

# RAF COLLEGE CRANWELL

## College Journal Extracts



1980

# 1980 - The Annual College Review (1)

## THE COLLEGE REVIEW



The College Review was held on 22 May 1980. The Reviewing Officer was General A. J. W. Wijting Royal Netherlands Air Force, Chief of the Netherlands Defence Staff, who had served with the Royal Air Force during the 2nd World War.

The Review included the Graduation Parade of No 42 Initial Officer Training Course. As a result of the rationalisation of the 'Prize Year' the customary presentation of annual prizes is held in abeyance until 1981 when the Review will be renamed the Royal Review. The prizes awarded this year were for No 42 Initial Officer Training Course. The Sword of Merit, awarded to the RAF Officer who has demonstrated outstanding ability, leadership and other officer qualities and potential for further development, was presented to Flying Officer S. Birnie of the Administrative

(Physical Education) Branch. The Sash of Merit, awarded to the WRAF Officer displaying these qualities, was presented to Acting Pilot Officer J. C. Foster WRAF commissioned into the Supply Branch.

After the Ceremony a Service of Dedication was held in the Church of St Michael and All Angels, followed by a formal luncheon.

To commemorate the visit, General Wijting planted a tree in the North East extension of Queen's Avenue, and the Air Officer Commanding and Commandant, Air Vice-Marshal B. Brownlow, presented him with a picture of the College. General Wijting presented to the College his poniard which will be displayed in the College as a reminder of the close ties of friendship between the Royal Air Force and the Royal Netherlands Air Force.

# 1980 - The Annual College Review (2)

## AWARD WINNERS 1980

### THE DEPARTMENT OF INITIAL OFFICER TRAINING COURSE AWARDS

The Sword of Merit is awarded to the RAF cadet of each course who has demonstrated outstanding ability, leadership and other officer qualities, and the greatest potential for further development.

Winners:

40 IOTC	Plt Off M A Townsend-Smith BA	GD/P	Feb 80
41 IOTC	Fg Off M C Taberham B Eng	GD/P	Mar 80
42 IOTC	Fg Off S Birnie	Admin (P Ed)	May 80
43 IOTC	A Plt Off F A Wauchope	Sy (Prov)	Jul 80
44 IOTC	A Plt Off N B Ashworth	GD/P	Aug 80
45 IOTC	Plt Off M O Whitaker BA	GD/P	Sep 80
46 IOTC	A Plt Off D E Moule	GD/P	Nov 80
47 IOTC	Plt Off C M Foan BSc	GD/P	Dec 80

The Sash of Merit is awarded to the WRAF cadet of each course who has demonstrated outstanding ability, leadership and other officer qualities, and the greatest potential for further development.

Winners:

40 IOTC	No WRAF on course		
41 IOTC	Plt Off J A Davies BA	GD(Grd) (AcC)	Mar 80
42 IOTC	Plt Off J C Foster	Supply	May 80
43 IOTC	Plt Off L J Litherland	Admin (Sec)	Jul 80
44 IOTC	Plt Off A Hill BSc	Supply	Aug 80
45 IOTC	No WRAF on course		
46 IOTC	Plt Off H Vardy MA	GD(Grd) (AcC)	Nov 80
47 IOTC	Plt Off C Taylor BA	GD(Grd) (AcC)	Dec 80

From 41 IOTC, the Hennessy Trophy and Philip Sassoon Memorial Prize is awarded to the best all round RAF or WRAF cadet of each course, other than the winners of the Sword of Merit or the Sash of Merit.

Winners:

40 IOTC	Plt Off M A Townsend-Smith BA	GD/P	Feb 80
41 IOTC	Fg Off P L Weller BA	Admin (Ed)	Mar 80
42 IOTC	Fg Off C S Chisnall BA	Admin (Ed)	May 80
43 IOTC	Fg Off R J Oxborrow	Med Sec	Jul 80
44 IOTC	Fg Off A Leonard B Eng	Eng	Aug 80
45 IOTC	Fg Off P J Gow BSc	Eng	Sep 80
46 IOTC	Fg Off P D Grainger	Eng	Nov 80
47 IOTC	Plt Off M C Green BSc	GD/P	Dec 80

The British Aircraft Corporation Trophy is awarded to the cadet, whether RAF, WRAF or F&C, with the highest mark for professional studies on each course.

Winners:

42 IOTC	Fg Off C G Lamper	Admin (Sec)	May 80
43 IOTC	Plt Off A Bannister BSc	GD/P	Jul 80
44 IOTC	Plt Off A J Sudlow BSc	GD/P	Aug 80
45 IOTC	Plt Off M O Whitaker BA	GD/P	Sep 80
46 IOTC	Fg Off P D Grainger	Eng	Nov 80
47 IOTC	Plt Off S Wilson BSc	GD/N	Dec 80

The Overseas Students' Prize is awarded to the F&C cadet on each course who has the best overall performance in leadership, officer qualities, and professional studies.

Winners:

41 IOTC	Plt Off F A A Al-Amri	SOAF	Mar 80
42 IOTC	No award		
43 IOTC	2nd Lt H Wilson	JDF	Jul 80
44 IOTC	2nd Lt B L Williams	JDF	Aug 80
45 IOTC	No award		
46 IOTC	Plt Off S B S Al-Mingi	SOAF	Nov 80
47 IOTC	No award		

The Alasdair Black Memorial Trophy and Prize are awarded to the RAF or WRAF cadet on each course who submits the best essay on war studies.

Winners:

42 IOTC	Flt Lt E J Scaplehorn	Marine	May 80
43 IOTC	Fg Off A M Barker	GD/P	Jul 80
44 IOTC	Fg Off P J Squires MSc B Eng C Eng MIERE	Eng	Aug 80
45 IOTC	Plt Off M O Whitaker BA	GD/P	Sep 80
46 IOTC	A Plt Off A J Yule	GD/P	Nov 80
47 IOTC	Plt Off F P Scanlon BSc	Eng	Dec 80

### ANNUAL AWARDS

The qualifying period for annual awards has been changed from the academic year to the calendar year, subject to a transitional period from 1 Oct 78 to 31 Dec 80. Thus no annual awards were made during 1980, and the selection of winners from IOTCs 32 to 47 has not yet been made.

### THE DEPARTMENT OF SPECIALIST GROUND TRAINING COURSE AWARDS

The Whittle Prize is awarded to the student on the Aerosystems Engineering Course who has been adjudged the best student in terms of progress in studies and contribution to the success of the course as a whole.

Winner:

Flt Lt R J S Stokes BSc, 13 AEC Dec 80

The Royal United Services Institute Prize is awarded to the student who has been adjudged runner-up to the winner of the Whittle Prize.

Winner:

Sqn Ldr P L Hills BSc, 13 AEC Dec 80

The Halahan Trophy is awarded to the student of the Aerosystems specialisation who achieves the best all-round performance on each Initial Specialist Training (Engineering) course.

Winners:

1 BAEC	Fg Off B A Moore BA	Nov 80
2 BAEC	Fg Off P J Scott BSc	Dec 80

The Chicksands Cup is awarded to the student who achieves the best overall performance on the Communications-Electronics specialisation of the Initial Specialist Training (Engineering) course.

Winners:

1 BCEC	Fg Off J P Baggott BA	Nov 80
2 BCEC	Fg Off T H L McMaster	Nov 80
3 BCEC	Fg Off D A Nidd	Dec 80

The Royal New Zealand Air Force Trophies are awarded to the student of each specialisation of the Initial Specialist Training (Engineering) course who achieves the best performance in applied technologies.

1 BAEC	Fg Off S P Davis-Poynter BA	Nov 80
1 BCEC	Fg Off S H Cassia BA	Nov 80
2 BAEC	Fg Off T Kirby	Dec 80
2 BCEC	Fg Off M Butterfield	Dec 80
3 BCEC	Fg Off S D Dawson BSc	Nov 80

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The Beckwith Trophy is awarded to the student of each Initial Specialist Training (Engineering) course who, irrespective of specialisations, submits the best paper on a selected engineering subject.

Winners:  
 39 IEC Fg Off R W Jennings Feb 80  
 1 IST(Eng) Fg Off R G Torrens BSc Nov 80  
 2 IST(Eng) Fg Off G G Cooke Dec 80

The Supply Cup is awarded to the student who achieves the highest standard in professional studies on each course.

Winners:  
 326 ISC Fg Off A T Potts Dec 79  
 327 ISC Fg Off A K Kopp Mar 80  
 328 ISC Exec Off G Sides May 80  
 329 ISC Plt Off A S Ransley (WRAF) Jul 80  
 330 ISC Flt Lt P W Gedge Oct 80  
 331 ISC Fg Off K D Manville Dec 80

Prior to the cessation of secretarial training at the College in Aug 80, the Secretarial Cup was awarded to the student who achieved the highest standard in professional studies on each course.

Winners:  
 SOC 51 Fg Off W C Mellors Jan 80  
 SOC 52 Fg Off C A Murray Mar 80  
 SOC 53 Plt Off P A Brown (WRAF) Apr 80  
 SOC 54 Fg Off P J Holden May 80  
 SOC 55 Fg Off G A Jermy Jun 80  
 SOC 56 Plt Off M A Splitt BSc (WRAF) Jul 80  
 SOC 57 Fg Off R S Montgomery BA Jul 80

## ANNUAL AWARDS

The qualifying period for annual awards has been changed from the academic year to the calendar year, subject to a transitional period from 1 Aug 79 to 31 Dec 80. Thus no annual awards were made during 1980 and the selection of winners from Nos 38 and 39 IEC, Nos 1-3 IST (Eng) has not yet been made.

## THE GROUP CAPTAIN P W LOWE-HOLMES AWARD FOR SPORT

The award is made to the student officer or officer cadet from DIOT or commissioned student from DSGT or BFTS undergoing IST who, by active, cheerful and sportsmanlike participation, has given the greatest service to sports and sportsmanship at the College during either the summer or winter season.

Winners:  
 Summer 1979 Fg Off S W J Purves  
 Winter 1979/80 Fg Off J H Millar

## THE DEPARTMENT OF AIR WARFARE

The Andrew Humphrey Memorial Gold Medal is awarded to the best overall student on the GD Aerosystems course.

Winner:  
 13 GDASC Flt Lt P C Lee-Preston GD/P Dec 80

The Aries Trophy is awarded to the student on each GD Aerosystems course who produces the best personal project.

Joint Winners:  
 13 GDASC Flt Lt T Almond GD/N Dec 80  
 Flt Lt P J J Haines BSc GD/N

## THE BASIC FLYING TRAINING SCHOOL COURSE AWARDS

The Hicks Memorial Trophy is awarded to the RAF pilot who is placed first in his course order of merit in Ground School.

Winners:  
 13 IBFTC Flt Lt S B Allen B Eng Jan 80  
 14 IBFTC Flt Lt A J Tailby BSc May 80  
 15 IBFTC Flt Lt S Billington B Eng Apr 80  
 16 IBFTC Flt Lt S M Wright Jun 80  
 17 IBFTC Fg Off A V Hoy BSc Aug 80  
 18 IBFTC Flt Lt A F Clitherow BSc Sep 80

The Dickson Trophy is awarded to the RAF pilot who on completion of his training course has shown most proficiency in applied flying.

Winners:  
 8 IBFTC Flt Lt E G Jones BSc MB ChB Nov 79  
 9 IBFTC Flt Lt C R Topham BSc Nov 79  
 10 IBFTC Plt Off C Chattaway May 80  
 11 IBFTC Not awarded  
 12 IBFTC  
 13 IBFTC Plt Off T J Wheeler Sep 80  
 14 IBFTC Flt Lt C M Stephens BSc Nov 80  
 15 IBFTC Flt Lt M J Crossey BSc Dec 80

The Battle of Britain Trophy is awarded to the RAF, Navy or Army pilot, who on completion of his training is judged to be the best acrobatic pilot on his course.

Winners:  
 8 IBFTC Plt Off J E Fernie Nov 79  
 9 IBFTC Flt Lt C R Topham BSc Nov 79  
 10 IBFTC  
 11 IBFTC Not awarded  
 12 IBFTC  
 13 IBFTC Plt Off R Barber Sep 80  
 14 IBFTC Flt Lt R P Chambers BSc Nov 80  
 15 IBFTC Lt C M L Gilbert BA RN Dec 80

The R M Groves Memorial Prize is awarded to the RAF pilot who is placed first on his course in the combined final order of merit for flying and associated ground school subjects.

Winners:  
 8 IBFTC Flt Lt E G Jones BSc MB ChB Nov 79  
 9 IBFTC Flt Lt C R Topham BSc Nov 79  
 10 IBFTC Plt Off C Chattaway May 80  
 11 IBFTC Not awarded  
 12 IBFTC Plt Off D M I Bye Aug 80  
 13 IBFTC Plt Off T J Wheeler Sep 80  
 14 IBFTC Flt Lt R P Chambers BSc Nov 80  
 15 IBFTC Flt Lt M J Crossey BSc Dec 80

## ANNUAL AWARDS

The transitional period for BFTS annual awards was 1 Aug 79 to 31 Dec 79. Thus interim annual awards were made to students of 5 to 7 IBFTCs. Winners of the 1980 annual awards were selected from 8-15 IBFTCs.

The Kinkead Trophy is awarded to the best R M Groves Memorial Prize winner of the year.

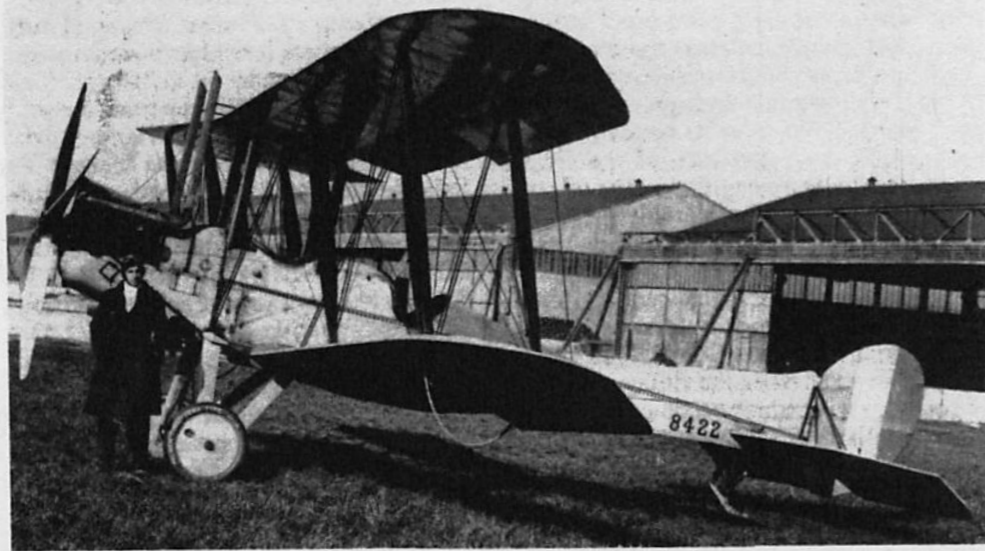
Winners:  
 Flt Lt J P Warren Wilson BA, 5 IBFTC (1979 interim)  
 Plt Off C Chattaway, 10 IBFTC (1980)

The Michael Hill Memorial Prize is awarded to the best Dickson Trophy winner of the year.

Flt Lt J P Warren Wilson BA, 5 IBFTC (1979 interim)  
 Plt Off C Chattaway, 10 IBFTC (1980)

# 1980 - Lead Article (1)

## 65 YEARS OF FLYING AT CRANWELL



*The BE2c – an ex World War I trainer*

The origins of flying at Cranwell date back to before the official records of the RAF. The site of Cranwell was requisitioned in 1915 by the Royal Navy to become a Naval Air Station. In 1918 the station was transferred to the newly formed Royal Air Force who renamed it Cranwell. A subsequent Act of Parliament established Cranwell as a military air academy, the first in the world, and in February 1920 the first formal flying course began.

The Courses lasted 2 years and all officer cadets learned to fly. As early as 1920, cadets were given thorough training in ground as well as air subjects and, as an incentive to understand the workings of the internal combustion engine, all were issued with a temperamental World War One motorbike. The cadets were expected to maintain the motorbike in good running order and to this end there was a free issue of oil and petrol. Not surprisingly, motorcycle accidents exceeded the flying accidents by a factor of 14:1, but it was the 'press' of the day and not the Air Staff who were responsible for the withdrawal of the motorbikes. The free issue of oil and petrol was too much for the news-hungry journalists who condemned it as an utter waste of public money. This adverse publicity was unusually beneficial to the RAF; the motorbikes were withdrawn and the accident rate was correspondingly reduced.

In the early days of flying training, the cadets learned to fly the Avro 504 and the more able students progressed to advanced training on ex-World War One machines such as the DH9 and Vickers Vimy. During the depressed post-war years, there was little money available to spend on flying training and it was not until 1934 that the aircraft were modernised with the introduction of the Avro Tutors, Bulldogs and Hawks. Cranwell was also the scene of other flying activities. The grass runway on the south airfield was then the longest available in the country and Cranwell became the departure aerodrome for the attempts on the long distance record. To ensure the successful take-off of the heavily-laden potential record-breakers, a special hump was constructed at the end of the runway to 'help' the transition from ground to air; it thus predated the Sea Harrier ski-jump by some 50 years.

When war broke out in 1939, the College as such ceased to function but the flying training continued. The RAF College Flying Training School (FTS) came into being and functioned as a normal FTS. By today's standards, its inventory of aircraft was phenomenal; there were 150 Oxfords on charge. A signals school was established at Cranwell to train wireless operators; a Number 2 Central Flying School was formed and rapidly moved on. A Coastal

Command Operational Training Unit also arrived and one of their aircraft was responsible for the only large-scale war-time damage to Cranwell when it hit the College roof in fog. The year 1941 saw Cranwell as the site of the first flight by a British built jet-powered aircraft when Sir Frank Whittle brought his newly designed prototype to make its maiden flight. Throughout the war, the task of the FTS remained essentially the same while the title of the organisation varied considerably. In 1944 the FTS was renamed 17 FTS and in June 1945 it became 19 FTS which lasted until April 1947 when the College reopened its doors and once more took-over the responsibility for flying training at Cranwell. In 1979 history was reversed when the College ceased to control flying wing which became part of the station as a re-born FTS.

newly formed aerobatic team, the Poachers, which gave excellent displays and continued to represent Cranwell at the air shows until 1974 when the fuel crisis, financial cuts and pressure of work forced its disbandment. The severe defence cuts of 1975 paradoxically seemed to make Cranwell even larger. The College of Air Warfare, together with its Dominie Squadron, and the Central Flying School with its Jet Provosts and Bulldogs became lodger units. However, the skies and runways became too crowded so the Dominies left for Finningley, and the Central Flying School, like its war-time predecessor, moved out, this time to Leeming.

Over a span of 65 years the method of instruction has been developed and refined. The first Commandant of HMS Daedalus attended a 2 week course; he spent the first



*the Jet Provost Mk 5a – Formation Take Off*

Post-war, Tiger Moths and Harvards were used for flying training, but those types were soon replaced by the newer Chipmunks, Piston Provosts and Balliols. The flying 'pigs', the Valetta and Varsity, arrived and stayed only for a short spell during which they were used to train navigators. Concrete runways were built and then in 1957 a new noise was heard as the first jet aircraft, a Meteor, arrived. It was used to give advanced students some jet experience and was soon replaced by a Vampire. In 1961, as a result of new Air Staff Policy, the Jet Provost was introduced at Cranwell; shortly afterwards, the Chipmunks were withdrawn and the RAF became the first air force to introduce all-through pilot training on jet aircraft. In 1968 the Chief Instructor led a

week learning to fly and the second week learning to instruct! The modern day instructor usually has accomplished at least one operational flying tour and has attended the instructors' course at the Central Flying School. In general, he arrives at Cranwell with upwards of 1500 flying hours. There is the odd exception in the form of the 'Creamy', an instructor with no operational flying experience who on completion of flying training is selected to become an instructor.

The background of the Cranwell student has also changed. In the late sixties, the Air Force Board realised that many potential officers when faced with the choice of 3 years higher education at University or at Cranwell opted for the former, and were then lost to the

# 1980 - Lead Article (2)

RAF. Since the RAF had always recruited a small number of graduates and because it was now less expensive to sponsor an officer through 3 years of university than 3 years training at Cranwell, the Graduate Entry System was evolved. Number One Graduate Entry commenced in 1970, and after completing officer training, the students were joined by the Prince of Wales for their basic flying training. The new scheme was not quite the hoped-for success; the more developed mind of the 22 year old graduate proved to be far less malleable than that of his 18 year old flight cadet predecessor, and some graduates could not make the transition to military life. With the closing of the Officer Cadet Training Unit at Henlow, all officers are now trained at Cranwell and the students who arrive at the flying squadrons are a mixed bag. A student may have already learned to fly with a University Air Squadron or he may have flown the Chipmunk at RAF Swinderby where the Command Flying Selection Squadron is located. Alternatively he may have gone through a full flying scholarship or he may never have flown at all. On arrival at one of the 3 Cranwell Squadrons, he learns to fly the Jet Provost T5A, a 2 seat side-by-side jet trainer. The course lengths are continuously reviewed, but a student can expect to spend one third of the course learning the basic flying techniques to a high standard. When he has successfully demonstrated his ability in this task, the pace is increased and he is introduced to some applied flying in the form of advanced handling and low level navigation. The student is then 'streamed' for further training. Those who are destined for multi-engined and fast jet training

remain at Cranwell; the former complete a short course which is biased to instrument flying while the latter undertake a 60 hour course comprising advanced handling, advanced low level navigation and formation flying.

Although the principal function of flying wing at Cranwell is instruction, other flying does take place. The GD Aerosystems course make an annual flight to the North Pole and the Dominies from Finningley are frequent visitors. As recently as 1978 one young officer set out from Cranwell to fly round the world in a private aircraft and on his successful return he commenced flying training with the RAF. There is also a thriving Flying Club which was formed in 1960. There were 35 club members then and the charge was 36 shillings (£1.80) per hour for officers and 26 shillings (£1.30) per hour for airmen. The charge is now £30 per hour which surprisingly is still good value. A recent visitor to Cranwell had been an instructor with 19 FTS (when the present Deputy Commandant trained) and he was given a free trip in the Club's Tiger Moth to stir old memories. The club is now expanding and has acquired 2 new machines, one of which is fully kitted for airways flying.

As we close for press, one of the new aircraft has been raced in the King's Cup Air Race. A thriving RAFGSA Gliding Club shares the North Airfield with the Flying Club. While military flying training takes place on the south airfield, the North still offers the opportunity to feel the wind in your face and hear the wires hum; long may it remain so!

## 20 SQUADRON

No 20 Squadron is to hold a Reunion and Open Day, on 4 July 1981, at RAF Bruggen. Further details of this, and the formation of the No 20 Squadron Association, may be obtained from Flt Lt Mike Bryan, RAF Bruggen, BFPO 25.

# 1980 - Second Article

## INITIAL OFFICER TRAINING FOR THE SPECIALIST ENTRANT AND RE-ENTRANT OFFICER

How/whom/what/when/why should I salute? . . . How will I recognise an airman/Air Marshal? . . . How do airmen get paid? . . . HOW DO I GET PAID? . . . What are my responsibilities as an officer? . . . The answers to these and many related questions are to be found in the 18 weeks of initial officer training (IOT) during which the new recruit becomes accustomed to the Service way of life and gains an understanding of his responsibilities on being awarded his commission. However, for the students of the Specialist Entrant and Re-Entrant (SERE) course, these questions are real and immediate as they are already commissioned on arrival. These students have only four weeks in the Department of Initial Officer Training (DIOT) in which to lay the foundations of their Air Force careers, a brief period indeed in which to absorb a wealth of information and equip themselves with the skills and attributes required of them. The primary aim of this article is to show how the SERE course helps them attain these objectives.

The SERE Course caters for those whose commission has been gained by virtue of their professional qualifications or on the strength of their previous commissioned service in either the Royal Air Force or one of the other United Kingdom or Commonwealth Armed Services. The course had been previously run by the Officer Cadet Training Unit at Jurby, Feltwell, and, more recently, Henlow, before arriving at Cranwell in January 1980. Prior to 1974 it was known as the Professionally Qualified and Re-Entrant (PQ&RE) course, or epitomizing the short service terms of many of its members, as "Pick one Quick and Retire Early". The aim of the course is to introduce newly commissioned officers of the Medical, Dental, Chaplains and Legal Branches, Princess Marys' Royal Air Force Nursing Service, Royal Auxiliary Air Force, Royal Air Force Volunteer Reserve and re-entrant Officers of all branches, to the Service way of life, its administration generally, and to their responsibilities as officers. A slight variation on the syllabus is also provided for officers of the Royal Observer Corps. The course therefore has to cater for a wide variety of backgrounds and vastly differing levels of ex-

perience. Nine courses are run during the calendar year and, with numbers averaging 16/17, and a maximum intake of 20, a 2 flight system is operated.

The course covers all the subjects taught on the basic IOT course but in the limited time available there is only scope to give the very broadest of broad brush treatments to any one subject. There is much reliance therefore on preparing individual students so that they will be able to gain as much as possible from their early service careers. To guide them in their initial stages they are given the same instructional notes as are issued to the cadets on the full IOT course. The planning, administration and to a large extent the teaching commitment on each course are undertaken by the 2 flight commanders and the squadron commander, whilst specialist subjects such as War Studies, Ground Defence Training, Security, Drill and PE are taken by the respective specialist departments or by visiting lecturers.

Each SERE course begins on a Sunday evening when the new arrivals are met in College Hall Officers' Mess by a member of the DS who briefs them on the following day's course of events. On the Monday morning they are welcomed by the Director of the Department of Initial Officer Training and are then interviewed individually by their respective flight commander. Kitting out follows during which they are issued with 'combat kit' and DMS boots which they will wear with varying degrees of comfort for the first 2 weeks of training. 'Blue' uniforms are not normally ready until the beginning of the third week. Course and individual photographs are taken at the end of the first Monday morning before the academic programme starts in earnest.

In very simple terms the course can be considered in 3 interdependent segments: Professional Studies, Leadership, and Ground Defence Training. Binding the whole together is a network of ancillary subjects and sporting and social events. The culmination of the training programme is an examination in the final week which, besides providing an incentive during the course, also gives the DS a yardstick by which they can validate the instruction they provide. The sedentary lecture

day is alleviated whenever possible by periods of drill and PE, during which, to the hitherto undreamed delight of the students, quite high standards of military precision and fitness are achieved. However, despite the attentions of the College Warrant Officer, the standards of drill are unlikely to worry the Queen's Colour Squadron.

In Professional Studies the students receive a basic introduction to Officers' Responsibilities, Duties and Regulations, Customs Etiquette and Social Responsibilities, Signals and Casualty Procedures, Accounts, Supply, Personnel, Welfare, Flight Safety and Air Force Law. Instruction in the conventions of Service Writing is consolidated by the submission of narrative entries in the second and final week of the course during which the students make progressive comments on their training and incidentally provide valuable feedback to the DS. Further consolidation in this area is effected by the office simulator phase which takes place in the final week with all students playing the role of junior officers on a typical RAF station and coping with a variety of day to day problems. The simulator exercises are designed to put into perspective the whole of the professional studies aspect of the course, from welfare interviews to signal writing and Air Force Law. To develop skills and confidence in oral communications the students are given the opportunity to practise briefings and 5 and 10 minute talks in front of their respective flights and the CCTV cameras. This is an experience new to most of them and



SERE draining National Trust land in Derbyshire.



Route discussion

many students are surprised at the marked improvements in their performance by the end of the course. As an indirect result of these talks the DS are becoming experts on anything from home brewing to leprosy. In the Oral Communications briefings the students are given a useful introduction to the leadership phase of the course and it is to this that we turn our attention next.

Following basic lessons in field living and navigation, the Leadership phase commences with instruction in the functional aspect of leadership. This in turn is followed by classroom and airfield exercises in command, management, and leadership as a build up to the camp which takes place over 3 nights from the Friday of the second weekend. Executives selected during the first week take over the organisation and running of the camp under the watchful eye of the DS who plan exercises to give each student the opportunity to gain confidence and experience in leading a team. The exercises, which are varied in length and physical demands according to the strengths or weaknesses of particular courses, are planned for each morning, afternoon and evening, and wherever possible interplay between flights is organised. Exercises last for 2 to 3 hours and cover between 5 and 10 kilometres during which the leader has to cope with a variety of problems designed to put him/her under varying degrees of stress and to bring out different aspects of leadership. The camp is held in one of the Practical Training Areas (either Stanford or The Dukeries) or in conjunction with the National Trust in Derbyshire. In the latter case the course carries out National Trust projects such as fencing or ditching and drainage in lieu of some of the

normal leadership exercises. Whilst at the time camp is a challenge for all and a struggle for some, it is almost invariably enjoyed in retrospect.

The third main area of the course, Ground Defence Training, is designed to make students aware of the importance and complexity of modern warfare and, in particular, the problems of casualty handling. All students are given training in the Royal Air Force Ground Defence Policy and practical aspects of Nuclear, Biological and Chemical warfare, culminating in a model station defence exercise. In addition, the combatants spend a day undergoing personal weapon training and instruction on guards and sentries. During this time the non-combatants, who normally comprise the majority, have the opportunity to visit an operational station, which consolidates much of the classroom instruction.

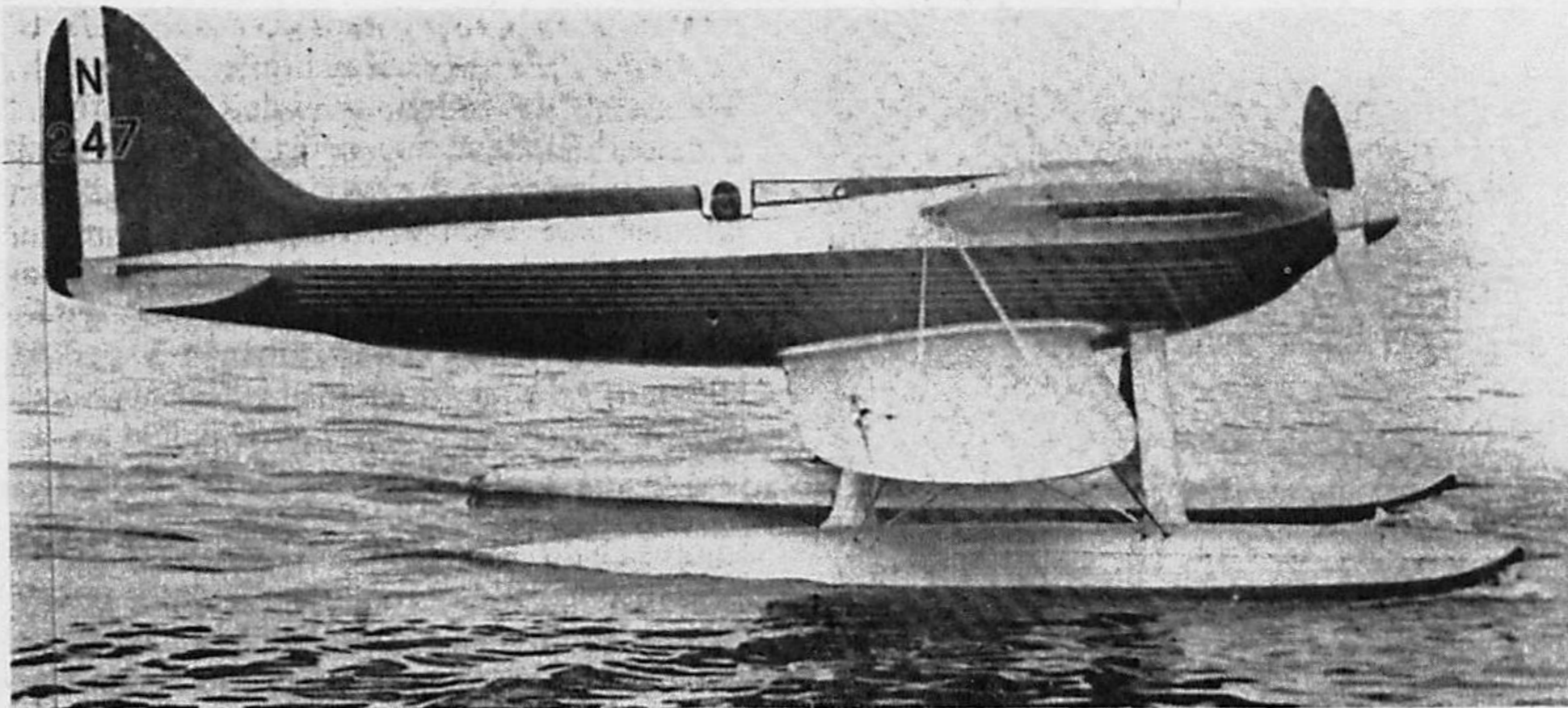
It should perhaps be stressed at this point that the learning environment is not wholly confined to the classroom or field. The students attend, as part of their training, one of the IOT Dining In nights. They are actively encouraged to take full advantage of Mess and sports facilities, and most courses organise some form of sporting or social function during their short time at Cranwell.

The course is rounded off by the students being given the opportunity to present a course critique. This is followed by the final interviews in which flight commanders discuss with individual students their strengths and weaknesses. The course culminates in a graduation ceremony in which a visiting reviewing officer, after a short address, presents course certificates prior to luncheon in the College Hall Officers' Mess. The students then clear from the unit whilst the DS complete course administration and clear the decks for the next intake.

As can be seen, the course is intensive and is designed to cover as many aspects of General Service Training as possible in 4 short weeks. To this end it is made varied and stimulating, but its success can only be measured by the ability of each student to answer favourably the question "Have I sufficient knowledge to be able to go out into the Royal Air Force with confidence in my ability to carry my responsibilities as an officer?" The students leave Cranwell with, if not all the answers, then at least the knowledge of where to find the solutions to the many problems that will tax them during their varied careers in the Royal Air Force.

# 1980 - Third Article (1)

## THE SCHNEIDER TROPHY



*The record breaking Supermarine S6*



# 1980 - Third Article (2)

When the French aviator Jacques Schneider conceived the idea of a special contest for sea planes few people foresaw the development of the most coveted international air race of all time. Within 10 years of its inception in 1913 the Schneider Trophy had captured the hearts and minds of aviators throughout Europe and the United States and the frantic race to develop reliability and speed in the seaplane had a far reaching influence on aviation. 1981 is the fiftieth year since Britain won the trophy outright, a fitting occasion on which to recall this historic event and to pay tribute to all those, including 2 famous Old Cranwellians, who played a major role in bringing the trophy to this country.

Three wins in 5 years were what was required to retain the trophy permanently. After being curtailed by the 1914-18 war, first the Italians in their Savoias and Maachis and then the Americans in their Curtis bi-planes dominated the race. The success of the Americans with a strong military team, thoroughly prepared and financially supported, changed the course of the trophy. Previously, it had been essentially a private flying club venture; now national prestige was at stake. Britain had had only scant success in winning the trophy. Wins in 1914 and by Henri Biard flying a Supermarine Sea Lion II in 1922 had been our only victories. However, after the Government-backed Italian team wrested the trophy from the seemingly invincible American military team in 1926, the decision was made to form a High Speed Flight within the Royal Air Force. With Air Ministry and Treasury support—albeit reluctantly given—the Royal Air Force at last had the opportunity to prepare for the trophy in a professional way.

The 1927 race was to be held in Italy in September and Britain had very little time to get ready. The aircraft from Supermarine's, Gloster's and Short's arrived just in time for a few quick trials before being despatched to Venice. Nevertheless, the British performances were magnificent. Flight Lieutenant S. N. Webster came first in a S5 with an average speed of 281.65 mph and Flight Lieutenant O. E. Worsley second in a similar aircraft. Flight Lieutenant S. M. Kinkead, who was to be tragically killed the following year going for the high speed record, force-landed his Gloster IV B on the fifth lap. None of the Italians successfully completed the course; the engines of the Maachi M52s had been over-boosted

and were unable to withstand the strain of the race. For Britain it was a great victory and the combination of high quality pilots and first class engineering support augured well for the future.

The next race in 1929 brought together 2 Old Cranwellians who had already made their mark in aviation. Flying Officer H. R. D. 'Waggon' Waghorn and Flying Officer R. L. R. 'Batchy' Atcherley were posted in as pilots on the High Speed Flight. They had joined the Royal Air Force College Cranwell on 15 September 1922 and both were to prove themselves airmen of very special qualities. They were commissioned on 31 July 1924, Waghorn demonstrating his leadership potential by winning the Sword of Honour and Atcherley showing his already outstanding airmanship with the Groves Memorial Flying Prize. Both gained international recognition in the late 1920s as star turns in the air shows that Trenchard had introduced to make the British public more air-minded.

The intense interest in the 1929 race at Calshot was heightened because the British in the new Supermarine S6 and the Italians in their Maachi aircraft were flying virtually untried and untested machines. With the seaworthiness trials behind them, the day of the air race over Southampton water was calm and clear. Waghorn went first and miraculously everything went according to plan. His average speed over the 350 kilometres was a record breaking 328.63 mph. Unfortunately, he was unaware of the celebrations below as, believing he still had a lap to complete the S6 ran out of petrol. His despair at 'failure', his bewilderment at the enthusiasm below, were to turn to unbridled delight.

Atcherley was flying the other S6 and, drawn last, he knew exactly what was expected of him. In taking off, however, he porpoised badly in the worsening sea conditions, had to tear off his goggles rendered opaque by oily water and from then on had sighting difficulties. Nevertheless, after a haphazard first lap, he improved rapidly picking up the 50 and 100 kilometre records. His average speed of 325.54 mph gave him second place but the race judges ruled that he had fouled the course by passing inside a turn on the first lap. Although he forfeited second place his records were to stand. He also broke the air speed record with 370 mph. Flight Lieutenant D. D'Arcy A. Grieg was third in the older S5.



*Waghorn with 'Batchy' on his left.*

The British entry for the 1931 race nearly did not take place. The Socialist Government of Ramsey MacDonald refused financial support and, only after persistent attacks in the press and Parliament, reluctantly authorised the defence of the trophy. The British entry was finally saved by Lady Houston who, in a magnificent public-spirited gesture, guaranteed £100,000. Britain had just 7 months to prepare.

Our competitors that year, France and Italy, were dogged by bad luck and losses of both pilots and aircraft. As the day of the race drew near both countries had to withdraw, leaving Britain and the RAF team with the S6Bs as the only competitors. Flight Lieutenant G. H. Stainforth went for the speed run and broke all previous records with an average of 379 mph. Flight Lieutenant J. M. Boothman had the first chance to fly for the trophy. He duly completed the course at an average speed of 340.08 mph thus permanently securing the trophy for Britain.

The 1931 victory brought to the end the greatest international air race of all time and marked the climax of a tremendous surge forward in aviation history. In the Supermarine S6 Britain had produced an all metal monoplane which was the fastest, and arguably the safest, in the world. Moreover, in designing an aircraft to win the Schneider Trophy, Britain had produced the first real prototype of the fighter aircraft of the future, the aircraft from which Mitchell was to design the Spitfire.

Without the vision of Schneider in creating the most thrilling air race of all time, the dedication of British designers and engineers in their pursuit of aeronautical progress, and the brilliance of the Royal Air Force pilots, such as Atcherley and Waghorn, the generation of British Fighters, which were to play a crucial part in saving Britain from defeat by the Germans, would never have emerged.

Sadly, Waghorn never saw the outright victory by his colleagues in 1931. Having won the trophy in 1929 and an AFC for his feat, he left the High Speed Flight in the Spring of 1931 on temporary attachment to the Royal Aircraft Establishment at Farnborough. He had only been there for a few days when he was tragically killed testing a Hawker Horsley. Flight Lieutenant Waghorn died on 7 May 1931. For a man of his very special attainments and immense potential his death was a tragic loss to the Service. In 1975, in recognition of the service he rendered to his country, a memorial, a bronze eagle, was removed from his grave near Farnham and re-erected in the Officers' Mess Gardens at Farnborough. The memorial was unveiled by his son.

After the 1929 race, Atcherley was posted overseas and went on from success to success. He distinguished himself throughout the Second World War as a brilliant leader and a man of outstanding integrity and courage. His progress continued until his retirement from the Royal Air Force in 1958 as Air Marshal Sir Richard Atcherley KBE AFC. He died on 18 April 1970. His life had spanned the birth and growth of the air age; he was born in the year the Wright Brothers made their historic flight and died a few hours after the spectacular voyage of Apollo 13.



*The Waghorn Memorial*

# 1980 - Fourth Article

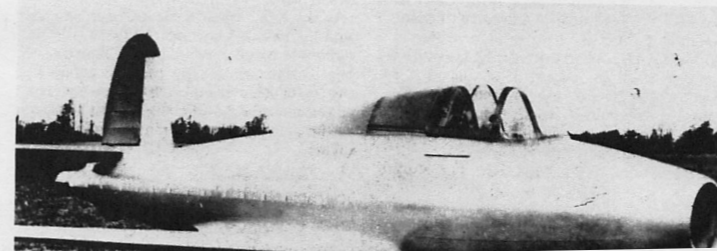
Forty years ago on 15 May 1941 the first British jet aeroplane, the Gloster Whittle E28/39, successfully completed its historic initial flight at RAF Cranwell. The development of this revolutionary design, which proved the principle of jet propulsion for aircraft and led directly to the first generation of jet fighters, the Meteor and Vampire, was due entirely to the brilliance and dedication of a famous Old Cranwellian, Sir Frank Whittle.

It was at Cranwell as a Flight Cadet (1926-28) that Whittle wrote the thesis that stimulated the train of thought which led ultimately to the jet engine. The thesis, which won him the Abdy Gerrard Fellowes Memorial Prize for Aeronautical Sciences, planted the seed in the mind of this brilliant aviator and scientist. As the seed germinated he began to work on his ideas for the development of a turbo-jet engine. Whilst at Cambridge University from 1933-36, where he graduated with a first class honours degree in Mechanical Sciences, he worked on the preliminary design of an experimental engine and sought to interest the Air Ministry and industry with his ideas.

Eventually, in 1936 a company called Power Jets, to which Whittle was loaned by the Air Ministry, was set up. His first engine ran successfully in 1937, and 2 years later in September 1939 the Gloster Aircraft company was granted an Air Ministry contract to design an aeroplane capable of jet propelled flight. The flying test-bed became known as the Gloster Whittle E28/39 ('E' for experimental and 28/39 from the number of the Air Ministry specification).

In less than 2 years the E28/39 was undergoing secret taxiing trials at Brockworth and on 11/12 May 1941 was taken by road to Cranwell for the flight test. Cranwell was chosen as the location because of its long runway, clear approaches and a certain remoteness which aided wartime security. After a few further taxiing trials the E28/39 was declared ready to fly.

## BRITAIN'S FIRST JET FLIGHT



On 15 May, after waiting all day for the weather to clear, P E G Sayer, Gloster's chief test pilot, took the E28/39 down the runway. Everything went according to plan. The machine took off at 1940 hours, recorded a 17 minute flight and landed without a hitch. Frank Whittle, George Carter, the chief designer of Gloster's, and a handful of technicians were the only spectators. During the next 12 days the aeroplane completed some 15 flights and the 10 hours flying for which the engine had been cleared. From the birth of an idea in the mind of a young unknown RAF Flight Cadet, a unique event had taken place. History had been made.

**Whittle remained on the Special Duty List attached to Power Jets until 1946 when he became the Technical Adviser on Engine Design and Production to the Controller of Supplies (Air), Ministry of Supply. He retired from the RAF in August 1948 as an Air Commodore. Just before his retirement he received a Knighthood, having previously been granted a reward for his invention from the Royal Commission.**

**In the epilogue of his book 'Jet - The Story of a Pioneer' he recalls with pride and a touch of sadness:**

**"As the King touched me on each shoulder with his sword, I became the first Old Cranwellian to receive the honour of Knighthood. The satisfaction this gave me overshadowed any regret at leaving the Service in which I had served since the age of 16 and which had given me the training which had made possible the jet engine".**