken part in a race that morning. You've heard of the 'King of the Mountains' in the Tour de France; well, I am the 'King of the Mendips' in the Tour de Locking, and as such I am often called upon to defend my title. Hence my motto, 'Personne ne me passe,' which is inscribed below my crest, the famous emblazoned wheel, surmounted by handlebars rampant.

Should it be blowing 'agin,' then my one-gear cycle would give me the advantage, for high gears are useless in such conditions and I could comfortably take my man on the flat. If it was a following wind, then I would wait till the hills, which again would give my lower (but higher than his middle and bottom) gear the advantage. Thus weather, machines, know-



Down the Bleadon Hill

ledge of the route, are all factors in this early morning sport.

Of course, times are changing; the sport is not what it was. All these scooters, autocycles, mini-motors, motopeds and the like, are ruining the ride and detracting from racing. Nothing gives me more satisfaction than to pass a coughing, sputtering, motor-boosted cycle, with its pretentious number plates, flashy mirrors and horn which cannot be heard above the cough and splutter. I have even seen one with a 'G.B.' plate, which, I think you'll agree, is pushing things little far. And the smug look of the goggled driver as he urges his mongrel machine slowly past you, straining that pathetic splut to the limit. "Fancy

people still riding push bikes," he is saying. "How Quaint," while you choke in his fumes for the three minutes he needs to overtake.

Ah! Give me the honest endeavour of the open road, where the only exhaustion is bodily; where healthy competition and friendship are engendered. I made many friends along that stretch of road, from the 9th hole to the camp gates. I was one of the pushing, pedaling brotherhood of morning cyclists; and still now, at half past seven, as I eat my leisurely breakfast, my mind becomes transfused for a moment and I am out there again, winning another race, battling against the wind, and quietly shedding a tear — perhaps because I miss it.

P. P.

NO. 5 REGIONAL BAND

They say that variety is the spice of life, and if this is so the Regional Band must be one of the spiciest outfits in this part of the world. Not for us the daily drudgery in the same places, seeing the same faces, doing the same things day after day. Nearly every week of the year we are on tour over the Western counties, doing our musical job from Pembroke to Portsmouth.

Come with me and take a peep at some of the highlights of our year's work — perhaps you will feel you joined the wrong branch after all!

When Her Majesty the Queen visited Cornwall and Devon we saluted her at Barnstaple; before her arrival we entertained about 3,000 children with selections from our extensive repertoire. It wasn't extensive enough, however, for they clamoured for 'Davy Crocket.' You have never lived until you have stood in front of 3,000 children all yelling "We want Davy Crocket." But it was a very moving and inspiring sound when the Queen arrived and those same children sang 'God Save The Queen' with great gusto and sincerity.

Another interesting and different assignment early last year was the première of the film, 'Now and Forever,' starring Jeanette Scott. We started the show with half an hour's entertainment, and then provided all the fanfares for the official arrivals and speeches.

Then came our annual tour of A.O.C.'s parades; the weather largely determines the enjoyment we share in a well-run parade, and in that respect we had good luck generally.

However, the weather let us down badly when we played at the Fairford Carnival in Gloucestershire; this is a huge carnival and show and includes a funfare, a brass-band championship with twenty bands competing, a marvellous procession of decorative floats and fancy dresses, and a military tattoo. We were the resident band, playing the incidental music for all the turns, and we were on the stand from midday until 9.30 p.m. During the whole of that time it rained without ceasing; at the end we were producing plenty of 'gurgles' and it took us days to dry our ceremonial uniforms.

At R.A.F. Station St. Mawgan we attended a very moving service when the last of the Lancaster bombers was taken out of service; this was made doubly dramatic by the presence of crews of the U.S.A.F. with their super-Forts which were continually flying off to search for one of their aircraft which had crashed in the Atlantic.

We took part in the presentation parade when the station was given the Freedom of Weston-Super-Mare; we have attended similar functions at Andover and Old Sarum, but we felt that the parade from Locking was the most impressive.

At the Bath Tattoo, our Director, 'Hutch,' had the satisfying task of conducting the massed bands of the R.A.F., The Royal Navy, the Inniskilling Fusiliers, the Somerset Light infantry, and the American Army. He reports that it took him at least two A.O.C.'s parades to convince the Regional Band that it was more normal not

to Samba or Foxtrot on the march, in spite of what the Americans do.

We returned to normal when we went to Uxbridge for the Inter-Regional Band competition where we won the cup presented by Wing Commander Simms, O.B.E., Organising Director of Music, R.A.F. We were judged to be the best band on parade.

Apart from all this we have filled many other engagements, at Guest Nights, Cocktail Parties, Sports Days, Boxing Tournaments, Open Days and At-Homes, Battle of Britain Parades, Church Services, Concerts and also, unfortunately, Service Funerals.

The enthusiasm of the band is high; we lead an interesting and varied life, and we are not afraid of hard work, and when we appear in public we have but one aim: To Give Of Our Best.

SPORTING PERSONALITIES

SERGEANT KEOGH

Sergeant Keogh was posted to Locking from R.A.F. Weeton in October 1956. The Basketball club was particularly interested in this, as it meant that the current R.A.F. Captain and English International would greatly strengthen our side.

His Sporting activities show a gradual specialisation. In 1950 he was the R.A.F. breast-stroke champion; from 1950-52 he was javelin champion of 24 Group. Although he still does some athletics in season, they have somewhat fallen into the background in the face of his other sports.

Sergeant Keogh, is a member of the R.A.F. Badminton 2nd team and since his arrival at Locking has played for Somerset County. Unfortunately, as the Badminton season coincides with that of Basketball, the former sport has had to be neglected somewhat.

The Locking P.T.I. has now played for England on seven occasions,, his first representative

game being in September 1955, and it seems that he is sure of his place for some time to come. Sergeant Keogh has captained the R.A.F. and Technical Training Command basket-ball teams. With this experience, it is not surprising that he has done much to enable the Locking team to win the R.A.F. Inter-Station Basket ball cup this season. The team, being almost exclusively drawn from his own section, the gymnasium staff, has had considerable opportunity to practise and train together under Keogh's supervision. Thus I think, many members of the team will agree that he has helped them to improve their play individually and also done much to weld them into a Unit. It is noticeable that the long shots, always a gamble, have been greatly reduced during this present season, and individual players have changed their approach to the game.



Sgt. Keogh

Unassuming, and always ready to give advice, he encourages his team rather than drives them, often imparting some of his own calm to the other players when the situation is critical. On the court, Keogh appear deceptively leisurely, but those who have played against him know otherwise.

We thank him for his work at Locking and wish him a continued success in his sporting career.

ELECTRONICS AT WORK

By Squadron Leader S. W. Sarll, A.M.Britt. I.R.E.

“Automation is just around the corner.” The purpose of this article is to try and explain the meaning of this rather enigmatic phrase, and its significance for anyone studying radio practice.

If the popular press is to be believed, an increasing interest is being taken by the industrial world in automation, but what does it actually mean. A simple definition of automation as a generalisation would be the undertaking of routine, arduous, monotonous or repetitive human activities by a mechanical, hydraulic, electrical or electronic machine which only requires starting and stopping by human activity. This may appear rather ponderous but in fact automation in many simple forms has been in current use for some years without arousing public interest.

The mass production of an ever widening field of consumer goods has employed the principles of automation in a simple form by replacing manual skill with pure mechanical repetition. One essential link is missing from this simple automatic chain; some form of fault or error feedback path that may be used to correct the action to remove the error. Without this link, human intelligence must be used to determine the quality of the product, and reasoning used to decide on the corrective action necessary. If the necessity for that human intervention can be eliminated, then a near approach to pure automation can be achieved where human agency is necessary only to start and stop the process.

An increasing understanding of electronics and the almost limitless potentialities of its employment resulted from the hot-house atmosphere of World War Two. Since the war, electronic engineers have found more and more uses for the thermionic valve and its associated circuitry, some of them in a form completely divorced from conventional wireless techniques. Nowhere is this more so than in automation, where the essential feedback path forms a perfect medium for the highly sensitive, extremely fast-acting electronic circuits.

Electronics, the science governing the study and employment of electrons in all forms, is

comparatively well known in its application to the transmission and reception of intelligence by wire or electromagnetic waves. It is also true that the use of electronics to discover the range and direction of unseen objects, is well known as radar. Now Industry, including the commercial radio firms, are making use of electronics for an ever widening field of operations, but it is only in the last ten years that the prospect of automatic control of machine operations has appeared.

Before investigating in greater detail the actual processes of electronic control, it would be wise to consider of what interest to the qualified or potential radio engineering tradesman this subject may be.

At present the Royal Air Force is faced with the task of maintaining and operating a large number of varied and complex radio and radar installations — only one branch of electronics. As the complexity increases so the necessity for more highly qualified craftsmen increases; but since there is unfortunately a limit to the academic standard to which the service can afford to educate its technicians, then it is necessary to reduce the extent of a man's responsibility by specialisation. This inevitably leads to a greater number of technicians being required to cover the complete radio field. But there are not sufficient numbers of potential technicians willing to enter the service on a long term career, so the problem is merely transferred from one of insufficient academic background to one of insufficient quantity.

It should therefore be the aim of every right-thinking technician to widen his own field of knowledge so that he may not only enjoy a larger interest in life, but provide during his service the type of technician that the service needs. And what more rewarding science to study than electronics.

It is not difficult to imagine the administrative section of a future R.A.F. Station; equipment accounts for example, manned by only one or perhaps two accounts personnel but with a permanent electronic technician to look after an 'electronic brain' that has replaced the other accounts clerks. Industry is already using these

computing machines for a variety of functions such as solutions of complex mathematical problems, simulation of flight characteristics of supersonic aircraft and unmanned missiles to discover unknown behaviour, and a host of others. What is of prime interest here, is the electronic-computer which can control the manufacturing processes of a complex production line, or indicate the quantity of cream buns required at a particular well known tea shop in London. Yes, it is true that the arduous labours of a number of humans engaged upon routine clerical, accounting, or control processes has already been superseded by the modern wonder of an electronic machine.

This type of electronic computer is being developed and produced by a number of well known electronic engineering companies in this country and abroad, and it may not be so very many years before they are used in the service to improve its efficiency and make more practical use of available manpower.

At the present state of the art, electronic computers, which incidentally cannot really 'think,' fall into two categories and both have applications in process control for automation or in replacement for routine clerical processes. Of the two, the binary digital computer is the most versatile, while the analogue computer is more suitable for specific functions. Only the digital computer can be considered in this short article.

Digital Computer

Quite a variety of electronic digital computers have been developed since the early Manchester University computer but they all rely upon the same fundamental principles, which is all that can be considered at this stage. Numerous detailed technical descriptions have appeared during the past few years in the various engineering journals.

An electronic digital computer possesses the characteristics of accepting a particular problem, provided it is converted into a form that the computer can understand, carrying out certain arithmetical processes upon that problem, storing the various answers as it progresses and finally giving forth the solution in a form which can be interpreted by the user. A computer is capable of carrying out all those processes on a very complex problem having a large number of relevant factors, and giving a solution in a matter of minutes that would have occupied

a team of trained mathematicians some many months to produce. This is simply due to the very high speed at which electronic circuits operate.

Unfortunately electronic circuits have a disinclination to remain constant and any device which relies upon the circuit parameters remaining stable over long periods is likely to be most unreliable. The most reliable use of electronics is achieved by asking the circuits to assume only two states:— on or off, or more explicitly a valve heavily conducting or completely cut off by a bias. Such a 'two-state' circuit is difficult to relate to ordinary decimal arithmetic so use is made of a simple form of binary (or two-state) arithmetic to carry out the processes.

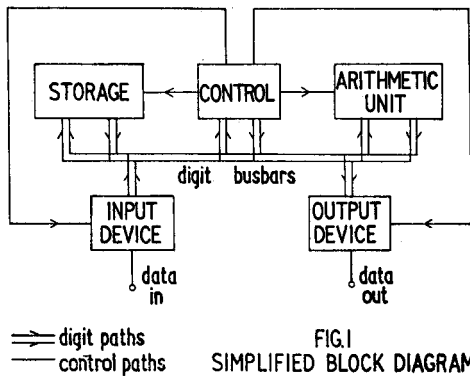
A computer must have an electronic memory but it need not have a brain capable of thinking. What actually happens is that the information to be processed is inserted and stored. All the processes to be made by the computer are of a simple nature such as adding, subtracting, multiplying and are 'told' to the machine in the form of a logical 'programme' of operations. This actual programme is also stored along with the input information which has to be operated upon. Now the computer can be told to start and it follows its instructions in sequence until the last instruction tells it to display its solution in some form.

Following the plan outlined above the computer does not rely upon human intervention from start to finish and can therefore operate at its own speed. A staff of skilled 'programmers' can be preparing a further set of instructions ready for when it has completed one problem. Since it operates so very rapidly; for example in one computer it takes only 2 milliseconds to multiply two 11 decimal digit numbers, a computer can be set to solve the same problem twice to check the accuracy of each solution.

It should now be possible to see just what a computer comprises and figure 1 is a simplified block diagram of a typical digital computer.

It can be seen that all information is fed into the computer via an input unit which converts the numbers, values, instructions, into a code that the computer can understand. These codes are stored in the storage unit, and under the direction of the control unit, are passed out, via the digit bus-bars, to the arithmetic unit. From the arithmetic unit the answers are replaced into the store for future use, or at the end of a

programme are passed to the output unit where they become intelligible as numbers, values or letters. At each stage, or 'beat' in the complete rhythm, a pre-ordained action takes place. Each of these actions is triggered by the control unit using a number of 'gates' in the inputs and outputs of each part of the computer. For, example, the multiplier and the multiplicand may be read out of the store and passed along the digit bus bars to the arithmetic unit. The answer to the multiplication process is returned via the bus-bars to the store. If that answer was the final conclusion it would be routed to the output unit, again under instructions from the control unit.



To make use of the two possible states of the circuitry, the computer must see all its inputs as binary digits. In a computer capable of handling, say, 24 binary digits, one could work upon decimal numbers from 0 to 16,777,215. What is the relationship between these two facts, and how can ordinary decimal numbers be represented by binary digits? Take for example a lamp which has two conditions:— on, or off. If its 'on' state is made to represent a 'one,' and its 'off' state a 'nought' then that single binary (two state) lamp or digit can represent decimal 1 or 0. If a second lamp is used in conjunction, each having two states, then while the first lamp represents 1 or 0 the second represents 2 or 0. This can be extended for any number of lamps — or binary digits, i.e.

No. of binary digits	decimal number
1	0 or 1
2	0 or 2
3	0 or 4
4	0 or 8
5	etc. 0 or 16

If there are 5 lamps each having the decimal value assigned to them above, they could be put on or off in 32 possible combinations. To indicate decimal number 25, the lamps would be set up thus:—

Value 16 8 4 2 1
 Lamp ON ON OFF OFF ON = 25
 The total is discovered by adding the decimal values of the ON digits.

From this it follows that, using binary arithmetic, decimal number 25 is written as:—

1 1 0 0 1 (adding from right to left)
 i.e. 1 + 8 + 16 = 25

Each succeeding digit has a value equal to twice that of the previous digit so any number can be represented in binary digits, provided enough digits are used.

The arithmetic unit is used to carry out simple arithmetical processes on the appropriate digits in the sequence determined by the control instructions. Its actual method is quite complex but it follows simple rules: To add two 5 digit values for example, the state (either 0 or 1) of the smallest significant digits are 'sensed' and if both are 0 the answer is 0: If they are 0 and a 1 the answer is 1; if they are both 1 the answer is 0 and 'carry one.' If a carry 1 is added to 1, the answer is '1 carry one.'

Binary	Decimal
32 16 8 4 2 1	
1 1 0 0 1	= 25
0 1 1 0 1	= 13
1 0 0 1 1 0	= 38

The rules for binary arithmetic are similar to those for decimal arithmetic and examples can quickly be worked out using the rules. Other arithmetical processes can be carried out in a similar manner.

Electronic computers use short pulses, of the order of 0.1 s to 5 s, to denote each binary digit. Pulses are assembled into 'trains' whose length depends upon the 'rhythm' of the computer. If the machine is designed to handle 24

'bits' (binary digits) that is called a 'word' and some machines can store simultaneously more than 4,000 words.

Most computers are of the serial type; digit pulses occur in time sequence and are acted upon in a logical order. Since control instructions as well as quantities are accepted by the machines as digit pulses the composition of a complete pulse train will be very complex. These pulse trains are inserted into the computer via the input device, using specially prepared punched cards or punched tape with a very high speed electronic tape reader, capable of reading some 100 'words' per minute.

Depending upon the 'programme' the computer is required to follow, so the pulses representing instructions, control orders and quantities are routed into storage elements. Three main types of store are used in digital computers today, cathode ray tubes, magnetic drums, and delay lines.

A C.R.T. store has a metal plate in place of the normal glass screen, and different charge patterns are built up on the plate by modulating the electron beam from the digit pulses. The charge pattern, representing some 1280 digits, is 'read out' and regenerated in the tube every cycle of the computer. If the information to be stored is changed, then the old pattern is replaced with the new and the process continues. Fig. 2 is a simplified block diagram of such a store showing the 'readout' and 'write in' units, together with the storage tube and amplifiers.

To provide larger storage capacity than can be achieved with C.R.T. stores, rotating magnetic drum stores have been developed. These are capable of storing some 400,000 digits in the form of small discrete areas of magnetic fields in the magnetic medium of the drum surface. One such storage drum has a 0.0005" nickel coating on the 10" diameter surface, which is 12" high. On this surface 150 circular tracks each contain 2,560 digits. A notation '1' is recorded as a minute magnetised area with the 'push-pull' magnetic lines arranged face to face. A notation '0' is stored as the fields back to back. Small 'reading' and 'writing' heads are fixed close to the drum surface which are similar to, though smaller than, those used on commercial tape recording machines.

Since the 'access time' of a magnetic drum store is slightly longer than that for a C.R.T.

store, and governs the speed at which the computer can operate, the whole rhythm of the machine is synchronised to the rotation of the magnetic drum.

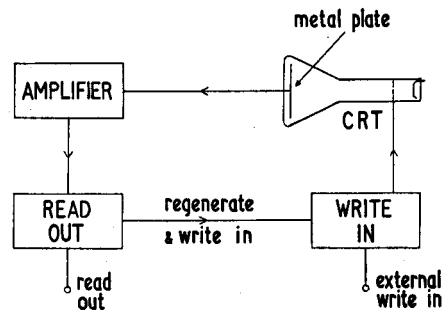


FIG 2
CATHODE RAY TUBE STORE

Acoustic delay lines are usually long metal tubes containing mercury with crystals at either end. Digit pulse trains modulate high frequency signals which occupy a finite time in travelling from one end of the tube to the other. If the delay resulting is just longer than the longest pulse train then a series of binary digits can be stored for ever by merely sending them round via a regenerative circuit again, and again. These delay lines have a very limited capacity but are very useful for, say, holding the multiplier or the multiplicand in the arithmetic unit.

To delve into the details of operation of any one computer is beyond the scope of this article. The foregoing is intended to illustrate how electronics is being used to solve complex problems in extremely short time periods. How the answers are extracted from the output unit and used, depends upon the operational use of the computer. Some are made to print normal page type, others punch cards or tape, while others, intended to control industrial processes operate directly upon other computers. These latter are generally of the analogue type where specific quantities are represented by AC or DC voltages to a fixed scale. All computations are carried out on voltage levels, and the final result may cause a milling machine to cut a particular shape in a piece of metal. What that shape is, will depend upon the requirements. This in turn depends upon the shape or size of other parts

to which this one must be mated. It would be pointless, for example, to machine a piston to fit a 1½ litre engine, and attempt to mate it with a 2½ litre cylinder being machined elsewhere. Numerous managerial functions which are essential to prevent such an occurrence can be delegated entirely to a computer. It is then possible for the exact and perfect shape required to be manufactured entirely at the command of electronic machines where only the necessary input information must be handled by humans.

Conclusion

It is unfortunate that an article of this nature must of necessity be rather sketchy. Other more precise and detailed treatise can be found in any technical library by the inquisitive wishing to learn more. If through the medium of this annual review a window has been opened and the sphere of interest of any radio technician has been widened, both he and the Royal Air Force will surely benefit.

LOCKING GOLFING SOCIETY

The past year has perhaps been more marked by the loss of many long standing members of the Society than for brilliant achievements. Names such as Sqn. Ldr. Fincher, Sgt. Kay, Cpl. Collins, S.A.C. Fraser spring to mind and just as we go to press comes news of W.O. McGivern's posting overseas. The departure of these players and many others is deeply regretted and will be keenly felt. Our very best wishes go with them.

During the year some very low handicap players passed through the station. Unfortunately they were on short training courses and their stay was all too brief.

The spirit of the Society remains high but at the present time our playing strength is lower than we would wish. However we hope for new blood in the months that lie ahead, and look forward to another successful season.

During 1956 many enjoyable competitions and matches were arranged. Once again advantage was taken of the apprentices summer camp at Braunton to play on the well known Saunton course with its sand dunes and reeds to make things difficult.

The four ball bogey competition was won by Sqn. Ldr. Fincher and Sgt. Kay, whilst Sqn. Ldr. Fincher, as ever well to the fore, won the singles Medal competition. The Station Bogey cup, which is competed for annually at Worlebury, was also won by Sqn. Ldr. Fincher, from



Golfers who took part in the competitions at Saunton Course.

which it will be gathered he had an extremely successful season, and is a very consistent player.

It was only after a very tough fight with this same player, that Warrant Officer Nash emerged winner of the final for the station Match Play cup.

A fitting reward for Sgt. Kay's dogged persistence was the winning of the Station Medal cup competition. During the year he worked extremely hard as the Society's secretary, and as already stated his loss will be very keenly felt.

In outside matches the Society was very successful beating Bristol Aeroplane Company Golfing Society in both the four ball and singles matches, the Somerset Police in a four ball match (the only encounter), whilst although the singles match against our old friends the Worle-

bury Golf Club was lost, we won back the Four Ball Cup thus reversing the previous years results with the Club.

Members of the Society had a very instructive and entertaining afternoon officiating at Worlebury when those masters of golf, Bobby Locke, Dai Rees, Peter Allis and Ken Bousfield played an exhibition match, in aid of the National Spastics Society funds.

Once again the Society extends a warm greeting to all new members and those playing off of 24 are as welcome as the player with a single figure handicap.

V. K. C.

TO MAKE YOU THINK

Solutions to the Problems given in last issue

- (a) A glass X is half filled with water and a similar glass Y is half filled with wine. From Y a teaspoonful of wine is taken and put into X. From the mixture a teaspoonful is taken and put into the wine. Is the quantity of water removed from X greater or less than the quantity of wine removed from Y?

Strange as it may seem, at the end, the amounts of water and wine removed from the respective glasses are the same.

V = volume of water in glass X

V = volume of water in glass Y

v = volume contained in a teaspoon

After 1st operation

Volume of mixture in X = $V + v$

Volume of wine in Y = $V - v$

Of the mixture in X,

$\frac{V}{v+V}$ is water and $\frac{v}{v+V}$ is wine.

Therefore in a spoonful of the mixture there is :

$\frac{V}{v+V} v$ of water and $\frac{v}{v+V} v$ of wine.

After 2nd operation

Volume of mixture in X = V

Volume of mixture in Y = V

Of the mixture in X, $\frac{V}{v+V}$ is water.

Therefore the amount of water in X is

$$\frac{V}{v+V} V = \frac{V^2}{v+V}$$

In Y there is $(V - v) + \frac{v}{v+V} v$ of wine.

$$\text{i.e. } \frac{V^2}{v+V}$$

Thus the quantity of water remaining in X is the same as the quantity of wine remaining in Y.

(b) In the following magic square, the central figure is 5

4	9	2
3	5	7
8	1	6

Show that, in fact, any magic square using the numbers 1 to 9 must have the central figure as 5.

Here is one solution.

Let x be the central number.

The two diagonals add up to 45; they are, however, equivalent to the two outer rows plus $3x$. But the two outer rows add up to 30.

Therefore: $3x = 15$ and $x = 5$

a	b	c
	x	
d	e	f

TO KEEP YOU THINKING

A midget lived on the top floor of a five storey building. He seemed an odd fellow, apart from being a midget, for he always used the stairs in going up to his flat but invariably came down in the lift. But he was not so queer as you think. Why?

LOCKING SCOUT TROOP

The present Scout Troop has now been running for 18 months. We are very proud of our progress and efficiency that we have maintained throughout the past months. When our Troop started two years ago it consisted only of three members but now we have 15. Most of the Troop have received their Tenderfoot and Second Class. Our members are very enthusiastic about hiking and camping which the Scout Movement encourages.

GOING ON LEAVE

What pictures those magic words conjure up in the imagination.

Every so often, it is decreed that even Apprentice Schools should break up and all the occupants should be packed to their respective Mums and Dads. Yes, Apprentices do have Dad's, despite the rumours that jealous N.C.O's spread on that subject.

On the golden day everyone is up bright and early owing to the fact that no one has been to bed. Breakfast is served at some unearthly hour but everyone is at the Mess fifteen minutes before time, howling to be let in. The scene reminds the casual eyewitness of 'le Quatorze Juillet,' with the angry crowd attempting to take the Bastille.

After an interminable delay some brave spirit within responds to the rending timber and shattering glass. Sounds ensue of chairs rattling and bolts being drawn back in a breathless expectant hush, then a seething swarm surges through towards the food.

One by one the kitchen staff creeps out from behind tea urns and piled plates and, mid furtive whisperings the chief cook advocates two minutes silence for poor Headstrong Harry, the brave new boy who volunteered to fling open the cookhouse portals and bid the screaming horde enter.

After breakfast comes a hectic rush back to the billet in order to be in time for the Flight Commander's inspection. Three hours later he leaps gaily around ensuring that all windows are I.R.A. proof, completely unconscious of the twenty pairs of eyes which eagerly follow his progress, or of the twenty pairs of feet which tap patiently upon the highly polished floor. (Incidentally, speaking of Edwardians, even the mice have been issued with crepe-soles for traversing the perilous 358 centre, especially when the Barrack Competition is on.).

Acknowledging in no uncertain manner the wistful looks bestowed upon us by the less for-

tunate Wing fellows, with passes and railway warrants clutched tightly, we stream in triumphant profusion towards Three Shed. At this point, one usually wakes to the realisation that all this is not a dream, and that home is just around the corner.

A breathless silence hangs over the huge enclosed space in Three Shed as the first Apprentice is paid. "Thirty Pounds!"

The echo is barely allowed to die away, before it is caught up by numerous other echoes, and a sound of wind sighing through leafy glades breaks loose.

The Paying Officer grows the colour of boiled beetroot. His eyes stare glassily at the notes he is ladling out. Perspiration stands out in little beads on his forehead. He passes a dry tongue over his lips. Resentment rises in his bosom. What use were Apprentices anyway? All that money . . . As the payments continue and the little echoes became louder and louder until they are demons shrieking in his ears, he can stand it no longer.

"Shut up! Shut up!" he croaks.

"I refuse to pay anyone else until you are silent." With a superhuman effort he controls himself and growls, "Carry on."

After a decade it seems, the pay parade is over. The last figure has disappeared over the horizon; the last taxi is just pulling away from the Guard Room. A lone figure slumps in his chair, nerveless fingers plucking a cigarette from a moth-eaten case. Suddenly a hand appears before the paying officer's face, and he catches a glimpse of gold watch and cufflinks, before looking up to see where the diamond studded cigarette lighter had come from.

Catching the unbelieving look on the other's face, the Corporal Apprentice assures him: 'I'm staying on camp, Sir. Can't afford it this time.'

A/A B. S. Grist,
81st Entry, "C" Squadron.

558537 F/Sgt. P. M. SALTER, B.E.M.

Ft. Sgt. Salter receiving the B.E.M. from Air Commodore J. B. M. Wallis, O.B.E.

April 6th, 1957, was a happy day for the Station, when, on behalf of the Queen, the A.O.C. H.Q. 27 Group presented the British Empire Medal to F/Sgt. P. M. Salter.

We would like to record our appreciation and pride in F/Sgt. Salter for the honour accorded to him.

In his two years at Locking the F/Sgt. re-organised The Analysis and Investigation Section into a very efficient unit.

Originally — this he likes to keep very quiet — he was a Halton apprentice, but transferred from the Fitter Trade to Clerk Statistics in 1951.

We don't know, but think he may be the first B.E.M. in the new trade group, and once again we say "Congratulations Flight Sergeant."

NATIONAL SAVINGS

Station Savings Officer — Fg. Off. SALMON.
No. 1 Wing — Flt. Lt. G. P. FRY.
No. 3 Wing —

Fg. Off. J. McDONALD

The importance of the Savings campaign has been realised by Locking personnel to a greater extent than at any other Station in the Group. More than 75% make regular contributions through voluntary savings and many more buy savings stamps and savings certificates.

In the last four months the amount invested in National Savings increased by a third to a total of over £1500. We even hope to exceed this in the current year.

I Wonder . . .

Who could it be who acts so free,
 Who fools about in endless spree,
 Who couldn't care less for anyone,
 Who frequently sings some low-down song?
 Who keeps sick people up at nights,
 Who argues till you say he's right,
 Who lays in bed when reveille sounds,
 And often smokes while out of bounds?
 Who polishes buttons and spits on boots
 And joins the band of bull-mad brutes;
 Illegal creases and crew-cut hair,
 Yet when siving comes, he'll do his share?
 Who wears those shining slashed peak hats
 And doesn't like the N.S. chaps;
 Who often chases N.A.A.F.I. girls,
 The ones who don't have pinned up curls?
 Who pays no attention in class each day,
 Who hacks at desks in friendly play,
 Who pushes in that N.A.A.F.I. queue,
 Then passes the blame back onto you?
 Who whips away to Worle golf club
 Then quietly slips to the Windsor pub,
 Who whips wireless spares to sell in town
 Anything for a gash half-crown?
 Who goes special sick when it's P.T. or drill
 And say he's a pain or a terrible chill,
 When it's C.O.'s parade and it's all best blue
 Who hides in that field near S.S.Q.?
 Who could it be that spends his time
 On 'Jankers' parade for some silly crime;
 Who jeers and shouts in the Astra at nights,
 And is always fusing electric lights?
 But being more serious, who can smile
 And have a joke when others writhe
 And muck in together and share the rough
 And prove he really is quite tough?
 Who proves that Service spirit's great
 And is always prepared to help his mate,
 And isn't a bad bloke really you know,
 Well, who is it? An Apprentice!
 I'm telling you so.

FLEMING'S TECHNIQUE . . . BAH !!!

Self-consciousness is the Englishman's burden — he lives in a permanent world of embarrassment — he avoids his next door neighbour like the plague — he hides behind his newspaper on the train — he is perpetually terrified of being involved in some sort of public scene. This disability is a great social handicap and it can also have severe financial repercussions. The self-conscious man is constantly submitting to the demands of every brash vacuum salesman, every door-to-door charity peddler and every 'aven't had a fag all day guv' type of person, all because of his determination to avoid scenes and arguments at all costs.

Truly, the self-conscious man has a dog's life, and until recently I was no exception.

Strangely enough, it was not until I had succumbed, yet once again, to the low cunning of a second hand book dealer, who persuaded me, much against my will, to buy a volume entitled, 'Guilt Complexes In Modern Man,' that I began to overcome my disability: at least, so I thought.

Sitting in the bus, flicking through the pages of my latest acquisition, my eye caught the heading; 'The Guilt of the Self-Conscious.' I was amazed to learn that I had been suffering from an acute 'anxiety neurosis' since early childhood; that my lack of drive and initiative, my shy, retiring nature, was a direct result of 'Aggressive Conditioning' by over-zealous parents. My inability to fulfil parental ambitions had produced a mammoth sized guilt-complex which bordered on 'depressive mania.' There was a final gloomy chapter, warning the reader of the suicidal tendencies which often develop in the later stages of depressive mania such as mine. I was most disturbed.

The very next day, I presented my problem to my local doctor. I made a complete diagnosis of my case for him, outlining the origin and course of my guilt complex, explaining that I was entering the final stages of depressive mania and concluding that before long, I would probably blow my brains out. He remained quite calm, remarking unsympathetically that if I didn't stop wasting his time, he would be pleased to do the job for me. His obvious ignorance of the terms I had used, convinced me that a second opinion was necessary, and I was fortunate enough to find a young Americanised

doctor who listened most patiently as I unburdened myself to him. He made copious notes which he studied at some length once I had finished. He agreed with my diagnosis and suggested that Fleming's 'Assertive Technique' might produce some startling results. The Fleming method was based on the 'stare them out' principle; on every possible occasion, I was to force myself to be aggressive, bellicose, beligerent and even brutal in my dealings with my fellow creatures. As a solution, it appalled me, but since the alternative was too ghastly to contemplate, I agreed to give it a try — twenty-five guineas.

It occured to me, that since I had suffered so much at the hands of unscrupulous salesmen, it would be a good idea to put Fleming's method to the test, by reversing the roles. I would advertise some quite ordinary piece of domestic furniture, and attempt to sell it for an exorbitant sum. If I succeeded, then the metamorphosis would be complete, and my self-consciousness a thing of the past



Some quite ordinary piece of domestic furniture

"Come in," I boomed, staring the unsuspecting visitor between the eyes. He faltered on the

doorstep. I was pleased by the success of this early strategem.

"Good evening," he mumbled feebly. "I've come about the Radio-gram." I ushered him into the hall, nudging him towards the lounge. "This was going to be easy," I told myself as I closed the door and followed him in.

"Well now," I continued, pushing him towards the Radio-gram. "No use beating about the bush. Here's the gram and a mighty good one at that. Cost me a fortune two years ago." The accomplished ease of my lying staggered me. I stared brazenly into his watery eyes, as though challenging him to dispute the fact. I was thoroughly enjoying myself.

"Yes," he replied meekly. "I can see it's a good one, and you've kept it well, too."

"Help yourself," I said, warming to the theme. I made a mental note to increase the price by twenty pounds. This character would swallow anything. "Have a good look at it; play a few records; turn the thing inside out; it's as sound as a bell. Mind you, I wouldn't dream of selling, but I'm leaving the country shortly."

He poked about with the machine for a few minutes, muttering to himself, nodding his head approvingly from time to time. He listened to the various programmes, twiddled all the knobs, tinkered about at the back of the set and played a record of the Luton Girls singing, 'Nymphs and Shepherds.' More approving nods and appreciative murmurs.

"Satisfied," I enquired as he finished his inspection.

"Absolutely," he replied, almost with enthusiasm. "Just the sort of thing the firm is looking for." His voice took on a humble note as though I were doing him a favour by letting him buy the thing.

"Very well then," I said, continuing the pose of the assured business man. "Let's get down to terms. No need to waste time. I'll tell you what I'll do. I won't take a penny more than eighty pound for it. I can't be fairer than that, can I?"

Once more, the humble look, the watery eyes, the approving nods. "It's a bargain," I persisted pushing home my initial advantage. "It'll last a life time," I paused, and was about to press on in further praise of the instrument when he said,

"Eighty pounds seems quite reasonable."

I was flabbergasted. No bargaining; no hag-

gling; no reluctant dropping of the price. "Good old Fleming," I murmured to myself.

"Well, that's settled," I said hurriedly, not giving him time to change his mind. "Can you take it now, or will you send someone in the morning?"

"Oh, in the morning I think," he said, taking out his cheque book.

"Make it out to M. J. Martin," I said, smiling inwardly as I pictured the astonishment of my bank manager when he received such an unusual amount into my account.

He took out his pen and began to write. I almost breathed the words onto the cheque. He paused above the space for the signature. I waited impatiently. The pen wavered. I cursed inwardly. He put the pen down. I almost snarled with frustration.

"Anything wrong?" I asked, trying to keep calm.

"Wrong?" he questioned, a weak smile flitting across his face. "No, nothing wrong. It's just that I've remembered something Mr. Winstone mentioned as I was leaving this afternoon. He's the manager, you know." I didn't know.

"Go on," I said, trying desperately to disguise the quaver of indecision which was creeping into my voice.

"Well," he said, "For goodness sake don't bring back an R.48."

"What the devil are R.48's?" I demanded, raising my voice in genuine anger at this infuriating little man.

He didn't answer immediately, but walked thoughtfully across to the radio-gram, where he bent down to examine something at the back. He made a peculiar clucking noise — a despairing noise — an apologetic noise. My heart sank.

"Well," I said, fearing the worst.

"What a pity," he murmured, almost to himself. "It's an R.48 alright. Dear me, dear me. What a great pity."

He looked into my face, and I felt my eyes dropping before his watery gaze.

"Most distressing," he cooed. "You see, R.48 is the serial number given to certain models of this type, and I'm afraid they're more trouble than they're worth." He was most apologetic. I gazed blankly at the back of the radio-gram as he pointed out the offending marks which I had failed to notice previously. Sure enough, there they were, printed on a little, shiny, copper disc, which was attached by wire to the back frame. He went into a long highly technical dis-

sertation on frequencies, valves, tuning bands and circuits, all of which was intended to prove that my radio-gram was in imminent danger of wheezing to a permanent standstill.

He picked up his cheque book, and with a "So sorry to have troubled you," moved towards the door. In desperation I brought him back.

"Well, what will you give me for it?" I asked humbly.

There was a long pregnant silence.

"I suppose we could knock it apart and use it for spares," he said thinly.

I flinched.

"The frame might polish up — might get a few shillings for it."

I said nothing.

"I think seven pounds ten shillings might be a fair offer," he said.

I gulped in disbelief, but, broken and frustrated, I accepted, and we parted with a perfunctory handshake. There was a curious smile on his face as he handed me the cheque for seven pounds ten shillings.

It wasn't until a few days later, when I came across three small, shiny, copper discs, attached to small pieces of wire, on the carpet near the wall where I kept the Radio-gram, that I had cause to remember that curious smile. Three R.48 discs.

"How on earth . . .?" The slow dawn of realisation. I recalled the watery eyes, the humble tone, the apologetic gestures — Surely such a creature couldn't have been capable of such knavery, such duplicity.

Later, when I saw a Radio-gram, which looked more than a little like my R.48 displayed in the window of a firm which he had represented, price £75, the whole hideous plot became clear to me. He had 'Counter-Fleminged' me from the very beginning. I had been admiring my forceful eloquence, he had been fixing a little copper disc onto my radio-gram. A quick twist of wire and his story about R.48's had sufficient authenticity to convince me of the worthlessness of my own radio-gram.

I have now reached the last, and most virulent stages of depressive mania — I have lost all faith in myself and the world — the only thing which stops me from buying the gun, is the fear that they might swindle me over that too.

J. J. F.

75th ENTRY

Reviewing Officer :

AIR MARSHALL SIR RICHARD L. R. ATCHERLEY,
K.B.E., C.B., A.F.C.

A brief summary of the Address of Air Marshall Sir Richard L. R. Atcherley K.B.E., C.B., A.F.C. on the graduation of the 75th Entry of Aircraft Apprentices from the Royal Air Force Station, Locking, on the 31st July, 1956.

The Reviewing Officer congratulated Flight Sergeant Apprentice Thompson and all the members of the 75th Entry on a superb parade: the turnout, precision and steadiness were first class and in the highest tradition of the School.

By being present at the parade the parents had shown their natural pride in their sons and this was a very real encouragement to the School. He was grateful that he had been asked to take the parade, because it had given him opportunity of renewing his acquaintance with the Radio Apprentice School — he could remember it from the days when he was a cadet at Cranwell from 1922 to 1924.



Air Marshall Sir Richard Atcherley inspecting members of the 75th Entry.

He had always had a very great regard for the sense of duty and the character of the apprentice; when he was Air Officer Commanding at Cranwell he had had first hand experience of an apprentice's initiative and sense of adventure: he had himself "acquired" a Messerschmidt 108 as a personal souvenir, and one Sunday morning the souvenir was borrowed and crashed in the airfield — it was many years

before the culprit was discovered to have been a radio apprentice who wanted to go solo without instruction.

The Cranwell cadet and the aircraft apprentice were the bastions that sustained the Service in peace and war; when the late Lord Trenchard had been founding the R.A.F. he had had this in mind: a buttress of dedicated, disciplined and highly trained men on the ground and in the air — from them was to be built the expanded force required by war conditions.

How well both came through the ordeals of war: the operational commands were the spearhead, and they were strengthened by the knowledge that the aircraft and equipment on which they depended were serviced and maintained by men of their own sort who never botched a job and never spared themselves, even under the worst combat conditions.

The pilot of today relies for his safety and efficiency upon technical aids and devices that have become more and more complex; the most valuable of these depended on radio and radar — thus the technician's responsibility was of the highest order.

From those passing out the dedication and skill of generations of apprentices would be expected: it was for them to vindicate the foresight with which Lord Trenchard had founded the Radio School.

TECHNICAL SUBJECTS :

Air Radio Fitters A.A. Buckman, A. J.

Ground Radar Fitters
C.A.A. Gumbrecht, A. J.

Ground Wireless Fitters A.A. Baker, B. J.

Highest Educational Marks
S.A.A. De Soyza, A. A.
L.A.A. Armstrong, M. J.

General Service Subjects
C.A.A. Gumbrecht, A. J.

Highest Aggregate Marks
C.A.A. Gumbrecht, A. J.

Burma Defence Services Prize A.A. Taw Taw

Victor Ludorum Trophy
L.A.A. Dissanayake, L.

Wing Championship ... "B" Squadron

LITTLE THEATRE

Many of you will remember the performance of "The White Sheep of the Family" which proved to be a success. It was the intention to follow this up with another three act play, "The Housemaster" in February of this year. However, the presentation of this play has been deferred until October in favour of a variety show called "This and That." The show, which went on, on 28th January, 1957, proved to be a resounding success and gave great encouragement to those taking part, so much so that we are putting on another variety show in June.

The main disadvantage in a three act play has been that out of the twenty or more enthusiasts, only six or seven could take part in a play. This difficulty has now been overcome with the variety show and with the presentation of three one act plays, and opportunity exists for anyone interested in acting, to "have a go."

Now, a word about our last show; it consisted entirely of new talent; the Jazz Band and the Skiffle Group gave their first public performance, the latter almost stealing the show; the actors gave good results, especially in the two sketches written by members of R.A.F. Locking; the Physical Fitness staff gave a first-class demonstration of agility; and our two tame comedians were right at home under the spotlights. The lighting was ambitious, but was well handled, giving an almost professional touch to the show; and the stagehands were on their toes throughout the show, only falling down twice on two very quick changes.

Drama comes under the Pursuits Section of the Duke of Edinburgh's Award and it is hoped that we will have sufficient apprentices interested in the theatre to start classes on make-up, acting, decoration, lighting and perhaps, producing.
A. J. T.

LOCKING ROVER CREW

A friendship, already established between the Crew and various youth organisations in the country, was strengthened at a Youth weekend held at Yatton in June 1956, where the Crew assisted in the running of the event.

Rover-Ranger co-operation was continued with the Third and Fourth 'Rover-Ranger Camp,' held in June and September respectively. Various invitations to socials and parties from the Rangers were received during the year.

In September the Crew was asked to assist in the preparation and running of the Scout 'Nailsea Barbecue.' Although the work was

hard, a good time was had by all members, as is normal on such occasions.

It was our privilege to act as marshalls and to supply and operate field telephones for the Finals of the 'Soap Box Derby' held in Weston in September 1956.

Crew numbers are low at the moment, owing to quite a few of the members being posted, but the remaining rovers are carrying on despite this setback.

All of our members extend an invitation to Scouts and Ex-Scouts to attend and enjoy the meetings at the 1st Locking Rover Crew.



Air Commodore J. B. M. Wallis, A.O.C. 27 Group
inspects members of 3 Wing during a recent visit to Locking.

CHURCH NOTES

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.
(except Monday & Saturday)			
Compline	...	...
(except Monday & Saturday)			
Prayer Circle (Monday only)	...	...	21.00 hrs.
	...	...	20.00 hrs.

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 following were the Special Preachers at the Passing-Out Services for Aircraft Apprentices during 1956 :—

- Mar. 25—The Rev. J. R. Appleyard, Q.H.C.,
Principal Chaplain (United Board).
July 29—The Rev. J. N. Keeling, M.A., Assistant
Chaplain-in-Chief.
Dec. 16—The Rev. C. Y. McGlashan, M.A.,
B.D., Assistant Principal Chaplain
(Church of Scotland).

CHURCH OF ENGLAND MEN'S SOCIETY

As was stated in the last number of "The Locking Review," Locking was the first R.A.F. Station to form a branch of the Society. The C.E.M.S. operates under much more comfortable conditions that it did a year ago. Its clubroom, which is also the Fellowship Room, was ingeniously fashioned out of what was formerly a decontamination building! Previously it had to be content with a lecture-room in the Station Education Centre — a bleak spot with uncongenial associations, despite the relief afforded by posters put up by the Girl Guides, who also used the room each week.

BIBLE STUDY

Once upon a time the Bible Study Circle used to meet each week for an hour's intensive study of the Scriptures. This proved to be somewhat exacting for men who were tired at the end of the day. A new scheme was introduced, whereby Compline is now followed immediately each

night by a brief Bible instruction lasting 10-15 minutes. The innovation has abundantly justified itself.

CONFIRMATION SERVICES

During the year candidates were presented at eleven Confirmation Services. Whenever possible they are taken to nearby Confirmations; but from time to time it happens that a special one has to be arranged, to ensure that men who have completed their preparation do not proceed on posting to far-distant places without having been Confirmed. This past year we have been indebted especially to The Right Reverend Mark Allin Hodson, Bishop of Taunton, for his help in this respect. The lovely little church at Dinder, near Wells, which he uses for such occasions, is an inspiration to all who go there. The private talk which he has afterwards with each candidate in turn, at which he presents to each one a little book of his own, will surely be remembered with much appreciation for many years to come.

PADRES' HOURS

While under training at Locking the Airmen regularly attend Padres' Hours. The Aircraft Apprentices come once a fortnight throughout the three years of their course. For many of the men these provide the first systematic training in Christian faith and practice to be received. In the course of the year wide use is made of the great variety of films supplied by "Religious Films Limited." The famous "Fact and Faith" films are also shown periodically. The latter series takes the form of "sermons from science" and is intended to demonstrate scientific reasons for belief in God. It presents Him as the God both of the telescope and of the microscope. They are viewed with intense interest by their scientifically-minded audiences. Frequently they lead to animated discussion afterwards in the barrack blocks. The padres devote fourteen hours a week to Padres' Hours. These take place in working hours as part of the normal training programme for Airmen and Aircraft Apprentices in the Radio Engineering Trade Group. It is the policy of the Service that these training courses should cover general educational subjects as well as technical subjects associated with the particular trade.

THE DIOCESE

We take pride in the reflection that we were the first R.A.F. Station in the Diocese of Bath and Wells to enroll as a "Corporate Friend" of the Cathedral. This is an indication of the fact that the association between the Station and the Diocese, referred to last time, is far from being a formal one. A genuine interest is shown by numbers of Churchmen in their Mother Church and in extra-parochial Church life in general. The Anglican Chaplains like to feel that they, with their congregation, form an integral part of what they call, perhaps incongruously, "the Civvy Church." True, they hold the Archbishop of Canterbury's Licence and are answerable to

him through their Chaplain-in-Chief at Air Ministry for their aberrations, mental or otherwise; but they rejoice to attend the monthly meeting of the local clergy and to share as much as possible in the common life of the Church of God. It has been noted that a large number of Airmen and Apprentices attend Evensong regularly in the neighbouring churches. We know, too, that similar support is given by the Free Churchmen to their own churches and chapels. We take this opportunity of expressing our profound gratitude to the clerics and laics of the district for the splendid way in which they make spiritual and material provision for their visitors from "the Camp."

E.W.L.M.

ROMAN CATHOLIC CHURCH

CHURCH OF THE HOLY CROSS — REV. FATHER J. C. S. HARRIS

Father Moriarty

Last May we lost Father Moriarty who had been chaplain in Locking for over three years. They were very fruitful years for the Catholic community and our numbers more than doubled; indeed the Church is often too small for the congregation today, especially at the 09.30 Mass. He also obtained the use of two fairly large rooms as a Club which has been a great help to Catholic social activities. We all owe him much for the good work he did here.

Father Moriarty was posted to Singapore but unfortunately he fell ill and spent over a month in hospital. All his many friends will be glad to hear that he has now recovered and has been posted to R.A.F. Syerston, Newark, Notts.

The Mission

A Mission was preached from May 27th to June 2nd. Despite the counter-attraction of a spell of fine weather, the services were very well attended. The Missioner, Father Raymund, was a war-time Flight Sergeant and brought an inside knowledge of service life to his task. His Franciscan habit (and impressive beard) became well-known on the Station and he made himself popular with everybody during his stay. He is now at the Gregorian University in Rome, reading for his Doctorate, but we hope to see him again in Locking one day.

Altar Society

During the Mission the ladies of the parish formed themselves into an Altar Society to see

to the decoration and appearance of the church. Week after week they delight us by tastefully arranging beautiful flowers in shining vases. The altar linen and vestments have also received their care. Finally, not the least appreciated of their good works has been the organisation of refreshments in the Club after evening Mass on Fridays and certain feast days.

The Principal Chaplain

Monsignor O'Connell has honoured us by two visits during the year and we have also had the pleasure of receiving Father Henry, the Assistant Principal Chaplain. These visits were very helpful and we are especially grateful for splendid new vestments, Stations of the Cross, cassocks, surplices and many other things they sent us. As most of the original furnishing of the Church was done by the first Chaplain, Father Richards, from his own resources, we have been able to claim this year from R.A.F. sources many useful articles, including a new chalice, an organ and a carpet for the sanctuary.

Moral Leadership Courses

During their service career all Catholics should try to go a Moral Leadership Course. They are held several times a year and last about ten days. Apprentices and Airmen under training obviously cannot go, but all get a chance eventually and those who take it agree

enthusiastically that, although the course is far from being a holiday, it is an inspiring experience. The Pope is always insisting on the vital role of the well-instructed layman in the modern apostolate and these courses provide a superb opportunity for hearing and discussing Catholic solutions for the problems of the day.

Two Leadership Groups have been established at Locking and new members are always welcome. Those who have not been on a Course can join the groups provided they intend to take a course when possible.

Music and Liturgy

Catholic congregations in England are often poor singers. This is a pity as the full magnificence of the liturgy appears only when music and ceremonies are properly performed. At Locking we venture to sing Mass occasionally but our repertoire is limited and our execution shaky. However, there is a real readiness to learn and in time we hope to build up a competent choir and an experienced guild of servers. Meanwhile recruits without number are required.

Despite the Station closedown there was an excellent attendance at Midnight Mass at Christmas. Three of the Fitters had constructed a beautiful Crib which was much admired and was a great help to devotion. The approach of Easter now presents the challenge of the incomparable Holy Week ceremonies in which it is hoped everybody will take part.

Glastonbury

A party of pilgrims visited Glastonbury to take part in the annual diocesan pilgrimage last June. The trip was made in twentieth century comfort by motor coach, but the procession from the Tor to the Shrine, followed by Pontifical High Mass and sermon, was exacting enough to satisfy the toughest medieval pilgrim. There were about eight thousand people at the Mass, a reasonably good number considering the

wretched weather at that time. After the celebrations we just had time for a quick look at the ruined abbey and the ancient chapel which was the oldest shrine of our Blessed Lady in these islands. Next summer we hope to fill at least two coaches.

Evening Mass

Modern industrial life does not permit laymen to attend week-day Mass as their forefathers used to do— "They all attend Mass every day," said a fifteenth century Venetian traveller to England. However, the recent decree of the Holy Father permitting the offering of Mass in the evenings in certain circumstances has given us a chance to revive the ancient practice to some extent. At Locking we have an evening Mass every Friday and, although the numbers present seldom exceed twenty-five, many find this an excellent opportunity to receive the sacraments.

T.C.H.

CHURCH SERVICES

Mass—

Sundays at 08.00 and 09.30 hrs.

Weekdays at 07.00 hrs.

Holydays of Obligation at 07.00, 10.00 and 20.30 hrs.

Fridays at 20.30 hrs.

Benediction—

Sundays after 09.30 hrs. Mass.

Tuesdays at 18.30 hrs.

Rosary and Night Prayers—

Monday and Friday, 20.15 hrs.

Rest of week at 18.15 hrs.

Confessions—

Saturdays at 11.15 — 12.00 hrs. and 18.15 — 19.15 hrs.

Eve of Major Feasts and 1st Fridays—

18.15 — 19.15 hrs. Before Evening Masses — 19.30 hrs. Also any evening after the Rosary, at request.

ST. ANDREW'S CHURCH

Presbyterian, Methodist and United Board

From the Chaplain, Rev. G. T. Brigg

Assessing the achievements or otherwise of the life of a Station Church is less easy than that of a Station sports team. With the latter, one can state its victories and losses; analyse the prowess of the individuals which comprise it; and compare it with previous sides. Even so, and in sporting terms, I think it can be fairly said that St. Andrew's has had a profitable "season"; that our wins have exceeded our losses; and that the "Team" has maintained a good spirit throughout.

I was fortunate in taking over from a most capable "skipper" last April, for Padre Cook had built up a live and forward-looking Church, and the way seemed open for two new advances. The first was an all-out attack on the premises themselves. We drew up a list of desired improvements, and discussed how they could be realised. Some could be obtained through Equipment; others by the good-will of Workshops; and most would have to be purchased at a cost far above what could be raised locally. It was a formidable programme, but through the magnificent co-operation of all concerned, it is already almost completed. With a most generous grant from P.M.U.B. Headquarters (Air Ministry) of £100 we purchased a blue velvet curtain to hang behind the Communion Table; some light Japanese oak; and a whole pile of plaster-board, timber, etc.

With the oak, Workshops (bless them) made for us some beautiful Communion Rails and a reading desk, and with the plaster-board, converted the "barrack-room" ceiling into a pleasing level one; while the electricians re-wired

the Church and re-hung the lights at a more aesthetic height. Meanwhile, the sanctuary end of the Church was raised by platforming, and a fine Wilton carpet was laid upon it. The Officers' Mess kindly made us a present of their old Bar, and this was skilfully reduced to make an effective pulpit.

The *premises* of our Church having been improved, the way was set for a similar advance with its *personnel*. Actually, this advance had been arranged months earlier, and it took the form of a P.M.U.B. Mission. The special Missioner was the Principal Chaplain (Methodist) from Air Ministry, Padre A. W. Hopkins, B.A., and the period was from 21st — 23rd January. During each day the Missioner spoke to the men assembled for the usual padres' hours, and again each evening at a voluntary meeting in the Church. On the Monday, we arranged an "Any Questions" session, and the Panel consisted of three leading Westonians plus the Missioner, with the Station Commander kindly taking the Chair. Both at this meeting and the other two, the Church was full, and there is no doubt that the whole Mission was of great value to the life of the Church and, we hope, to the Station at large. Congregations since have grown still larger, so much so that seating them all has become something of a problem.

We are grateful to God for all that has been done in the last year, and we confidently look forward to a continuing happy fellowship at St. Andrew's; to welcome all newcomers who may care to join us; and to maintaining the amicable liason which we enjoy with our C. of E. friends.

G. T. BRIGG.

RADIO EX-APPENTICES SOCIETY

SECRETARY'S NOTES

As stated in previous issues of this magazine the aim of the society is to stimulate interest and comradeship between Radio Ex-Apprentices of all entries from No. 1 at Flowertown to No. 77 which has just left Locking and to entries still to pass out.

We have had a reasonable response to the request for articles for the magazine several of which appear in this issue, but it is a task which gets more and more urgent as the "dead-line" for the passing of the edited material to the printers approaches, to find articles suitable for publishing. We are always delighted to open the days' mail to find:—

- (a) A technical article of 1500-2000 words.
- (b) A humorous article of the same length.
- (c) Interesting or historic photographs.
- (d) A cartoon.
- (e) Or an item of interest to past or present Radio Apprentices.
- (f) Any combination of the above.

The register of Radio Ex-Apprentices is not included in this issue because, at the moment only a few ex-apprentices have sent the required details, we would like from *every* radio ex-apprentice the following details:—

- (a) Name
- (b) Present rank
- (c) Apprentices number
- (d) Apprentice entry and date of entry
- (e) Where trained as apprentice
- (f) Present post

Frankly this idea of a register has been borrowed from the Halton magazine which seems able to fill many pages with details for their register and it seems to me to be a good idea because it does show how far up the ladder of promotion apprentices can and have got and also will enable old friends to re-establish contacts, so please don't be shy and let me have the required details.

For those who have not yet seen our previous issues, there is a Radio Ex-Apprentice tie which may be purchased at a cost of 11/- on production of a certificate signed by the Training Officer No. 1 Radio School. These ties have proved very popular and there are several hundreds in circulation and should be a popular method of 'breaking the ice' between members of the society.

E. C. HARGEST,
Flight Lieutenant,
Secretary Radio Ex-Apprentices
Society.

MAGIC CIRCLE

The group has virtually come full circle and is once more kept alive only by a small core of really keen amateur wizards. The efforts of about four people have kept the society going and it meets every other week but lack of funds and physical support has curtailed its activities considerably. Once more the Children's Christ-

mas party benefitted from its tricks and ideas and the society has proved its value to the Station; but it does need more members! Anyone who would like to see what the club has to offer should go to the Station Education Centre on a Monday evening and add their support to the society's activities.

SPORTS REPORT

SPORTS EDITORIAL

Winter Season 1956-57 seen in retrospect proved highly successful from a Station point of view, the more notable achievement being the Rugby XV's magnificent victory in the R.A.F. Challenge Cup at Uxbridge where they defeated Topcliffe by 40 points to nil, producing a standard of Rugby which Air Marshal Sir George R. Beamish described as the best he had ever seen from a Station Team. In addition the Station retained the Somerset Seven-A-Side Trophy in the face of some stiff opposition.

The Hockey 1st XI came very near to emulating their success by reaching the final, only to lose 3-1 to R.A.F. Waddington after a dour struggle.

At Soccer although our progress in the R.A.F. Cup was limited, the Station teams excelled themselves in local competitions. The 1st XI won the Somerset Senior League Cup, and the Charity Cup and the 2nd XI were runners-up to Winscombe in the Weston-super-Mare and District League.

When we consider the summer of 1956, we see that the weather was not so kind as in the previous year, but nevertheless the Station Teams enjoyed a reasonably successful season. The Cricket teams fulfilled some friendly fixtures with civilian clubs in the area which were enjoyed by both sides, although played on the inferior Arena pitch.

At Tennis, our teams extended their fixtures lists, and their social contacts, and the Athletics team had a full fixture list, which they fulfilled in an adequate if not spectacular fashion.

In summing up, the past achievements of Locking in sporting activities are well-known, and play an important part in the communal life of the Station, especially in our contacts with the surrounding districts, and in order to ensure that the future will be just as bright, sportsmen at Locking must do all in their power, both on the field of play and off, to further this good-will, so that the name of Royal Air Force Locking and sportsmanship will be synonymous.

STATION RUGBY

R.A.F. Rugby Cup comes to Locking



Left to Right. Standing.
 A.C.2 Hewitt L.A.C. Wicks L.A.C. McDermott Fg. Off. Blake Fl. Lt. Gray
 Fg. Off. Shuttleworth L.A.C. Jones K. Sq. Ldr. P. Uprichard A.C. Thwaite
 Fg. Off. Jones H. S.A.C. Peake

Kneeling.
 Fg. Off. Jones R. H. Fg. Off. Collard S.A.C. Meadows Sgt. Howell

Wednesday, April 20th, 1956 was a great day for the rugby enthusiasts at Locking. At 8 o'clock in the morning, a fleet of buses carrying some 300 supporters, left for R.A.F. Uxbridge where the R.A.F. Rugby Cup Final was being staged. Locking's opponents were R.A.F. Topcliffe, who had built up the reputation of being a strong defensive side, hard tackling, and supremely fit, and who accounted for R.A.F. St. Athan, one of the most fancied sides in the competition, in the semi-finals.

Topcliffe quickly showed that this reputation was well founded, and in a very even first half, several times came near to scoring. They were very quick to seize on mistakes caused by spoiling and some poor handling by the Locking backs. It seemed that the first half would be pointless when suddenly a fine move gave Locking the lead. An orthodox three-quarters movement, a pass inside from Meadows to Collard, a high overhead pass to the middle of the field, and Uprichard was left with a clear run in.

R. Jones had no trouble in converting and Locking crossed over 5 points ahead.

In the second half the Locking 'threes' at last began to combine smoothly, using the large share of the ball provided for them by the efforts of a hard-working pack. Two tries in the first five minutes of the second half, and Topcliffe's resistance crumbled. From then on the Locking side ran riot, the forwards backing up every attack and several spectacular tries resulted. Eight tries in fact were scored in the second half and the final whistle left Locking the winners by the huge score of 40 points to nil. The R.A.F. Rugby cup, was thus secured for Locking for the first time in the Station's history.

The 1956-7 season is rapidly drawing to a close and has once again been a most successful one. The one set-back however has been our

defeat by R.A.F. Innsworth in the third round of the Cup. A hard game, played in good conditions, was eventually decided in Innsworth's favour by 12 points to 5, their score including, 2 penalties and 1 dropped goal, all kicked by K. Richards, a current Welsh trialist. The Locking side played extremely well in the second half, when a little more steadiness close to the line might have lead to a different result.

Apart from this match, the side has only lost two games; notable performances have included the defeat of Bristol United, and a drawn game with Weston-Super-Mare. D. Neate, Watkins, R. Jones, and J. Blake played regularly for Technical Training Command, while Neate and J. Blake have both gained the R.A.F. Colours by playing in the Inter-Services matches. Neate also had an English trial.

STATION BASKET-BALL

It is difficult not to sound smug when outlining the record of the Station Basket Ball team over the past season. Local opposition in Weston, Bristol and Exeter has been met without defeat: the United States Air Force Team at Burderopark found us tough opponents; the team won a five station competition sponsored at Locking; and finally we proved ourselves to be the best R.A.F. team in the country by winning the Inter-Station Cup Competition. A defeat by Nottingham Y.M.C.A. in the National Club Championship, has, however, prevented an undue inflation of ego.

October 1956 started quietly, with games in Weston Y.M.C.A. each Monday evening. As the Season got underway we secured a fixture with the U.S.A.F. team of Burderopark, one time finalists in the American Airforce European Championship. The posters said, 'come and see basketball at its best.' Some three to four hundred spectators turned up at the Gym, including the Station Commander and Mrs. Blair-Oliphant, so providing the match with that certain atmosphere, impossible to create in an empty arena. The fact that Locking lost by some twenty points was unimportant compared with the entertainment afforded the audience and the experience afforded our team. To score over a hundred points against such opponents

was no small achievement. Locking then organised a five team tournament which was held over a weekend in the Station gymnasium. St. Athan, Compton-Bassett, Yatesbury and the Locking Apprentices provided our opposition, each team playing the other. On this occasion one point from a basket, scored in the last seconds of the game gave the decision to Locking.

And so the cup trail was taken up in November. Victory over R.A.F. Chivenor took the team over to St. Athan to battle out the area final. As has happened before, and not only in basketball, the winner marched on to win the final. Certainly this round of the tournament was the stiffest. After an even first half, and the subsequent 'fouling off' of the St. Athan's captain, Locking emerged deserved winners. Compton-Bassett were beaten at the next round held in Locking, and so we journeyed to R.A.F. Cosford on March 6th, to play off the semi-final and final of the competition.

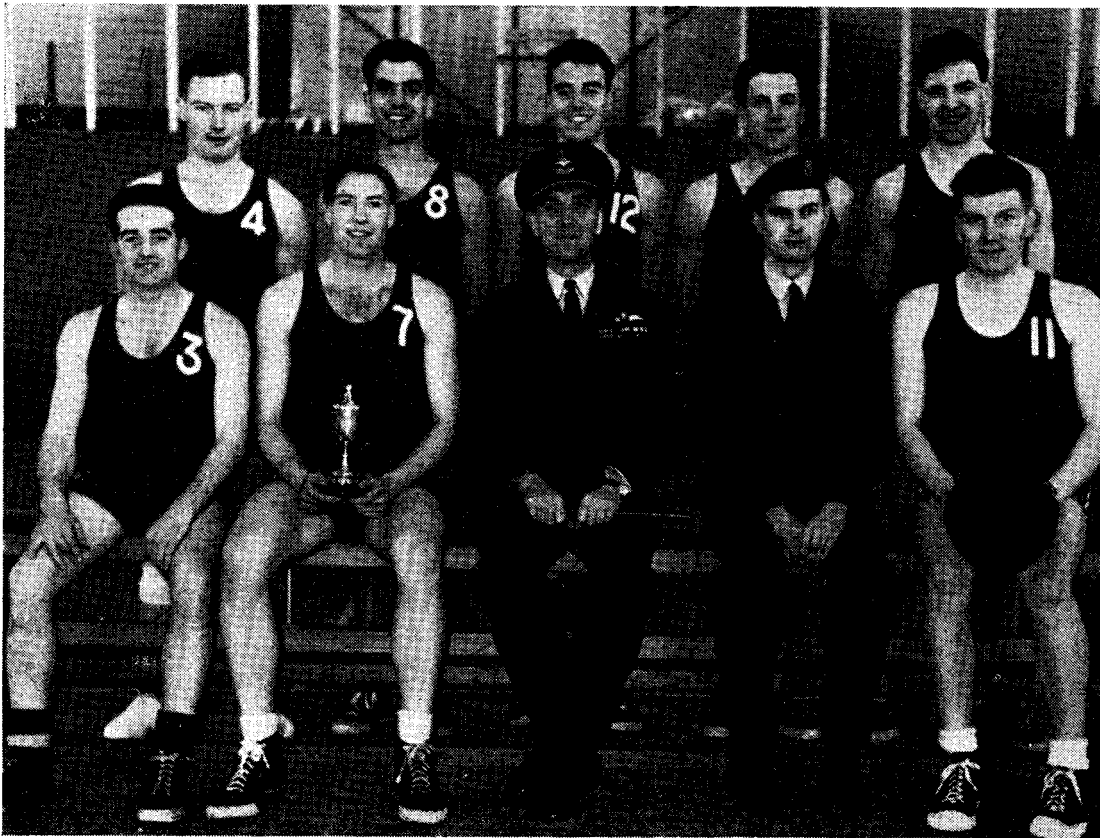
The semi-final was against R.A.F. Catterick, and when it became apparent that Locking would win comfortably, Sgt. Keogh used the opportunity to bring on the three substitutes who made up our party. It is perhaps symptomatic of the sport's standing in the Service, that not more than fifty people watched the final, even though the hosting station was the

other finalist. Although Locking won easily, 91 to 25, it was a good game to watch, Cosford being energetic to the last. And so the cup came home to Locking.

The team has been mainly composed of the gymnasium staff. Sgt. Keogh, the English International, has captained the side knowledgeably and has done much to weld the individuals into a team. It is particularly noticeable how Sgt. Thomas has modified his individualism to meet the new team requirements. During the past two seasons, he has had to go it alone in order to win. Now, with a better balanced team, he can afford to be less spectacular. Sgt. Hagan has proved

himself an accurate shot, and very quick off the mark. Sgt. Lester is a much improved player as is Cpl. Bugler, while Sgt. Garner and Sgt. McGartland remain sound in defence. Cpl. Brown, recently posted in from Padgate, appears to be fitting into the side well. Sgt. Mitchell, one of the 'characters' of the team is about to be posted to Cyprus, and his humourous enthusiasm will be difficult to replace.

Locking is not only well-known for its basketball throughout the R.A.F. but also throughout civilian clubs in the Amateur Basketball Association, and as long as we maintain our present standards, our reputation is safe.



Cpl. Bugler Cpl. Brown Sgt. Lester Sgt. Garner Sgt. Thomas
Sgt. McGartland Sgt. Keogh Gp. Cpt. Blair-Oliphant Fg. Off. P. Proud P/O Yeomans

STATION HOCKEY



Sgt. Mitchell Fg. Off. G. Mitchell Ch. Tech. Rouse Fl. Lt. Folland Ft. Sgt. Brailey
 W.O. Nash Ft. Lt. Clarke A.C. Grainger
 Fg. Off. Mason J/T Haynes J/T Mills

The 1955-56 season ended with the station team reaching the final of the R.A.F. 'A' Cup. In this match the team did not play their usual high standard of hockey and unfortunately lost 2-1 to R.A.F. Waddington. The game was very hard fought and not until nearly the end of extra-time did Waddington score their second goal. The season as a whole had been extremely successful.

The 1956-57 season saw us without Flt. Lt. I. M. Clarke, Fg. Off. G. D. Mitchell and F/Sgt. Brailey. All were stalwarts of the 1955-56 side and in particular Flt. Lt. Clarke, who was a tremendous asset to the side, was missed.

Later in the season J/T Mills and then Cpl. Haines were demobbed and two more players of a high standard were lost.

Due to the closure of some stations, transport difficulties and weather, the number of matches played has been small. The record however is very good.

1st XI	P. 11	W. 9	L. 2	For 35	Ag. 6
2nd XI	P. 5	W. 4	L. 1	For 18	Ag. 6

Initial progress in the R.A.F. Cup was good; the defence again this season being the dominating factor. We had walkovers in the preliminary and first rounds and then went on to beat Chivenor 6-0 and St. Mawgan 2-0.



Ft. Lt. Folland goes for the ball in the Final of the R.A.F. Cup.

In the area final at St. Athan we lost 3-1. J/T Mills had been demobbed and Cpl. Haines

was playing for the R.A.F., and so the team was a shadow of its true self. The defence was very shaky and could not get a grip on the game as it normally did. St. Athan scored first and in a period of good play Locking equalised. The play then swung backwards and forwards and St. Athan making use of their opportunities scored twice.

The station team themselves have shown a very fine spirit but it is the turn of the Umpires and helpers to be applauded. The Players thank you.

In conclusion we must mention that Cpl. Haines, has played regularly for the R.A.F. and has only missed the inter-service games through being demobbed. J/T Mills has also played for Technical Training Command.

R.L.M.

STATION SOCCER

In retrospect season 1955-6 was a reasonably successful one as regards Station Soccer. We were very fortunate in having a blend of permanent staff and 3 Wing Trainees, the more prominent being the skipper Sgt. Rose, Sgt. Garner, Cpl. Bugler and Cpl. McCaffrey; J/T Green our very capable Centre Half was posted in during the season. The first XI excelled themselves by winning the Somerset Charity Cup by beating Shepton Mallet 3-1. It also had the distinction of winning the Somerset Senior League, a great feat and one of which we were justly proud for we did not know the result until the last match had been played.

This season opened with our committee reshuffled a great deal. Fg. Off. T. J. Grisewood took over as Officer i/c ably supported by Flt. Sgt. Bridson in his accustomed roll of Secretary and General Factotum and there were two new faces on the selection committee, Chf. Tech. Spowatt and Sgt. Yemm and Sgt. Anderson, each of whom showed great enthusiasm and interest in the Station Soccer. After his holiday in Germany we were pleased to welcome back Cpl. (Now Sgt.) Duncan, the stalwart of our Weston League Team. Flt. Lt. J. Ellis has given as much help and encouragement as has been possible owing to his pressure of work and chronic back trouble.



Station 1st XI

Standing.

Brennan Taylor Parker Collier Paxton Casey
Hogg.

Sitting.

Sgt. Anderson Petts Sgt. Lester Cpl. Rose
(Capt). Ft. Lt. Grisewood Sgt. Garner Cpl.
Bugler Ft. Sgt. Bridson.

For many reasons it was decided to run only two teams this year, First XI in the Somerset Senior League, and the Second XI in the Weston District League.

The First XI although very strong on paper has not quite fulfilled its high promise and after beating R.A.F. Melksham (the holders) in the R.A.F. Challenge Cup we were deservedly beat-

en by R.A.F. Pembroke Dock, a poorish team but one which took its chances. Our position in the league is average at the moment, but we have fought our way into the semi-final of the Subsidiary Cup and the right to play Worle Old Boys; indeed all our hopes are pinned on winning this match.

On the other hand the Second XI has been going great-guns and except for an early reverse against Winscombe has not lost again to date;



2nd XI
 Cpl. Burnett Hayne Richards Lee
 Sgt. Anderson Harrison Rogers Ft. Lt. Grise-
 wood Keddie Shefford Ft. Sgt. Bridson

indeed they have already won the Charity Cup by beating Baytree Rangers, have reached the

Final of the Hospital Cup, the semi-final of the K.O. Cup and stand a very good chance of (scooping the pool) and carrying off all honours. The team has endeavoured to play open football at all times. Members of the Permanent Staff who play in the team are :—

Ft. Lt. T. J. Grisewood Sgt. McGartland
 Sgt. Duncan J/T Rogers

L.A.C. Hayne

and a late edition Cpl. Burnett of the Gymnasium, and they have at all times been ably supported by Trainees of 3 Wing.

In conclusion, there can't be praise high enough for the officials for all their efforts throughout the season the players especially the trainees who give up 36's and 48's to play for the station, and our hardy band of supporters.

T. J. G.



Winners of the Permanent Staff Football League
 1956.

STATION CRICKET

The 1956/57 season opened with the news that all games would be played on the Area Pitch for Cook's Field had been relaid, and that a concrete pitch was available for the Second XI's fixtures in the Weston-super-Mare League.

The Station XI was a very strong one, on paper at least, and to support Garner we had some fine bowlers, McGibbon, Grainger and A'Court (From the Gloucester Ground Staff), and as support to Clarke, Shuttleworth and Blake, Waldron performed very well on occasion.

As the season progressed our worst fears were realised concerning the Arena Pitch; it had received very little attention during the Winter, and during the season many strange things happened especially during the all-day game with Brighton Brunswick, when things became so dangerous that only the slow bowlers were allowed, and against R.A.F. Melksham when the batting reached an all-time low, the magnificent total of 16, and Melksham fared not much better, losing 6 wickets for 14 runs before a couple of edgy fours got them out of trouble.

In the R.A.F. 'A' Cup Competition, the team defeated St. Athan at Weston-super-Mare's ground by 8 wickets.

St. Athan batted first, and thanks to some fine bowling by L. McGibbon, a member of Northumberland's Minor County XI, ably supported by Grainger and Garner, they were shot out for 90, their main contributions coming from No. 6 and 7 who made 58 between them, and took the score from 17 for 5 to 72 for 6.

When Locking opened, Blake was back in the Pavilion with 26 on the board, but then Shuttleworth and Clark took the score to 74 before Clarke was out and the game was won.

In the next round we went down to Chivenor where the home team was bowled out by Garner and Grainger who each took 5 wickets, but then rain came and a replay was necessary. However, Chivenor fared even worse when they visited Weston for they were shot out for 35, again by Garner and Grainger, and the game was won by 8 wickets.

The real test was to come in the encounter with Innsworth (the eventual winners of the competition). They batted first, and as a result of some indifferent fielding, and some forceful batting, they declared at tea, at the score of 154 for 8 wickets.

When Locking batted, Blake was soon out and the score was 5 for 1, but Clarke and Shuttleworth again came to the rescue, and the next wicket (Clarke's) fell at 57 and things looked bright. Waldron then appeared, and between

them, the score rose to 75, before he was bowled for 7; A'Court came in and stayed for 7 minutes while the score crept to 89 when he was caught. Wicket Keeper Rose then came to the crease and, it really looked as though Locking had a chance for the pair took the score to 111 before tragedy came and Shuttleworth was out after reaching a magnificent 42. This in fact was the end for a procession then started and batsman after batsman threw his wicket away, and the Locking innings closed at 126 all out, leaving Innsworth to bowl on and win the R.A.F. 'A' Cup Competition.

Leading Averages for the season:—

<i>Batting</i>	<i>Runs</i>	<i>Innings</i>	<i>Not-Out</i>	<i>Aver.</i>
I. M. Clarke	499	14	3	45.4
R. Shuttleworth	426	18	1	25.1
B. Waldron	219	13	4	24.3
G. Smith	70	5	2	23.3
J. Blake	267	17	3	19.0
G. Higgins	79	7	1	13.3
<i>Bowling</i>	<i>Overs</i>	<i>Runs</i>	<i>Wickets</i>	<i>Aver.</i>
C. Grainger	126.2	235	39	6.02
W. Garner	85.3	179	28	6.4
L. McGibbon	61.1	113	16	7.02
D. A'Court	68	139	15	9.3
A. Rogers	33	60	10	6.0

Features of the season were:—

R. Shuttleworth's 128 against Bristol Police, and the large total of 238 for 7 declared against Wells of which Clarke contributed 74 and Blake 58 in an opening stand of 140.

T.J.G.

ANOTHER R.A.F. CUP FOR LOCKING

The Locking table tennis club, probably the smallest sports club on the Station, has just completed a highly successful season by winning the R.A.F. Inter-Unit Table Tennis Plate competition. This is the first year that Locking has competed in this event. It has been a triumph of team work as their progress through the series clearly indicates — Western Zoyland defeated 7-2 — R.A.F. Lyneham defeated 7-2 — R.A.F. Sutton Coldfield defeated 7-2 — R.A.F.

Kinloss defeated 8-1 in the semi-finals and R.A.F. Beachey Head defeated 8-1 in the finals. Although each member of the team deserves mention, perhaps the outstanding performance has been that of the doubles pair, S.A.C. Van Rixtel and Pilot Officer Bowden, who went through the whole series without losing a match. The other two members of the team were Flying Officer Griffiths and A.C.1. Harvey.

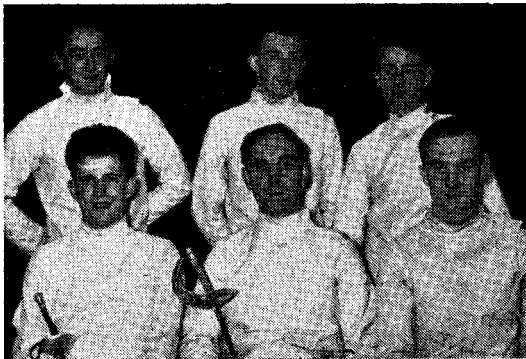
L. G.

STATION FENCING

Although rarely hitting the headlines, the station fencing team has achieved greater success with less publicity than almost any other club on the Unit. Unobtrusively, the team has reached the final of the R.A.F. Senior Inter-Unit Competition, won the Somerset Team Sabre, been runners-up in the Somerset Team foil, to say nothing of the very long list of individual honours gained.

Major Triumphs

Certainly, the greatest team success has been the winning of the West of England team Epee competition for 1956. Of the ten teams entered, the Station emerged winners after a tremendous battle against the redoubtable Phoenix Fencing Club, Bristol, who included two English Internationals in their team. Reaching the final of the R.A.F. Inter-Unit was another major triumph, and the result might have been a very different one had we been able to include some of our Apprentices who normally fence with the Station team. As it was, while they were struggling with examinations, we were struggling against R.A.F. St. Athan — three R.A.F. Blues — and we were eventually defeated by four fights out of twenty-seven.



A.A. Parkinson A.A. Downes A.A. Grist
Fg. Off. Evans Gp. Cpt. Blair-Oliphant Fg. Off.
Holt.

Apprentice Standards

The standard of Apprentice Fencing on the station has improved enormously, and this is due to a combination of their own boundless enthusiasm harnessed to the sound technical instruction which they receive week by week from Flying Officer D. Holt. As an Apprentice team they have won the Somerset Schools Foil Team Championships, while as members of the Station Team they have been instrumental in gaining victories over Bristol F.C., Weston Sword Club, Clevedon F.C., Queen's College Taunton, Milfield School and Downside School. Apprentice Downes, the current 1 Wing captain, achieved notable successes in the R.A.F. Junior Championships, Birch Shield, gaining 6th place at foil and 4th at Sabre, and being placed 6th in the Junior Master-At-Arms Tournament. Aircraft Apprentices Grist, Parkinson, Putnam and Gambrell have all had consistently good results and hopes are high for the Royal Tournament Series.

We have been grateful for the enthusiastic support given to the club by the Station Commander, Group-Captain D. N. K. Blair-Oliphant, who has been a regular member of the Station Sabre team throughout the year.

Individual Performances

Locking fencers have acquitted themselves well in Individual Tournaments throughout the season. In the Somerset Championships Flying Officer Holt won the sabre event while Flying Officer J. Evans won the foil. Both fencers represented Tech. Training Command at the Inter-Command Championships, while Flying Officer Evans has been a regular member of the R.A.F. and Combined Services teams. After being placed second in the R.A.F. Foil championship in 1956, Flying Officer Evans reached the final of the Inter-Services Royal Tournament and was placed seventh. He has subsequently won the Welsh Foil and Sabre Championships.

STATION TENNIS

The 1956 Season is perhaps the best the Station has had according to previous records. We played 17 matches, winning 14, losing 2, and drawing 1. Additionally, there were a few "A" teams and Seconds fixtures. The team reached the semi-finals of the Zone Knock-out competition, but were beaten by a very strong St. Athan's team.

Two competitions were held within the Station. One was the Inter-unit competition which was won by Admin & Training Wing, who beat 15 Flight, 3 Wing Team in the Final. Small cups were awarded to the winning six, plus a trophy to be held for the year.

A successful Singles Championship was also staged. Out of a field of nearly 50 entrants, F/O Craine ran out the winner, and Flt. Lt. Harris was runner-up. Both received appropriate cups.



A.C. Parsons A.C. Inch J.T. Brook
Fg. Off. Craine Rev. Brigg Ft. Lt. Harris

A tennis Hut was provided during the season, and this has proved a great asset to both Match teams and general players. The greatest hindrance to good play has again been the persistent winds from the sea. A solid wind-break is in process of being built up on the offending side, and it is hoped will be completed by the commencement of the new season.

The following regularly represented the Station :—

Rev. Brigg, Flt. Lt./Harris, F/O Craine, F/O Hulley, AC's Badell, Brook, Emberton, Inch, Palmer and Parsons. Five of these will be here for the 1957 Season.

Thanks are due to the P.F.O. and his staff for giving valuable help throughout.

G. T. B

STATION CROSS-COUNTRY RUNNING

An ambitious programme of 26 matches has been arranged for the 1956-57 season, but an abnormally large number of cancellations has resulted in only eleven matches being held to date.

After a bad start to the season the station team has improved considerably and six out of the last seven fixtures have been won. In the Area eliminating Race of the R.A.F. Championships, R.A.F. Locking was placed third, being narrowly beaten to second place by R.A.F. Compton-Bassett. Although the team as a whole failed to qualify, five of the team qualified to represent the Station as individuals in the Final at R.A.F. Cardington.

The following performances are worthy of mention :—

Cpl. D. Lee Fastest time this season to date
over the station course

26 min. 38 secs.

A/C Bowden 6th in the Area Final of the
R.A.F. Championships.
16th in the Final of the R.A.F.
Championships.

A/C J. Gibson 4th in the Area Final of the
R.A.F. Championships.

In addition to the above, the following have been prominent in the Station team this season :
A/C Towle; A/C Veals; A/C Hurcum; A/C Reay; A/C2 Cauldwell and A/C O'Keefe.

Recent arrivals at the station have included A/C Earl and A/C Carter who will help to strengthen the team in the remaining matches of the season.

The station team is indebted to the P.T. Staff and the willing band of airman helpers from 'C' and 'D' Squadrons who marked out the course this season.

A. T. R.

STATION BADMINTON

The club can boast a fine record. So far this season the team has won fifteen of the twenty games played and reached the area final of the R.A.F. Cup only to be beaten by R.A.F. Hereford.

Last season the club held an open tournament which proved to be a great success. At the finals evening, the first of its kind, the Station Commander presented the trophies. The open singles was won by Cpl. Hendrie, who has since left us for "Civvy Street," and the doubles by Cpl. Hendrie and Sgt. Hall. The club proposes to hold this year's tournament in March.



W.O. Williams A.C. Packard Ft. Sgt. Truesdale
Sgt. Keogh Fg. Off. Rees Sgt. Hall

Two members of the team, Sgt. Keogh and Sgt. Hall attended the R.A.F. Individual Championships at St. Athan where they acquitted themselves very well. Sgt. Keogh reached the last 16 in the singles and played for the R.A.F. Second Team. He has also represented Somerset this season. On March 23rd and 24th Sgt. Keogh and A.C.2 Carr will be representing Locking at the Technical Training Command Trials at Halton.

This season the Somerset County Badminton Association held its open tournament on 18th, 19th and 20th February, in our Gym. It provided us with the opportunity of seeing some first class badminton which proved to be very entertaining.

What of next season? It seems that most of the team will still be here. Last season the team went the same distance in the R.A.F. Cup to be beaten by Yatesbury, surely next year must be 'our' year.

H. R.

STATION CYCLING

It would appear that the effort of running the Cycling Club at R.A.F. Locking, is a fatally difficult one for the officer to whom the task is given, because the present incumbent is the third holder of the job in three seasons. He has nevertheless remained calm, and in an effort to prolong his life-span, has re-organised cycling so that there are now three classes of cyclists on the station.

The first class comprises junior officers and senior N.C.O's, who pedal industriously from their respective messes to the training blocks and back. The officer i/c cycling is one of the fraternity, but does not consider them to be eligible for membership of the cycling club.

The second class consists of those who cycle around the county of Somerset for pleasure, on Wednesdays if they are fitters; on Thursdays if they are mechanics or at the weekends if they cannot get a 36! These enthusiasts, who, in previous years, pedalled their way anonymously have now the cycling organisation on the station at their backs — and how some of them need a push from behind on the longer and steeper hills. But the rumour that each week's pack leader is bribed to cycle through Weston has no foundation!

The remaining cyclists are those who actually race for the station. They compete in various local competitions and occasionally they race in service competitions. At this early stage in the season, they have achieved no notable success but it is hoped that, later in the season, the cycling team will bring off the long awaited victory.

J. Mc.

STATION SWIMMING

The 1956 season was enjoyable and reasonably successful for the station swimming team; the training sessions on alternate Wednesday evenings were well attended and it was most gratifying to see the improvement in individual performances. At the practices swimmers swam in competition with each other and against the stop watch week after week whilst faults in starting, turning and style were pointed out and corrected. One swimmer improved his time over 100 yards from 73 secs. to 59 secs., this is good considering that the R.A.F. championship was won last year at 54.3 secs.

As in Cricket the governing body is trying to give swimming more speed and spectator appeal and F.I.N.A. are going to alter the rules for Water Polo so that the team do not swim back to their own goal line each time a goal is scored but the team who conceded the goal are given possession of the ball, this should speed up the game considerably and, in my opinion more goals will be scored per match. The rules for breast stroke swimming are also changed for both orthodox and Butterfly breast strokes these are the main changes as in A.S.A. Law 57.

- (f) The race shall be swum on the surface of the water.
- (g) There shall be only one "stroke" underwater at the start and on each turn. This should eliminate the tendency for breast stroke swimmers to disappear under the surface at the start and only be seen on the turns when they come up for breath.

At the R.A.F. A.S.A. Annual General Meeting it was decided to introduce swimming championships for Boy Entrants and Apprentices for the first time. It is hoped that these can be arranged for this season and full details will be made known when available.

The Knightstone Baths in Weston have been booked again this season on alternate Wednesdays starting in May, any Locking personnel are welcome to attend these coaching sessions so come along and keep the standard high.

E. C. H.

STATION ATHLETICS

The 1956 season was a successful one as far as Station Athletics was concerned. In the No. 27 Group Inter-Station Competition at Netheravon, the Station again came second to Yatesbury but the contest was much closer than in previous years. Eight of the Station Athletes represented No. 27 Group in the Inter-Group Competition and three represented Technical Training Command in the R.A.F. Championships. A.A. Rennolds is to be congratulated on representing the R.A.F.

The Station Athletic Championships were held on the 27th June, and it was found that by holding them on this later date, the standard of athletics improved and the social aspect of the occasion was more successful. At this meeting more station records were broken.

It is to be hoped that 1957 season will be even more successful.

APPRENTICE SPORTS

RUGBY

The most notable feature regarding Apprentices Rugby this season is the new look Fixture List. Economy in transport and the reduction in subsidized travel have forced us into the orbit of the Bristol and District Rugby combination. This combination of clubs was formed to promote the game of Rugby Union Football in Bristol and District. Although the Locking Apprentices are, as yet, not members, this sporting body has extended to us untold help and assistance in building up our Fixture List. Through their good offices, fixtures have been arranged with the Bristol Aircraft Company Corporation, Bishopston and Bristol University, to mention a few.

This season, the Apprentices Rugby, for coaching purposes, has been divided into three main classes. Flying Officer R. Salmon is in charge of the Novices Rugby, Flying Officer D. Baxter runs the 2nd XV and its attendant members, and the 1st XV is controlled by Squadron Leader R. J. H. Uprichard. By this method, more individual coaching has been available and a higher degree of Supervision exercised.

The aim throughout the season has been to open the game up regardless of result and as we are enjoying to date one of our best seasons ever, we are of the opinion that this type of Rugby pays off.

Again this season, we managed to defeat both our Army rivals — Arborfield by 8 points to 0, and Chepstow by 5 points to 3. However, one of our most attractive games this season was our victory by 19 points to 11, over Taunton School, played at Locking on March 2nd. Taunton had built up a substantial lead of 11 points to 0 at half-time. The three tries which they scored in this half, were magnificent, the result of hard, straight running in the centre, rounded off by the wing going all out for the corner flag. In the second half, the Locking machine clicked into top gear and a series of swift passing movements soon put us on equal terms. A mistake in handling by the Taunton centres on the half-way mark, found Brookes in possession and streaking to goal between the posts. This was



Rugby Team

followed by a try by Dunn, neatly taken on the blind side, with a quick dash to the corner flag. This game was played at top speed throughout, and both sides revealed a number of fast moving attacking players, both inside and outside the scrum. The stage is now set for our match of the season versus Halton on 16th March, and whether our luck is in or out on that occasion, we shall endeavour to open the game up and display its attractive qualities.

PADDY U.P.

Results to date :—

Played	Won	Drawn	Lost
19	15	1	3

SOCCER

At the time of writing the Wing teams have had a reasonably successful season. In the inter-service games against Arborfield and Chepstow last season's results were reversed and we now look forward hopefully to the Halton game.

The 'A' and 'B' teams have also shown themselves more than a match for local opposition. Last term the 'A' team won the Subsidiary competition and the final of the Trevor Cup was between the 'A' and 'B' teams, being won rather surprisingly by the 'B' team.

So far this term the 'A' team has progressed through three rounds of the County Youth Shield. The 'B' team has now reached the senior final of the Lye Cup and three team members stand a good chance of representing the League in the final of the Lewis Cup.



Carden O'Reilly Graves P.O. Scott W.C.
Linnard Scott Rennolds Hull Fg. Off Moll
Jessop Curry Leak Newman Flett Batey
Broughton

In the Inter Apprentice and Boy Entrant School's Competition for boys under 19 years of age we travel to Halton to meet Cosford in the semi-final, having beaten St. Athan's No. 1 Wing.

We are therefore well placed in competitions this term and should maintain last term's successful form.

The Team captains are :—

Wing XI	L.A.A. Scott	(80th Entry)
'A' Team	A.A. Francis	(79th Entry)
'B' Team	A.A. Luck	(82nd Entry)

Last term's outstanding results :—

Trevor Cup,				
R.A.F. 'B'	4	Arborfield	3	Away
Wing XI	6	R.A.F. 'A'	0	
Wing XI	3	Chepstow	0	Away
Wing U19 XI	5	St. Athan	2	Home

Leading Goalscorers
in Subsidiary Cup : 'A' Team, Critchley 12
'B' Team, Merryfield 15

In winning the Subsidiary Competition the 'A' team scored 25 points out of a possible 28.

J. S.

HOCKEY CLUB

The team started the 1956-57 season with seven of last seasons members. The opening match of the season against British Cellophane was won by 3 goals to 1 and in the next fixture Bristol Civil Service were defeated by 5 goals to 2. Playing a strong Station XI the Apprentices were defeated by 5 goals to 2. A feature of these opening three matches was the prolific scoring of A/A Stewart (81st) who had scored 9 of the club's 10 goals to date.



Hockey Team

This bright start was unfortunately not maintained and defeats were suffered at Yeovil and in the Winter Games at both Aborfield and Chepstow. After Christmas bad weather and petrol rationing caused cancellation of several fixtures although we were able to play Old Nor-tonians and Somerset Farm Institute. The former was lost by 3 goals to 1 and the latter won by 2 goals to 1.

In the Autumn term the team was captained by A.A. Hibbett (76th), and in the Spring term by A.A. Driver (78th). The outstanding player of the season has been A.A. Mackay (83rd) whose sound defence and intelligent use of the ball have saved the club on numerous occasions. Colours have been awarded during the season to A.A. Hibbett (76th), A.A. Stewart (81st), A.A. Mackay (83rd), A.A. Hart (77th) and A.A. Driver (78th).

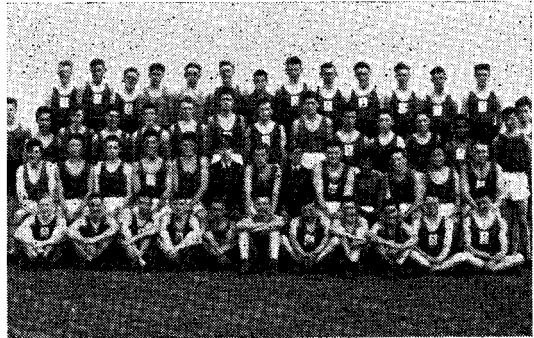
WING ATHLETICS

The 1956 season was a highly successful one with a very large number of records broken. The Wing was fortunate in having such a strong team but having built up our strength we have had to say farewell to about two-thirds of the team as three entries have passed out since August, 1956. It is this fact which makes us look at the Youth events with our eye on this season's team and as the results below show we need not be despondent.

Inter Squadron Championship — 8th May

As usual this was the first meeting of the season and as well as providing all the tension and excitement of the inter-squadron tussle it puts on show those athletes who are going to form the basis of the Wing team.

The 8th of May was a fine warm day with a light wind blowing down the back straight of the track. Seven events had been held on the previous Saturday morning and it was not long before the squadrons were neck and neck for first place. This situation remained throughout



Wing Athletics Team 1956

the afternoon and the final result depended upon the relay event. In this finale 'A' squadron were a little over excited and had to be disqualified due to a bad change over.

The final results of the meeting were:—

Youths	Juniors
1st A Squadron	1st C Squadron
2nd C Squadron	2nd A Squadron
3rd B Squadron	3rd B Squadron

Inter Squadron Athletics Trophy

1st C Squadron	253½ points
2nd A Squadron	240½ points
3rd B Squadron	178 points

The Victor Ludorum Trophy

was won by A.A. Rennolds with 17 points, A.A. McDermott being a close second with 16 points.

The Thomas Hansford Cup

was won by Weston Grammar School Youth Relay Team.

No less than eight Wing records were broken:—

Youth Records

A.A. Knight	High Jump	— 5 ft 1 inch
A.A. Elson	Weight	— 38 ft 8 inches
A.A. Hunter	Hammer	— 85 ft 5 inches
A.A. Elson	Javelin	— 148 ft 6 inches
Wing Team	Relay	— 48.6 secs.

Junior Records

A.A. Shrubsole	440 yds	— 53 secs.
A.A. Clarke	2 Miles Walk	— 15 mins 27.8 secs.
A.A. Holland	3 miles	— 16 mins 19.4 secs.



A.A. Lockyer clears 9' 9" and creates a new Station Record

No. 27 Group Athletics Championships — 6th June

As a result of their efforts in the Wing sports ten apprentices were chosen to represent the Station at Netheravon in the Group Championships. Locking were second to Yatesbury but the achievements of our ten apprentices we record with great satisfaction and appreciation. They were up against R.A.F. Champions with great experience but a name such as Derek Ibbotson does not demoralise an Apprentice.

A.A. Rennolds	1st in Hop, Step & Jump
	3rd in Long Jump
A.A. Clarke	2nd in 2 miles walk
L.A. Batey	2nd in 440 yds Hurdles
A.A. Farmer	3rd in Hammer
	7th in Shot
A.A. Locker	2nd in Pole Vault
L.A. Dissanayake	4th in 120 yds Hurdles
A.A. Shrubsole	4th in Long Jump
A.A. Castle	3rd in 440 yds
A.A. Newman	5th in 120 yds Hurdles
A.A. Wood	6th in High Jump

Rennolds, Clarke and Batey were selected to represent Group at Command Sports.

MacEwan Trophy Inter R.A.F. Apprentice School Championships — 9th June, 1956

This meeting was held at Cosford with heats during Saturday morning and finals in the afternoon. The word 'heat' was rather misapplied to say the least because it was bitterly cold and damp. Although we won the Youth Cup by 2 points from Halton they won the Junior Cup from us by 5 points. If your maths will stand up to it that means a win for Halton by 3 points. We were very unlucky because after counting our 'chickens' in the three miles Holland had to drop out with cramp.

Final points:—

Halton 114	Locking 111	St. Athan 78
	Cosford 63	Hereford 50

Four of our Wing team broke MacEwan records:—

A.A. Rennolds	Hop, Step and Jump —
	42 ft 1 in.
A.A. Farrington	Discus — 167 ft 10 ins
L.A. Locker	Pole Vault — 11 ft
Wing Team	Relay — 46 secs.

Quadrangular Contest at Chepstow — 16th June Locking v Chepstow v St. Athan v Hereford

Two vehicles with hard wooden seats (not to be confused with buses) left Locking camp on

Saturday, June 16th, and headed for Aust Ferry. It was raining when the contents spilled out (complete with ground sheets) just above the muddy banks of the Severn and was still raining when they returned to the waiting 'buses' in the evening.

The real bright spot of the day was A.A. Shrubsoles, 440 yds. in the relay. It was just a normal relay with Locking too far behind to make first place, until Shrubsole took over. He must have been about eighty yards behind and as the gap closed up it looked as if it was going to take more than fifty seconds to close it completely. Well Shrubsole did close up the gap in a supreme effort but was beaten at the tape. This was undoubtedly the best effort in the Wing during last season.

Despite the continual rain the points mounted up, Locking making a total of 60 with Chepstow 58 in the Senior events. The Junior events were won by St. Athan with Locking beaten into third place by Chepstow.

Station Sports — 27th June

The strength of the Wing was divided on this particular day as the three squadrons competed as separate units. But of eight squadrons competing A Squadron were 2nd, C Squadron 3rd, and B Squadron 7th.

Individual Results

Farmer	Hammer — 93 ft 7 ins. (Station Record)
Wood	High Jump — 5 ft 9 ins. (S.R.)
Rennolds	Long Jump — 21ft 11 ins. (S.R.)
Locker	Pole Vault — 9 ft 9 ins. (S.R.)
Shrubsole	440 yds.
Dissanayake	120 yds. Hurdles.
Batey	440 yds. Hurdles.
Farrington	Javelin.
A Squadron	4 x 110 relay — 46 secs. (S.R.)

Results of Other Matches

Annual Meeting v Halton at Locking — Won by Locking.

Annual Meeting v Aborfield at Locking — Won by Locking

Locking v Weston Grammar School — Won by Locking.

A Farewell to Members of the Team

Captain of the team L.A. Batey — represented Group in the 440 yds. Hurdles being second and hence selected to represent Command in the R.A.F. Championships. After being involved in knocking over the last hurdle and



Cross-Country Running Team

so affecting Sgt. Farley's finish Batey was replaced by Sgt. Farley who did poorly.

A.A. Rennolds who represented Group and Command in the Hop, Step and Jump, has always been consistent in his efforts for the Wing and will leave a gap which will not be filled for a long time; at the R.A.F. Championships he was placed second and represented the R.A.F. in the Inter services match and in the match against the Civil Services and Middlesex A.A.A.

A.A. Clarke represented 27 Group in the Command Championships in the 2 miles walk. The popularity of walking in the Wing is mainly due to Clarke's efforts and the constant support he has given his team members is very much appreciated in the Wing.

L.A. Locker. We must congratulate Locker on the rapid progress which he made in Pole Vaulting during the season. Jumping at ten feet requires strong nerves and very strong muscles and the rate at which Locker developed these was astounding. His 10' 6" equals the Wing record and he was unlucky not to get over the 10' 9" which he attempted in Group Sports.

A.A. Shrubsole took the quarter mile seriously for the first time this season. He has the build and has proved that he has the stamina and determination for this event. This is the race where one has to run as fast as possible from the gun and still save something for the last eighty yards. An impossible situation but Shrubsole has the answer.

Farmer, Dissanayake, Castle, Farrington, and Wood worked very hard both in competition and in training. We wish them the Best of Luck in their future sporting activities and no doubt we shall meet them representing other stations in Group Sports.

As mentioned earlier the popularity of road walking is to a large extent due to A/A Clarke (Also A/A Potter of the 69th Entry). His departure has not meant the end of the team. On the contrary they have been stepping out on three occasions since September. On 13th October, 1956, they competed in the Annual English Trophy 6 mile race at Chippenham.

On 15th December again at Chippenham where the team were placed third. Straugham and Hillman winning their six miles in the hour badges, (Harvey had previously qualified).

At Cranwell on January 30th, our team came fifth in the Inter-Command, Inter-Station seven miles road walking. A/A Harvey was included in the first six to finish for Tech. Training Command which won the Inter Command Competition. He therefore won a team badge and his Command Athletics Badge.

The team is Harvey (Capt.), Chapman, Straugham, Hillman, Kyte, Hobbs and Wheeler. Harvey will be pleased to meet any people interested in walking at the rate of something like six miles an hour — for one hour!



Road Walking Team

WING BOXING

During the season 1956-57 Apprentice Wing Boxing has continued to maintain the high standard of the past. In fact, it could be said that we are doing even better as a team and the spirit amongst the boxers is most gratifying.

The Inter-Squadron Competition was the first event of the season, the final taking place on the 10th October, 1956. Squadrons entered Junior and Senior teams, which resulted in an overall win for 'A' Squadron. 'C' Squadron won the Senior and 'B' Squadron the Junior Competition.

All the contests were well matched as results show and an excellent evening's boxing was enjoyed by all. Apprentice supporters were well organised with Robot Cheer Leaders and "electronic" flags and banners. The latter made a colourful array along the balconies of No. 3 Shed.

On the 22nd November, the Wing took part in the Royal Air Force Association Minehead Inter-Station Competition. The result was a win for Locking for the third time against Compton Bassett, Yatesbury and Melksham.

Our visits to Arborfield and Chepstow Army Apprentice Schools were unsuccessful in the boxing sphere and showed the need for a more aggressive spirit from our point of view.

After these two defeats, the team went into strict training for the Sigrist Trophy Championship which took place at Royal Air Force Halton on the 24th October. Our training efforts were not in vain and we returned with the Trophy for the fifth time in succession. Outstanding boxers on this occasion were A.A. Bonser 76th Entry, A.A. Slocombe 76th Entry, A.A. Jessop 77th Entry and C.A.A. Dartnell 77th Entry. A special mention should be made of A.A. Davidson of the 80th Entry, who boxed extremely well and courageously and, with the others, won his bout. Team Captains were A.A. Appleton 76th Entry in the first half of the season and later A.A. Wells 82nd Entry.

The Hubert Scott-Paine Trophy Championships were held at Royal Air Force Hereford on 14th - 15th February, 1957. Owing to some last

minute changes, due to sickness, it was not possible to take the strongest team. However, we emerged runners-up to No. 2 Wing, St. Athan, this being due in no small measure, to the boxers selected from the 85th Entry, who had been here only three weeks. Resulting from this event, the following were selected to represent the Royal Air Force at H.M.S. Ganges, on the 28th February, in the Inter-Services Boxing Association (Boy's) Championships.



Sigrist Trophy Winners

A.A. West 85th Entry, A.A. Manchip 85th Entry, A.A. Buckley 84th Entry, and A.A. Booth 83rd Entry.

Training throughout the season has been carried out by Warrant Officer P. Parkes, assisted by Corporal Clifton and Corporal Robbins. The former, at times, has taken certain risks by sparring with A.A. Pratt (4 ft. 11 ins.) and on one occasion, suffered a damaged knee-cap. Fortunately, the watches, usually kept in the trainer's pocket for safe keeping, escaped damage.

Reviewing the season as a whole, results have been very good, with the last competition against Halton still to take place on the 16th March, 1957.

H. G. R.

CRICKET

The season as a whole, proved to be very disappointing. Although the Wing XI won four and drew one of their first five games, they lost the last four matches.

The first match of the season against Weston Grammar School was drawn, but it gave the apprentices some much needed practice which stood them in good stead for the Bristol Grammar School game. This proved to be a first class game, and the team demonstrated good all round ability.

Two months later, when the Apprentices played their annual match against Halton, they were a ghost of their former selves. On Weston Grammar School Ground the Wing XI won the toss and elected to bat on a good wicket. In a little over one hour they were dismissed for a total of twenty-four runs. In reply, Halton scored twenty-five runs for the loss of one wicket. In fairness to the Locking team, it should be mentioned that they had been much weakened by Wing Athletic team calls.

The season was badly interrupted by the wet weather, and four games had to be cancelled.

Wing XI Visitors

April 28th	Weston Grammar School	Drawn	113	60-7
May 5th	Bristol Grammar School	Won	84-4	81
May 12th	St. George's Grammar School	Won	151-7	18
June 2nd	Weston-s-Mare C.C.	Won	52	38
June 9th	Chepstow Army Apps.	Won	99	77
June 23rd	Dr. Morgan's School	Lost	29	82-9 Dec.
July 7th	Halton	Lost	24	25-1
July 14th	Taunton School	Lost	64	76

In the Weston Mid-Week League, the Wing Team won four out of their eight matches. Unfortunately, they were knocked out in the first round of the cup competition.

Colours were awarded to:—

- L.A.A. Dissanayoki.
- A.A. Jessop
- A.A. Parnell
- A.A. Cherry
- A.A. Graves

Colours were re-awarded to:—

- A.A. Palmer
- L.A.A. Walter
- A.A. Philips

C. W. A.

SWIMMING

The Inter-Squadron Gala held on June 5th, 1956, was one the most thrilling for many seasons. The final position of the Squadrons was decided by the result of the last event. 'B' Squadron emerged as champions, the final points score being 'B' Sqdn. 93 pts., 'C' Sqdn. 91 pts. and 'A' Sqdn. 87 pts. The outstanding swimmers in the Gala were L.A. Jackson (80) individual champion and L.A. Adams (80) the runner-up.

We have never beaten Halton at swimming but we came very near to doing so in the Gala, on 6th July at Knightstone Baths. The event which turned the scales in Halton's favour was the Medley Relay. The finish was so close that it would have needed a "photo-finish" to have been certain of the winner. Halton were adjudged to have touched the side of the bath first and went on to win the Gala by 39½ pts. to 28½ pts.

Adams, Jackson and Jenkins (82) are to be congratulated on their success in the Group Championships.



It is hoped to arrange several swimming and water-polo fixtures with other Schools and with local junior swimming clubs during the coming season. The standard of swimming continues to rise and with all the 'stars' of last season and a few promising newcomers we should have a very successful season.

H. B. J.

TENNIS

The Locking Apprentice tennis team had a very enjoyable if not successful season last year. Several matches were played against local clubs, but owing to the shortage of suitable opposition, it was difficult to fill the fixture list.

The apprentices who played regularly for the team, consisting of three couples, were :—

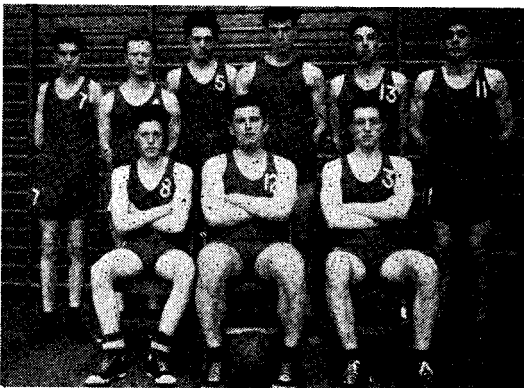
L.A.A. Jones, Capt.
S.A.A. Anderson
A.A. Jamieson
A.A. Cattell
A.A. Emerson
C.A.A. Broadbent
A.A. Morley

The singles championship was a great success attracting a large field of entries; congratulations should be given to A.A. Graves, the winner, and L.A.A. Jones, the runner-up.

Some matches were rained off last season, but we are hoping for a better season this year.

L. N. H.

WING BASKETBALL



The season shall have to be recorded as more enjoyable than successful. The year's main fixture, that against Halton resulted in a defeat by 48-26. It was not found possible to play the match in their fine gymnasium and an outdoor court was the best they could offer. Arborfield for some unaccountable reason resulted in a drawn 42-42. The rules of basketball do not allow for such a result and extra time should have been played to force a decision.

The mainstay of the season's efforts is in the local Y.M.C.A. league and again it is not possible to record the teams success. They met strong opposition headed by the station first team and might be excused not defeating the R.A.F. Champions. The Wing inter-entry league is a fine breeding ground for future players and thanks are due to Flying Officer Moll for his organisation of this.

Colours Awarded :—

1956 S.A.A. Farrington
A.A. Cornforth
A.A. Morley

BADMINTON 1 WING

The Apprentice Badminton team has been extremely unfortunate in having the bulk of their home fixtures in the later half of the season. All our home matches, to date, have had to be cancelled by opposing teams due to petrol shortage since rationing. The team has however, maintained its high standard in spite of its lack of good opposition.

On March 1st and 2nd the team comprising of :—

1st Pair	2nd Pair	3rd Pair
A/A Watts	A/A Cattell	A/A Leake
A/A Manocha	A/A Jamieson	A/A Clarke
reserve — C/A Grant		

travelled to R.A.F. Halton to compete in the Inter-Wing Badminton Championship. In the final result Locking and No. 2 Wing Halton were at the top with 9 sets each. The Championship Cup was awarded to No. 2 Wing Halton, who won 27 games; we won 26 games and were each awarded a "runners-up" medal.

R. N. C.

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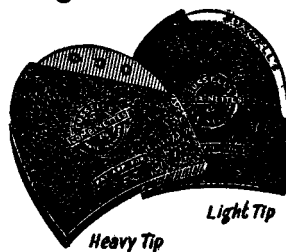
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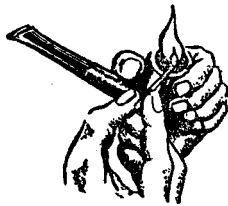
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