



Royal Air Force College Cranwell

History and Heritage

Memories Series

**Air Chief Marshall Sir George Mills
GCB DFC**

February 1920 Entry B Sqn



Mills joined the RAF College at Cranwell as cadet entrant number 32 in 1920 and so became one of the earliest graduates of the newly formed College.

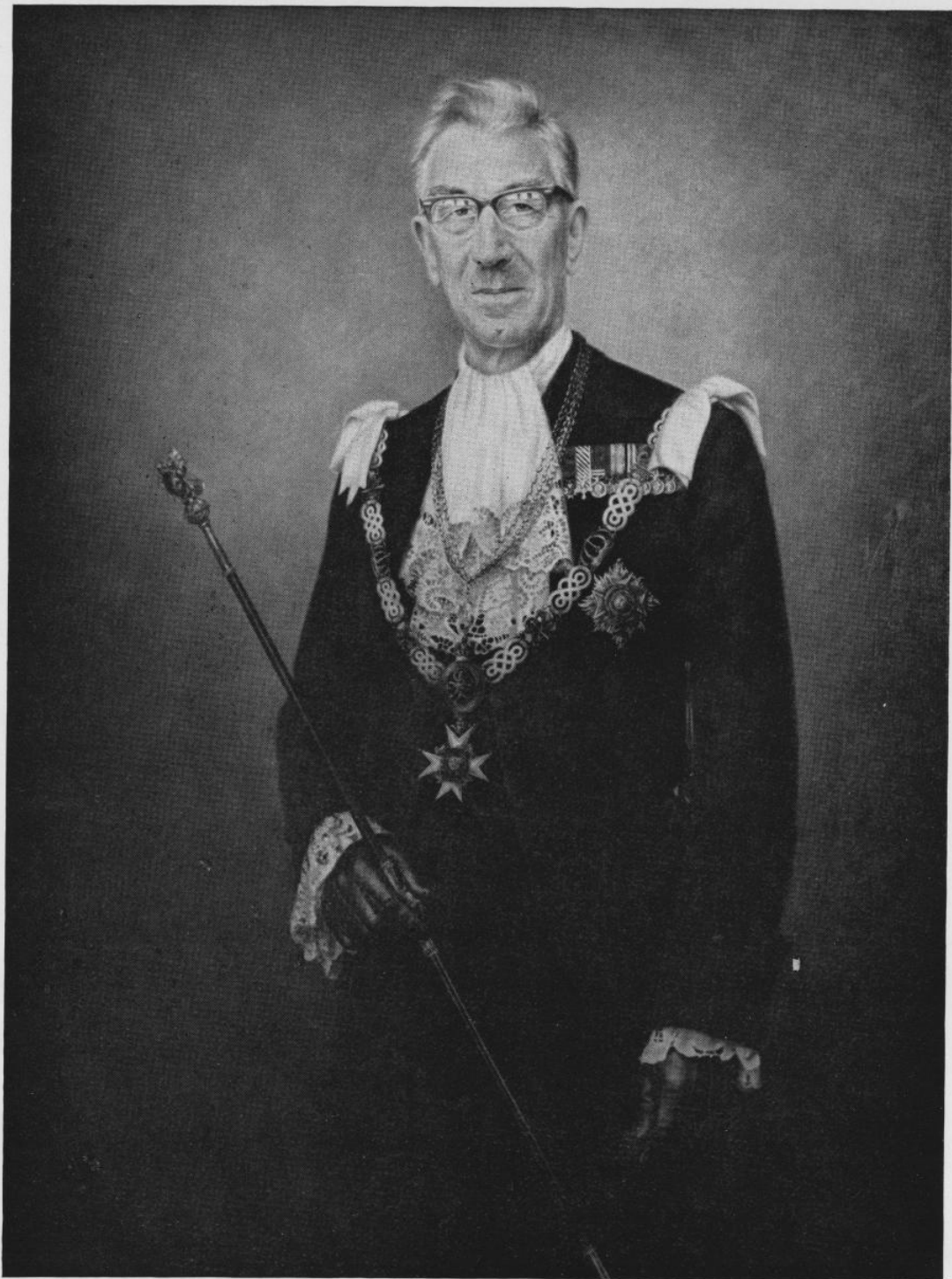
After graduating he spent a short time at the RAF Depot. Mills was then posted to Mesopotamia flying DH 9As with No. 8 Squadron. He transferred to No. 100 Squadron in 1927 flying Hawker Horsley aircraft. He attended the RAF Staff College in 1935.

He served in the Second World War taking up command of No. 115 Squadron in late 1939 and then joining the Air Staff at Headquarters Bomber Command before becoming Station Commander at RAF Watton. He was appointed Director of Policy (General) at the Air Ministry in September 1943 and Air Officer Commanding Balkan Air Force in February 1945.

After the War he was appointed Director of Plans at the Air Ministry in 1946, Air Officer Commanding No. 1 Group in 1949 and Air Officer Commanding Air Headquarters Malaya in 1952. He went on to be Air Officer Commander-in-Chief Bomber Command in April 1953, Commander Allied Air Forces Central Europe in January 1956 and Chairman of the British Joint Services Mission to Washington, D.C., and UK Representative on the NATO Standing Group in July 1959.

He retired from the Royal Air Force on 18 September 1962.

In retirement he served as Gentleman Usher of the Black Rod in the Houses of Parliament.



AIR CHIEF MARSHAL SIR GEORGE MILLS, GCB, DFC,
Gentleman Usher of the Black Rod.
(after the portrait now hanging in College Hall).

CRANWELL CADET—1920

by AIR CHIEF MARSHAL SIR GEORGE MILLS, GCB, DFC

When the Royal Air Force (Cadet) College opened on 5 February 1920, there were fifty of us Cadets. Seventeen were from the Navy, two Sub-Lieutenants and fifteen Midshipmen. They wore uniform with the two war ribbons. The rest, the Schools Entry, wore suits and bowler hats and that is how we paraded till our uniforms were ready. One character did appear once in breeches, stockings, trilby hat and gauntlet gloves but not for long.

The Naval entry had been offered the chance of a permanent commission after a year at Cranwell. This was at a time when big cuts in naval strength were inevitable. The rest of us were to do two years. We had taken the same examination as candidates for the Army who trained at Woolwich and Sandhurst. There was a qualifying standard but beyond that it was competitive. In those days the first forty or fifty would go to Woolwich with the rest up to the required number to Sandhurst. At first our standard was low in comparison, for instance I was first for Cranwell but only forty-fourth for Woolwich. This changed very quickly.

On the other hand our medical standard was much higher and kept out several who would otherwise have qualified easily. This upset the plan of one of my friends who purposely failed the written examination so he could stay on to captain his school rugby team till Easter. He was called in to take a vacant place. Another friend benefitted too. He was late for the examination but was allowed a place on nomination by his Headmaster, only to be turned down three times with a defective eye. He did not give up, he got a list of pilots who had done well in the war with only one good eye and sent it direct to the Secretary of State with an appeal. He got in and was a first-class, natural, born pilot. The Secretary of State was Winston Churchill.

Why did we choose Cranwell? There is no single answer but there are two overriding factors. First, flying was new and had come right into the public eye during the war. Secondly, when the war ended in 1918 all

chance of learning to fly virtually ended until Cranwell opened. So some came simply to fly, others who would have chosen a Service career anyway, were able to branch into something new and others, notably the Naval term, were able to combine both with a better chance of staying in a Service. In common with Woolwich and Sandhurst we cost our parents or guardians about £125 a year. There was some reduction for sons of deceased and serving members of the forces below the rank of Group Captain. A King's Cadet, from the Boy Apprentice Schools, was free. A Prize Cadet, the first three in the entrance examination, cost only £20 or so. On the other side of the ledger, we were paid 5/- a day in our first and 10/- a day in our second year, plus 1/- a day ration money.

February 5th was a Thursday and the rest of the week was taken up with settling in, being detailed to two Squadrons and being measured for uniforms. About now too, Cadet NCO's were appointed. For the Naval Entry this was simple, they had their seniority, for us it seemed necessary to have a moustache to qualify. However it worked, and those of us with young, boyish faces were left with two carefree years as simple flight cadets.

When we began our regular work it was very disappointing to find that we would not begin pilot training till the next year. However, two periods a week were allowed for flying so it was not too bad seeing that most of us had not even sat in an aeroplane. We never averaged two flights a week, it was more like one, but the prospect kept us going.

Within a fortnight we had our first flights. It is hard to recapture the excitement, and the anxiety lest we should not like it after having set our hearts on it for so long. In fact two left very soon because they were airsick. Our flying kit was simple; helmet and goggles, a pair of thin leather gauntlets, with a sort of bag on the back which could come over the fingers, a pair of silk linings, two pairs of overalls and a huge pair of rubber overshoes we never wore except in the snow. It was a

pale blue, slightly hazy day with no cloud when I first flew. I had asked the pilot to loop and he did, but I did not see much of it because I was looking inside the cockpit and centrifugal force kept my head down. I was rather disappointed, but he did several other things and I thoroughly enjoyed it. From now on we tended to live for the next flying day and to worry lest the weather should stop us which it so often did. We enjoyed life alright, it was so much freer than school but the thought of flying again before long added greatly to our enjoyment.

We were at the West end of the camp, with our Mess opposite the present entrance to the Orange about 100 yards from the road. Our huts were to the east of it and were of black, tin-hutted construction. Next came Station HQ and the Officers' Mess as now, then the airmen's quarters and finally the East Camp where the Boys' Wing was. Practically all flying was from the south aerodrome, huge then as now. The north aerodrome was unobstructed except for a few sports grounds tucked in on its southern edge. To the north was Lighter than Air with its big airship shed unused except for storage ; it stood where the officers' married quarters now stand. The Lodge was occupied, there were five other officers' married quarters to the west of our mess, and a few for airmen towards East Camp. A small railway ran from the camp to Sleaford station. We used it once or twice early on, then it seemed to revert to freight.

We lived five to a hut. One half was bedroom, with plenty of room for our five beds and chests of drawers, the other half sitting room with five tables and chairs, some easy chairs and a coal stove. There seemed to be plenty of washing and lavatory facilities. Each hut had a civilian batman who kept it clean, made the beds, did our boots and called us. We did our buttons. Some of the batmen stayed for years and were great characters. One night early on when we were in bed we heard a lot of shouting from the main camp and this went on for some time. We learnt later that some airmen had chased the Sergeant Major into the Guard Room because he was so strict. We never heard how it all ended. We had to stand to our beds for kit inspections and medical inspections. The latter came about once a term when we stood in shirts only, ready to

bare our innocence as the MO came by. Kit inspections came more frequently, always after lunch and for only two huts at a time. There was therefore enough time to borrow if necessary.

Raised and covered wooden footways connected the huts to the Mess. They did not keep out the wind or driving rain ! The mess was comfortable and furnished in officers' mess style. The food was good and we had plenty. Drinks were only served at meals and beer was the only alcohol allowed except for a glass of port on Fridays for the loyal toast. This cost a shilling. We wore mess kit at least five nights a week and had a roll-call before dinner. Later when there were more of us it was easier to answer for someone who was a bit late. Our mess accounts were made up daily in a big ledger in which our pay was credited. Periodically we drew any balance due to us, or our parents had to make up any deficit. I usually had a small credit even on 5/- a day.

The parade ground which lay just behind the mess was the domain of the two Flight Sergeants, Allan of 'A' Squadron and Burdett of 'B' ; and later of the famous Sergeant Major Gorwood, who did the rest of his service at Cranwell. Between them they made drill very bearable and made us quite good. They had to too because we soon became the centre of a hollow, three-sided square on the daily, colour-hoisting parade, with the Boy's Wing on one side and the rest of the station on the other. Even then we marched off to the RAF March and the 'Lincolnshire Poacher' and the sound of either, now, still takes me straight back to that parade ground. Once, on colour-hoisting, we saw an NCO discharged with ignominy. He was marched in front of us, his sentence and crime read out and his buttons and stripes ripped off. Another time a workman was working on the mast as the colour went up to the yardarm and took off his cap with a fine flourish as we presented arms. Colour-hoisting was every day except Sunday when we had Church Parade, with a keen inspection by the Assistant Commandant. It was during inspections before these daily parades that summonses to the Squadron Commander's orderly room were issued. Few can forget the refrain as the Flight Sergeant passed behind us, 'Office for you Mr so-and-so,' and 'Eyes



Flight Cadet G. Mills.

front !' as ' Mr so-and-so ' looked round in horror.

Our other ground subjects of course took much more time than drill but it is hard now to remember much about them except where we went and a few odd details. Engineering was simply fitting and rigging, which we did in a hangar across the road from the mess. Apart from the Gnome, Falcon and Liberty engines, fitting included metal work and making those dreadful steel cubes which got smaller and smaller as we tried to get them right. Rigging was largely a matter of getting the aeroplane symmetrical, quite an art with a structure of wooden members and bracing

wires. There was woodwork too for repairing damaged parts, and control cable splicing. We made many of the toilet-paper boxes on the camp, all with laboriously dove-tailed joints. Later, to encourage our mechanical sense, P & M motor bikes were issued to some of us. Petrol was supplied but we did the maintenance. They could be used outside the camp in certain circumstances which was useful as we were not allowed our own bikes or cars even if we could afford them. Our maintenance was rather shown up in a reliability run held towards the end of our time. Less than half completed the course in time, with many straggling home in the dark without lights. One cadet broke his leg.

Armament was taught in a building near the road to the airship shed. 20lb, 112lb and 250lb bombs were current issue and had a confusing range of fuses, detonators and exploders. For guns we had the moveable Lewis and fixed Vickers. The CC gear allowing the latter to fire through the propellor was a difficult mystery to handle.

Academic subjects like English, Science and Mathematics had a brick building near to Station HQ. We did written exams here too. The instructors were civilians and many became familiar figures to many terms, unlike the Service instructors who stayed for relatively short periods. In mathematics we got to elementary calculus, in English we could choose our own subjects for essays. This was very advanced. I remember little else except that our Squadron Commander once came to an evening class in full uniform with breeches and field boots and a civilian cap. Those were the days of field boots for Squadron Leaders and above and puttees for those below, even for flying.

In a hut near the parade ground a Flight Lieutenant with an Observer's Wing taught us Law and Air Photography. Another did wireless, where we wrestled with morse keys and headphones. There was no voice radio and the W/T operator was very much of a specialist. We wrestled with service organisation under our own officers. All I can remember is that boys in the Navy could be caned in those days.



Tail Skid Problems.

Airmanship and Navigation lectures came in our flying periods when weather prevented flying, which seemed much too often. They were bad days. We would march to the hangar still clinging to hope and our Cadet NCO would go in to report. Then out he would come giving the 'wash-out' signal and march us off to a nearby hut. It was hard to concentrate when you felt so disappointed. The Church, gym and swimming bath were all in hangars on the south aerodrome just east of the present ones. All three padres were great characters.

Games and exercise of all kinds were vigorously encouraged and we were expected to do something active every free afternoon. During our first year, in September, I was lucky enough to break a finger at hockey. Not only did this keep me off rifle drill and other tiresome things but left me free to hang around the hangars if anyone was flying. I got four extra passenger trips this way. But for my finger I could have been in trouble for skulking round the tarmac instead of taking exercise.

At first with so few of us, competition to get into the teams was not severe, but the arrival of new terms in September and the new year quickly altered this and standards rose fast. By the next summer we began regular fixtures with Woolwich and Sandhurst.

Riding was very much encouraged, because it developed the sensitive hands so essential in the air, where the feel of the controls meant so much. Anyone could readily get time off for hunting, but very few indeed could afford even to ride. The cadet who won the first R. M. Groves Memorial Prize for flying was one who did. I think he had ridden all his life. Beagling was encouraged but did not have the same virtue as hunting. We could get transport but not time off for it.

We had about four weeks leave at Christmas and in the Summer and about ten days at Easter. We would travel to and from Grantham in 5 ton Leyland lorries, twenty or more of

us, all standing. A dozen or less might have a 30 cwt Crossley tender which had a bench down each side. Our leaves were entirely free of any special activities, the only snag was having no chance to fly.

We flew from the south aerodrome, the hangars being where they are now. There were no runways, parachutes or flying control. The procedure was simple. You took off and landed in your own time into wind and where it was most convenient. The pilot was responsible that all was clear ahead and that he would not obstruct anyone else already landing or taking off. A machine landing always had right of way. We always spoke of 'machines' then. All our flying was on the Mono Avro, the 504K with a 100 HP Gnome Monosoupape rotary engine. With luck one could get a short flight in another type if an instructor could borrow it from a visiting pilot. I had two that way.

The Mono Avro was used in great numbers as a trainer during the war. It was very well-suited, big enough to avoid torque trouble, reasonably light on the controls and robust enough to stand a good bit of bumping about. It was good for aerobatics, 'stunting,' for beginners. Loops, half rolls, stalling turns and an occasional falling leaf and spin were our normal repertoire. She did about 70 mph level, came in at around 60 and had to be dived to 90 for a loop.

She had no inherent vices but was not easy to taxi in a wind. This prevented flying on many occasions, as did low cloud and poor visibility, since we had no radio or blind flying instruments. For intercom there were two Gosport tubes, one from instructor to pupil and vice versa. These were flexible metal voice pipes with a mouthpiece at one end. The other end connected with two earpieces in our helmets via a metal Y piece and thinner lengths of rubber tubing. They were quite effective.

The engine was a slight problem as it only ran at one speed, the throttle lever simply allowing a fine adjustment of the petrol flow to let it do so. In the air when you closed the



Q.F.I's.

throttle in the normal way your forward speed kept the propellor, and engine, windmilling. To start again the lever must be pushed forward to the correct setting. If the engine stopped through gliding too slowly you could start it by diving if you had enough height. For waiting on the ground and taxiing there was a blip switch in the top of the control column; this allowed the engine to be run in short bursts without upsetting the throttle setting which was critical. The engine used castor oil and used it lavishly. The smell of it and the noise of the blipping engines are quite unforgettable. They were heaven. All the same this inability to throttle back made it easy to lose your propellor on landing. This was not so bad if flying with an instructor, you just got out and swung it. You were not so popular if you were alone and someone had to come out to do it.

On the first detail for the day the machines were lined up for inspection and when the word was given our instructor led us round, with the rigger and fitter in attendance. He would check the wheels, flip a wire and tweek a control cable here and there and maybe test the tailplane for firmness; there seemed to be no set procedure and certainly no maintenance sheets to sign. When all were done we carried on flying.

Our first year we sketched villages and places and map read, while we followed the progress of the Naval term with interest and envy. They were all flying solo by the summer. That autumn the weather was very bad and

the naval term had to have preference, so we got very little flying, which was miserable. Nevertheless by Christmas we had done ten hours or so each and had got used to being in the air. Our only real excitement was when a naval cadet, Yale, had the only crash in our two years. He stalled making a forced landing, badly damaging the undercarriage and front of his Avro. He was unhurt. We saw the wreck coming in on a trailer, it was a great thrill !

When we began dual instruction in February 1921 we flew much more often, sometimes maybe three or four times in a week. It was fun but at times I thought I would never learn to land. The first of us went solo at the end of March and the rest of us over the next month or so. We had had between ten and fifteen hours instruction. I got very impatient and rather frightened as I began to feel ready to go but felt quite calm when I was sent off alone. I lost my prop just before touching down but that was forgiveable on a first solo and I was not too far from the tarmac.

After this, apart from frequent short checks by our instructors, we always flew alone. We would be told what to practice and for how long ; anyone who landed late when someone else was waiting was very unpopular. Very soon we added aerobatics on our own, often egged on by hearing that someone else had tried. Some were shown how by their instructors but I never was. This was in line with the Gosport doctrine that a pupil should be encouraged to find out for himself once he could fly reasonably safely. It could make you breathe a bit, making up your mind to do things, particularly for the first time ! Like going up through an unbroken cloud layer ; we had no blind flying aids. But the wonder of breaking out into bright blue sunshine with the dazzling white of the clouds piled up around was worth a bit of anxiety. Once I got in a panic just because I was in the air. I knew there was an eclipse but when the light went an eerie, greeny-brown, I felt I must get down. But I couldn't because my time was not up, so I went down and flew at 'nought feet' across the north aerodrome. There I saw our shadow picked out like a drawing, struts and all. Then I felt better and went back up and carried on. We never really spoke about being frightened even amongst ourselves, but no doubt most of us were from time to time. In fact it was this mixture of fright and enjoy-

ment that made flying such fun and so fascinating.

We did two cross-country flights, one to Lincoln and back and the other a triangle of 45 miles ; the sight of the big airship shed was as always a great comfort. We never landed away from Cranwell except for engine failure. These were still quite frequent and had a marked effect on flying technique. In lectures we were taught always to keep a possible landing place in view and how to tell the wind at ground level. Do cows still lie down into wind ? In the air every landing had to be treated as a forced landing ; once you had shut off your engine that was that, it was the height of bad airmanship to use it again to drag yourself in to the desired spot. We were taught how to sideslip off height, undershooting was bad. 'No I deadly sin' was of course to turn back on take off.

Thanks to this teaching but even more so to the size of the aerodromes at Cranwell and of the fields around, Yale was the only one to come to grief in a forced landing. I do not know how many we had, but I see I had six in 1921 in thirty-four hours flying, three alone and three with my instructor. The causes are interesting. In two, one to each of us, we ran out of petrol and flew back after someone had flown out with a can or two. We had only been flying some twenty minutes at the time ; normal endurance was 1½ hours or so ! Once we had a broken connecting rod. When I did my first loop and 'hung' on top, the distributor wire fell out of the magneto because the split terminal was loose. I got down in a field. Another time gliding from 11,000 ft the oil congealed and I could not get the engine to turn. This was over the aerodrome. The other time involved a three-mile walk home for help, while my instructor waited with the machine. My log book gives no cause. No special notice was taken of these incidents and both times I flew out of the fields I had landed in.

We were not allowed to fly together or take passengers but shortly before we left two particular friends in our term flew with me. I had extra flying in the afternoon and picked them up and landed them again on the North aerodrome, and we got away with it. Probably others did the same but one did not talk about it.

By mid-December flying finished and exams began. We averaged about forty-five hours in

the air of which eighteen to twenty were solo and around fifteen dual. About this time too we heard that a third of those passing out would stay in UK, the rest would be posted to Egypt, including Palestine and the Sudan, India and Mesopotamia (Iraq). We were allowed to state a preference and though the overseas tour was five years I believe enough of us volunteered. We could also say what type we wanted to fly, DH9a, Bristol Fighter or, I think, Sopwith Snipe.

There must have been special parades when the Naval term passed out and when we did a year later but I cannot remember them. I can remember speeches in the gym after lunch, with prize-giving when we left. There were only three prizes then, the Sword of Honour, the Groves Memorial prize for flying and the Abdy Gerrard Fellowes for Science and Mathematics. We had passing-out Balls each year too, though I cannot recall that we were at any time told if we had passed out. That came later in letters from the Air Ministry after we had left. In the same envelope we had our posting instructions when most of us seemed to get what we had asked for. Sixteen of the original seventeen on the Naval course were commissioned and twenty-seven of the thirty-three on ours.

Those who stayed at home went to a conversion squadron but the rest of us did no more flying till we got to our overseas Commands in April. We travelled of course by troopship. In Egypt there was a full-scale flying school where they could convert, in India and Mesopotamia our squadrons had to do it. This was quite a problem for them, with us so inexperienced and facilities pretty sketchy with the one dual aircraft often un-serviceable. Moreover the squadrons were mostly quite occupied with other work, including small wars and air control operations. It was not all that easy to learn a new type in these circumstances and I know that at times I must have strained people's patience to the limit. No doubt others did too. These men had all seen war service and many did not have permanent commissions as we did, yet nothing seemed to diminish the great kindness and friendliness with which we were treated. There was none of the 'keep the new boy in his place' attitude which was quite common in the other two services. This is perhaps the warmest and deepest of the host of cheerful and happy memories I have of those early days.

