

THE
ROYAL AIR FORCE
COLLEGE



JOURNAL

CRANWELL

1971

VOL XLIII

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COLLEGE



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It is regretted that the publication of this volume has been delayed unavoidably. Future editions of the Journal will be published each September.

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The Reviewing Officer with Under Officer N. G. Matheson, Senior Under Officer C. D. Poate, Senior Flight Cadet Saeed Ahmad and Senior Under Officer D. R. Williams.

THE GRADUATION OF No 99 ENTRY

The Graduation Parade of No 99 Entry took place on the morning of 26 February 1971. The Reviewing Officer was Air Marshal Abdul Rahim Khan, HQA, SPK, SBT, Chief of the Air Staff and Commander-in-Chief, Pakistan Air Force. The parade was commanded by Senior Under Officer C. D. Poate and the Parade Adjutant was Senior Flight Cadet B. S. Simpson. The Sovereign's Squadron was commanded by Senior Under Officer D. R. Williams and No 4 Squadron by Under Officer I. C. Atkinson.

After the Advance in Review Order, the Reviewing Officer presented the Sword of Honour to Senior Under Officer C. D. Poate, the Queen's Medal to Senior Under Officer D. R. Williams and the R. M. Groves Memorial Prize and Kinkead Trophy to Under Officer N. G. Matheson. He then gave the following address :

Gentlemen,

It is a cold day and I will keep my address as brief as possible. There are, however, two things I insist on saying and a few more if you will bear with me for a little longer.

First, I would like to thank the Royal Air Force for the honour done to me in inviting me to take this parade. It is an honour which I very much appreciate and one which warms the cockles of my heart — if not of my feet.

Secondly, I would like to congratulate you cadets on the splendid and quite faultless way in which you executed the parade. Perhaps I need not say more than that it is the Cranwell standards to which we aspire at Pakistan Air Force College Risalpur, with, I am happy to add, some measure of success.

Now what can I say to you cadets that you are likely to remember ? I am sure you have had more than your fill of lectures since you



The Reviewing Officer, in company with the Commandant, Air Marshal Sir Leslie Mavor and the Assistant Commandant (Training), takes the salute at the Fly-Past.



The Reviewing Officer inspecting the Graduation Parade of No 99 Entry.

walked round The Orange for the very first time, and I doubt there is much left to say that you have not heard before. However, as I sat in my office in Peshawar a few days ago — 6,000 miles away — some thoughts occurred to me which I would like to share with you.

I thought, for instance, how fortunate you and I are in our choice of a career. For though distance, politics and many of the troubles and upheavals of life today tend always to divide us, yet flying — and the immense pleasure we get from it — provides us with a common bond which not even the pressures of the modern world can break. Furthermore, this bond promotes a spirit of comradeship and friendly competition which helps us all to raise our standards.

I well remember the pride with which a few years ago, I watched 16 Pakistan Air Force fighters do a formation loop over Karachi — a record at that time. I remember, too, that when I watched 22 Royal Air Force Hunters

do the same thing at Farnborough a year later, it was not envy, irritation or 'sour grapes' which filled my mind, but admiration for the skill and effort involved and, if you can believe it, pride too.

What I am trying to say is that with Air Forces, nationality often counts far less than the sense of belonging to a world-wide band of airmen; and I know of no other profession or occupation where such a strong bond exists. This is surely an influence for good in a troubled world. In our case, of course, this bond is further strengthened by the Royal Air Force background and training of so many Pakistan Air Force officers and men, myself included.

So much for our good fortune in belonging to our two Air Forces. But gone are the days when standards were measured by sheer size and numbers. Nowadays it is the quality of the individual men and their equipment which counts and the first priority for us all, whether

we are aircrew, ground crew, equippers, accountants or whatever, is surely to reach the highest standard in the air and on the ground, which our training, our ability, our equipment or our conscience can achieve. Nothing else is good enough.

This of course, applies not only to your professional role, but also to your role as officers. I always remember being told when I attended the Staff College at Andover, of one of your Generals — Horrocks I think it was — who said that of any group of ten men, two would lead, seven would be content to be led and one would much rather not be there at all. It is your job to be always one of the two. This will not be easy but it won't be so hard either. If you bear constantly in mind

the fact that your men are first of all people, with hopes, anxieties, ambitions, fears and frustrations just like you, and if you can remember always to combine compassion with firmness and fairness in your dealings with men, you will almost certainly become good officers.

The Royal Air Force will provide for you an unending challenge and I have no doubt that, like your predecessors, your response to that challenge will continue to enable the Royal Air Force to uphold its glorious traditions, established both in peace and war.

I wish you all the best of good fortune and success in your careers.



The Reviewing Officer planting a tree to commemorate the occasion of the Graduation of No 99 Entry.

THE WINGS AND PRIZES CEREMONY

Presentations of Wings and Prizes to No 99 Entry were made by the Commandant, Air Vice-Marshal F. D. Hughes, CBE, DSO, DFC, AFC, MA, in the Whittle Hall on 25 February 1971.

After making the presentations, Air Vice-Marshal Hughes addressed his audience :

Ladies and Gentlemen : I am truly absolutely delighted to see so many parents, relatives and friends of No 99 Entry who have braved what they thought was the Lincolnshire winter to be here for the graduation ceremonies. I can assure you that we all appreciate your presence on this occasion which is such a milestone in the military careers of these young men. They are completing a very exacting course of training and, believe me, you may be justifiably proud of them. I am sure that the graduating entry would wish me to acknowledge that their success reflects, in no small measure, the support that you have given them during their 2½ years at the Royal Air Force College. I would like to take this opportunity, for myself, to thank you for all that you have done. Speaking as a parent whose son graduated with No 84 Entry, I know just how much this ceremony and the graduation parade tomorrow must mean to you.

I would like to congratulate all the members of No 99 Entry on successfully completing their course, and to compliment the prize-winners on earning their trophies. In particular I must mention the winners of the three major prizes who must wait until tomorrow to receive their awards on the Graduation Parade :

The R. M. Groves Memorial Prize and Kinkead Trophy for Flying : Under Officer Neil Matheson.

The Queen's Medal : Senior Under Officer David Williams.

The Sword of Honour and R. S. May Memorial Prize : Senior Under Officer Derek Poate.

These prizes will be presented by our Reviewing Officer, and on this occasion we are fortunate to be able to welcome the Chief of the Air Staff and Commander-in-Chief, Pakistan Air Force, who is making his first official visit to the Royal Air Force College. Usually, the Battle of Britain Trophy for Aerobatics is presented at this ceremony, but

because it was won by Senior Flight Cadet Saeed of the Pakistan Air Force, I have asked the Reviewing Officer to present it on the Graduation Parade tomorrow.

Now, Air Marshal Abdul Rahim Khan joined the Royal Indian Air Force in 1943. On commissioning he was posted to his first squadron and saw action in Burma with the squadron during World War II. In 1946 he came to England and passed through the Central Flying School to become a Qualified Flying Instructor. That was the first of many courses in Britain — he did the Fighter Leaders' Course at the Central Fighter Establishment, Staff College, IDC — all the right ones except Cranwell ! But before the War, he was too young for Cranwell !

He has been a QFI, served on the staff of the Royal Pakistan Air Force Academy, formed the first jet fighter squadron, was the first Pakistani pilot to fly supersonic, commanded the Fighter/Bomber Wing, organised the Pakistan Air Defence System, was the Senior Air Staff Officer on an Operational Group, commanded the base at Mauripur, was Director of Plans, Director of Operations, and Assistant Chief of Air Staff (Operations). He was holding this appointment during the war with India in September 1965 and, in his capacity as Chief of Operations of the Pakistan Air Force, he was responsible for the conduct of all tactical close support and counter-air operations. For this he was awarded the 'Sitara-e-Pakistan' at the end of the war.

In February 1966 he became Commandant of the Pakistan Air Force College and from there returned to Air Headquarters as Assistant Chief of Air Staff (Administration). On 1 September 1969, Air Marshal Rahim Khan took over as Chief of the Air Staff and Commander-in-Chief, Pakistan Air Force.

We are indeed honoured that such a distinguished military leader should agree to be our Reviewing Officer, and it will give me great personal pleasure to welcome the Air

Marshal and the Begum Rahim Khan to Cranwell, and back to the Royal Air Force with which he has spent so much time.

Now what of our Graduating Entry ? No 99 Entry arrived at Cranwell in September 1968 with a total strength of 134, the largest entry we have ever had. Before starting academic training, each flight cadet had to decide whether to seek entrance to university or to follow the standard Cranwell course. 99 was the first entry to be offered this opportunity and, as a result, no less than 60 flight cadets transferred to university. The remainder, believing with William Congreve that 'Tis well enough for a servant to be bred at university ; but the education is a little too pedantic for a gentleman' decided to follow the standard course. 99 has managed to accumulate its fair share of firsts and lasts. To begin with, it is the last of the double figure cadet entries ; it is also the last to endure the complete flight cadet system with its moves from the South Brick lines to the Junior Mess Blocks and then to College Hall ; and, finally, it is the last flight cadet entry to visit the United States Air Force Academy at Colorado Springs. On the other hand, it is the first senior entry to enjoy the affluence of the Military Salary ; it is the first senior entry to be denied the traditional privilege of boiled eggs with their tea ; and it is the first to have taken a leading part in the notable Eastern Counties Clog Dancing Championships.

Looking at the statistics, after the departure of the university element, we see 'played 74, won 6, lost 4 and (with) drawn 24,' This leaves us with our graduating total of 52 ; made up from 15 pilots, 25 engineers, 7 suppliers, 3 navigators, 1 secretary and 1 regiment.

I would like to spend a little time now in taking a look at the Entry's progress through the College. First of all, academic training. The entry grew noticeably in confidence and solidarity when their pre-university fellows did in fact leave for university. Since 99 was a small Entry the cadets got more individual attention from instructors, to the general benefit perhaps, but not always with a warm welcome from the recipients ! Written English was weak to begin with, but their overall performance in the humanities was at least on a par with that of previous entries and the same could be said of the sciences and mathematics.

Stimpson did well to pass the Royal Air Force Colloquial Examination and later the Civil Service Commission examination in French, and in the former Pennington got a very good mark of 82%. The SSR Language set all raised a fairly good standard in French, some of them helped by the skiing trip to Ancelle where they achieved local fame for 'la capacité des Anglais.' Crockatt, Fox and Williams did some good work in their Special Subjects studies, proving themselves to be forward thinkers if not revolutionaries ! Luker's study of 'Literature and War' produced a most interesting paper. Several projects in the Associated Studies phase were in Economics, and included some focussed on Cranwell. We got some startling recommendations from these, but I think we might have a few problems in implementing them.

First in the final Academic order of merit was Tingle for his outstandingly good work in Mathematics, Physics and in the Applied Sciences.

The Senior Regiment Instructor tells me that 99 have achieved superlative standards of ceremonial drill. It is his own considered opinion that these high standards could only have been achieved by a dedication directly related to their lack of deep academic and intellectual aspirations !

In May last year the pilots began what has proved to be a rather dis-jointed pattern of flying training. However, the final results were rather better than expected and 99 will graduate having achieved 5 high average, 5 average and 5 low average assessments. The 4 best cadets divided the flying prizes between them. As a non Royal Air Force cadet, Saeed does not appear in the Order of Merit but his flying marks would have gained him fourth place. His performance at the flights and in ground school make him a credit to the Pakistan Air Force and we were therefore delighted to see him with the Battle of Britain Aerobatic Trophy.

As regards Ground School, the Entry achieved an overall average of 74%, thus maintaining the general standard set by recent entries. This result is also on a par with current averages at other BFTS's.

Navigator training began with two students, but a third was recruited at a later stage. All three are graduating so that, in industrial terms, one could say that our productivity bonus has been 50% and we have managed to achieve this without recourse to further pay claims or arbitration. The course standard was High Average for both Airwork and ground studies and the entry was the first to be trained to an entirely new syllabus designed to meet the demanding requirement of the aircraft now entering service. It is the first course since 1962 to complete its basic and advanced navigation training at the Royal Air Force College, and this has been done on three entirely different aircraft.

The engineer flight cadets did well in the first year of their degree course and managed to remain cheerful despite the hard work which the course demanded of them. They are assessed as having the same standard of ability as their predecessors but they have managed to get better results by sheer hard work. Good stuff, 99 !

The Supply Branch flight cadets maintained an average standard in their professional studies and their results are on a par with those achieved by previous entries. Three secretarial flight cadets started professional training but by October last year the number had reduced to one. The survivor, Edey, has attained a higher standard than the average of recent Secretarial entries.

The Engineer, Supply and Secretarial members of the Entry will return to Cranwell after graduation to complete their specialist training. On the other hand, Fox, our single Royal Air Force Regiment flight cadet, will go straight to No 51 Sqn at Wittering. However, he had better not unpack as I understand his squadron is on standby for duty in either Northern Ireland or Germany !

In sport the Entry has made a considerable contribution to the College teams and can take pride in the fact that 20 of their number have gained colours in 13 different sports. They have 7 Royal Air Force representatives : Jones and Sucking at Swimming, Luker and Hunt at Modern Pentathlon ; Crockatt and Spencer at Rowing and Tingle at Chess. In addition they have three Training Command representatives, Rounds at Basketball, Atkin-

son at Rugby and Boardman at Karting. This achievement offers quite a challenge for future entries, trad or grad, to try and beat. Well done, the 99th !

Gentlemen, you have responded well to your responsibilities as Senior Entry. Conscious that generations of flight cadets have been watching you from the wings, you have had the special role of introducing the first two graduate entries to the life and traditions of the Royal Air Force College. The manner in which you have accomplished this has set an encouraging pattern for the future. You may reflect, with personal satisfaction, that the transition has been effected with few disruptions to the harmony of College Hall Mess.

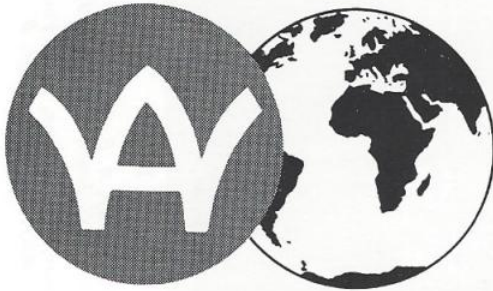
You have all completed your basic Officer Training ; in a short time your specialist training will also be behind you, and soon you will be put to the test when you join your first units. The foundations for your career have already been established, and you are about to assume responsibilities both as an officer and as a specialist in your own branch. The ability and willingness with which you discharge these responsibilities will determine the pattern of your future careers.

Never be satisfied with anything that you consider to be barely adequate — just enough to get by. We receive periodic reports about the pilots and navigators from Cranwell as they pass through their next stages of training and it is discouraging to note some that seem unwilling to make the necessary effort. I'm afraid we learn this from reading their suspension reports ! Since there is now a Single List, you will be in direct competition with everyone else for promotion and for the more coveted appointments. In view of this, I urge you never to let your standards relax once you leave here. Just remember Private Speakman of the Black Watch who was awarded the Victoria Cross in Korea for an act of incredible bravery. Afterwards, when he was being congratulated, he said : ' It was nothing special — I only did my best like I always do.' That single statement says so much.

But there is another thing to remember as you leave here. You go out into the cold hard world with the Cranwell stamp on you.

Because of this, people will expect you to be firmly above the average. If you only make the average bracket you may even be thought of as a bit of a failure. That's pretty hard, isn't it? But its how your fellow officers will certainly react. So the barely adequate is going to get you nowhere, is it? Ponder on Speakman — 'It was nothing special — I only did my best, like I always do.'

Well, now, gentlemen — you have earned your Queen's Commission by your performance here over the past 2½ years. You are leaving, in my view, at a most exciting phase in the development of our service. My congratulations on completing so successfully this vital stage of your training. You are now well on your way to a challenging and rewarding future and I wish you the best of luck for tomorrow, but especially for the years to come. As they say in Irish — God love ye all !



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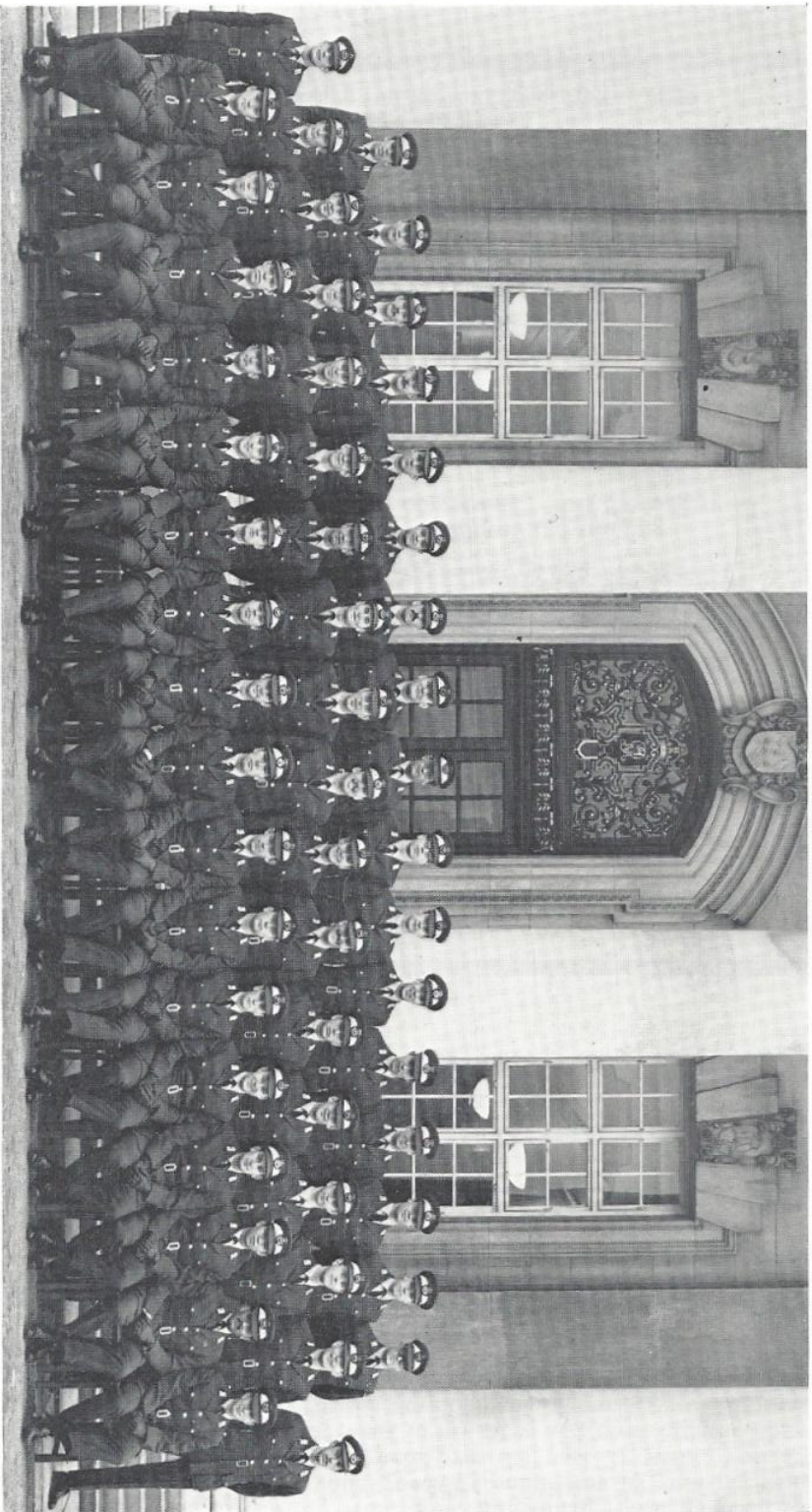
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NO 99 ENTRY

Back Row :

Senior Flight Cadets : T. J. Fear, A. G. Sims, W. J. R. Kelly, A. B. Crockett, R. W. Mussard, C. A. Suckling, T. J. Oakley, A. J. Pennington, T. W. B. Round, A. S. Rutter, J. F. Gardner, A. L. Lewis, G. Jones, N. B. Hunt, J. W. C. Spencer, P. N. Harborne, A. S. Humphries.

Centre Row :

Senior Flight Cadets : B. S. Simpson, D. R. Thompson, D. G. Wilson, S. D. Vince, M. R. S. Chinnock, J. C. P. Robinson, T. A. Galloway, G. E. Bolton, P. W. Cholerton, K. J. G. Platt, G. M. Edley, J. G. Wheatcroft, B. A. Wait, P. D. Luker, N. B. Tingle, H. G. Britten-Austin, B. A. Lee, C. W. Simpson.

Front Row :

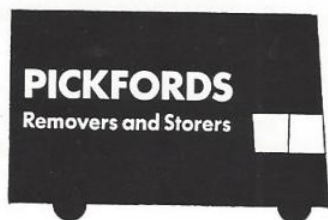
Senior Flight Cadets : B. S. Gooi, H. J. Boardman, M. J. W. Allen, D. W. Payne. Under Officers : J. G. Sutherland, N. G. Matheson, C. H. Lawrence. Senior Under Officers : D. R. Williams, C. D. Poate. Under Officers : I. C. Atkinson, I. S. Cartwright-Terry, M. G. Wilson. Senior Flight Cadets : I. P. Durr, C. B. Montagu, S. C. Chan, Saeed Ahmad, G. H. Fox.

COMMISSIONING LIST

No 99 ENTRY

- C. D. POATE, *Senior Under Officer (Pilot); The Sword of Honour and the R. S. May Memorial Prize.*
- D. R. WILLIAMS, *Senior Under Officer (Navigator); the Queen's Medal; The Philip Sassoon Memorial Prize; The Institute of Navigation Trophy and the Ministry of Defence (Royal Air Force) Prize for Navigators; The Alasdair Black Memorial Trophy for General Service Training.*
- I. C. ATKINSON, *Under Officer (Engineer).*
- I. S. CARTWRIGHT-TERRY, *Under Officer (Pilot).*
- C. H. LAWRENCE, *Under Officer (Engineer).*
- N. G. MATHESON, *Under Officer (Pilot); The R. M. Groves Memorial Prize and Kinkead Trophy for Flying.*
- J. G. SUTHERLAND, *Under Officer (Supply).*
- M. G. WILSON, *Under Officer (Pilot); The Ministry of Defence (Royal Air Force) Prize for War Studies and Humanities and the Royal New Zealand Air Force Trophy.*
- M. J. W. ALLEN, *Senior Flight Cadet (Engineer).*
- H. J. BOARDMAN, *Senior Flight Cadet (Engineer).*
- G. E. BOLTON, *Senior Flight Cadet (Supply).*
- H. G. BRITTEN-AUSTIN, *Senior Flight Cadet (Engineer).*
- S. C. CHAN, *Senior Flight Cadet (Engineer, Royal Malaysian Air Force).*
- M. R. S. CHINNECK, *Senior Flight Cadet (Engineer).*
- P. W. CHOLERTON, *Senior Flight Cadet (Engineer).*
- A. B. CROCKATT, *Senior Flight Cadet (Pilot); The Dickson Trophy and Michael Hill Memorial Prize for Applied Flying.*
- I. P. DURN, *Senior Flight Cadet (Engineer).*
- G. M. EDDEY, *Senior Flight Cadet (Secretarial).*
- T. J. FEAR, *Senior Flight Cadet (Engineer).*
- G. H. FOX, *Senior Flight Cadet (Regiment).*
- T. A. GALLOWAY, *Senior Flight Cadet (Pilot).*
- J. F. GARDINER, *Senior Flight Cadet (Pilot).*
- B. S. GOOI, *Senior Flight Cadet (Engineer, Royal Malaysian Air Force).*
- P. N. HARBORNE, *Senior Flight Cadet (Pilot).*
- A. S. HUMPHRIES, *Senior Flight Cadet (Supply).*
- N. B. HUNT, *Senior Flight Cadet (Supply); The Ministry of Defence (Royal Air Force) Prize for Supply Flight Cadets.*
- G. JONES, *Senior Flight Cadet (Engineer).*
- W. J. R. KELLY, *Senior Flight Cadet (Engineer).*
- B. A. LEE, *Senior Flight Cadet (Engineer).*
- A. L. LEWIS, *Senior Flight Cadet (Engineer); The Ministry of Defence (Royal Air Force) Prize for the BSc (Ord) Course.*
- P. D. LUKER, *Senior Flight Cadet (Pilot).*
- C. B. MONTAGU, *Senior Flight Cadet (Engineer).*
- R. W. MUSSARD, *Senior Flight Cadet (Engineer).*

- T. J. OAKLEY, *Senior Flight Cadet (Engineer)*; *The Chicksands Cup for BSc (Hons) Course in Electrical/Mechanical Engineering.*
- D. W. PAYNE, *Senior Flight Cadet (Pilot).*
- A. J. PENNINGTON, *Senior Flight Cadet (Pilot).*
- K. J. G. PLATT, *Senior Flight Cadet (Engineer).*
- J. C. P. ROBINSON, *Senior Flight Cadet (Engineer).*
- T. W. B. ROUNDS, *Senior Flight Cadet (Navigator).*
- A. S. RUTTER, *Senior Flight Cadet (Engineer).*
- SAEED AHMAD, *Senior Flight Cadet (Pilot, Pakistan Air Force)*; *The Battle of Britain Trophy for Aerobatics.*
- B. S. SIMPSON, *Senior Flight Cadet (Supply).*
- A. G. SIMS, *Senior Flight Cadet (Pilot).*
- J. W. C. SPENCER, *Senior Flight Cadet (Engineer).*
- C. W. STIMPSON, *Senior Flight Cadet (Navigator)*; *The Ecole de l'Air Trophy for French Studies.*
- C. A. SUCKLING, *Senior Flight Cadet (Engineer).*
- D. R. THOMPSON, *Senior Flight Cadet (Supply).*
- N. B. TINGLE, *Senior Flight Cadet (Pilot)*; *The Hicks Memorial Trophy for Ground Subjects*; *The Abdy Garrard Fellowes Memorial Prize for Maths and Science.*
- S. D. VINCE, *Senior Flight Cadet (Pilot).*
- B. A. WATT, *Senior Flight Cadet (Supply).*
- J. G. WHEATCROFT, *Senior Flight Cadet (Engineer).*
- D. G. WILSON, *Senior Flight Cadet (Engineer).*



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THE PRESENTATION OF ACADEMIC AWARDS

A ceremony to mark the award of Bachelor of Science Degrees and Higher National Diplomas in Mechanical and Electrical Engineering to No 93 Engineering Degree Course, Nos 94, 95 and 96 Engineering Diploma Courses and No 6 Standard Engineering Diploma Course was held in the Whittle Hall on 18 September 1970. The certificates were presented by Dr E. J. Richards, OBE, DSc, MA, CEng, FRAeS, FIMechE, Vice-Chancellor, University of Technology, Loughborough.

After making the presentation Dr Richards gave the following address :

Commander-in-Chief, Commandant, Ladies and Gentlemen : I am always very happy when I give away prizes of certificates to young people who are just entering their particular career, and who have the whole of their professional lives ahead of them to enjoy. This is one of the things that we in our middle age begin to feel very badly about, as we have already enjoyed the wine of life for a long time and do not have it all available to us in the future. I am particularly pleased to come along today because the opportunities in the universities for seeing young people are getting rather less. As you know, Vice-Chancellors are now treated as the ogres of the educational world ; the generation gap is being set up as a means of ignoring us and as a means of forbidding our saying what we generally think of, and feel towards, things.

There is in fact a lot that we can say because the one thing that we have behind us is the experience of what has gone before. We can therefore predict what is likely to happen in the future and there is no greater area of need for this kind of prediction of what is going to be needed by young men than in the educational field. I am reminded very much of a story — an aeronautical story — of two very famous scientists in the world — Einstein and Theodore Von Karman who was one of the real pioneers of aviation, particularly in the fields of fluid mechanics and turbulence. They were talking to each other and Einstein said, ' You know, I'm going to be quite pleased when I die because there are one or two little points about my relativity theory that I want to talk to the Almighty about so that I can get them straight.' Theodore Von Karman agreed ' Well, you know,' he said, ' I feel rather the same thing about turbulence. There's so little we understand about it that I really must have

a chat with the Almighty.' To this Albert Einstein replied, ' Oh, but my dear Theodore, you must realise that even the Almighty doesn't understand turbulence !'

I think, in a way, you know, even the Almighty doesn't understand education. It is an extremely difficult thing to get the picture of what we are trying to do in education, whether it be in the Services or in civilian life. It is extremely difficult to know what it is we are trying to prepare you for, to try to get you to really understand. I think we must have our aims, in just the same way as everybody else does. I suppose the aim in education is not to prepare you for next week but for you to realise that you have a career of some 30 or 40 years and that we must prepare you for somewhere in the middle of that career and that period of time.

It is quite extraordinary how difficult it is to prepare you for that large number of years ahead. One of the things that is noticeable to people of my age is how much change has occurred. Indeed it is said, and I am willing to believe this, that knowledge doubles every 15 years. This means that the extra knowledge that is to come into the world during the next 15 years, which will take you to the middle of your careers, is going to be equal to all the knowledge we have obtained up to now throughout the whole of the generations. This is really quite a frightening thought, although surprisingly true.

Looking back, one of the things you can do is to list the way of the world in past decades ; I remember as a child in Barry in South Wales, my brother building the first radio set in the town. He was about 12 (and, incidentally he went into the Royal Air Force afterwards).

That was my first solid thought about technology ; that here was radio coming into existence for the very first time. One could really list the decades going on — 1930, the motor car became available to ordinary mortals ; 1940, the aeroplane became something for more than just joy rides, it became a part of the war scene and a part of the civil aviation scene. I shall always remember how, during the early years at the National Physical Laboratory, in order to do a study of an aviation situation, my boss flew over to America in the belly of a Liberator to have discussions about wing design. This was really the only method to get over there in those days — a very dangerous, very hazardous affair. Since then I have flown over the Atlantic about a hundred times without the slightest thought of any significant dangers at all. This is what happens in quite a short period of time. In the 50's jets, computers, television sets, etc., came about bringing with them complication upon complication. In the 60's we had sputniks, going to the moon, drugs, tape recorders and, in the 1970's, there is no doubt that the continuation of these efforts can go on in just the same sort of way.

Knowledge is increasing ; knowledge is growing ; knowledge is accelerating and you are the people who have unprecedented opportunities for gaining this knowledge, but you are also the people who have to have the responsibility of using it and who have to be educated in a way that will allow you to use it most appropriately. I remember during the war acting as secretary of very secret conferences in which we were discussing the performance of Royal Air Force aircraft, and one of the things we were talking about was producing more of them. I remember Petter giving a paper saying that he could produce aeroplanes at 22s. 6d. per pound of aeroplane. Now, in fact, it is something like £20 per pound of aeroplane, and although the value of the pound has gone down by say a quarter, the amount of added complication is never-the less equivalent to about a factor of five. This means to say that you, as opposed to my generation, are having to deal with aircraft which are something like five times as complicated as those we had. If curricula were directly affected as a result, courses would be five times as long to match the increase in knowledge. This might be rather enjoyable in some ways — that you should stay in the

university for 15 years and 40 years in school in order to achieve all this knowledge. Obviously this is not possible and those of us who are in education are having to really think about how, in fact, to get you ready ; how can we make you good citizens when this enormous explosion of knowledge and responsibility is upon you. We as older people are very aware of this. We are not irresponsible about it, we just know that this is one of the big problems. The way in which we have tended to cope with this in universities, and it is not by any means a good solution, is to say, ' All right, we must distil this knowledge ; we must boil it down into the deep analytical kind of thinking ; get away from the humanity of it and make it into a rather insipid soup which can be given in large quantities so that you can imbibe the relevant facts and so forth.' This I think is a great pity but we are being, to some degree forced towards this by virtue of enormously increased amount of knowledge that we have compared with that of the past. What is more, we have obviously got to reduce the subsidiary aspects of the students' education ; we've got to be more specialist ; we've got to have more people concentrating upon their particular topics. This is one of the big problems we must face in due course ; it has been said that in the year 2000, everybody will know everything about nothing and no one will be able to talk about anything that anyone else knows about. There is the danger of specialisation. We will then obviously have to say, ' Well, we can't do it all, we simply must have people coming back for courses throughout their lives,' and this is one of the things that is obviously growing — continuation courses. A further problem is that it is most difficult for students nowadays to work harder and have clearer aims about what they are doing.

If you look at all these trends and say to yourself, ' How am I shaping in the light of all these things ; how is the Air Force giving me an education which really satisfies me on these things ?' — I think you will find that the kind of education you have at Cranwell, the kind of education for which you have now received your diplomas, comes out very high on the list, and you can be very, very proud of what it is and of the awards that you have come here to receive today. I think that the specialist idea is, for example, very much better if it is adjusted and carried out in

terms of an environment that you know is significant. I think that one of the reasons why we have so much trouble in universities at the moment is because people come along not knowing what the purpose of the exercise is ; they choose the wrong specialisation and, not being able to see where it fits into their life, become discontented and the result is that they do not recognise the validity of exactly what is being taught. At Cranwell it is quite obvious to me that you are having an education which has had to be specialised, but which is in absolutely the right context, with a sandwich element which, I am sorry to hear, is disappearing, and with a relationship to outside use. That, I think, is enormously valuable.

Another point is that you are receiving something valuable, the great lack of which in the modern world is one of the great worries, and that is that you are being taught to work hard ; you are being taught to work really hard and get on. This, in my view, is something which is essential as an exercise of training if you are to be ready to cope with the challenge, the modern challenge, the challenge of five times the amount of complication that we had as young people. Indeed, I think, if you look at them all, you will find that the Service methods of education are extremely satisfying and much better than in civilian life. You can come back to courses throughout your career. If you knew how hard it was in civilian life to come back to courses, to top up as you might say, to increase your knowledge as your aim in life becomes more clear ; if you were to realise how difficult it is in civilian life to do this, you would be very thankful that you have chosen the Royal Air Force for your life and that you have such a well organised system of educating yourselves. I admire, and always have admired, the Royal Air Force's educational system, and I think that you in turn, when

you get to my age and look back over what you have achieved, will realise how valuable it has been. I have to admit that I encourage the students at the University to join the Air Squadron, because I believe that learning to fly is one of the greatest contributions to confidence and self-reliance that I can think of. I think that I also encourage them because of the discipline involved in it, because of the fact that they have to recognize themselves as part of the system, and that they have to sacrifice a certain amount of their freedom in order to really be efficient as part of that system.

So may I say how grateful I am that I have been asked to come along and say these few words. I do hope that when you are my age, and after you have learned from experience of life, you will be able to pass on this kind of comment to those who will be coming behind you. I always remember it is very difficult to give advice to young people, but there is a story about Lord Trenchard which may, or may not, be true — I don't know — that in his last few years he was a bit absent-minded ; he had three cadets come into his room to be presented and to be congratulated on a very high performance. When they got into the room he had forgotten the purpose of the meeting ; he hummed and ha'd for a little while and then he got out of it by saying, ' Well, if you do another job for the Royal Air Force, do it better ! ' And you know, although he didn't know what he was talking about, I think that this is a jolly good motto for everyone here, in fact for everybody in life, that with the next job, do it better and you will find that you have a very satisfying career, a very happy life and you will be very much appreciated by all those around you.

Thank you very much, Commandant, for inviting me here this morning.

No 93 ENGINEERING DEGREE
COURSE

- Flying Officer M. H. MAAN : BSc (2nd Class Honours, 1st Division).
- Flying Officer A. EVANS : BSc (2nd Class Honours, 2nd division).
- Flying Officer P. WITHERS : BSc (2nd Class Honours, 2nd division).
- Flying Officer B. WOOLSTENCROFT : BSc (2nd Class Honours, 2nd division).

No 94 ENGINEERING DIPLOMA
COURSE

(HIGHER NATIONAL DIPLOMA)

- Flying Officer L. C. BATE : Electrical.
- Flying Officer J. BATES : Electrical.
- Flying Officer G. N. GREEN : Electrical.
- Flying Officer J. MARCUS : Electrical.
- Flying Officer A. J. VAREY : Electrical.
- Flying Officer D. A. WRIGLEY : Electrical.

No 95 ENGINEERING DIPLOMA
COURSE

(HIGHER NATIONAL DIPLOMA)

Pilot Officer N. G. BETTS : Mechanical.
Flying Officer K. C. BYRNE : Mechanical.
Flying Officer L. G. G. CARTWRIGHT-TERRY :
Mechanical.
Flying Officer J. E. CHANDLER : Mechanical.
Flying Officer M. CLOVIS : Electrical.
Flying Officer G. COLE : Mechanical.
Flying Officer R. J. C. DAWSON : Mechanical.
Flying Officer V. R. DENWOOD : Electrical.
Flying Officer C. J. HOCKLEY : Mechanical.
Flying Officer J. C. W. LAPSLEY : Mechanical.
Flying Officer G. ROBERTSON : Electrical.
Flying Officer P. R. SLAWSON : Mechanical.
Flying Officer I. SLOSS : Electrical.
Flying Officer J. B. WELHAM : Mechanical.
Flying Officer D. J. WEBB : Electrical.
Flying Officer O. M. WILLIAMS : Mechanical.

No 96 ENGINEERING DIPLOMA
COURSE

(HIGHER NATIONAL DIPLOMA)

Flying Officer P. A. BOTTERY : Mechanical.

Flying Officer J. K. CARTLIDGE : Mechanical.
Flying Officer J. L. HAMER : Mechanical.
Flying Officer J. MCCARTNEY : Electrical.
Flying Officer P. C. MINTER : Electrical.

No 6 STANDARD ENGINEERING
DIPLOMA COURSE

(HIGHER NATIONAL DIPLOMA)

Flying Officer R. ANDREWS : Mechanical.
Flying Officer R. M. BRIGHT : Electrical.
Flying Officer R. BRUMPTON : Electrical.
Flying Officer C. P. CLAYTON : Mechanical.
Flight Lieutenant J. CUMMING : Electrical.
Flying Officer D. W. FISHER : Electrical.
Flying Officer E. A. HARDWICK : Mechanical.
Flying Officer R. S. HARRISON : Mechanical.
Flying Officer I. E. HURRELL : Electrical.
Flying Officer B. J. R. NELSON : Electrical.
Flying Officer D. W. PEDRICK : Electrical.
Flying Officer M. J. W. SHEPHARD :
Mechanical.
Flying Officer I. SINKINSON : Electrical.
Flying Officer C. F. STANDHAM : Electrical.
Flying Officer J. M. WOOD : Electrical.



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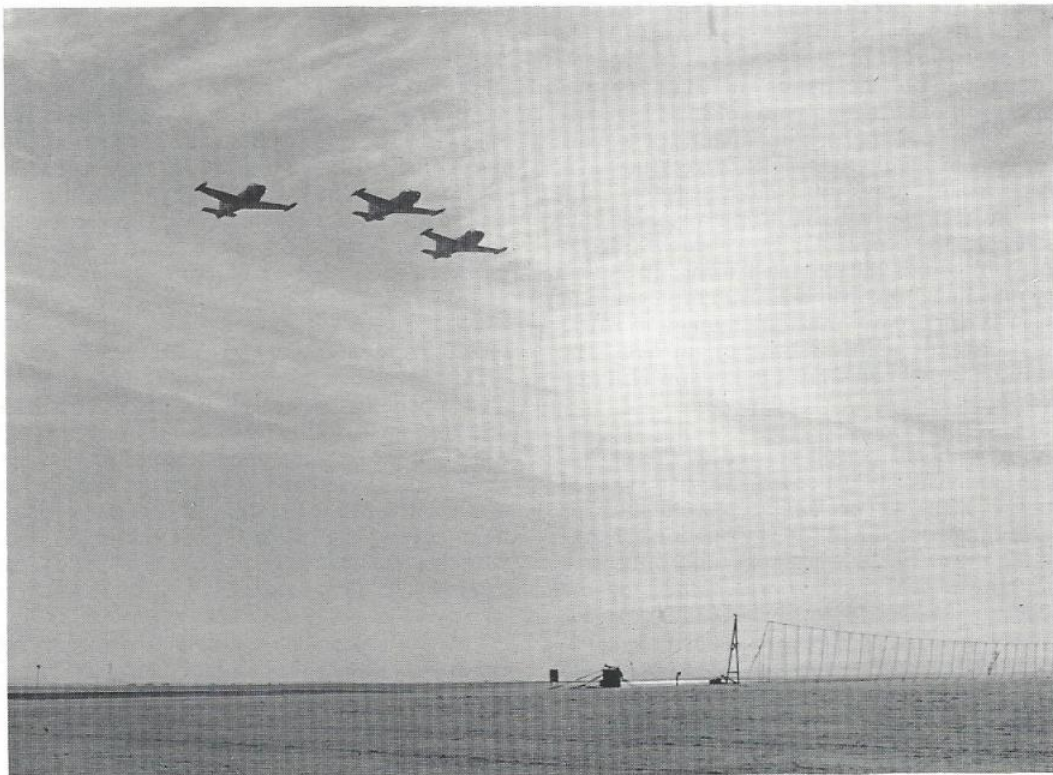
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FLYING WING



Poachers 70

Navigation Simulator

Cresta Run

Jottings from Nor

POACHERS '70

by SQUADRON LEADER W. P. JAGO

The Poachers started off the 1970 season with a distinct advantage over last year's team. I had had the experience of a full year's leading and I still had my deputy leader Jeff Timms. We therefore had to pick two new members from the 15 QFI's who wanted to join us. I started by flying everyone I thought eligible at the beginning of January and finally announced the team on the 11 February. When picking new members for a team like this, probably the last thing you look at is flying ability. One must have absolute faith that no member is liable to do anything that would let the Royal Air Force down (alright you win — but please don't bring up Brilon again). It also involves a considerable amount of hard work, early morning flying and working weekends with no time off in lieu. The eventual lucky two were Flt Lts Jon Hill and Pete Day.

Our work-up period started at the end of February. Unlike last season we had decided on the sequence before we started and we knew the problems of the various formations. In the event, it all went very smoothly with only the expected difficulties caused by the weather. On the 22 April the AOC gave his approval for us to display down to 1,000 ft above the ground — low enough at that time of the year — and we were ready for our first display.

On the 3 May we started our season with a show at Blackpool. After a publicity fly-by of the Tower the display went very well in perfect flying conditions. A week later we flew off to Bergen, Norway. As it was such a long way the authorities thought we might get lost, so we had a Dominic escort. I must admit that this was an excellent plan. Not only did the navigator flight plan properly and take us to the right places (that was until he got airsick) but on landing he automatically gave me the flight times — an incredible saving in mental effort! The display, despite poor administrative conditions in Norway, went very well and received considerable publicity on Norwegian TV. After Norway we went to Bentwaters, Sleep and then off to Belgium for a repeat of

the display we carried out at Balen the year before. As usual we met with outstanding hospitality. The weather was fine except for a very strong 35 knot wind, which helped to make our display very tight.

After Balen we had to change our sequence in order to fit in with the rules and regulations of displaying in front of the Queen. I had the honour of being introduced to the Queen and the Duke of Edinburgh; he unfortunately did not appreciate my 'Poacher' handshake on his polo hand. However, the day went well for Flying Wing and a merry band it was that gathered in the bar at TGIF.

At the end of June we had an eventful return from a display at Waterbeach when ATC was struck by lightning and we landed on a flooded runway. All the aircraft flamed out due to water ingestion. I must admit, whilst on the runway, underwater, I was rather shattered to hear the Engineering Officer who was with me say 'So this is why we always wear these Mae Wests!' Undaunted the next day we were off for Tollerton with four spun-dry Jet Provosts!

Later in the season we went to Stuttgart in Germany. The hospitality of German flying clubs is unbeatable. For this trip we took with us a well-known Assistant Commandant (Training). I must say the only time I have seen him flustered was when, in the middle of the Daimler-Benz car factory, I introduced him to a French lady who said that she had never made love to a General before! That aside, for the display there was a huge enthusiastic crowd and a grand weekend was had by all.

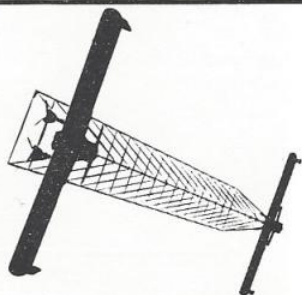
The following weekend we were back in Germany for another two displays. The first of these was at Langenselbold near Frankfurt. The navigational problems involved in finding such a place (without any aids at all in a strange land and with only an approximate position) are at times somewhat under-rated. We also had to operate out of Frankfurt Main airport, which is about the same size

and has about the same traffic intensity as Heathrow. The problems of entering a traffic pattern of this sort in a JP are similar to a 65-year-old eunuch trying to get to a pop festival. Having got into Frankfurt, with a Boeing 747 landing on the adjacent runway, our morale was considerably boosted by the base ops who informed us that we were the first 'fighters' to have landed there for years. After much 'fighting talk' we took off, displayed, landed back at Frankfurt, refuelled and were off back to Gutersloh for our second display of the day at Brilon. This was a difficult display as it was up in hills 2,500 ft high. We noticed a distinct lack of power which made the sequence very difficult to fly, and it was a very tired team that arrived in the Brilon club-house later that evening. And once again what tremendous hospitality! It was so good that it encouraged me to rise to my feet and give a speech in fluent German. None of the Germans understood it — but the gesture was there. The most unfortunate incident of the evening was the appearance of a crate of beer on the bus that took us back to Gutersloh — this made flight planning back to UK rather difficult.

The following weekend we were off again for two Battle of Britain displays at Finningley and Benson. Once again we came across terrible weather conditions at Finningley. Pride kept our morale high, however, especially when we found out that three navigational training Dominie aircraft had failed to find the airfield. Our last three displays of the season were at Waddington for Bracknell Staff College, the JSSC and IDC.

The season had been a very hard and long one for the team and the airmen who went with us. It is difficult to realise that behind the glamour there is considerable stress and strain. Overall, one is proud to have taken part in a team of this sort and thankful for the opportunity — but it will be nice to be home for just two weekends on the trot and have a lie-in till 7 in the morning.

Finally, after two years of leading the team, I must praise the finest ATC in the Royal Air Force and thank Eng Wing for their magnificent support. Without the two the Poachers would have been just like any of the other JP teams — relying on publicity for their credits. All the best Cranwell, keep them flying, and I'll be thinking of you — in Kenya!



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files everything that flies

NAVIGATION SIMULATOR

by FLIGHT LIEUTENANT M. A. BRISTOW

During the last three decades, the major air forces of the world have realised the importance of Simulators in all aspects of training. The early trainers were link trainers or closed-circuit, air-blown, analogue trainers, which, though serving a useful part in teaching procedures, were not versatile enough to act as simulators. This versatility came with the introduction of digital techniques for use in simulators.

Since most people know that digital simulators have been in service for a number of years, what is new about the Navigation Simulator shortly to go into service at the Royal Air Force College? Two aspects are different: it is the first simulator built only for Navigators, and it is the world's first all digital simulator.

Hawker-Siddeley Dynamics have manufactured the simulator, using a Standard Elliott 4130 computer. The storage capacity is at present 16K with long term storage on a magnetic disc. This disc will hold 1,024,000 words, or 25,000,000 bits. As a comparison, there are approximately 844,740 words in Tolstoy's 'War and Peace.'

The major aircraft simulated is the Dominie T Mk 1. Two extra navigation equipments from the Varsity, the basic training aircraft, are included so that the simulator can be used for basic and advanced training. It is feasible to fly mixed Dominie/Varsity sorties in this five cubicle simulator.

Control of the 'beast' is taken by the Simulator officer sitting at the Master Console. Students treat the Instructor as the pilot and ask for changes of speed, altitude, and heading. These requests are entered into the computer and the requested changes take place within the ODM specifications of whichever aircraft is being simulated in that particular cubicle.

A visual presentation of the intended track and the actual tracks being flown by each student are presented on a large screen in front of the Instructor.



This screen is known as the Track Indicator, and is a most valuable aid. To help with air-manship training, engine noise, as appropriate to aircraft type, is fed into the cubicles through loudspeakers. The white hiss, representative of most VHF equipments, and R/T chatter are fed through the headphones. All of the major navigation aids are present and perform as the airborne equipments. All aids can be subjected to partial or complete failures. Astro is available, unfortunately via a computer presentation and not from a mini-planetarium.



Graham Hill in front of a display.

Throughout the sortie, information of specialist navigation data is printed out for each cubicle on the Hewlett-Packard Printer. At the end of the exercise the desired track and actual tracks for individual cubicles are plotted on tracing paper by the CIL (Computer Instrumentation Ltd) Plotter. At the same time, all the information required for post flight analysis is printed out from the printer, separately for each cubicle, showing all relevant changes of heading, wind velocity etc from the start of the take-off run to completion of the landing run. As a matter of interest, it is possible to simulate the taxiing of the cubicles to the take-off point.

It is very difficult to be objective about something which one has been close to for

more than two years. However, I feel that the simulator will help to produce more competent navigators at the end of their training. Certainly over the past few months the simulator has attracted a great deal of attention from the BBC, ITV, the local press, and other notable personalities. All have agreed that it is a most interesting machine and will cope adequately with its task for its intended service life.

Although the major air forces are very enthusiastic about our simulator, and wish to buy British, I think a word of caution should be sounded about simulators. They will never replace flying !!

CRESTA RUN

by FLIGHT LIEUTENANT P. C. NORRISS



' Battledore '

It all started off as a big con trick. After taking part in the 1970 Cresta season Flt Lt J. A. Barnes asked several bachelor QFI's to join him in St Moritz for the 1971 Inter-Service Cresta Run Races. Having made the mistake of answering 'Why not?' and actually parting with some hard-earned money, a team of five QFI's found themselves setting out for St Moritz with the haziness of New Year's Eve only a few hours behind them. The departure had split-second timing. John Barnes' smashed-up car was ready at the repairers five hours before the boat sailed and we made it to Harwich with a cool eight minutes to spare. As it turned out there was no need to hurry; the ferry sank a coaster on leaving Harwich harbour and had to put back for inspection. Was this an omen?

Four days later we viewed the Cresta Run for the first time, and went straight to the bar to recover. The Cresta Run is a 1.2 km stretch of ice track with a series of bends of varying curvature and steepness. Each bend and straight has a name, the most famous being Shuttlecock. This is a long left-hand bend about halfway down the course and it is designed to throw you off the track if you are going too fast to negotiate safely the lower banks. Some of the spills there are most spectacular. The overall drop from Top to Finish is about 1:14, but this varies all the way down. Church Leap, for example, has a slope of 1:2.8. A new rider starts at a point called Junction, which is about one-third of the way down and so cuts out the steep upper banks,

until he has negotiated safely and consistently the lower ones. He then has his first ride from Top.

To all of us on our first rides the run was a blur of ice and our bodies merely cushions between the toboggan and the ice walls. These toboggans have tubular steel runners, on which is mounted a sliding seat which you move forward for speed and rearwards for directional control. The bends are negotiated by pushing the outside of the toboggan into the bend and using your inside foot as a pivot. If anyone had said before we rode the Cresta that three rides, which take about a minute each, would completely exhaust us we would have laughed in their faces. But it was true, and our breathlessness at the Finish demonstrated that we had not drawn breath all the way down. Could it have been fear? Well, the experts reach speeds of up to 85 mph on the final straight; so perhaps there is reason for fear.

After three days Peter Norriss, Martin Christy and John Wools had smashed left hands and did their walking wounded act in the bar.

The following week John Barnes did a spectacular tent-peg at shuttlecock and spent the next few days tightly strapped up. Meanwhile Phil (Diddy) Owen was honing down the run. Invited to ride in a cup race that took place in a snowstorm he entered the Junction Straight at about 30 mph, covered in snow and blinded by it. He pushed hard round Shuttlecock when he thought the time right, but he was too strong and found himself in the snow on the *inside* of Shuttlecock, a feat that has probably never been seen before.

After we had been there a month the Inter-Services Championship took place. The Royal Air Force's six-man team had two Cranwell members, Flt Lt Christy and Fg Off Owen. In a very exciting race, during which



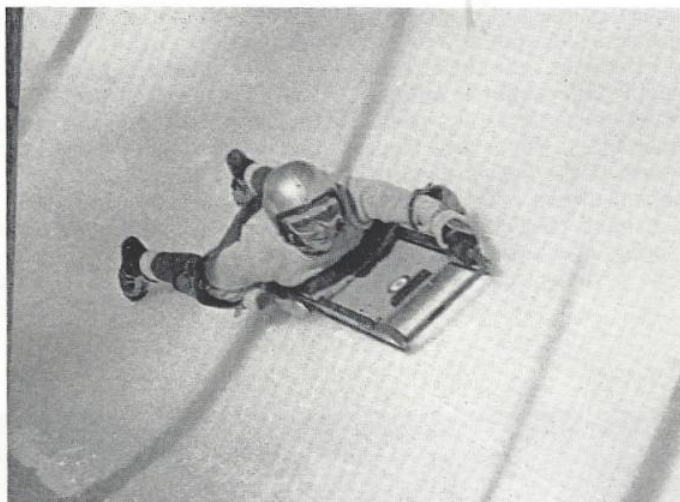
' Shuttlecock '

the Royal Navy was disqualified because insufficient of their riders could resist taking a dip at Shuttlecock, the Royal Air Force team regained the Prince Philip Trophy. So the aim of our expedition was achieved.

As well as riding the Cresta Run the team enjoyed the rather special delights of St Moritz. The magnificent snow on the Corviglia slopes was a constant attraction to the

skiers, the beer in the Sunny Bar at lunchtime a regular après-Cresta relaxation, tea at Hanselmann's a splendidly civilised social gathering, and JB's cooking a financial necessity for the hungry!

Indeed it was JB who said 'Riding the Cresta Run has been called the second greatest sensation known to man. Are you coming along next year?'



In the course

BOOK REVIEW

MILITARY AIRCRAFT 1939-1945

ROY CROSS

Hugh Evelyn Ltd

£3.50

This book, outwardly, appears to be a thin version of *Jane's*, but the information it contains is far less comprehensive. The title, *Military Aircraft 1939-1945*, to most, would suggest a reference book of fighting aircraft of the period of the Second World War, when in fact it deals only with sixteen selected aircraft of that time. These aircraft range from the ever popular Spitfire, through the Mitsubishi A6M2 Zero-sen and the B-17G Flying Fortress to the Messerschmitt Me 262. About one third of the available printing space in the book is left blank and this is considered to be an extravagant waste when the 'potted' histories of the aircraft and their development are so abbreviated as to be of

little interest to the enthusiast. (The story of the Mosquito is compressed into about eight hundred words).

There are numerous line drawings of construction details of the various aircraft and several accompanying photographs and the book ends with sixteen colour plates of the side elevation of each aircraft, supposedly at a specific time in its service. The colour printing process causes some variation from the true colours of the aircraft, however there are some mistakes in detail which detract from authenticity.

The general impression of the book is that it would not meet the requirements of the aircraft history enthusiast or connoisseur and it is an expensive coffee table book — if one desired this type of book on the coffee table.

D.K.R.

JOTTINGS from NOR

On 8 March HRH the Prince of Wales arrived at Cranwell for his flying training on the Jet Provost. He started flying a fortnight later, and on the afternoon of Wednesday, 31 March, he flew his first solo sortie in the Cranwell circuit. Prior to his flying the Prince completed a series of ground lectures and pre-flight training which included a ride on the ejection seat rig shown here.



His instructor is Squadron Leader R. E. Johns, who has spent many years at Cranwell as a Cadet, ADC, OC No 2 Squadron and DCFI. Helping with the Prince's training are Squadron Leader J. B. Robinson, Flight Lieutenant M. Gaynor and a few QFI's on the Wing.

At the end of 1970 the Jet Provost T5 came to Cranwell. The first two of these were the Golden Eagle aircraft for the Prince of Wales' flying training. Eventually it is hoped that Cranwell will have 35 T5's which will be used for the advanced part of the flying syllabus.

Sqn Ldr J. B. Robinson took over the 'Poachers' from Sqn Ldr W. P. Jago and

started training early with a brand new team — Flt Lts D. A. Z. James, I. D. Macfadyen and C. Mitchell. Below is a foretaste of what the season promises.

The 'Poachers' already have a fairly full season ahead of them with displays in the UK and overseas. Flt Lt M. G. Christy is the Team Manager. In February Flt Lt Peter Day left Cranwell and the 'Poachers' to join the 'Red Arrows.' We wish him and the team every success for the season.

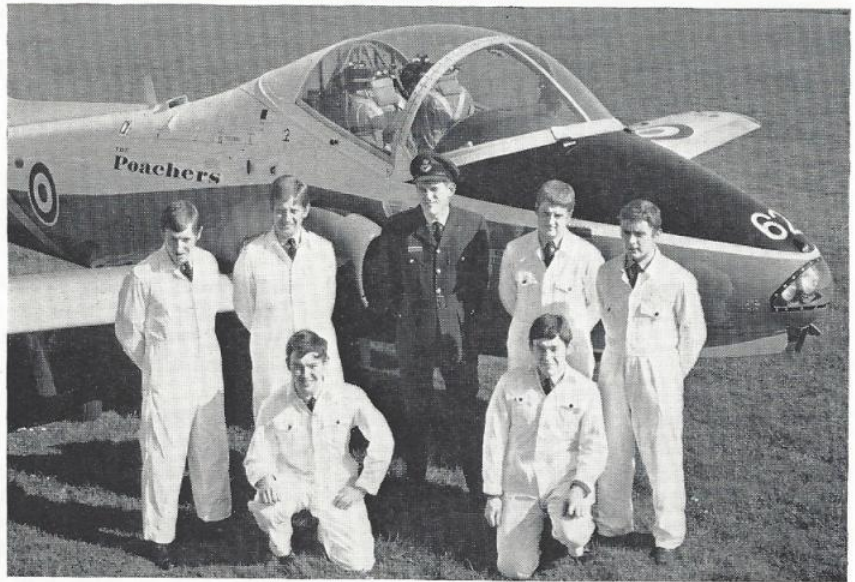
Over the past year Flying Wing has undergone several changes. Last August it changed its name from Flying Training Wing and was placed under the Station Commander. In November the first of the Graduate Entries started flying at Cranwell. The QFI's now have an added task on their hands, as the students arrive with more airborne experience and more enquiring minds, so glib references to Bernouilli and Reynolds Number no longer pass unquestioned. Mind you, some of the answers to such questions are variations on the theme of 'Never mind about that now, Bloggs, get your kit on and get airborne!' or 'I don't care if you do have a degree in aerodynamics, your aeros are punk!'

In December No 10 UAS Course graduated from the College; they were followed in February by 99 Entry. For both of these graduations Flying Wing put on their traditional formation flypasts.

In May Flight Lieutenant Peter Norriss won the Wright Jubilee aerobatic competition at Little Rissington. He will be giving displays of solo aerobatics at air shows throughout the country until he leaves Cranwell in August. This is the third time in four years that the Wright Jubilee Trophy has been won by a Cranwell pilot.

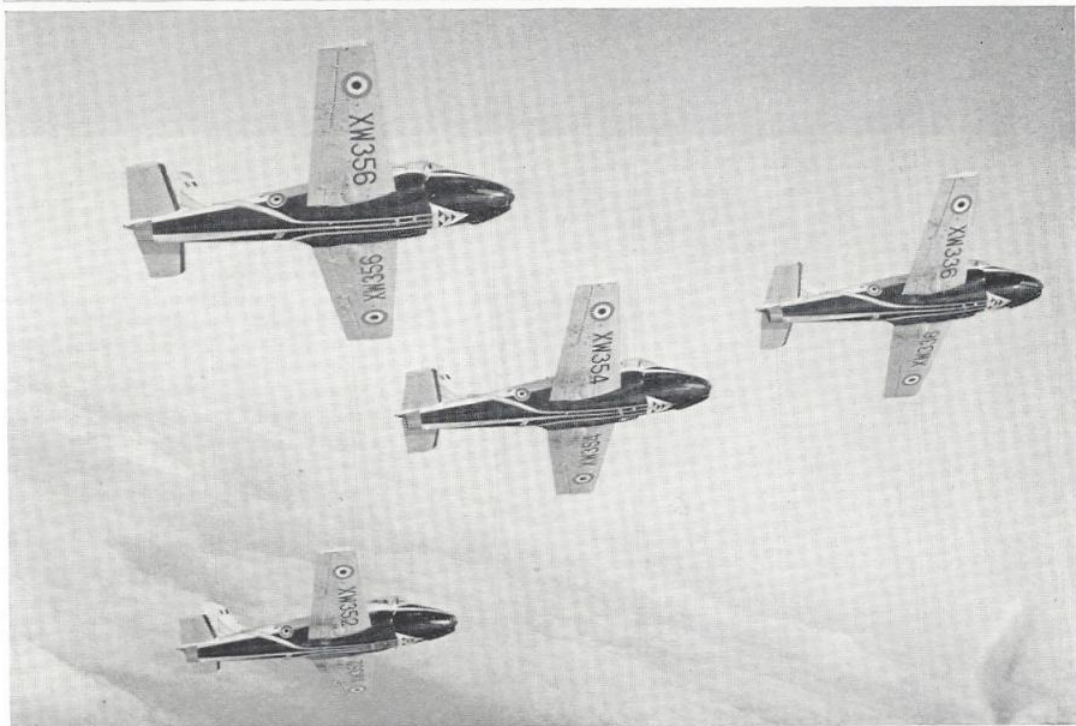
Long before the next *College Journal* is published the CFI, Wing Commander Brian Huxley, will have left Cranwell. After a most successful tour in the chair he is going to Valley as Station Commander. We should like to thank him for his efforts on Flying Wing's behalf and to wish him and his wife every success and happiness at their new station.

Running in across the College in line abreast.



The 'Poachers' depend on ground support to keep them in the air. These are the men responsible for aircraft servicing with the team in 1971.

In perfect line abreast above the clouds.



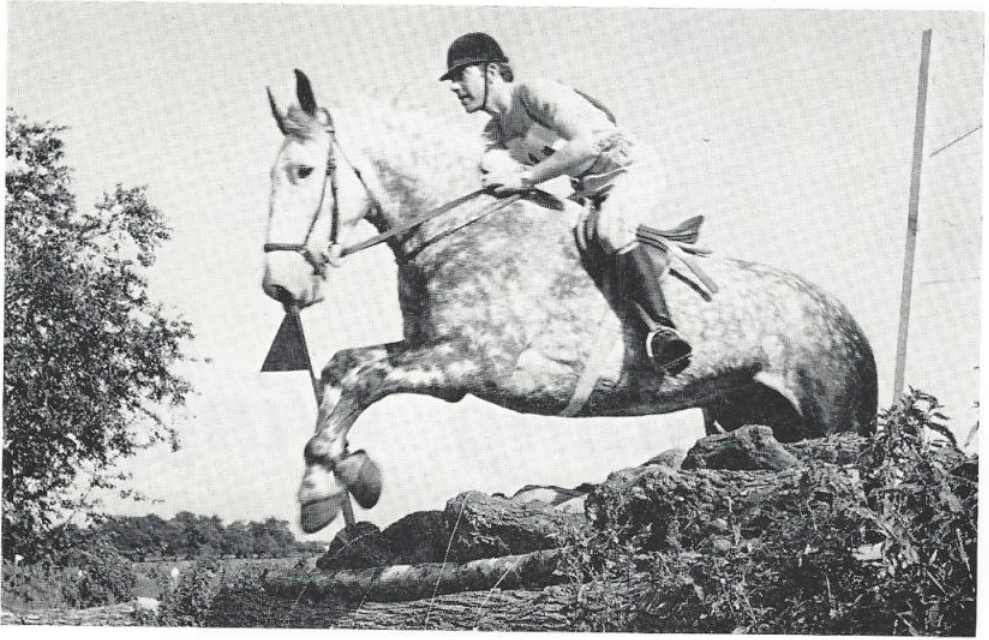
Swan formation : this photograph shows off to good effect the fuselage colour scheme of the Poacher aircraft.

Training Wing

Sports and Activities

Articles

Poetry Review



SPORTS AND ACTIVITIES

RIDING

As a result of the PSI taking over the responsibility for riding from the College Society, the Royal Air Force College Saddle Club has broadened its membership during this last term. There are now over one hundred members with twenty coming from the College.

Coupled with the greater use of the facilities by other people on the station, the importance placed on the Centre and its facilities by the Royal Air Force Equitation Association has also increased. The Association now employ a fully qualified BHSI, Bill Davison, as a Resident Chief Instructor. As a result the standards achieved by the flight cadets and student officers have also improved.

This last term with many new members coming from the College has been one of preparation for what should be a very active Summer Term. The term started with a very well supported Gymkhana run by Senior Flight Cadets Allen and Humphries for all the members of the Saddle Club. For once both old and young members, experienced or novice were able to ride in one competition.

On the 3rd and 4th of October the College was well represented in the two station teams entered in the Royal Air Force Championships at Royal Air Force Halton. For the first time the entries for the competition topped the sixty mark with the Army, Royal Navy and Royal Marines all being represented. The competition consisted of a dressage competition, a cross country course and a show jumping phase. The competition as a whole receiving the recognition of the British Horse Society as being to their standards. With three flight cadets riding out of the six riders entered from Cranwell the College fared very well. Flight Cadet Young (100 Entry) took individual first place out of the Royal Air Force to become Royal Air Force Champion winning outright the show jumping, coming second in the dressage and fifth in the cross country. Second Flight Cadet Humphries riding for the first team which took the team championship, was first placed seventh individual whilst Senior Flight Cadet Allen riding with Flight Cadet Young in the second team had the misfortune to have three refusals in the show-jumping and so be eliminated.

The Royal Air Force Championship was the last show of the 1970 calendar and so the attention of the College members was confined to hunting and hunter trials for much of the rest of the term. Both Senior Flight Cadet Allen and Flight Cadet Young rode in the neighbouring Cottesmore Hunt Hunter Trials besides turning out on various occasions to hunt with the Blankney Hunt. Many other College members also rode to hounds when the Hunt 'met' on the Orange early in February.

Towards the end of the term the College rode its first University match of the season against Sheffield University. In a home match Flight Cadet R. V. Thompson was placed first in a match in which the College team were clear winners.

SQUASH

The 1970-71 season was not at all successful, the team winning only seven matches out of twenty. Difficulties were found in raising a team of a reasonable standard to meet the fixtures list which was marred towards the end of the season by three consecutive cancellations. The question of whether the College Squash team will exist in its present form next season will need to be looked into, an alternative being an amalgamation with the station side.

The annual match against Royal Military Academy Sandhurst resulted in the usual way with a crushing 5-0 defeat, however the match against Britannia Royal Naval College Dartmouth provided very good sport, the College loosing narrowly by 3-2.

Chimay squash this year displayed the power of the Graduate Officers by their efficient demolition of both Cadet teams. The only victory for a cadet being provided by Senior Flight Cadet Chinneck against Pilot Officer Lapraik.

Colours were awarded to Senior Flight Cadet Chinneck as Captain for the season.

POTHOLING

The Society has experienced a most rewarding six months since the last report was published. Keen interest has been shown by the Flight Cadets of 101 Entry, and even though many had not been underground previously, they show great promise as future expedition leaders.

Looking back over the last few months there have been many trips, some more important than others but all equally enjoyable. Over the period, 1 - 13 August 1970 a party of five cadets travelled to Italy to explore the cave systems there. The details of this expedition are included elsewhere in the *Journal*.

During the weekend 2 - 4 October 1970, a party of seven cadets travelled to Yorkshire to explore the cave systems of 'Gunnerfleet,' 'Runscar,' 'Little Douk' and 'Sunset.' Much ladder experience was gained this weekend especially in 'Sunset Hole.'

An expedition also went to Yorkshire on the weekend 27 - 29 November 1970 to explore caverns in the Ingleborough and Birkwith Areas. The main task of this expedition was to train new leaders for the future.

The last major trip was over the weekend 12 - 14 March 1971, when a party of four cadets spent 17 hours 30 minutes underground.

Other expeditions over the period have been one day ventures. Two expeditions went to 'Gautries' in Derbyshire to give members of 101 Entry experience. Also, two expeditions went to explore the extensive 'Carleswark' System at Stoney Middleton, Derbyshire. This system, as far as records show, had not previously been explored by the Cranwell pot-holing club and it proved to be a most interesting cavern to negotiate.

The Club has progressed steadily these last few months, helped of course by the keen interest shown by some members of 101 Entry. It is hoped that as the Club's experience increases there will be ample opportunity to attempt cave surveys and underground photography to a greater extent.

HOCKEY

Last season saw the amalgamation of cadet and station hockey; the combination provided the basis for a very strong 1st XI under the captaincy of Flt-Lt P. Carroll if ever it could be fielded in its entirety. We did beat North Luffenham in the preliminary round of the Royal Air Force Cup but were then knocked out by Cottesmore in a very close match which went to extra time. Senior Flight Cadet Neil as cadet captain, captained the Under 24 XI which played occasional matches as a preparation for the traditional matches against Sandhurst (drawn 1 all) and Dartmouth (won 3 - 1). A 2nd XI was fielded most Wednesdays under the captaincy of Flt Lt R. Goodliffe until his posting and then under Sqn Ldr A. Rogerson; overseas officers, from Malaysia and Ghana especially, have made a considerable contribution to college hockey, both on Wednesdays and for our occasional Saturday fixtures. Fg Off Bakewell has generally captained the Saturday XI. Fg Off P. Harding, Fg Off S. Saifurrahman and Senior Flight Cadet Neil have all played for the Royal Air Force. Flt Lt R. Shepherd has been very active as Sec of the Royal Air Force HUA, in umpiring College matches and as cadet guiding officer. We miss Sqn Ldr W. Sword who handed over as OIC at the beginning of the season prior to his retirement from the Royal Air Force. Flt Lt D. Lawrence took over from him and was promptly posted and Sqn Ldr C. Miles now holds the reins.

Overall we have lost more matches than we have won but we have had some enjoyable hockey in a mild winter and at the time of going to press look forward to winning the Boston 6-a-side competition and the Faville Trophy, both in April.

BASKETBALL

This has been a successful first season for the newly amalgamated college and station teams. The 1st team won the Royal Air Force 'B' Cup and came second in the Lincoln League. They were also entered for the Lincoln Cup but were knocked out early in the competition.

There were not many fixtures for the cadet team but they were one of the few teams to win both the Sandhurst and Dartmouth

matches achieving the double yet again. Mick Duguid and Kev Anderson were the top scorers in the match against Sandhurst. The final score was 67 to 43. Colours were awarded to the following : T. Rounds, W. Morgan, M. Duguid, K. Platt, P. Cholerton, M. Ewer, S. Stanton.

On behalf of everyone on the team I would like to thank Major Sams, on his first full season with the college, for the effort and encouragement he has put in, and to say farewell to Tom Rounds who as Captain for the past two years has been invaluable to the success of the team.

KARTING

The purchase of a new frame meant that the society was able to open its folds to some new members from 101 Entry. We now have one competitive frame and two BMF 100 racing engines. Negotiations are now in progress for the purchase of a second frame which will make two mounts available for the hard-working members of the society.

The usual practices have been taking place at weekends on the South Airfield. A practice day at Fulbeck was arranged to enable practice to take place on a proper circuit. This proved enlightening to the newer members as it was their first experience of driving under competition conditions. The results of this practice were encouraging with the newcomers quickly finding their feet under the guidance of the team captain Pilot Officer Boardman.

Four drivers have been entered for the 1971 Royal Air Force Kart Championships at Royal Air Force Little Rissington in May. We expect to have a successful weekend as we shall be using some highly competitive karts.

SHOOTING

The small-bore season this year saw the abolition of separate cadet and station teams for the Lincolnshire League and Nobel Cup competitions. The three combined teams have achieved considerable success this season in these two competitions with many victories being scored. From the cadets' point of view the season has been rather unsuccessful as we



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lost to both Britannia Royal Naval College Dartmouth and Royal Military Academy Sandhurst by a very close margin during a very enjoyable weekend at Dartmouth. We kept our regular fixture with Oundle School and won by a comfortable margin. We lost competitions against the United London Hospitals team and the Cambridge University Team. This lack of success is attributable in the main, to competition nervousness. Many of the newer members of the team, whilst having shot many times in postal matches, find difficulty in relaxing in the tense, shoulder-to-shoulder, competition atmosphere. We hope to correct this by arranging more shoulder-to-shoulder matches to gain experience. The full-bore season has just opened and judging from scores already put up we should have a strong team. Some difficulty is at present being experienced in obtaining long-range practice as our local range at Beckingham is undergoing modernisation. No doubt a solution will be found so that we can have the essential practices so that the team's potential will be fully realised. We expect therefore to have a full and successful full-bore season.

BADMINTON

The season began with a complete change of team after the graduation of 97 and 98 Entries. Even so, on Wednesday afternoons badminton was very well supported and it was not long before a selection of 10 or so competent players was possible and the college was able to present a team capable of matching University standards.

Our first team was possibly the strongest for some years and we were able to beat Royal Military Academy Sandhurst and snatch two games from the almost invincible team that Dartmouth present. For school matches the standard of the team was lowered to provide keen competition rather than to attempt outright wins. This policy was reflected in the season's results which showed a slight majority of wins to losses.

The college team was captained by Senior Flight Cadet Gooi, the other members being Pilot Officer Woodcock, Pilot Officer Rees, Senior Flight Cadet Chan and Flight Cadets Hopkins, Gooding, Parker and Wrigley.

The team would like to thank Sergeant Joyce for giving up his valuable time in coaching us during the season.

LITERARY AND DEBATING SOCIETY

A debate was held in the College Lecture Hall on Tuesday 19 January, when the motion before the House was 'That in the opinion of this House the world would be a poorer place if the British were to become "Europeans".'

The debate was chaired in inimitably avuncular and erudite fashion by Wing Commander Barham and the principal speakers were Flying Officer P. E. Lewis and Flight Cadet P. I. A. Neal who proposed, and Flying Officer J. Giles and Flight Cadet R. J. Lawley who opposed the motion.

There were several impressive (and a couple of wildly incoherent) speeches from the Floor, and the motion was eventually declared carried by 84 votes to 61, with some dozen or so abstentions.

ATHLETICS

At the end of the 1970 season Sqn Ldr Goulding retired as officer IC athletics and I would like to take this opportunity of thanking him for all the organising, help and encouragement he has given to the athletics team. The task has been taken over by Sqn Ldr Anderson. I am sure it is partly due to his enthusiasm that the athletics team has had one of its most successful seasons.

The team consisted mostly of cadets and engineering student officers with one or two graduates, which was disappointing, as we were looking to the graduates for a fair amount of strength. However, this balance should be restored next season. The lack of strength in depth was shown especially in the inter-college triangular match which this year was held at Sandhurst. I am sure we would have beaten Sandhurst and halted their overlong run of victories if we had had some stronger second string runners. The match was very closely fought with two college records falling and many personal best performances, Cranwell again came second.

It was decided to organise this season's fixtures into triangular or four sided matches if possible, to bring stronger competition to all events. This worked well and some very good matches were held at the college. It was a pity there was such little support. The results produced give some indication of the good competitions.

For service competitions only one athlete per event is required so we were able to produce one of, if not the, strongest unit teams. This was evident in the Training Command Championships where Cranwell won the individual Stations cup. In the inter-stations competition we won the first three rounds with little trouble to reach the final at Royal Air Force Cosford. All athletes performed well especially in the third round when many of our top athletes were away. Unfortunately we were unable to participate in the finals, as the selected date clashed with our major overseas exercise and summer leave. This has happened over the past few years and something will have to be done to allow us to win this cup in the future.

Records this season have fallen regularly. One of special note is the breaking of the high jump record for the first time since 1921. On its 50th Anniversary F. E. Nuttall's jump of 6 feet (1.83m) was broken by Fg Off Renwick with a jump of 6 feet one inch (1.85m) at Sandhurst. I wonder if this record will stand for the next 50 years. S. F. C. Finneron broke his own 400m record several times to bring it down to 51.4 secs. The only other record to go was the 4 x 100m relay which was lowered to 44.3 secs by Flt Cdt Mayhew, Flt Cdt Malcolm, S. F. C. Finneron and Fg Off Paterson. This was brought about by the four training hard to bring their baton changing to a high standard.

Many of this years athletes will have left by next season so emphasis will be on the graduate entries to continue the high standard set this season. What little support the team got, mainly the WRAF contingent, was enthusiastic and greatly appreciated. Lets hope with the new interest now being shown in athletics nationally, a vast improvement will be seen next season. We look forward to next season and hope for even better results.



PERFUNCTORY PENTATHLETES?

Pentathletes seem to be regarded with an air of suspicion by other sportsmen, for whenever some alarming sporting activity is taking place, pentathletes are usually at the bottom of it.

Modern pentathlon is one of the oldest sports in the world, probably originating from an Egyptian keep-fit class in Cairo sometime ago. As its name implies, it is a five activity sport, each activity being a sport in its own right, shooting, fencing, swimming, cross-country running and horse riding make up the five.

Other sportsmen are often perturbed by the seemingly perfunctory manner in which pentathletes go about their own sport, yet it is results that matter to the Cranwell club and it is results which have been achieved in the past year of sport.

Despite lack of support from graduate entries, modern pentathlon has still had a very active season, with good results due to a full training programme.

The Wednesday afternoon peregrination starts at the 25 yard range where the .22 pistol is fired. An hour later the club arrives *en mass* at the east camp gym, where without hesitation, the members undertake fencing in a one hit style that the experts find difficulty in combating. Without wasting a valuable second of possible sporting time the club moves once more, this time into the world of equitation. However, riding is the pentathletes one 'skeleton in the cupboard' because when it comes to horses, you can either ride them or you can't.

Under Major Nason's watchful eye (as he has slight difficulty in mobilising his own animal) the remaining members go through the painful rigours of learning to ride. Finally, for those with energy remaining, there is always the formidable two and a half mile cross country or the nine rapid lengths of the swimming pool.

Quality has not been impaired by lack of quantity in this last season and quality has been achieved by Major Nason and his great enthusiasm for the Cranwell pentathletes to succeed.

In most matches, Cranwell has usually received individual or team recognition. The best result of the season was achieved by Cranwell 'A' team at the Royal Air Force Championships, when SUO Prissick, Plt Off Hunt and Sgt Cunningham scored 8785 and won the first place. In addition to this victory was added Sgt Cunningham's individual tetrathlon prize.

The Cranwell v Sandhurst match was less fortunate and a loss was recorded marginally (170 points in 6000). Major Nason was regarded with a suspicious eye on this occasion. However SUO Prissick received individual first placing but there was no prize on this occasion. At the RAFMPA tetrathlon championships, competition, held at Cosford in April, individual recognition was received by Sgt Cunningham, first overall, and Flt Cdt Maddox, equal first in fencing.

With further matches arranged into the New Year we look forward to an even more promising season than our last, for which we must thank Major Nason who has been so fine a guiding officer to us during his stay at Cranwell.

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MALTA - SICILY

Canoe Expedition September 1971



The Malta-Sicily Canoe Expedition was the brainchild of Flight Lieutenant M. D. C. Fonfé ex of 91 Entry to the Royal Air Force College, now stationed at Royal Air Force, Abingdon. The aim of the eight man expedition was to canoe from Sicily to Catania from where an attempt would be made to climb Mount Etna, Europe's most active volcano. Although strictly a Royal Air Force Abingdon expedition two members of the College canoe club Flight Cadet P. Hodgson and Flight Cadet M. S. Flemmings were invited to take part.

Expedition equipment was assembled in July at Abingdon prior to airlifting to Malta. The canoes, four to be used and one spare were an assortment of canvas collapsible boats of three different types all specifically built for sea canoeing. These all had to be assembled and tried for faults before taking apart and packing into crates along with the large amount of food and camping equipment.

On the first of September an advance party consisting of Flight Lieutenant Fonfé and the deputy expedition leader Sergeant Saunders flew out to Malta where they spent a few trying days completing administration and assembling canoes and kit before the remainder of us joined them early on the sixth. We were accommodated in the Royal Air Force transit mess at Hal Far not far from a hut loaned to us for the purpose of assembling and packing the canoes.

After sleeping off the effects of our journey we were treated to a lightning tour of the island in a hired minibus visiting places of interest such as Valetta the capital and the walled town of Rabat before heading for Paradise Bay on the North coast where we spent a very pleasant few hours swimming in the clear blue Mediterranean water. In the evening we were to receive our last period of relaxation when we dined at an excellent restaurant in Rabat.

Early the following morning transport arrived to convey canoes and canoeists to a small village on the South coast where our only sea practice in the Mediterranean was to take place. After carrying the canoes, laden with a total of half a ton of kit down what seemed like hundreds of steps we embarked at a small rocky wharf and paddled out exploring some beautiful wave-eroded caves before our rendezvous with a Royal Air Force marine craft which was to act as our escort vessel. Then we pointed our canoes towards the island of Filflar three miles away and got down to some hard paddling. The sea was quite choppy and the wind strong, typical of conditions we were to meet later. Steady progress was made and we canoed round the island and back in two hours. This gave a reliable estimate of our probable speed over the long distances to be covered. Returning to Hal Far we had lunch and then made our final adjustments to the canoes before retiring to bed early in readiness for the following days crossing.

We were scheduled to set off from the Grand Harbour at 4 p.m., so we all rose late, had lunch and waited for our transport. Our high spirits were soon to be ruined as a few minutes before the transport arrived news came that due to a duty free fuel embargo by the Maltese government, our escort vessel could not sail and therefore the crossing would have to be cancelled. Much hard thinking went into ways of procuring an alternative vessel but we drew a blank. A decision was reluctantly made to forget the crossing and travel to Sicily with the canoes on the ferry that evening. Morale was soon restored, however even this plan was doomed to failure. When the ferry arrived it had mechanical trouble and was deemed u/s till Friday morning, two whole days wait. An attempt to catch another ferry on the Thursday morning was also doomed to failure as the cost was too high.

Thursday night was spent on the ferry, a small ancient craft called the Egardi and early on Friday morning with much vibration the ship left harbour. The crossing was quite rough and the old craft pitched and wallowed alarmingly. Nine hours after leaving Valetta we disembarked at Syracuse on the East coast of Sicily. Deciding to make the most of the remaining hours of daylight

we put the canoes into the murky waters of Syracuse harbour and set off in a Northerly direction up the coast. After two hours of canoeing along a line of impressive cliffs we sighted a small sheltered beach and decided to make camp for the night. The beach was a rather unfortunate choice as it proved to be rat infested and much of the evening was spent hurling stones at them as they scurried in and out of the rocks.

The following morning we were on the water as the sun rose. An early start was imperative as we had thirty miles of canoeing ahead of us if we were to make Catania by nightfall. We made our first stop two and a half hours later at St Augusta where we surfed quite spectacularly into a sheltered area near an Italian officers club. Here we took in food and replenished our 'liquid' supplies. By the time we again set off the sun was becoming quite hot and liberal amounts of sun tan oil were applied. After another long spell of canoeing along a series of seemingly endless headlands we landed at a small fishing village, made lunch and had a swim to cool off a little before commencing our longest canoeing spell so far. This was a twelve mile stretch across a long bay to Catania; this took us nearly four hours. We approached the beach near Catania cautiously as there was heavy surf, however despite all our caution and much 'expert' advice two canoes were swamped in the landing fortunately with no damage or loss of kit. We camped at the top of the beach and spent an uncomfortable night with dozens of mosquitoes and sandflies.

Leaving one member of the expedition to look after the equipment the party set off early on the following morning. We walked the few remaining miles into Catania and found a taxi large enough to take us all as far as possible by road towards the summit of Mount Etna. The drive into the foothills took us past vast lava flows from old eruptions. The lava solidifies in an ugly black cake-like rock. Vast sheets of this rock cover thousands of acres of once fertile soil. We passed several small secondary cones on our way up the mountain, their symmetry and black coloration reminded us of Welsh slag heaps. After about an hour's driving the limit of the road was reached and we left the taxi to



Three members of the expedition unfurl the College House Flag on the summit of Mt. Etna !

wait for our return. The summit, our goal, could be clearly seen among the clouds above us, emitting wisps of smoke.

As we picked our way up the lava and ash covered slope the true form of the mountain became apparent to us. The summit consisted of three large craters, two in close proximity, the actual highest point being the top of a ridge between these two craters. We were a little apprehensive about scaling this ridge as clouds of sulphur dioxide gas were blowing across it intermittently from one of the craters. However, taking a few deep breaths we hurried up the slope in order to take photographs of the College House Flag being flown on the summit. The flag had been disguised as a small tent so as not to alert the Abingdon members of the expedition to our plan.

We spent a further hour exploring the summit area, collecting various coloured and curiously shaped rocks. Some areas were extremely hot and water poured on to many of the rocks boiled instantly.

On approaching the lips of the craters and looking down a sheer drop could be seen disappearing into the clouds of gas. We were disappointed that we did not have enough time to observe the summit at night as many areas seemingly black in sunlight, glow brightly at night.

Reluctantly we descended to rendezvous with our taxi and return to Catania. Here we had a hearty Italian meal before returning to our beach camp weary of leg and faced with the prospect of canoeing back to Syracuse in order to catch the return ferry. However the main object had finally been achieved in spite of all the difficulties we had to deal with.

Two days later we arrived at Syracuse. All that remained was the ferry trip to Malta, the packing of the canoes, and the flight back to England. Although our original plan had been much modified we felt that the main objective had been gained in the climbing of Etna. Certainly it was a tremendously enjoyable and worthwhile trip.

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THE FASCINATION OF THE SUBTERRANEAN WORLD

by UNDER OFFICER C. C. BURWELL

Underground exploration first began in earnest around the turn of the century with tweed-coated gentlemen wearing bowler hats adorned with candles, crawling into dark holes in the ground. Interest in the sport continued until the second World War and the enthusiasm was revived after 1945. Since then the interest has steadily grown; new systems have become increasingly more difficult to find; tweeds have been replaced by wet suits and candles by water resistant electric lights.

Potholing (the negotiation of underground passages requiring the use of ropes and/or ladders) and caving (the negotiation of underground passages requiring no tackle) have much interest for the more experienced pot-holer besides their actual exploration. Potholers are becoming interested in the origin of caves (are they phreatic or vadose? has the master cave been found?) the formation in caves (stalactites, straws, stalagmites, flowstone etc), cave surveying, cave animal life and cave photography. With the growing interest in the sport, equipment has become much more functional. Rope ladders have been replaced by aero-cord ladders with aluminium rungs, man-made fibre ropes have taken the place of perishable hemp lifelines and the modern potholer now attempting an arduous system is usually well waterproofed.

Potholes normally occur in limestone regions and their names often have significance (e.g. Boggart's Roaring Holes, Flood Entrance Pot, Lost John's System). The centre of British potholing is undoubtedly Yorkshire, where there are both caves and potholes in varying degrees of difficulty and usually very wet (i.e. active systems). Other limestone outcrops containing caves and potholes occur in the Mendips (mostly dry caves) and Derbyshire (both potholes and caves, usually very muddy). Scotland and Ireland also boast a few limestone outcrops which have some very interesting and unfrequented caves and

potholes. Underground descents may last anything from one hour (sometimes less) up to days, and potholing is by no means a 'males only' sport.

The Cranwell Potholing Club has a good reputation in potholing circles, at one time being a member of the Derbyshire Cave Rescue Organisation. Since 1955 there have been a number of overseas trips to the Pyrennees and Ligurian Alps (where '55 expedition discovered, or so they believed, a new system). So it was that last August, five members of the club spent five days in the company of the 'Centro di Cultura' in Northern Italy exploring the caves and revisiting 'Caverna di Cranwell.' This trip was most rewarding and enjoyable — some amazing formations were seen, prehistoric relics were seen in many caves, but it was discovered that 'Caverna di Cranwell' was not found by '55 expedition. We were informed that a farmer had originally found it 60 years ago when one of his animals fell down it, but that the Cranwell party had rediscovered it.

The months since the return from Italy have been spent expanding the membership of the club and the winter's activities culminated with a 17½ hours trip, necessitating sleeping underground. This was carried out in Long Churn Cave, Yorkshire, where the main party, with able support from the surface, spent six hours in surprisingly sound sleep and 11½ hours on exploration and cave photography. It was intended to make a start on surveying Long Churn Cave but the time limit on the expedition did not permit this.

It is hoped that in the coming months interest will be forthcoming from the graduate entries, as it has been from 100 and 101 Entries, so that the club may continue to introduce this fascinating sport to novices, and provide challenging caving and potholing for its more experienced members.

Conversations - 1

You begin with a pronoun
'I' you say
and I listen vainly trying to help.
You are building
a bridge of words
between us but I wash it away
with a flood
of sympathetic misunderstanding ;

Again you are trying
to breach the citadel of understanding
but I push away
your eloquent scaling ladders
with a dumb look
and pour hot oil
upon your verbal soldiery
by smiling in the wrong places.

What are you saying ?
Is it so different
from your thoughts
that you muddle and meddle
with the essence of our
conversation, trying to label
with words
what I understood from your eyes
and the tapping
of your foot

Somewhere, between the womb
of thought
and its birthing place
upon your moving lips
something goes missing
searching for its name
and ' though you feel the loss
you cannot find it
on the roll-call of your thoughts
marked with a neat cross —
absent.

G. M. EDDEY.

POETRY REVIEW

Conversations - 2

What a funny girl you are,
You sit and murmur,
raise your shoulders slightly,
rub your index finger
precisely, with your thumb,
tie and untie your elegant
hands, and toss your head
distractedly, whilst I sit,
scratching at my stubble
nails rasping on the growing
beard, while you look out
of the window ;
You turn to face me,
your eyes are searching
for a meaning in my
shrug, or the throw away
motion of my hands.
We never listen to the words
that echo like a death-knell
in our room ;
' We have tried ' you say at last
and talk of incompatibility,
conflicting ideals, moral codes
and so forth,
and I scan your face
blindly while your words
colide and bounce off
my composure,
Then you are crying
and I know what
you mean.

G. M. EDDEY.

Conversations - 3

Its a quarter past three
I know because the clock
struck in the hall and told me
the hour, and I stop
for a moment in my breathing ;
Your fingers trace
my collar bone, then stealing
up my neck, you touch my face
and I, in turn, stroke
the silk of your hair.

Above us, like a cloak
of deepest velvet, the night air
reveals only the glow
of my dull cigarette
and at last we know
each other, with my indrawn breath
the only sound prevading
in our room, and the warmth
of your head thats laid
upon my chest, and the vague form
of your body close
to mine, is my awareness,
what we value most,
our comprehension, is in the darkness
realised, without a sound
and for the first time
we have not drowned
our meaning in a slime
of words to complicate
and anger, and frustrate
our course, and loose the essence
of what we wanted to say.

G. M. EDDEY.

AN INTRODUCTION TO WAR

It happened one year
But how I'll never know
— Once I felt secure
Knowing I was safe
Within this world
But then I was shown
Man's hatred and fury
All at once I was
alone
afraid
cold
hurt
bruised
and tired
But then again I found
I became quite strange
No longer a sheep
A member of the many
Within this world
At last I found my angry soul
My inner fury
All at once I was
alone
brave
wild
vengeful
and a killer
Such is war they say
I'll never know
How I felt then or feel now
Whether I knew
I destroyed myself
Along with a million other anonymous faces

J. WILLMOT.

SURVIVAL OF THE FITTEST

He did not know how long it had been. Alternate waves of nausea and unconsciousness swept over him. The salt stung his eyes and his swollen tongue prevented him from breathing properly. All around him lay the watery wastes, his feeble attempts at swimming no match for the infinite power and strength of his ocean keeper.

He did not know how long it had been. His tortured body had kept his mind on an aimless and erratic course. Images of life flickered in front of his tired eyes. White washed steps with milk bottles, cobblestones, chimneys belching forth clouds of black smoke, ships' horns and masts sailing into the unknown. The unknown power of a different world ruled by a being over which no mortal had control. The sea both gave and took life, and now, he had found himself in the mercy of this attributing power. How, his mind lost itself in the effort of remembering.

He did not know how long it had been. He felt different. The water was no longer attack-

ing him, but gently caressing his body, licking at the tender spots that had cried out in agony, but could not escape. Hope surged in his mind and his encrusted eyelids found themselves open. No longer were they greeted by the sign of white topped waves charging him, but white sands stretched before him. Slowly, the dawn of realisation awoke his reason, and painfully he crawled until exhaustion swept over him.

He did not know how long it had been. The sun had gone in, but he was still on the beach. The sun suddenly rose and he raised his head. The cruel sea had been merciful and delivered him back to his own kind. Tall shadows stood around him. A man, a woman and a child. They were bent over him, eagerness and expectation in their eyes. He tried to speak but his last sight and memory of his own cruel world were the letters *Marie Celeste* on the man's sea jumper and those awful words the woman spoke — 'Look, baby, food . . .'.

J. WILLMOT.

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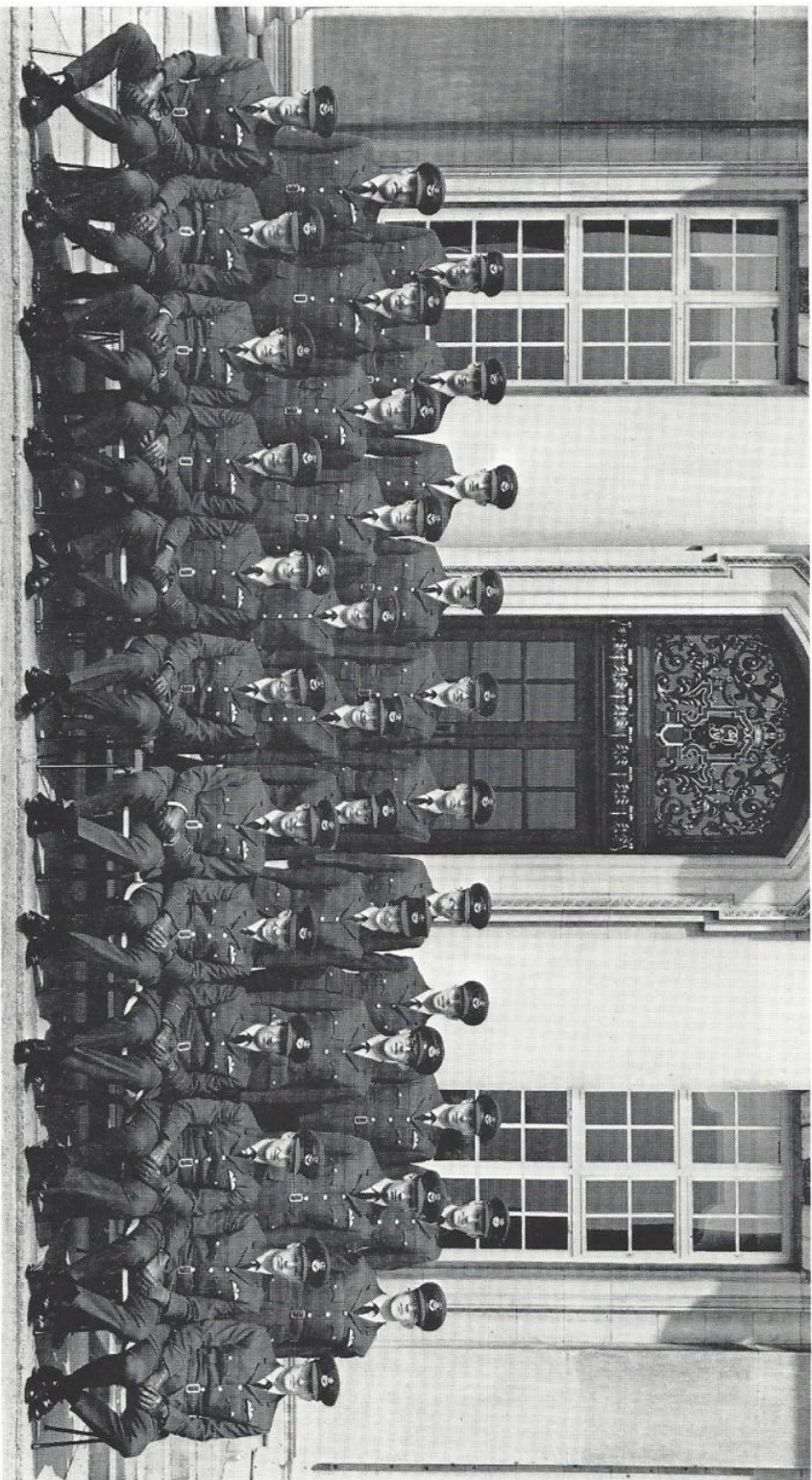
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NO 1/70 GRADUATE ENTRY AND NO 2/70 GRADUATE ENTRY (SUPPLY AND SECRETARIAL)

Back Row :

Fg Off R. G. Shepherd, Fg Off M. A. Hill, Fg Off S. M. J. McCartney, Fg Off C. M. Cradden, Fg Off S. Oakley, Fg Off C. D. Smith, Fg Off M. D. Duguid, Fg Off R. D. Johnson, Flt Lt M. J. Bell, Fg Off G. G. Blyth.

Centre Row :

Fg Off J. A. Giles, Fg Off J. A. West, Flt Lt G. O. Riddet, Fg Off M. J. Bratby, Plt Off H. Kerr (WRAF), Plt Off S. L. Cooke (WRAF), Plt Off E. Curtis (WRAF), Plt Off H. J. F. Sneddon (WRAF), Fg Off J. C. Page, Flt Lt M. D. Pledger, Fg Off P. R. Boyle.

Front Row :

Flt Lt G. K. Charlton, Fg Off J. H. Plumley, Fg Off P. R. Dixon, Fg Off D. J. Baldwin, Flt Lt D. M. Plows, Flt Lt H. G. Mackay, Flt Lt The Prince of Wales, Fg Off J. A. D'Aubyn, Fg Off R. C. Baek, Fg Off R. A. Walster, Fg Off R. D. Lapraik, Fg Off J. E. M. Mustard.

PASSING OUT CEREMONY

of

No 1/70 GRADUATE ENTRY No 2/70 GRADUATE ENTRY

The Passing Out Ceremony for No 1/70 Graduate Entry and the Supply and Secretarial Officers of No 2/70 Graduate Entry took place on 20 August 1971. The Reviewing Officer was Air Chief Marshal Sir Denis Spotswood GCB CBE DSO DFC ADC. The Passing Out Ceremony was honoured by the presence of His Royal Highness the Duke of Edinburgh.

After his Inspection of the Parade the Reviewing Officer presented Wings and Prizes to the Officers of No 1/70 Graduate Entry and No 2/70 Graduate Entry (Supply and Secretarial). He then gave the following address :

"I am sure that no-one would contest it when I say that this is a unique occasion in two major respects. First and foremost we have the honour and distinction of witnessing the graduation of the first Heir to the Throne to carry out a flying course at the Royal Air Force College. And second, this is the first Passing Out Parade of officers who entered the Royal Air Force from the Graduate Entry Scheme. Now, either event by itself would be historic; together they make this surely the most memorable Passing Out Parade to have been held at Cranwell.

But it will not have escaped anyone's notice of course that His Royal Highness the Prince of Wales has had so to compress his experience of Royal Air Force life that he graduates and has to leave the Active List at the same time. But we hope very much that the spirit, the enthusiasm and the undoubted aptitude and, I think, enjoyment with which His Royal Highness has pursued his diversified course here will cause him to come back to the Royal Air Force on very many future occasions, when, we would assure him he will always be certain of a very warm welcome - not only because of his position and the person he is, but also as a respected Old Cranwellian.

And most of all, we hope that he will find the time - I have no doubt about the inclination - to keep up his flying, even if, with regret, I may not arrange a posting to a fighter squadron for which, in other circumstances, and with his *particular* flying qualities, he would undoubtedly have been most suitable.

Now as far as the Graduate Entry Scheme is concerned I would only remind the rest of you that its success will not be judged by the number of people who apply for it, but by the quality of the product. You, therefore, have a special duty to your successors to justify the confidence that the Service has in this scheme and, thus, in you. From the results you have achieved - and I assure you I have studied them - and from what your Commandant has told me, I have absolutely no fears on that score. You have indeed set the whole process off to an excellent start which augurs well for the future of the Service as well as for you individually.

Now you probably know that it is traditional on these occasions for the Reviewing Officer to offer some advice. But, although I don't intend to depart from this tradition, I know jolly well that the worst time to listen to advice is when you have to stand on a parade ground. So I therefore hope to fulfil my duty both to tradition and to all of you here by keeping my remarks brief and suitable. In return of course I expect *you* to remember what I say.

First of all I suggest that there is no other career which could offer you so much challenge and variety of employment and enjoyment - and therefore, so much opportunity for you to get to know yourself and what you are capable of achieving. Reflect for a moment, if you will, on the enormous advance our Service has made during its relatively short history of some 53 years. The impossible of yesterday is the unremarkable of today. But these changes, dramatic



as they have been, could not have been achieved if they had not been matched by equally dynamic professional standards, by determination to make the most of our resources - men as well as material - and by a willingness never to be hide-bound by previous success or even established methods, but always, always to be imaginative. The Air Force, to do its job, must always be dynamic.

What you must never forget is that excellence is very much an attitude of mind, and let me give you a simple rule. You achieve mediocrity when you have completed 95% of a task. It's only in the last 5% that the real effort is required and which separates the first-class from the mediocre, and it's the the first-class that our country and our Service needs and deserves. In military terms of course, this distinction means the difference between success and failure or, in the final analysis, the difference between defeat and victory.

But have no fear, ladies and gentlemen; the efforts required won't wear you out for

the simple reason that there is no better stimulus than working - and playing - to the very best of your abilities. It's a simple truism - but, I believe, worth repeating - that the more you put into the right thing, the more satisfaction and fun you will get out of life.

Now my last point concerns your responsibilities as officers, and here I would remind you of your Commissioning Parchments. In those the special trust and confidence which The Queen reposes in your loyalty, courage and good conduct are stressed; and so, too, is your acceptance of the responsibilities to the men and women under your command. Now these are not mere high-sounding ideals. They are a practical summary of what is required of you and by which you yourselves should measure all your actions. Now regardless of which particular specialisation you are to follow in the Service, in the end it is the responsibility that you have as officers that will count. And this requires you to know your job, to make sure that your men know that you know it, and to know your men. And you





will do this only if you play as well as work hard with them. All this, I think, explains what we mean when we say - in short - that the Service is a way of life, not just a job.

Finally, I would like to congratulate you all on your bearing today; on the prizes you have won and perhaps most of all on those

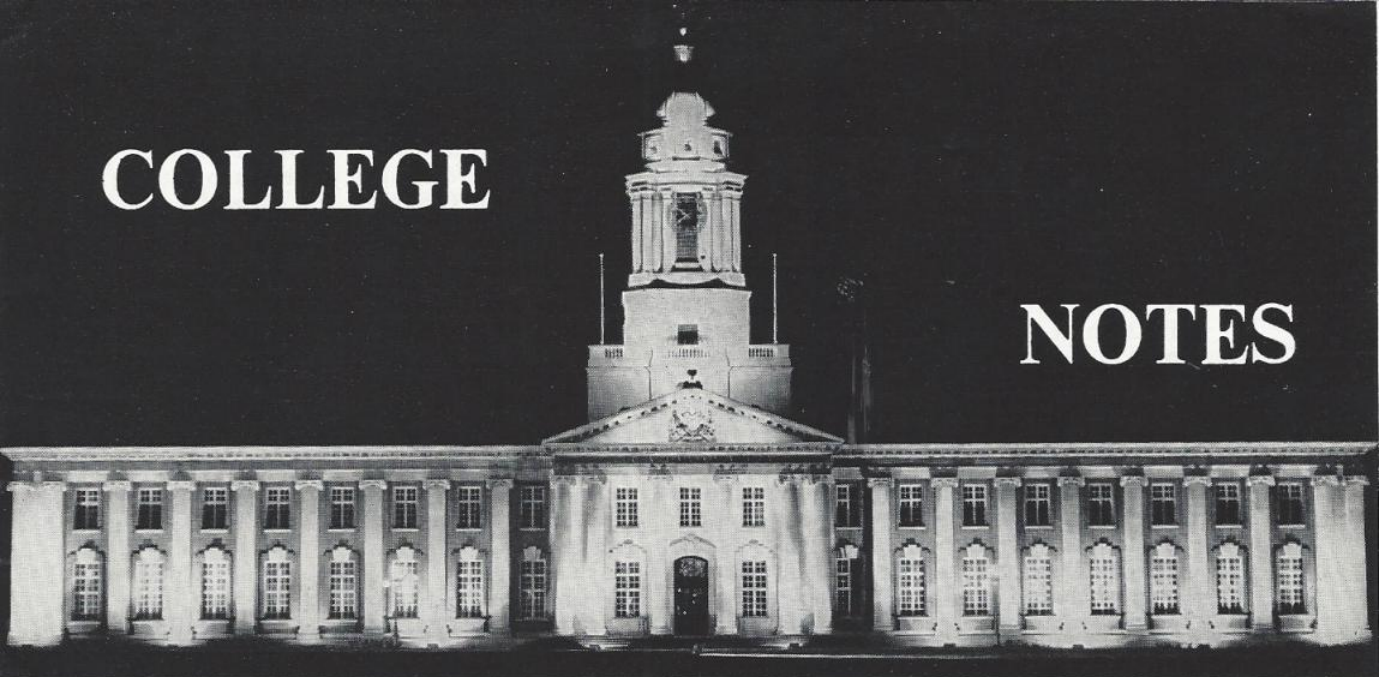
symbols with which I have presented you of a course well completed. And, finally, I am sure I speak on behalf of everyone here to offer you our very good wishes for the future. I don't believe that you could have hoped for a better start than your time at this College.

Good luck to you all !"



LIST OF PASSING-OUT OFFICERS No 1/70 ENTRY

Flight Lieutenant	The Prince of Wales	Flying Officer	D. J. Baldwin
Flight Lieutenant	M. J. Bell	Flying Officer	P. R. Boyle
	<i>The Hicks Memorial Prize</i>	Flying Officer	J. A. D'Aubyn
Flight Lieutenant	G. K. Charlton	Flying Officer	P. R. Dixon
Flight Lieutenant	H. G. Mackay	Flying Officer	J. A. Giles
	<i>The Sword of Honour</i>		<i>The Phillip Sassoon Memorial Prize</i>
	<i>The Kinkead Trophy</i>	Flying Officer	M. A. Hill
	<i>The Dickson Trophy</i>	Flying Officer	R. D. Lapraik
Flight Lieutenant	M. D. Pledger	Flying Officer	S. M. J. McCartney
Flight Lieutenant	C. Mac M. Plows	Flying Officer	J. E. M. Mustard
Flight Lieutenant	G. O. Riddett	Flying Officer	J. H. Plumley
	<i>The Battle of Britain Trophy</i>	Flying Officer	R. A. Walster
Flying Officer	R. C. Back	Flying Officer	J. A. West



HONOURS AND COMMENDATIONS

The *Journal* offers its congratulations to the following personnel of the College who have been awarded honours and commendations :

Wing Commander J. M. Stevenson was made an Officer of the Order of the British Empire.

Squadron Leader (now Wing Commander) C. B. Stribling and Warrant Officer J. A. Garbet were made Members of the Order of the British Empire.

Squadron Leader W. P. Jago received the Queen's Commendation for Valuable Service in the Air.

The Air Officer Commanding-in-Chief has commended the following for meritorious service : Flight Lieutenant (now Squadron Leader) S. W. Tennant, Flight Sergeant A. Bidmead, Sergeant D. N. McGlashan, Corporal R. W. Pickering, Mr R. C. Dickinson and Mr J. E. Simons.

The Air Officer Commanding and Commandant has commended the following for meritorious service : Warrant Officer J. F. C. Crabbe, Flight Sergeant V. J. McCrea, Chief Technicians M. Bethune and J. Dunlop, Sergeant C. E. Sproule, Corporal J. A. R. Munro, Senior Aircraftsmen R. J. R. MacDonald and M. H. Mills, Mr J. Andrews, Mr R. A. M. Blacklaw, Mr L. Young, Mr R. Dickinson and M. S. Godson.

The Air Officer Commanding-in-Chief Maintenance Command has commended Warrant Officer J. Ward for meritorious service.

PROMOTIONS — No 100 ENTRY

The following promotions were made in No 100 Entry in February 1971 :

Flight Cadet Senior Under Officer M. Prissick ; Flight Cadet Under Officers : R. D. H. Pine (Deputy to SUO), C. C. Burwell, R. J. Lawley, W. W. Morgan, A. W. J. Stewart.

RETIREMENTS

The following long serving members of the civilian staff have retired :

Messrs W. A. Howard (31 years service), W. H. (Andy) Capps (30 years service), S. Bailey (25 years service), F. R. Trelease (23 years service), A. S. Lucas (20 years service, after 22 years in the Royal Air Force) and C. A. Holmes (14 years service).

The *Journal* wishes to record the College's appreciation of the devoted service rendered by the above personnel, and wishes them a long and happy retirement.

DEATHS

It is with deep regret that the *Journal* records the deaths of the following long-serving members of the civilian staff :

Messrs. R. A. Jackson, G. Thomas and T. B. Wheeler.

AIR COMMODORE C. S. THOMAS, CBE, RAF

Air Commodore Thomas left us in February after some three years at Cranwell. He joined the Royal Air Force as an apprentice at Halton in 1934 and was commissioned in 1942 whilst in Malta. In 1949 he trained as a pilot at Royal Air Force South Cerney. Since then he has held a succession of senior appointments in this country and abroad.

He came here from a difficult period of duty in Aden during which the Royal Air Force was in the process of being evacuated from the territory. During his tour he has presided over the Department of Engineering at a time of great change in which his wisdom and long service experience have been of the utmost benefit to the College. He managed to keep his eye in at golf at which he is an expert player and formidable opponent.

In March Air Commodore Thomas became Director of Training (Ground (Royal Air Force)) at the Ministry of Defence and we are very pleased that in this capacity the College will still be maintaining links with him. We wish him and his family every success and happiness in the future.

AIR COMMODORE J. E. BAZALGETTE, DFC, MBIM

Air Commodore J. E. Bazalgette, DFC, MBIM, completed an eventful tour as Assistant Commandant (Training) in May, 1971.

He assumed his duties in December 1968 and was soon deeply involved in the reorganisation of the pattern of training at the College necessitated by the implementation of the Graduate Entry Scheme. His wise guidance and cheerful imperturbability proved of inestimable value during the inevitable period of turbulence associated with the change over and he must take much of the credit for the smoothness with which the transition was achieved.

Whatever his 'cares of state' Air Commodore Bazalgette endeavoured to see as much as possible of his trainees. A keen sportsman himself, he was a particularly avid supporter of College sporting activities;

indeed there can be few Assistant Commandants who have actually played rugby during their tours at Cranwell. He showed a similarly keen interest in all the activities of the College Indoor Society and in addition to being an enthusiastic 'first-nighter' at all theatrical and musical productions he was largely responsible for re-introducing the traditional Senior Entry Review.

His charming wife, Nell has been an enthusiastic and hard-working participant in numerous College societies. Her talents as an actress will be sorely missed by Theatre 329 and her many fine performances will be long-remembered.

Air Commodore Bazalgette left the College to take up an appointment as Personal Staff Officer to the Chief of the Defence Staff and the Journal extends its best wishes to him, Mrs. Bazalgette and their family.

GROUP CAPTAIN J. WALSH, BEM, BA

After more than five years in the post of Senior Tutor (Humanities), Group Captain Walsh, who was promoted to his present rank in July 1970, left the Royal Air Force College in December 1970 to take command of the Royal Air Force School of Education.

Group Captain Walsh's association with the College extended over nearly thirteen years, broken only by an exchange posting with the USAF Academy at Colorado Springs. First as Senior History Lecturer and then as ST(H) he made a significant contribution to the study of International Relations and strategic problems, subjects on which he was often called to lecture by outside organisations.

He has always striven hard for the maintenance of sound academic standards by his students. His interest in them was not, however, confined to the classroom and he took an active part in all aspects of College life. The football team, in particular, will miss his stentorian support.

We extend our best wishes to Group Captain and Mrs Walsh for their continuing happiness and future success.

**GROUP CAPTAIN
T. R. HARRIS, BSc, RAF**

Group Captain Harris retired from the Royal Air Force in February after some 20 years of service, 12 of which were spent at Cranwell. During the War from 1939 to 1946 he served with the Royal Artillery in Burma and India, was Mentioned in Despatches and attained the rank of Major. He began his teaching career at Taunton School before the War and returned there afterwards as Head of the Mathematics Department and Housemaster until 1950 when he joined the Education Branch of the Royal Air Force. Having spent three years at the Royal Air Force Technical College, Henlow, and 12 at Cranwell he has been associated with the teaching of Flight Cadets for a total of 15 years.

Group Captain Harris is a man of many parts and with many interests. He played rugby for Somerset and the Combined Universities and was a reserve for England v. Scotland and Ireland in 1939. In 1946 he had a rugby trial for England; had it not been that he suffered a severe injury in a county match at about that time he may well have represented his country. Although injury ended his playing days he retained his love of the game and served it loyally as a referee for many years. He was in charge of College rugby in 1952 and during 1957 - 62. He played cricket for Bath and the Combined Universities and went on a West Indies tour in 1938. He represented his university, Bristol, in athletics. He is also a very accomplished golf player.

He and his wife are acknowledged experts at Bridge and have done much to encourage others to take up and develop their skill at the game. Many players throughout the Royal Air Force now derive great pleasure from the game thanks to Mrs Harris's expert tuition.

Group Captain and Mrs Harris have played an active part in the life of the College and local community and are greatly missed as a consequence of their move to Harrow where Group Captain Harris has taken up his new appointment on the Mathematics staff of the famous school. We wish them both every success and happiness in the future.

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AIR COMMODORE A. MAISNER, CBE, AFC, RAF

Although born in Hamburg, Air Commodore Aleksander Maisner (49) is of Polish descent and spent most of his formative years in Poland. The outbreak of war in 1939 interrupted his studies at Warsaw University, and he was soon caught up in the ensuing turmoil. After spending some 2 years in Soviet labour camps in Siberia, he joined the Polish army as an officer cadet at the School of Artillery from which he graduated in 1942. Soon afterwards he transferred to the Polish Air Force, and after completing the appropriate flying courses in the United Kingdom, he gained his pilot's wings in 1944. A succession of flying appointments in Flying Training Command followed, and when he became a British subject in 1948, he was given a commission in the Royal Air Force.

In 1950 he went to the Suez Canal Zone where he served as Flight Commander on No 70 Squadron flying Valettas. On his return to the United Kingdom in 1952, he converted on to Canberras and was Flight Commander on No 50 Squadron at Binbrook. Subsequently, he was closely involved with the introduction of the Vulcan into service and

became the Chief Ground Instructor of No 230 (Vulcan) Operation Conversion Unit on its formation at Waddington in 1955.

In 1960, having attended the Royal Air Force Staff College course, he went to New Zealand as Wing Commander Flying at Ohakea where he assisted with the introduction of Canberras into the Royal New Zealand Air Force. On completion of this tour, he joined the Royal Air Force Staff College at Andover as a member of the Directing Staff.

After a short time in the Central Staffs at the Ministry of Defence, he became Deputy Director of Air Staff Plans 2 in April 1966. For the past 2 years he commanded Royal Air Force Seletar in Singapore.

Air Commodore Maisner is married, and has a daughter of 22 who is a qualified radiographer and a son of 17 who is at Caterham School.

The *Journal* welcomes Air Commodore and Mrs Maisner and their family to Cranwell.



AIR COMMODORE C. S. BETTS, CBE, MA

Air Commodore C. S. Betts was appointed Assistant Commandant (Engineering) at the Royal Air Force College with effect from 13 February 1971.

He was born in Nuneaton, Warwickshire, and educated at King Edward VI School, Nuneaton, and Sidney Sussex College, Cambridge where he was a member of the University Air Squadron.

Air Commodore Betts was commissioned in the RAFVR from Cambridge in 1941, and trained at Cranwell as a Signals Officer. His wartime service was in Coastal Command, mainly in the Western Approaches on Flying Boat stations, and in Iceland. He was granted a permanent commission in the Royal Air Force in 1945. Some of his subsequent

appointments have been as Chief Signals Officer, Air Headquarters Iraq, Deputy Director, Air Defence at the Ministry of Defence (Air), Station Commander, Royal Air Force Fylingdales, Commandant, No 1 Radio School, Locking and Director, Ministry of Technology, where he was responsible for Guided Weapon Projects for the Royal Air Force.

Air Commodore Betts is a graduate of the Royal Air Force Staff College, the Joint Services Staff College, the Imperial Defence College and the Advanced Guided Weapons Course, Royal Air Force Technical College.

The *Journal* extends a warm welcome to Air Commodore and Mrs Betts.

VISITS 1970-71

Visitors to Cranwell included :

SEPTEMBER

On 13th. Air Commodore J. L. Mitchell, MVO, DFC, AFC, Director of Royal Air Force Recruiting and Mr F. B. Campbell and Mr D. Headly of the Public Schools Appointments Bureau.

On 17-24th. Brigadier General R. Olds, USAF, Commandant of Cadets, USAF Academy, Colorado Springs.

On 18th. Dr E. J. Richards, OBE, DSc, MA, CEng, FRAeS, FIMechE, Vice Chancellor, Loughborough University of Technology.

On 20th. The Right Reverend J. T. Hughes, MA, Bishop of Croydon, Bishop to the Forces.

OCTOBER

On 12th. Air Vice-Marshal J. F. Powell, OBE, MA, Director of Educational Services.

On 22-23rd. Dr G. S. Hislop, Managing Director, Westlands Helicopters Ltd, and Dr P. Jones, Westlands Professor of Aeronautics and Astronautics, University of Southampton.

NOVEMBER

On 8th. The Most Reverend and Right Honourable F. D. Coggan, MA, DD, Archbishop of York.

On 25-26th. The Commandant, Brig D. Ernesto Axel Niethardt, Staff Officers, Cadets and SNCO's, the Argentine Air Force Academy, and the Argentine Air/Military Attache.

DECEMBER

On 3-4th. Mr Anthony Lambton, MP, Parliamentary Under-Secretary of State for Defence (Royal Air Force), accompanied by Air Marshal Sir Leslie Mavor, KCB, AFC, Air Officer Commanding-in-Chief, Training Command.

On 5-7th. The Right Reverend H. D. Douglas, Moderator of the General Assembly of the Church of Scotland.

On 9th. Colonel J. Chenet, French Air Attache.

FEBRUARY

On 7th. Air Vice-Marshal M. D. Lyne, CB, AFC.

On 11-12th. The Right Reverend G. W. Tickle, Roman Catholic Bishop to HM Forces and the Right Reverend (Group Captain) Monseigneur M. J. O'Brien, Principal Chaplain, Roman Catholic.

On 26th. Air Marshal A. Rahim Khan, HQA, Spk, SBT, Chief of the Air Staff and Commander-in-Chief, Pakistan Air Force, who was Reviewing Officer at the Graduation Parade of No 99 Entry.

APRIL

On 19th. Air Vice Marshal J. A. C. Aitken, CB, Director General of Training, Royal Air Force.

On 26-30th. Brigadier General R. Frodl, Commandant of the German Air Force Technical Academy, Neubiberg.

On 30th. Lieutenant General G. B. Simler, Commander in Chief USAF Training Command.

MAY

On 4th. Brigadier General R. Cescotti, German Defence and Air Attache, Colonel Y. J. Beck, Netherlands Air Attache and Colonel S. Nardini, Italian Air Attache.

JUNE

On 7-8th. Major General R. L. Clutterbuck, Senior Directing Staff Army, Royal College of Defence Studies.

On 17th. Professor G. A. Whitfield, Cranfield Institute of Technology, Professor Brearley, Royal Australian Air Academy and Group Captain Tonkin of Australia House.

'Ars Gratia Artis'

Cranwell Little Theatre

Enter A Free Man

Toby Teazle

CRANWELL LITTLE THEATRE

1970 - 71 has been a very successful season for the Cranwell Little Theatre. The play 'Relatively Speaking' by Alan Ayckbourn was staged in Skegness as part of the Skegness Theatregoers' Festival, and carried off two trophies, one being presented to Mrs Verley Carrington for her performance as Sheila, and the other, the Sir Billy Butlin Trophy, being presented by the audience season ticket holders to the group as a whole, for what was considered to be the most enjoyable play of the festival.

The mammoth Christmas production of 'Toby Teazle,' a report on which follows, was entirely home-grown, having been written and produced by Flt Lt Hopkin. Possibly the most ambitious production the Cranwell Little Theatre has ever staged, it attracted an audience of some 1,800 adults and children

over four performances, and won the Scott trophy for the best play in this year's Kesteven Drama Festival.

'Enter a Free Man' by Tom Stoppard was also entered for the same Festival, having been presented in Theatre 329 during October. Extracts from the adjudicator's report on this play appear below.

Work on Theatre 329 continues to plod on between productions, and we hope that before the end of the year, the Theatre will at last correspond to our original ideas. The Little Theatre has recently been amalgamated with the College Drama Group and thus with the expected influx of new talent and willing hands, we can look forward to continuing success in the future.

ENTER A FREE MAN

The Play. A very good choice of play for the company available and the particular theatre in which it was played. An intimate, static play needs a small theatre. Further its a play with meat on the bone and very valuable to work on.

Production. The production was very well cast and so the overall interpretation of the play was half done for you ; so that having found the key that fitted the lock you most expertly opened the door to the characters revealing their frustrations, feelings and attitudes about themselves and the society they were in. Atmospherically, the sense of pub characters and how they act upon (and are acted upon by) Riley was beautifully evoked. Similarly the family relationships were very much along the right lines, although here I thought you might have explored the relationships more deeply, particularly the psychology of a family of whom at least one is an eccentric. The stylized (heightened) realism of the production usually worked (and at all events was committed and unequivocal).

Stage Presentation. The set was extremely well designed so that it not only served the practical purposes of the action, but atmospherically told us about the landlord and his customers in the pub, and told us about the family's tastes in furniture, decoration etc. The only fault I would find is the picture of the Queen : it was badly placed because it reflected the lights. The dull colour schemes of the two 'rooms' emphasized the dullness of the peoples' existence. Also full marks to the carpenters who ensured that the whole thing didn't wobble when a door was slammed — a difficult achievement. Lighting was good despite the paucity of lamps ; as you are aware there were dark spots, especially head-height centre stage — I would have tried to eradicate that one since so many of the important Riley speeches were spoken from there. One further thing : why give us the sound of a *transistor* through a good speaker and a Tanberg tape-recorder ? Surely you could have used Radio 2, live on the radio, then the scratchy quality would have come over.

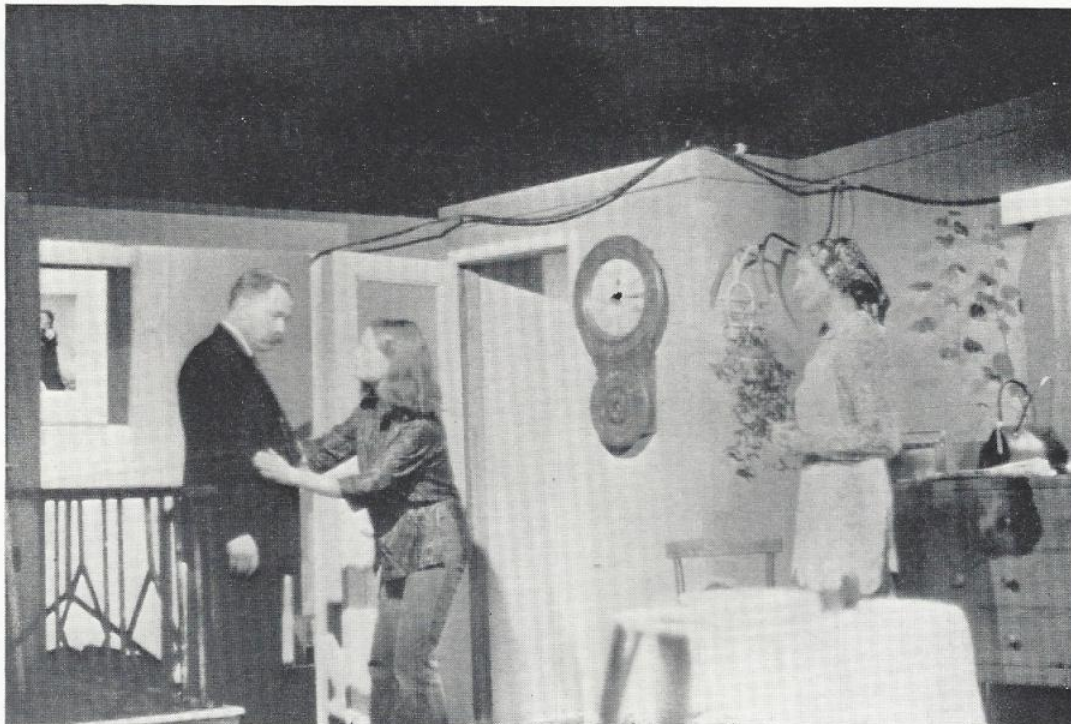
Acting. The pub characters all had an undoubted authenticity and a quality I always admire in actors, trust in remaining still, inert and relaxed in a single action, reading a newspaper without turning a page, or smoking a cigarette or drinking a beer. Very right especially for that opening scene where the genial indifference of Able, the somewhat grumpy indifference of Carmen (Geoffrey Shore) or the disdainful isolation of Brown (John Ellingham) told us so much and so simply about Riley. One really believed it was, and had been for a long time, the *local*.

Brown was a very good piece of casting and the image of the big man with little voice was ideal for the sense of the isolated drinker whose desire to be left alone is his most positive ! Kay Burrows as Harry however, seemed rather ill at ease but only in so far as he didn't give sufficient weight to the character. Florence, played by Jackie Griffiths was very well portrayed ; her flea-brained vulgarity struck the right note as Harry's girl. Riley (Andy Whyte) had the right quality of failure ; from the start we sympathised with his frustrations, knew he would never break free.

Nell Bazalgette as Persephone seemed better in the first act and showed a very real, patient, knowing wife. The mother/daughter relationship was very good although it is important to know how serious Linda, nicely played by Sally Macfadyen, is in trying to shock her parents and how much she loves them both. I have a feeling the part is not so well written as the others in the play.

General Comments. My highest praise to the Company for a very fine production from all departments. It was a very real pleasure to see a good play well done. You hardly have need for my comments, but maybe in your next production you will have a few more avenues to explore as a result of my comments. You have all the know-how technically and so can afford to go still more deeply into characters and their backgrounds and past (before the action of the play). My best wishes for future productions and I would be most pleased to see any future plays if at all possible.

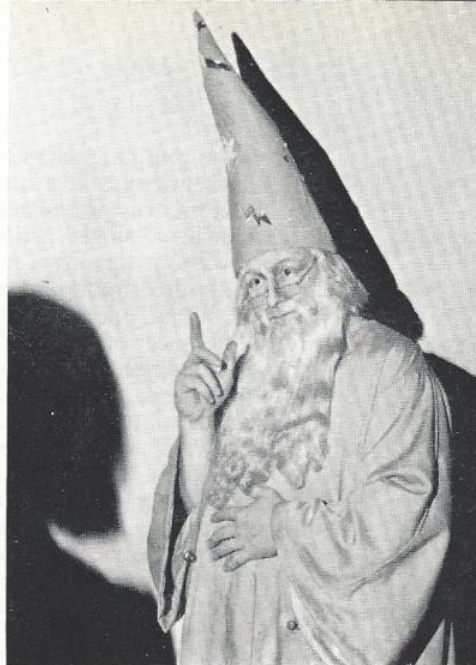
GEOFFREY GILLHAM.
Assistant Director,
Theatre Royal, Lincoln



Leaving home — Andy Whyte as Riley, Sally Macfadyen as Linda, and Nell Bazalgette as Persephone.



*The much-hated Black Witch, played by
Beryl Bolam.*



John Ellingham as Wizard Jingle.

THE EXTRAORDINARY ADVENTURES OF

TOBY TEAZLE

IN STORYBOOKLAND

*St. George (Mike Kearns) and The Dragon
(Dennis Hornsby).*



*The Pirates — Dirty Dick (Kay Borrows),
Smee (Mike Beck), and Filthy Fred (Rocky
Thompson).*



In Kesteven the pantomime presented by the Cranwell Little Theatre has become an annual event of some importance. For 1971, four performances of 'Toby Teazle' were given on January 14, 15 and 16 to crammed houses of enraptured children and indulgent parents.

This year's presentation held a special local interest because the pantomime had been written specially by the producer, Paul Hopkin. Although most of us were disappointed to learn from the programme notes that Julius Caesar, Tarzan and Professor Madcap were not going to appear we were happy to meet the mixture of fictional and traditional characters well enough known to the children.

The scene was set in the undefined time between here and now and once-upon-a-time and although the unfolding adventures took place in Storybookland only two sets of characters came from the story league. The rest were in the Nursery Rhyme, Legend or Play Leagues. But this was a small matter to the eager audience.

Wizard Jingle, played by affable John Ellingham, in a voice grown small and high with great and mysterious age, had none of the fire or temper of a Gandalf. But even if his magic powers seemed diminutive Jingle soon convinced the audience that with such an impoverished memory he was destined for great things in his profession. Just as every silver cloud has a black edging it became very clear that nice old Wizard Jingle was suffering a bit from an attack of Witches' lib. Quite suddenly the nastiest piece of work to be seen at this College for a very long time materialised at the rear of the auditorium. With an eldritch screech and hideous grimace the Black Witch stormed to the stage bringing her own poisonous green aura. She scared the hell out of every adult and every under five in the hall. Beryl Bolam played the witch with such sure conviction that one was unsure if this was the real Beryl Bolam. To every parent she was living proof of the awful consequences of a crash diet of fillet of fenny snake, eye of newt and toe of dog.

It is difficult to praise this central performance too highly and one can but suggest

that, in view of the casualties among the under fives, an amnesty be declared and that we should settle for Medusa as a less frightening alternative for next year's production.

As Toby Teazle, Tony Travis, established himself as a kind of universal brother who found the transition from this instant to storybookland to be a matter of little regret: his singing improved and his guitar was gay. Tony has a great ability to get along with children and with the large number of adventures still before us it was jolly pleasant to have him as our guide. Before long Toby set out on the adventures with the Cat belonging to Dick Whittington who had been imprisoned by the Black Witch, the nasty meany who had also stolen Jingle's hat. Sybil Wade in her black pussy outfit miaowed purrfectly and was so feline in her movements that not a few Daddies must have contemplated the possibilities of re-running the pantomime as a late, late night show called 'What's you Pussycat?' From the programme (awl in loe case) it was learned that this was Mistress Wade's first performance at Cranwell. Let us hope that we will see her again, in capitals. Toby and the Cat were joined by Sidney, a peripatetic scarecrow in evening duds, and throughout the pantomime this trio took us through the adventures. Although Sidney didn't seem to slot into the storyline so readily as Teazle and the cat — he seemed to have been tagged on either to provide us with an essential TRINITY against the forces of EVIL or to match subconsciously the rather more famous trio who joined Dorothy in her quest for the Wizard of Oz — 'he' was very much alive in Jackie Griffiths' elegant playing.

Both Tony Wade and Maureen Beck as the Mad Hatter and the March Hare were ignored completely throughout the entire proceedings by Joyce Craig, making her first timorous appearance as the Dormouse. The tea party was made into a remarkable slap up affair and both players gave due emphasis and weight to each line and every bit of business. The scene had a ritualistic quality that was warmly appreciated by the junior males who throughout the entire scene behaved like adverts for Five Boys Chocolate. The young ladies, very properly, found the table manners atrocious and the behaviour abominable.

In a different mood Sally McFadyen, as Little Bo-Peep looked charming and radiant. She always contrived to be contrite for her mean and spiteful actions which she carried out with dispatch. No wonder she had such a sizeable deficiency on the latest surprise sheep check.

The role of Peter Pan is always difficult to interpret and Anne Wagstaff's interpretation owed much to the popular view of Robin Goodfellow, in his Lincoln green outfit. She brought a gamin air to the role and moved with spirit and alacrity (although she didn't fly) and was resolute, resourceful and fearless as the occasion demanded. Her chief adversary was the fearsome Captain Jas Hook (Geoffrey Shore) supported by his villainous mate, Smee (Mike Beck) and the crew (Kaye Burrows and Rocky Thomson). Hook cut a resplendent 17th century bewigged figure of awesome nobility, tarnished only by the flashing hook and the certain knowledge that the only sale he'd seen was the annual one at Berman's. With his stentorian voice and commandeering looks no one was sorry to see him fall foul, at the end, of the Black Witch and to see him act like the dog we knew he was. Mr Smee was played in the round, and jolly well too. As a genteel second cousin to Uriah Heep, Smee was villainous in the most bumbling ways and lived in terror of the Captain and of his mighty crew of two: Dirty Dick and Filthy Fred. These two terrors of the sea were eager for any scurrility and they displayed the proper glee and disrespect at their captain's misfortune. It was plain for all to see as they swung the lead, with cheeky ease, that buckling swashes was child's play to them. We were to see Rocky Thomson in a second part as Jack, the nursery rhyme companion of Jill; Gill Travis made a pretty, charming and youthful Jill. This famous pair had been locked in a box for their pains by the Black Witch and were rescued by Toby, Cat, and Sydney. After some impressive first aid using the new wonder ingredients, vinegar and brown paper, Jack and Jill were able to escape.

Toby and his two companions had just met Simple Simon (Derek Woodburn) and his dog, Rover. Never easy to see, Rover was present; we were given Simon's word

for it, and as everyone knows, a pieman's word is his hound. Derek appeared later as the Goblin Gatekeeper wearing one of the wonderfully clever masks made specially by Muriel Humphrey for this production. By tricking this Goblin the trio were able to gain entry to the Witches Cottage and then to rescue Dick Whittington, stunningly played by Nell Bazalgette who looked every inch a traditional principal boy. From the opening of the scene the gallants in the audience were all for calling in the RSPCA to free the Bird in the Golden Cage but at last Toby succeeded in uniting Dick with his Cat and in doing so won for himself in perpetuity Aurora, the Dawn Princess played by Maureen Danes. The entire proceedings were brought to a spirited end when a promoted Wizard Jingle was able to upstage the Black Witch, still nasty to the last, and to reward Toby with the gift of staying for ever in Storybookland.

Now although they did not play a great part in Toby's adventures, Pat Smith as Guinever, your favourite damsel in distress, Dennis Hornsby as Marmaduke the dutiful dragon and Mike — Does your Mother know you'r Out — Kearns as St George were a special adventure in themselves for all the attending parents. Mike Kearns indulged the audience and himself with a stream of gags and jokes in a heart felt homage to Archie Rice. Pat and Dennis played their supporting parts with patience and indulgence. At the end of his hilarious turn, Mike was able to leave the stage, with dragon and audience slain, a smaller and visor man.

The complete production by Paul Hopkins was most effective; simple and colourful. The behind the scenes staff are all to be congratulated upon their experiments in large scale visual aid applications; at a stroke they were able to dispense with flats and rose-tinted spectacles.

'Toby Teazle' was a most successful production which obtained a very high and noisy level of audience participation at every performance and that of course, is the true measure of the success of any pantomime.

D.M.

A COMPUTER SIMULATION OF LOW-ALTITUDE BOMBING PATTERNS

'Miscellany'

A Computer Simulation of Low-Altitude Bombing Patterns

Carl Von Clausewitz - Philosophical Monster

Television - The Manipulators and The Public

A COMPUTER SIMULATION OF LOW-ALTITUDE BOMBING PATTERNS

by FLIGHT LIEUTENANT C. N. J. TILY

Introduction

Nowadays more and more schools are studying statistics and computing as part of their normal sixth form work, and more and more A-level papers are being offered in these subjects each year. *The Computer Weekly* in November 1969 reported that some 2,000 schools have got, or are able to use, a computer. Moreover, nearly every Technical College, College of Further Education etc has its own computer. F. J. Birkin of the Cornwall Technical College says, referring to the computer, 'It gradually falls into perspective as a powerful tool to be used intelligently,' in his article in the *Computer Bulletin*.

Simple Random Sampling

When the average master comes to the point in the statistics syllabus where it says, 'laboratory experiments in statistical sampling theory,' he is in for several hair-raising hours of dice being rolled, rods being measured, beads being selected and beads being bounced off pins to prevent their normal free fall.

The resulting distributions are usually of a most dubious nature and the master is left hoping and praying that 27 sixes will not be shaken in succession thereby destroying all his previous arguments. Meanwhile a poker school has been set up in the back corner of the laboratory to test further statistical hypothesis.

Simple Computer Simulation

Fortunately, the digital computer can generate numbers very rapidly which are uniformly distributed over any given range. For example the Elliott 4120 can generate 100 numbers rectangularly distributed over the interval 0 to 1 in under one second. The method used actually produces pseudo-random numbers which are random enough for most purposes and is described by Tocher in his book.

Having obtained a method of producing rectangular numbers, it is then quite straightforward to transform them to produce a

normal distribution of any mean and variance. So one is now able to introduce errors into readings and perform statistical analyses on them to test various hypotheses. These numbers can also be used to demonstrate the distribution of sample means and sample variance. But it is on the distribution of errors that the following simulation is designed.

Purpose

During the Professional Mathematics Course given to the General Duties Cadets at the Royal Air Force College the theory of bombing errors is studied. Briefly, when a bomb is dropped onto a target from a plane flying at low altitude there is an error about the aiming point along the line of flight, known as the range error, and a further error at right angles to this line, again about the aiming point, known as the error in line. All the factors that effect the accuracy in the dropping of the bomb are combined into these two errors which are assumed to be normally distributed about the aiming point and also independent.

The resulting bi-variant distribution is elliptical in shape and it is possible to calculate the size and location of the ellipses in which one would expect a certain percentage of bombs to land. Hence it is further possible to calculate the number of bombs to be dropped to destroy a certain complex target area with any degree of confidence. Conversely by analysing the scatter diagram of a given bomb drop one can estimate the error in range and line of that drop.

All this is fairly easy to describe in theory on the blackboard, but it would be rather uneconomical and very destructive, to say the least, to put the theory into practice in order that the students might see what was actually happening. This difficulty has been overcome by simulating the problem using the high-speed digital computer and the plotter.

With this approach the student is able to watch while the computer plots the position of each hit as it happens and he can see how

the pattern of all the hits gradually builds up into an elliptical shape. He can ask the computer to drop any number of bombs and he can vary the errors in range and line at will and hence readily compare scatters obtained under various conditions.

What Does It Demonstrate ?

If the theory is correct, the resulting scatter should be roughly elliptical in shape and about 50% of the bombs should land inside the given ellipse. As the errors in range increase, so the ellipse becomes longer, and conversely shorter as the errors decrease. This assumes the plane is flying across the target from left to right or vice-versa. The width remains constant if the line errors remain unaltered. A similar situation holds when the line errors are varied, keeping the range errors constant. Both errors may be changed for each drop, and should they both be the same, then the ellipse degenerates into a circle.

The first set of bombs dropped determines the scale for subsequent drops so that the resulting scatters for different errors can be compared. If the errors given to the computer then prove to be too large for that scale, the computer can even print out a polite message asking the student to choose new errors.

Details of the Programme

The programme was written in Algol 60 for an ICL 4120 computer. First of all a 12-inch square is drawn by the plotter, the mid-point of which being the aiming point. The computer then reads in three numbers as data representing the number of bombs to be dropped (n), the standard deviation of the range error (σ_x) and the standard deviation of the line error (σ_y). The 50% ellipse is then calculated from this information and drawn inside the square, its scale being such that one side of the square represents six times the larger standard deviation, all distances being assumed to be in yards.

The computer then pseudo-randomly generates the co-ordinates (x, y) of n points such that x is normally distributed with zero mean and standard deviation σ_x , and similarly for y . If the point is found to be inside the square it is then plotted, and running totals are kept of the points that are inside the square and of the points that are inside the ellipse. When all the bombs have been

dropped, ie all the n points dealt with, the percentages of bombs inside the square and inside the ellipse are recorded. Further experiments may then be carried out with a new number of bombs, if desired, and with fresh errors but keeping the original scale by feeding a one into the computer otherwise a two terminates that experiment.

Results

For the purposes of this set of experiments a target area of four square miles was taken with errors for the first run being 600 yards for the standard deviation of the range error. Subsequent runs were taken by changing the range and line errors as shown in the data given in Appendix B. In one case the two errors were made the same and hence produced a circular pattern, and in another case the errors given were too large and hence the polite message !

It can be seen that as the number of bombs increase so the scatter becomes more concentrated into an elliptical form. Of course we do not get exactly 50% of the bombs inside the ellipse due to the random errors, if we did we would suspect our generator, but the results are near enough to justify the theory without any headaches.

On one scatter pattern a semi-complex target has been drawn by hand and the number of bombs inside it have been counted, thus the number required to be dropped can be calculated allowing for misses if it is known that a certain number will destroy it.

Possible extensions

The programme may be extended to compare scatters with other ellipses such as the 75%, 90%, 95% and 99% ellipses. In fact any desired percentage ellipse may be drawn and its dimensions displayed. The plotter process is extremely illustrative and not too time-consuming, taking some 15 minutes to drop 500 bombs — the slowest part being the actual plotting, however the programme can be easily adapted to give just a pointed summary of many sets of drops for various ellipses.

As has been previously mentioned, when the scatter pattern has been obtained one can then superimpose a given target such as a building or a ship and hence estimate how many bombs will strike the actual target. This drawing and counting may also be done by

the computer once it has been given the co-ordinates of the building relative to the aiming point. For a simple shaped target area, a straight forward piece of integration would give the results, but for a complex shape, then simulation is by far the best approach.

For computers without a digital plotter, all the hits can be stored in arrays and then plotted out on a line-printer. The result is not quite so accurate, but still very dramatic. Here all the bombs have to be dropped before the scatter pattern is produced, so the student does not see the gradual build up of shapes.

A set of scatter patterns has been mounted on a wall display with a sliding transparent map over them to give added interest, the aiming point in this case being Paddington Station.

The entire concept has also been used as a demonstration for students studying digital computer simulation in general, such as a lead-in for the theory of queries. The big advantage of this programme is that it is the only feasible way that the theory can be simulated and the student can see what is actually happening, but it has the drawback that it needs a rather sophisticated and expensive piece of machinery to run it. Nevertheless, as was said in the introduction, the computer is now more readily available to more and more educational establishments every day, and hence it is believed that this programme is of great value.

Conclusion

It is appreciated that the approach in this article is of limited interest since not every student studying the theory of errors uses a bomb scatter as an example, but one can easily substitute a rifle firing at a target or seeds being dropped from a plane and the principle is the same.

When the programme has been used as a 'back-up' to an ordinary lecture it has always aroused great interest in the students and the impact has been such that, for a delightful change, they have shown a renewed interest in the subject !

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- a. *The Computer Weekly*. November 1969.
- b. *The Computer Bulletin*. March 1969.
- c. *The Art of Simulation*. K. D. Tocher. E.U.P.

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CARL VON CLAUSEWITZ

Philosophical Monster

By FLYING OFFICER N. C. RUSLING

A Prussian soldier and writer born in 1780 and died in 1831, his work 'On War' was published posthumously in 1832. The work was left unfinished as a hotch potch of ideas, thus Clausewitz was inadvertently misunderstood and is often seen as the prophet or promoter of developments which culminated in the mass slaughter of the Great War and in various horrific measures, such as the 'dehousing' of German civilians by the allied Bomber forces in the second world war. Clausewitz is often seen as a philosophical monster, an exponent of pure brute force and aggression in international relations. In fact, Clausewitz was not primarily a prophet, a promoter, of, or an apologist for, war. He was a Prussian soldier of high but not exalted rank, who, like many of his contemporaries in Germany, was of a philosophical inclination. His work was essentially one of critical analysis; he did not think war was right or wrong, he thought it inevitable.

It is popular to think of Clausewitz as the exponent of a political philosophy of war; as the author of the idea that war transcends the purely military. For Clausewitz, victory could only be defined in a political context and not in terms of the battlefield; he perceived war as a political relationship, in fact as a 'continuation of policy by other means.' Few would disagree that Clausewitz's practical instructions in his long discourse 'On War' are now of merely antiquarian interest. The major part of his tactical observations have been rendered archaic by the advance of weapons technology and means of transport; moreover, this feature of his work is by no means unique, for many authors produced works upon the technicalities of military activity at its varied levels. What is more questionable and in fact the purpose of this paper is to examine whether Clausewitz ought best to be remembered for his view of war as an instrument of policy or best remembered for his metaphysical discussions of the nature of war and his abstract remarks upon war at its strategic level.

Clausewitz's political philosophy of war, ie statecraft running a war, was not such an innovation as is often thought. Henry Lloyd¹ discussed, in 'Military Memoirs' 1781, the relationship of government policy and military operations and showed, fifty years before the publication of Clausewitz's 'On War,' an understanding of the place of war as an instrument of policy. Anatol Rapoport in the Pelican edition of 'On War' makes the point that Clausewitz's political philosophy of war assumes the state to be a perfectly defined entity and as such is only one of several idealised theories of war. The eschatological philosophy of war ('messianic' or 'global') which assumes that history will culminate in a final war leading to the unfolding of some grand design is mentioned as an alternative as indeed is the cataclysmic philosophy of war which looks upon war as a catastrophe that befalls some portion of humanity or the entire human race. It is this view of war which is reflected in the work of the Peace Research and Conflict analysts. It can also be pointed out that the Maoist theory of war has no place for the state system and is thus very different from Clausewitz's idea.

Today, with reference to unlimited war, the political philosophy of war has lost its credibility. Total war is unlikely to be the continuation of policy by other means. It is difficult to imagine total war between superpowers who possess the nuclear capability to commit mutual homicide to be brought about by a rational act of deliberate policy. It just might be seen as a rational act of policy, for a short time, in the event of a radical technical advance which gives one power an overwhelming if temporary superiority over the rest. A possibility which will be eliminated at least between the United States and Soviet Union should the Strategic Arms Limitations Talks succeed. The fact is that in spite of the arrival of nuclear weapons, sovereign states have interests which must be preserved and a commitment to put national defence before any other consideration. The consequences

being that American strategists in the late 1950's and throughout the 1960's attempted to bring force under control as a rational instrument of national policy by re-introducing the notion of Limited War. In terms of appropriate means to the political end, in terms of rationalising war by reference to Clausewitzian concepts of Centre of Gravity² and Culminating Point of Victory,³ war in the nuclear age once more made sense as a 'continuation of policy by other means.' The rise of the Neo-Clausewitzians⁴ and the resurgence of the political philosophy of war has been a feature of the past decade. All this however, tends to mask the important fact that Clausewitz was no innovator in expounding that war and politics are linked as one; Henry Lloyd for one had said this fifty years before. Nor did Clausewitz expound a general theory of war but only one particular philosophy of war (currently in fashion, although Anatol Rapoport in his introduction to the Pelican edition of 'On War' pleads for the banishment of Neo Clausewitzian thoughts from the minds of the crisis-managers of our age). In fact Clausewitz's greatest contribution to the understanding of war lies elsewhere in his treatise.

Book I of 'On War' or rather, sundry misinterpretations of it, are responsible for much of the misunderstanding of Clausewitz. For Book I, entitled 'on the nature of war,' consists mainly of a complex philosophical disquisition upon the nature of war and the relation of war to policy. Since Clausewitz set down his thoughts upon the essential nature of war in a way which was complicated and confusing without being subtle, an apparent contradiction in his ideas is revealed. This centres about the fact that Clausewitz does not make an adequate distinction between his thoughts upon the pure nature of war, and his thoughts upon the theory of war as it exists in reality, and in its relation to policy. In fact, at the beginning of his works and thus presumably in the portion of it most studied or read, it is easy to confuse his metaphysical speculations with his practical instructions. From this confusion arises the view that Clausewitz advocated the use of 'Absolute War,' in his own words '... violence pushed to its utmost bounds,' as a normal instrument of policy. In fact, Clausewitz advocated nothing of the sort. In order to clarify his thoughts upon the subject of

war, and this is the important part, he took certain elements from his experience of war, and, in his imagination extended them to their logical and at that time unrealizable conclusions ie Absolute War. By this process he created an abstract metaphysical conception of war from which he hoped to develop general outlines of a framework of military theory, which, when adapted to prevailing circumstances of the real world, could be of assistance to lucid reflection upon real military problems.

By reasoning in the abstract and taking war to its logical extremes in fact his ideal of 'Absolute Warfare' — 'an act of violence pushed to its utmost bounds' — Clausewitz performed his greatest contribution and presented us with a work of permanent utility with a very real transfer value from his time to ours. By examining war at the strategic level (Absolute ideal) he was able to isolate the essential characteristics of war, namely 'bloodshed' and a 'conflict of great interests.' By arguing that as war tends towards its Absolute so too will the military means and political ends coincide, Clausewitz leaves us with a framework which is useful as a point of reference for appreciating the complete lack of any rationale for unlimited nuclear war since the nuclear holocaust will make nonsense of the realisation of any political ends. In short, Clausewitz's 'Absolute war' was an innovation; no real attempt had been made, before Clausewitz, to construct a complete philosophy of war and it is his metaphysical discussion of the nature of war, and his abstract remarks upon strategy rather than his political philosophy which remain of compelling interest.

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- 1 Ref. M. Howard : Jomini and the Classical Tradition in Theory and Practice of War.
 - 2 Not a Physical Phenomena but the point at which the enemy recognizes a defeat. The Commander must recognize the enemy's objectives and where his Centre of Gravity lies.
 - 3 The point from which the Commander may escalate but run the risk of paying a higher price for successes and in the end risk defeat.
 - 4 Ref. Anatol Rapoport — Introduction Pelican classic 'ON WAR.'

TELEVISION - The Manipulators and The Public

by SQUADRON LEADER J. M. HARRIES

Many perceptive and intelligent people would assert that, for all its faults, television has generally served us well ; the public, they claim, has never been so well-informed on matters of moment and the Arts and Sciences are being brought literally, within the grasp of the 'average man' on a scale previously unequalled. The Open University, largely a televisual concept, will bring tertiary education to the masses, and the whole world — 'the global village' — shared the breathtaking success and near-tragedy of the Apollo 13 Mission in a way hitherto unimaginable. For a few days we forgot our differences and became, truly, world-citizens. Surely this increased communication can lead only to a greater understanding between individuals and nations as the barriers of ignorance, prejudice and language are gradually eroded ?

It would be difficult to refute the validity of such claims were it not for one vital fact which

often escapes our attention — namely that television (like all other mass media) is not a self-generating agency dedicated to the furtherance of truth, but a man-made device which is manipulated by those who employ it. It is, if you like, an extension of, and entirely dependent upon, the manipulator's own propensities for honesty or distortion. We may no longer subscribe to the 'It-must-be-true — I-read-it-in-the-newspaper' philosophy, but most of us find it difficult to 'explain away' what we see on our television screens in connection, for example, with student demonstrations, riot-control, or even sporting events. The point is, that while the camera cannot lie, it can only record what is happening in front of it, and the direction in which it points is determined not by some deistic power but by the manipulator in control of it. Thus, what we 'see' is very largely what someone else decides that we 'ought' or 'want' to see ; it is selective and episodic,

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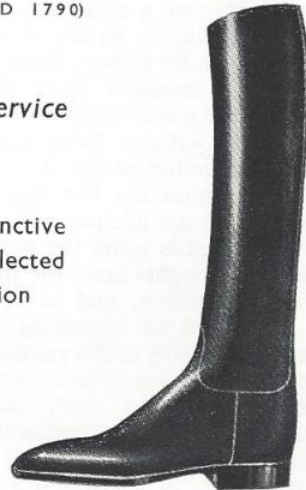
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and even at best, can only present us with one facet of 'truth.'

A further qualification has to be made ; in many circumstances, the mere physical presence of a television camera can significantly alter or influence the events themselves (it is a much more effective ploy to heckle a speaker when you know that the all-seeing eye is there to record your protest).

In a country such as Britain, with its unequalled reputation for honesty in broadcasting, the public, not so much gullible as trusting, tends to take it for granted that what it sees constitutes an accurate and impartial recording of the facts. Since the visual medium has so much more impact than the purely verbal one, a situation could arise wherein the trust of the public is open to betrayal by the manipulators, perhaps a further step along the Orwellian road to 1984.

One should make the point here that one is not referring to the 'escapist' role of television. Entertainment shows, fiction and fantasy have their place of course, but rarely pretend to be what they are not ; besides which the vast majority of people know how to differentiate between what is self-evidently 'fiction' and what purports to be 'fact.' It is in the sphere of the news, current-affairs and documentary programmes that the power of the manipulators to distort looms largest.

That the manipulators, the 'hidden persuaders,' to borrow Vance Packard's phrase, are to a certain extent pressured by such factors as allocation of time and money is inevitable. That they wish to stamp their finished product with some of their own individuality is understandable. What is disconcerting, even alarming, is that they can so select, edit and re-arrange their collection of episodic material as to 'bend' the facts to suit their own ends while claiming to present the truth. Recent programmes about India and South Africa, and the protests at Government level which they aroused, have illustrated just how misleading ('incomplete' is perhaps a more accurate word), one-sided presentations of the 'truth' can be.

This is not to deny that there is a place for controversial topics on television ; indeed one feels that the medium's potentiality for bringing home to the public the existence of the very real problems which confront our

society, is second-to-none. Nor is it to dispute the right of the individual to express his own opinion, but discussion, argument and opinion are one thing, the deliberate contention that an isolated or even engineered episode constitutes the 'truth' is another.

The main point of this article is to underline the dangers inherent in attacking automatic credibility to what we 'see,' not to outline the measures which ought to be taken by the Broadcasting Authorities to guard against deliberate (or even unconscious) distortion of actuality. Indeed, to do this without impinging on the programme-director's rightful freedoms constitutes a considerable dilemma but if we are to avoid the proliferation of slanted, angled, half-true 'news' stories then the problem must be faced. Perhaps the ultimate answer lies, again literally, in the hands of the viewing public, but the growth of propagandist indoctrination is such an insidious process that most people are still unaware of it. Perhaps it is too late even now, for as Philip Whitehead, who was Editor of ITV's 'This Week' programme for four years has observed, 'Television is the only profession in which the word 'cheat' is an inseparable part of the vocabulary.'

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PAINTING OF HIS ROYAL HIGHNESS THE PRINCE OF WALES

The painting by Mrs. Mara MacGregor of the Prince of Wales in his flying kit which was unveiled by Marshal of the Royal Air Force Sir Dermot Boyle after the Remembrance Day Church Parade on 14 November 1971.

OLD CRANWELLIAN NOTES

OLD CRANWELLIAN REUNION

The Reunion was held this year on Saturday and Sunday the 19/20 June, and possibly due to the 50th Anniversary Celebrations held last year, when a large number of Old Cranwellians attended, and probably due to the date clashing with School Half Terms which necessitated the presence of fathers, only a comparatively small number accepted — a little under 100 — the normal being in the range of 150/160. Still this did not affect the pleasure of meeting old friends and seeing new faces of those who had been prevented from attending Reunions in past years.

The weather, contrary to the previous three Reunions was distinctly poor, gone was the hot and cheerful sun we had almost come to expect and in its place was an overcast sky and rather a chilly breeze. However, it did not rain and this was something as at Cranwell we have been experiencing one of the B...st Junes for years in spite of the National monthly forecast of a real scorcher. Here let me stress the word 'National'. Under these dull conditions the usual Cricket match was played, sadly with few spectators, and this resulted in a pretty sound thrashing for the Old Cranwellians. In fact the Team was hardly an O.C. one as only four Members opted to play and much trouble resulted in getting a scratch team together. Likewise the Tennis and Squash resulted in wins for the College and here again there were very few requests to play. The Golf was played between Old Cranwellians at the Sleaford Course. This seems to be quite the most popular game and a number of Members have taken it up since they left the College and have qualified for very reasonable handicaps. Perhaps it would not be out of place here to say that one hopes that next year there will be many more Old Cranwellians asking to play games and that if they are prevented from attending they will let the Secretary know.

Due to the cold conditions Tea was taken in the Entrance Hall and produced a good gathering, not only of Old Cranwellians but

their wives, who, let me say, we all welcome in this essentially male atmosphere.

Not long after 1800 hours the Bar in the FGS (one must retain those old, traditional names) started to fill up and by 1845 it was not all that easy to get served, but after a struggle one was able to take a back pew and reflect on the assembly. One could see the History of the College in those 100 Officers, Old ones, young ones, Senior ones, Junior ones, fat ones, thin ones, bald ones, hirsute ones, tall ones, small ones, even sky blue shirted ones (very with it) and, yes red velvet-bowed ones (Highly sophisticated). There they all were mixed up together in happiness and friendship and all knit together by a common bond that at one time or another they had all worn the famous White Hat Band.

At 1915 we all tramped into the Lecture Hall for the Annual General Meeting, Chaired by the Commandant. The Meeting proved to be a long one. A main point of interest to all Old Cranwellians was that the Supporters for the College Coat of Arms has been approved by the Windsor Herald, subject to a small alteration to the Supporting Eagles. It was further approved by the Meeting that the Old Cranwellian Association should contribute the sum of £60 towards the cost of the new Coat of Arms.

As regards the Stock of Port Wine held in the Cellar for use at OCA Reunions; it was decided that the Stock value should be run down to a figure of £250 before additions, at the rate of £50 a year, be made. The present Stock figure is £465 and the Annual consumption at about £30/40 a year.

Now that the College Journal is only being published annually it was decided that the best month for publication was September; this will enable the results of Summer Games and details of the Reunion to be given instead of being a year out of date.

The Commandant also raised the matter of a Portrait of HRH Flight Lieutenant The Prince of Wales for the College.

HRH had consented to sit. The Meeting unanimously approved this Portrait should be done and the Committee was empowered to proceed and if necessary, send a 'Round Robin' to Members asking for donations towards a Portrait Fund.

The main point on the Agenda was the matter of the future membership of the Old Cranwellian Association. The Commandant opened the debate by saying that he was quite convinced that the University Degree Officers, now coming to the College for a year's training, should be made eligible for Membership of the OCA, they were displaying great keenness and ability in their studies and games as well as Professional subjects and were undoubtedly imbued with carrying on the traditions of the College. If they were disbanded it would mean that the OCA would become a dying Association. Speakers supporting this view were: AM Sir Walter Pretty, Group Captain M. M. J. Robinson, Air Commodore E. D. McK. Nelson (a past Commandant and Assistant Commandant), Group Captain G. A. B. Clayton, Wing Commander T. R. Morgan, Squadron Leader H. J. Crane, Wing Commander B. Huxley (present CFI) Mr. A. S. Paterson, Mr. B. A. Reader. ACM Sir Hugh Constantine asked if all the Degree Officers wished to join. Wing Commander M. J. Allisstone said that acceptance of Degree Officers would mean that Ladies (WRAF Officers) would be entitled to join. Flight Lieutenant A. Wade asked the Commandant the result of the Questionnaire on this matter which had been issued to Old Cranwellians serving at Cranwell; the answer was 50/50. Those who spoke against extending membership to University Degree Officers were Flight Lieutenant I. D. Macfadyen, Flying Officer Lapsley and your correspondent, who said that he had no ill will against the University Degree Officers in any way but he felt that the original Charter of the Association formed 45 years ago, with the express intention that Full membership should be confined to Flight Cadets, who had graduated to a Commission from the College should be maintained. He also said that the Meeting represented only 5% of OCA Members and this seemed a very small fraction to decide about making the biggest change in OCA rules since the Association formation.

ACM Lord Bandon, as President of the Association, then summed up. In view of the importance of the issue this is given verbatim: "Surely we are here to do what we can to see that the traditions of Cranwell are retained which, in fact, are the traditions of the Royal Air Force. Cranwell is not here just for the sake of Cranwell, do not let us be narrow minded about this just because we are Old Cranwellians. Cranwell is here to play its part in the Royal Air Force as a whole. It is our responsibility as Old Cranwellians to see, as far as we can, that those Officers who Pass Out from this College are the best that can be produced. You have selected an Advisory Panel to see that traditions are maintained. What right would we have to give advice if we reject the future Officers as being unworthy to join us. What would I do if I was not allowed to join the OCA, the same as we did and form our own Association. We would then have two Associations and the only one that would have any rights here would be the new one. All the reasons given why we should not allow the new Entries into the Association are, in my view, all the reasons why they should join us. Cranwell is our heritage, it is the heritage of the Royal Air Force. As I drove up to the College I was proud; I looked at it, it always brings a lump to my throat. Surely even if you are only here for a short time it must mean something to you, it must leave an indelible mark on you. Are we to be so narrow minded, are we to think that we were so much better than they are, are you to say to them: 'This is not your place it belongs to us.' No, we have no right to say this. This is a wonderful place, it belongs to anyone who has the privilege of passing through its gates. We must accept them and we must do this in the belief that the training and the tradition they gain from here will be to the great advantage of the Royal Air Force in the future".

Following ACM Lord Bandon's Summing up Air Commodore Nelson proposed: That the Old Cranwellian Association should continue to be a living Association by admitting all Officer Degree Graduates under training at the Royal Air Force College to be Members of the Old Cranwellian Association, regardless of their length of time of their Commissioned Service. This was seconded by Wing Commander L. C. Swalwell.

This motion was put to the vote which resulted in, as near as can be calculated, 87 in favour to 10 against. The motion was therefore carried.

Lord Bandon thanked the Meeting for their decision and said that had they voted otherwise he could not have continued to be the President of the Association.

The Meeting ended on the authority of the Commandant at 2030 hours.

Consequent upon the lateness of the Meeting, Dinner was retarded to 2100 hrs to enable Members to take in much needed sustenance following their deliberations at the AGM. After the Trumpeters had sounded the Commandant led in the Guest of Honour — ACM Sir Denis Spotswood, the Chief of Air Staff, to the Dining Hall and were followed by the 106 Members and Guests. After the Loyal Toast had been drunk, on the completion of Dinner, the Commandant gave the traditional Speech of happenings at the College in the past year in which many changes had occurred. MRAF Sir Dermot Boyle then thanked the Commandant for his very lucid survey over a wide field. He then said that he was delighted that the CAS was present and surely he needed no introduction as he was a past Commandant of the College and was known to a very large number of Old Cranwellians. It is interesting here to note that Sir Denis is the first CAS who has been Commandant of the College and, as Old Cranwellians, we give him our best congratulations on this achievement.

The CAS in his speech stressed the importance of all ranks of the Service, regardless of how or where they were trained, to 'Pull together' for the good of the Royal Air Force. In his position as CAS this was, and always would be, a paramount consideration in his mind and actions. He agreed entirely with the changes that had taken place, so far, at Cranwell, where the training was such that Officers, who had graduated from the College, should be capable of attaining the higher ranks, but, as hitherto, in competition with those who had not been in Cranwell. While the aim of Cranwell remained: 'To train the Commander from which should be drawn the future leadership of the Royal Air Force',

this did not, however, mean that a Cranwell trained Officer was inevitably destined for the top positions. Such Senior ranks would always be held by the most efficient Officers who, by their application, experience and professional knowledge and sense of purpose had fitted them for Leadership in the Service. It must always be remembered that the three Services offer the proof that this Country is prepared to defend its values. The quality of the Services is, therefore, a yardstick of this intention; but, let it be borne in mind, that in our Society there is no place for militant enthusiasts. We need in the Services something more controlled than this, more complex and certainly more difficult to define; of a certainty it requires of its Officers not only much study and thought but environment and a deep sense of purpose play their very necessary parts and Cranwell has an important part in all this. To this end, therefore, it is essential that the young Officer is trained and guided by all that is best, so that he will be capable of assuming the great responsibilities which, one day, he may be called upon to undertake. The CAS ended with a quip, which will not be printed here, but was much to the point and appreciated by his audience.

It is hoped that your correspondent will not be thought impertinent when he remarks that this speech delivered in a quiet voice, without frills, but full of great sincerity and wisdom made a deep impression on the listeners, and when the CAS resumed his seat, he was given a great round of applause in which was admiration, respect and affection.

Following Dinner Old Cranwellians returned to the FGS, at a late hour, in fact at midnight, and here many of them remained to the early hours of the morning, talking of old times, swapping tales and experiences and all those many things that make Service life and friends the pleasure and joy that it is. But all things must come to an end and the tired but ever cheerful Barmen were allowed to collect the glasses and close the shutters.

Church Parade was held at 1130 hours and by 1100hrs the Church was quite full. The Reverend Hewitt Wilson, an Associate Old Cranwellian, was the Preacher and a splendid Sermon he gave us. One that one would expect from a true Christian and an Irish

Rugger International, good forthright stuff. The salute at the Church Parade was taken by the CAS and after the Parade had been dismissed, there was the usual pre-lunch Sherry Party in the College at which a number of visiting Old Cranwellians were present.

A number of letters from Old Cranwellians, who were prevented from attending were received by the Secretary, and on behalf of the Association, they are thanked for the Good Wishes they sent for a successful and happy Reunion. Their names were displayed on the OCA Notice Board in the Founders Gallery.

HONOURS AND AWARDS

The *Journal* offers its congratulations to the following Old Cranwellians who received honours and awards in the New Year's Honours List and the Queen's Birthday Honours List in 1971.

Air Vice-Marshal F. R. Bird, DSO, DFC, AFC, FRAeS, (1938/39) and N. M. Maynard, CBE, DFC, AFC, (1940) were made Companions of the Bath. Squadron Leader P. G. Pinney (78C) was made a Member of the Victorian Order. Wing Commanders P. Gilliat (50B) and G. K. Mossman (47B) were made Officers of the Order of the British Empire. Squadron Leaders J. A. Bell (65B) and J. A. Williams (51B) and Flight Lieutenants J. A. Williams (51B) and Flight Lieutenant J. S. Allison (85A) were made Members of the Order of the British Empire. The Air Force Cross was awarded to Squadron Leaders R. Cloke (75B) and R. Kidney (70B) and Flight Lieutenants I. C. H. Dick (82B) and D. C. Longden (85C). The Queen's Commendation for Valuable Service in the Air was awarded to Squadron Leaders W. P. Jago (73B), K. B. Latton (82A) and P. M. Riley (79A), Flight Lieutenants R. B. Duckett (83A), B. P. Nicolle (81A), R. Pengelly (89A) and E. T. M. Danks (90C) and Flying Officer N. A. Buckland (95D).

Flight Lieutenant R. Shuster (89C) was nominated by the Royal Air Force as its representative at last year's "Man of the Year" luncheon, held on the 12th November 1970, at the Savoy Hotel, London. Flight Lieutenant Shuster was awarded the AFC (1970) for successfully landing his seriously disabled Canberra aircraft at Darwin, Australia.

PROMOTIONS

To the following Old Cranwellians who have been promoted since our last issue, the *Journal* offers its congratulations.

Air Chief Marshal Sir Lewis Hodges, KCB, CBE, DSO, and Bar, DFC and Bar (37-38C). Air Chief Marshal Sir Andrew Humphrey, KCB, OBE, DFC, AFC (39-40B). Air Commodores T. L. Kennedy, AFC (46B) and J. R. Rogers (49C). Group Captains R. J. Bannard (55B), D. F. Bates (49D), H. F. Caillard (46C), H. S. Carver, MVO (49C), D. J. Edwards, AFC (57A), B. Huxley (57A), W. E. Kelly (50C) and J. MacG. Robertson (46A). Wing Commanders M. J. Allisstone (61C), P. H. Atkin (58D), R. D. Bates (62A), J. A. Bell (65B), A. G. Bridges (65A), P. J. Broad (51D), D. C. G. Brook (68A), R. M. Brown (60C), B. M. Burley (52A), M. R. Campbell, AMBIM (53D), A. M. Chandler (63B), P. G. Cock, MBE

And so another Reunion has passed, and one which one hopes was enjoyed by all who attended. As always one must add that if it were not for the willing and cheerful efforts of the College Staff and the Mess Secretary — Flight Lieutenant D. J. Earle these Reunions would not be the excellent occasions they are. Our sincere thanks are given to them as well as our gratitude for their splendid service, none more sincere than my own personal thanks for all their efforts, and splendid help, in these Functions, over the past 18 years.

(59C), J. J. R. Cohe (71C), D. A. Cowley (70A), J. K. Craven-Griffiths (55D), M. M. Foster (53B), G. J. A. F. Green (59D), R. B. Gubbins (62C), J. D. Hutchinson (63C), R. H. B. LeBrocq, AFC (71C), T. R. Morgan (65C), J. W. Morrice (45C), J. E. Nevill (68C), C. J. Phillips (63C), E. J. E. Smith, OBE (68B), B. J. St Aubyn (61C), R. I. Stewart-Paul (67C), P. Walker AMBIM (69A), N. J. R. Walpole (63C), D. H. Warren (56C) and I. D. Wilkinson (62B). Squadron Leaders C. R. Adams (79B), N. B. Baldwin (81A), J. A. Bayliss (82D), R. C. Betts (82A), M. B. Bullocke (77C), T. J. Burns (66C), J. A. Cheshire (84A), C. E. F. Cooper (54A), D. Cousins (84B), H. J. Crone (80C), D. W. R. De-Garis (74A), I. C. H. Dick, AFC (82B), C. F. Dixon (80C), I. Dorrett (77C), R. B. Duckett (83A) P. J. Edworthy (75B), R. E. N. Freeman (74B), M. J. D. Fuller (75A), R. W. Gibb (79A), A. J. Gibson (71B), A. M. Goodman (74A), A. Green (80C), D. R. Green (83A), M. G. Head (80C), F. G. Hoare (81D), A. L. Hooper (76C), R. Humphrey (73A), M. R. Jackson (84D), B. E. Johnston (83B), A. H. Jones (81D), D. R. H. MacGregor (83B), R. C. McKinlay (83C), J. D. Malloch (74B), F. W. Mitchell (75B), T. A. Pearson (76B), L. S. Penny (80D), K. B. Latton (82A), R. Neal (79B), A. R. Oliver (78C), J. R. Oliver (78B), C. M. Quaipe (69B), C. G. Ritchardson (64C), G. H. Rolfe (81B), R. C. Saar (79A), M. R. Southgate (62A), R. E. Williams (79C), D. J. Willis (77B), M. H. Wilson (78A) and W. Wood (81C).

RETIREMENTS

The following Old Cranwellians have retired since the last issue of the *Journal*.

Air Chief Marshal Sir David Lee, CBE, CB, (1930-32), Air Vice-Marshal M. D. Lyne, CB, AFC, AFRAeS, (37-39B), Wing Commander B. E. Taylor, AFC (62B), Squadron Leaders J. G. Bourn (48B), A. Bright (60), B. R. Champion (39-40), B. G. Cox (61A), J. B. Gratton (83D), T. J. Greenhill-Hooper (69B), G. H. Hopkins (64A), I. F. C. Hutchinson (76B), K. McDonald (64A), R. W. Millward (63A), K. B. E. Roberts (56B), J. R. Sandle (58B), R. T. F. Snare (63C), J. L. Spatcher (61C), I. H. F. Walmsley (50A), A. J. W. Whitaker (62C) and A. C. Whitson AMBIM (60B). Flight Lieutenants K. A. Crowley (87C), J. N. Dymond (61C), J. C. Fittus (81D), J. K. Jennings (62C), A. P. S. Jones (7B), D. Lowe (87B) and P. D. Thopson (88D). Flying Officers G. H. Cornish-Underwood (91A), R. H. Hunter (96D), and A. P. McGrath (87C). Pilot Officers P. Goddard (97) and R. P. Watkins (98D).

AIR CHIEF MARSHAL SIR ARTHUR LONGMORE, GCB, DSO

A tribute by Air Chief Marshal Sir Wallace Kyle, GCB, CBE, DSO, DFC, RAF Retd, at the Memorial Service for Air Chief Marshal Sir Arthur Longmore, GCB, DSO, held at the Royal Air Force Church of St Clement Danes in the Strand on Wednesday, 27 January 1971.

'Most of us will have our special and personal memories of Arthur Longmore, the great gentleman we knew ; and we will cherish them. But all of us are here today to honour his memory and pay tribute to his contribution to his country ; and especially to the Royal Air Force. For he was one of the early pioneers of military aviation ; one of the first four Naval officers to be chosen for flying duties ; and as early as 1911 he qualified as a pilot and was awarded the Royal Aero Club certificate. And many of us, some who were witness to events at the time, will think with admiration of him and those other gay adventurers who learnt to fly in those early days, partly for the fun of it, but also to find out in practice the possibilities of military operations in the air. They made light of the constant hazards and the unreliable equipment ; and frequently risked their all in meeting this challenge.

Significantly, and ever since to our great advantage, their enthusiasm and courage were infectious and have remained a stimulant and a bond for all of us who, throughout the years, became involved in military aviation. He often talked of this, and set much store by it. But Arthur Longmore was not a visionary ; nor was he a man whom we associate with some great dramatic, or particularly vital, event in our affairs. Rather was he a man who charted his course and made his decisions instinctively, though with sure judgment. And it was this characteristic which determined his actions and made him recognise the need to explore all the possibilities of the new environment for military purposes ; so that we would be ready to exploit to the full the technical advances which he knew would come. And it was this characteristic, too, which influenced him to join with those who recognised that military flying must be allowed to develop independently, untrammelled by traditionalism and prejudice. And so he was, in truth, one of the early founders of the Royal Air Force. And we will always remember him with pride and affection, for the part he played in the formation of this Service of ours, and with admiration, for the contribution he made to its success.

I first met Arthur Longmore when he was Commandant at Cranwell in 1929. I was a cadet, occupied well enough with day to day problems and events, but lonely, sometimes, as my home was in Australia. It was then that I had first-hand knowledge of his kindness and his understanding ; for he recognised my need and sometimes took me to his home where I enjoyed the warm friendliness of his family.

I know that I am but one of the many who will always be grateful for his understanding and perception, particularly at that early time in our careers. For we became aware that here was a man, a very senior officer, who could adapt himself to our immature ways and gain our confidence and our complete respect. As a sportsman and a games player he was well endowed ; a keen and experienced yachtsman and a member of the Royal Yacht Squadron ; an accomplished horseman, and also with a natural aptitude for most ball-games. This is known well enough and not of itself particularly unusual or significant, but he used those skills not only for his own pleasure, but effectively as a means of getting to know his officers and men and establishing common ground with them. This was significant. And when age started to reduce his personal prowess, he delighted in teaching and passing on his experience to younger folk whenever the chance came. And so it is not surprising that he held most of the important command appointments both in operations and training. Nor is it surprising that he was admired for the way he carried his own responsibilities, sometimes with far less than his proper share of support ; or that he was held in great affection by the officers and airmen who came to know him for his understanding, not only of his own job, but of their problems. And so it continued throughout his life. After he retired from active service, he retained his intense interest in Air Force affairs and especially in those who were still serving.

More than ten years after he retired, he continued to give his service as he took on the job of vice-chairman of the Imperial War Graves Commission, and fostered its work as actively as anything he'd done before. And now, as we pay our tribute to him, we extend to his wife and his family our deepest sympathy. But we also applaud with them his great contribution to his fellow men, his Service, and his Country ; made willingly and with so much dignity. For this indeed was the measure of this gallant gentleman.'

THE FIRST FLIGHT-CADET

A MEMOIR OF AIR CHIEF MARSHAL SIR GEORGE MILLS, GCB, DFC

by AIR CHIEF MARSHAL SIR THEODORE N. McEVROY, KCB, CBE, (retd.)

In the *Jubilee Journal* Bertie Mills recorded his memories of the First Term at Cranwell. We little thought as we read it how soon he would pass from among us. Having served twice with him, I would like to add a personal memoir.

Bertie was a good man. We have had, and have, thank God, many good men in the Services : what was so rare about Bertie was his never-failing humour. No occasion, however tragic, is entirely without its funny side and it was Bertie's gift to see that side (without being flippant or facetious) and to relieve everyone's gloom. His keen judgment came, I think, from his never taking seriously anything that could be taken lightly.

In 1938 a branch in the Air Ministry called FO1, under Wing Commander John Whitworth Jones, dealt with all policy for flying operations. Bertie, as a squadron leader, was FO1a and I came from the Staff College to a new post, FO1b, to deal with fighter policy so that Bertie could concentrate on bomber policy. Hitler and Mussolini were on the rampage ; war could come at any time ; we had no modern aircraft or airfields and no money to buy any with. There was a good deal of undisguised gloom about but the late hours and heavy burdens could never subdue Bertie's humour or make him flap. We sat opposite one another in a small backroom in Kingsway. One day a shorthand-typist came in to take dictation from me. While I was casting about in my disordered mind how to begin the minute, the typist, to break the embarrassing silence, said : 'Wouldn't it be a lovely day for flying ?' Bertie looked sternly at her and said : 'When you've been here longer, Miss Bates, you will know that in the Air Ministry we don't *think* about flying ; we write about it'.

But Bertie did a good deal more than *think* about flying. The days being bung-full of work, Bertie arranged that we should fly at night. He would often go off from the Hendon

flare-path to such places as Finningley, getting back in time to be at his desk next morning. This was all done without radio or any navigational aids beyond some recently installed 'pundits'. One night, after the black-out had been introduced, Bertie was trying to motor home to Woking after a very late landing at Hendon. He became as lost as a German parachute-troop was intended to be and had the bright idea of popping into a telephone-kiosk and asking the operator : 'Where am I ?'

About then, Bertie was promoted and, as a wing commander, qualified for a room to himself. In those days a familiar advertisement for a digestion-powder stated : 'There's enough acid in your stomach to burn a hole in the carpet.' In Bertie's new office one day I complained that while a pampered wing commander was allowed a carpet, a wretched squadron leader had to make do with a worn-out bit of linoleum. 'Don't worry, chum,' said Bertie, 'you'll never get one. They know there's enough acid in your stomach to burn a hole in it.'

Our master (now Air Chief Marshal Sir John Whitworth Jones), another man of unswerving integrity, was a tornado of energy and dynamic initiative with a brain that left us limping yards behind. He not only thought things up but put them into effect. My recollection of project 'Starfish,' for instance, is that Whit thought before breakfast of the idea of bonfire decoys, went out with Conky Bill setting them all out about lunch-time and while the Germans were raining their bombs on them that night, Whit was busy on his next scheme. We sometimes felt we had to try to pour cold water on some of his ideas and I remember Bertie coming in exhausted after an hour with him and saying : 'Whit always makes me feel the enemy of Progress.'

In preparing air-raid precautions policy we had to study the effects of decisions taken in the 1914/18 War and discovered that the

black-out then had led to a marked increase in loot and rape. 'That gives you ideas, I suppose,' said Bertie. 'I know what you'd go in for, of course, but I think I'll go for loot : there's a pair of boots in Randalls' window that I've had my eye on for some time.'

When war did come, Bertie's main aim was to get out and fight in it, despite his being well beyond the age generally accepted as being suitable for taking up active operations and despite his great value as a staff officer in the CAS's Department. He got his way early in 1940, and was posted to command No. 115 Squadron at Marham on Wellingtons. From there he took part in raids across the North Sea, many of them to attack the enemy airfield at Stavanger. For his part in these operations he was awarded a well-deserved DFC.

At the end of his operational tour he was inevitably taken back for another spell of staff work ; this time at HQ Bomber Command, as DS at the Staff College and then back to the Air Ministry but before the war ended he got out again and took part in operations in the Balkans. I took over the post he had left in the Air Ministry and found his staff still with the smiles he had left on their faces.

After the War, Bertie was AOC Malaya and then C-in-C Bomber Command but the next time I served with him was at Fontainebleau from 1956 to 1959. He was Commander, Allied Air Forces, Central Europe and I went there as his Chief of Staff. Among the three Services of seven nations differences of opinion were inevitable but Bertie, with other equally well-chosen commanders, settled these satisfactorily with a minimum of rancour but no sacrifice of principle.

Our lives were continually illuminated by Bertie's quips. He and Molly lived in a house called the Hotel Bellune (occupied in Napoleonic times by Marshal Victor, Duc de Bellune). They had a most obedient and well-trained collie, Geoffrey, who was a favourite with us all. For some legal reason it was deemed necessary to put on the front gate a notice saying : 'Chien méchant'. Bertie said he found Geoffrey reading this notice one day and could never look him in the eye again. Bertie and Molly kept hens and Bertie told me he used to go down before breakfast and

talk to them. 'Do they speak French ?' I asked. 'Oh, yes,' said Bertie, 'They say : 'Heurrrreuses — heurrrreuses — comme nous sommes heurrrreuses !'

One day we were picnicking in the Forest and saw a notice prohibiting trespassing 'sous peine de poursuite'. We mediated over this a while and Bertie said : 'So you see, chum, if you come here to do the sort of thing *you* do in forests, you want to be sure you're wearing your gym-shoes.'

Under his light-hearted approach to all things was a quite inflexible devotion to principle. This was shown at a memorable exercise-conference at HQ Allied Forces. The Commander-in-Chief, Allied Forces, the late General Valluy, whom we all loved dearly, was (I suppose naturally) inclined to follow the French custom of being briefed, not by his Service Commanders, but by his 'Cabinet', who did not always consult the people they ought to have consulted. The decisions made as a result of these briefings were sometimes unfortunate. On this occasion, General Valluy, in full session before all the commanders and senior staff, announced a decision which Bertie saw would prejudice all future planning. He rose at once and said : 'Sir, I cannot accept that decision.' Whether or not such a thing had ever happened before on the Continent of Europe I don't know, but from the silence that followed Bertie's words I should say not. General Valluy, to whom full marks had to be given, smiled, took Bertie by the arm and said : 'My friend, let us go and discuss this'. Later, when the conference had re-assembled, the General had the moral courage and good sense to give a new decision and I think his stature was not diminished : Bertie's could not have been higher.

Of Bertie's time in Washington I cannot tell at first-hand but I recall that he re-introduced the Victorian ear-trumpet for use at cocktail parties, not to aid his own hearing but in reverse, as it were, so that he could talk to his neighbour without making himself hoarse, after tiring of the sort of conversation that went : 'I died this morning !' — 'Yes, isn't it !'

When I asked Bertie if he would propose the toast of 'The Bride' at my daughter's

wedding he agreed to do so as it would, he said, give him an opportunity to unmask me publicly. This he did to such effect that guests were heard to murmur that they hadn't realised that I was that sort of chap.

Bertie's tour as British Military Representative in Washington was his last before he retired. He had then served longer than any other Air Force officer in the World : he had gone to Cranwell when the Royal Air Force was the World's only Air Force and had outstayed all his contemporaries.

Of his spell as Black Rod others are more qualified to speak but the letters I used to get from him, written during debates in the House of Lords, made Hansard seem a colourless production.

Others who knew him — at Cranwell, in No. 12 Squadron, in Iraq — everywhere he served — no doubt treasure equally happy memories of his courage, humour and originality. This short note is just to record some of my own memories and to express the delight I had in his guidance and friendship.

IN MEMORIAM

We regret to announce the deaths of the following Old Cranwellians and extend our deepest sympathy to their wives and families.

Air Commodore C. W. Dicken, CBE, Entry 1924/25, died in July 1970.

Group Captain H. C. Parker (Retd) (26-27A) who died at his home on 2 June 1970.

Group Captain R. H. Carter, DSO, OBE, DFC (Retd) (21-22B) who died at his home on 17 January 1971.

Flight Lieutenant E. R. Perraux (76B) and Flight Lieutenant J. S. Haddock (85A) who were killed whilst attached to the Red Arrows Aerobatic Team on 20 January 1971.

Pilot Officer D. A. Bell (97A) who was killed in a helicopter accident at Royal Air Force Odiham on 12 November 1970.

Group Captain A. H. Willetts, DSO, (retired) (23-24B).

Wing Commander W. E. G. Measures, AFC (retired) (35-37B), who died in hospital on 10 October 1971.

Wing Commander D. J. H. Collins (68B), who was killed in an aircraft accident on 25 March 1971.

Flight Lieutenant P. A. Kelly (91C), who was killed in an aircraft accident on 25 March 1971.

