

# RAF COLLEGE CRANWELL

## “Training Transitions”



A Review of College Life Transitioning to Evolving Training Schemes  
1919 to 1981

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# Foreward

The RAF College has undergone a number of transformations during its 100 year history, some evolutionary and some fundamental. This album is an attempt to chronicle those changes and to explain some of the implications to officer training schemes adopted at the College. Our research reveals that, in addition to a natural evolution of officer training and training environment at Cranwell, there were five significant and distinct transitions:

- The transition from 1 November 1919 to 5 February 2020 from RNAS Cranwell operated by the RN since 1916;
- The abrupt transition from the pre-WWII RAF College Flight Cadet system to a College SFTS (Service Flying Training School) on the day war broke out, 3 September 1939;
- The gradual transition from 17 FTS (formerly the College SFTS) in 1944 to 19 FTS and thence the re-emergence of RAF College Flight Cadet System by 1947;
- The gradual replacement of the post-WWII Flight Cadet System with the Graduate Entry (GE) Scheme in the early 1970s;
- The introduction of SGIOT (Single Gate Initial Officer Training) between 1978 and 1981, which formed the basis of the IOT, IOTC, MIOT and SERE training schemes that have run ever since.

Of these transitions, the first is well covered by the RAF College's own commissioned publications, not least *The History of RAF Cranwell* by Gp Capt Haslam and articles in the early College Journals of the time. The transitions to and from a flying training school during WWII are less well covered, but we have found interesting summaries - Commandant's Briefs - that give some insight into an interesting and challenging period of College History. Notwithstanding, the Flight Cadet System ran from 1920 to 1973 along broadly the same lines pre and post-war, with an emphasis of selecting high calibre recruits for (Phase 1) officer training and specialist (Phase 2) training, initially for Flying but later Engineering, Supply and Secretarial duties. Throughout this period of some 50 years, the RAF College preserved a unique, some claim 'elitist', culture for turning schoolboys into men with a military mindset, ethos and core values of Respect, Integrity, Service and Excellence that underpin the RAF to this day.

However, the 1970s saw the RAF College meet the challenge of diverting its attention to the main recruiting source, the Graduate Entrant. There is not much mention of this transition in archived records, but fortunately the author of this album was a product of the new GE system at the time the old Flight Cadet System was being phased out. The GE System lasted 10 years before it metamorphosed into IOT/IOTC/MIOT/SERE systems of the 1980s and beyond. Again from alumni experience and inputs, and also from articles in the College Journals of the day and the meetings minutes of the Old Cranwellian Association (OCA), we are able to piece together the challenges the College faced as a consequence of SGIOT and the transfer of all officer training to Cranwell.

In the author's opinion, the transition to SGIOT systems represented a major transformation - a step change - in officer training and culture at the RAF College, which this album addresses. Reflecting the passages of time and perhaps to set the scene for this tribute, the College's 'journey' is reflected in the promotional video at <https://www.youtube.com/watch?v=0peMKp9QJiE>.

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# Part 1 - The RAF College Flight Cadet System

By the time the RAF took over the training assets at Cranwell on 1 November 1919, the RN had established a fully operational training station under the command of Cdre Geoffrey Paine. However, the RAF needed a training college of its own, to help forge the calibre, quality and spirit of the new 'independent' Service. Against constant political, RN and Army opposition that was to endure well into the 1930s, Sir Winston Churchill formally and successfully presented to Parliament Lord Trenchard's vision captured in a paper prepared by General Jan Smuts. These three men, together with the first College Cmdt (AVM Sir Charles Longcroft), are commemorated as the Founders of the RAF College; paintings of them commissioned by the Old Cranwellian Association - the 'Association of Officers' founded by College alumni in 1926 - hang proudly in the Founders' Gallery of the RAF College.



Field Marshal  
**Jan Christian Smuts**  
PC OM CH DTD KS FRS  
(21 May 1870 - 11 Sep 1950)



Marshal of the Royal Air Force  
**Viscount Hugh Montague Trenchard**  
GCB OM GCVO DSO  
3 Feb 1873 - 10 Feb 1956



Ait Vice-Marshal  
**Sir Charles Longcroft**  
KCB CMG DSO AFC  
13 May 1883 - 20 Feb 1958



Former Prime Minister  
**Sir Winston Leonard Spencer Churchill**  
KG OM CH TD DL FRS RA  
30 Nov 1874 - 24 Jan 1965

Part 1 of this tribute summarises the introduction of the 'Flight Cadet' training system that was to last over 45 years, pre and post-WWII. For the majority of that period, it was an intensive, two year course of academic (Year 1) and basic flying training (Year 2) for 17½ -19 year olds, initially selected from some of the UK's finest public schools. Although the first cadet Entry was to inherit some 17 former Sub Lts and Midshipmen from the RN at RNAS Cranwell, 29 recruits were selected through competitive examination and interview, another six through special nominations and cadetships. This section process was to persist throughout the life of the Flight Cadet system, and successful recruits would regard attendance at the College as a "privilege" extended only to a "lucky" few.

The aim of the Flight Cadet system was to attract the very best to fly in the RAF and, ultimately, to lead and command its sqns. Each Entry was to comprise up to 50 cadets, with two Entries to start each year, notionally in February and September; each Entry would be designated by the letter of the month and the last two digits of the year of entry (e.g. F20 for February 1920). In addition to the flying training, the course was underpinned by a full curriculum of academic education - English Lang/Lit, Maths, Elementary Science, British Empire History, Service History, etc - participation in many sports and the obligatory drill (i.e. "square bashing").



# Inheritance from RNAS Daedalus, Cranwell



The RFC had constructed its Central Flying School in 1912, on an elevated site of training gallops, about 1.5 miles east of Upavon village, near the edge of the Salisbury Plain, Wiltshire. The RFC site was unusual, in that it was bisected by a public highway, the A342 – with the airfield and hangars on the south side of the road, and all the administrative (and some technical) buildings and accommodation on the north side. Though fit for the RFC's purpose, it could not accommodate RNAS training, when the RNAS formed in 1914.



The Admiralty was thus forced to seek alternative accommodation and selected Cranwell as it was close to existing air stations on the east coast and, being in the middle of no-where, it was far away from possible extra curricular distractions.

In keeping with RN tradition, personnel posted to a shore base had to be borne on

the books of a naval vessel. In the case of Cranwell staff, they were borne on a renamed Medway hulk - HMS Daedalus - a depot ship for RN personnel serving ashore on Britain's east coast. Under the command of Cdre Geoffrey Paine, the RNAS students at Cranwell effectively became part of the ship's company of HMS Daedalus.

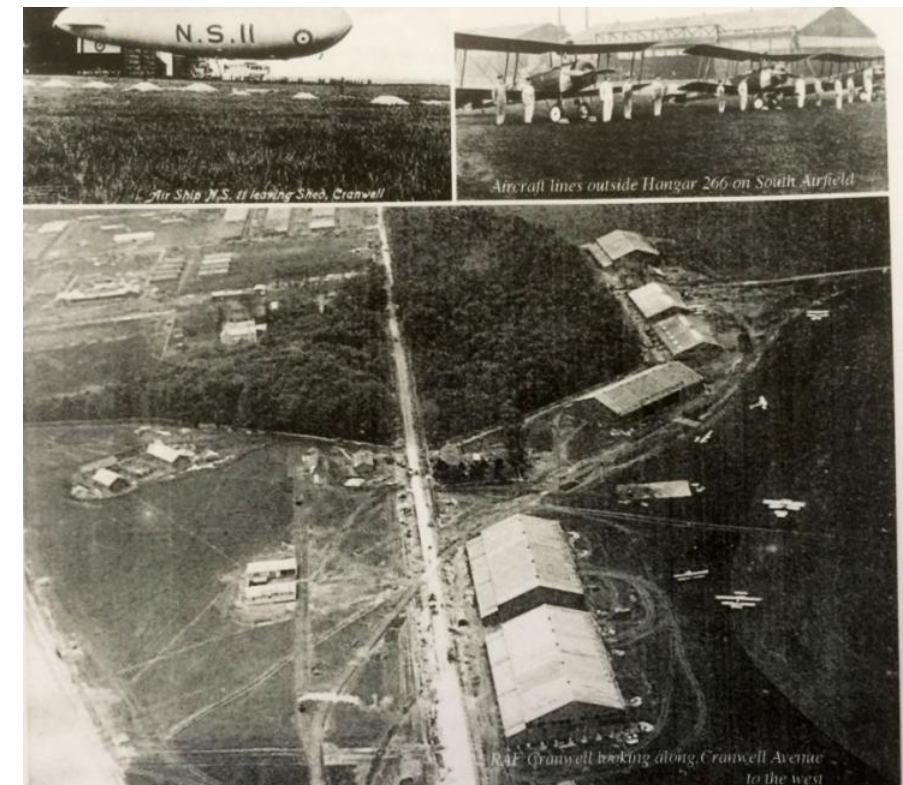


Warrant Officer Stevens, Fleet Paymaster Tier, Flight Commander J. H. Liddell, R.N., Lieutenant J. R. Potter and Flight Sub-Lieutenant F. H. M. Maynard, R.N.A.S. outside The Lodge in January, 1916

Cranwell Lodge Farm was commandeered from Mr Usher Banks for the Admiralty by CPO Whitlock on 23 November 1915. Accommodation for the men comprised three cottages and the outbuildings. Cranwell Avenue was, at that time, a cart track.

The Lodge was used as the Commandant's accommodation and also the Officer's Mess, or Wardroom in RN parlance, until early 1916 when the Mess building was completed.

With the infrastructure completed, the RNAS Central Training Establishment formed on 1 April 1916 and, in late 1916, RNAS Cranwell was fully established, equipped and operational.





# 1920 Intake



Left half

**This photograph appeared in the College Journal of 1920 as a fold-out**



Right half

# Transition from RNAS College to RAF College

The RAF College started training its first entry of cadets on 5th February 1920. This ‘F20’ entry comprised 52 cadets, two former RN Sub Lieutenants and 15 former Midshipmen, 35 entrants by competitive examination, four winning cadetships, and two specially “nominated” cadets. Of the naval cadets two withdrew, one transferred to the RAF and the rest graduated at the end of 1920. Of the other entrants, most graduated on 19 December 1921, but four graduated with S20 Entry in August 1922; two withdrew.

Surname	Initials	Feeder School	College Prizes Command+Click (Apple) Control+Click (Windows) On Underlined Text	Links to Decorations & Service Awards Command+Click (Apple) Control+Click (Windows) On Underlined Text	Career Notes	Surname	Initials	Feeder School	College Prizes Command+Click (Apple) Control+Click (Windows) On Underlined Text	Links to Decorations & Service Awards Command+Click (Apple) Control+Click (Windows) On Underlined Text	Career Notes
Akerman	WJM	Imperial Service College Windsor		CB; CBE; MiD**	Ret'd 14/4/56 AVM Walter Joseph Martin <a href="http://www.rafweb.org/Biographies/Akerman.htm">http://www.rafweb.org/Biographies/Akerman.htm</a>	Hayter	MC	Polytechnic Engineering College	Graduated Aug 22		Recoursed to S30 Graduated Aug 22; KFA Kenley 24/10/22. Matthew Charles
Barrett	JB	Truro Cathedral College			Ret'd 23/4/43 TWg Cdr James Burnley	Hayter-Hames	NC	Winchester College	<u>RM Groves Memorial Prize</u>		RMG; KFA Waziristan 21/3/25 Fg Off Neol Cecil <a href="http://www.rafcommands.com/forum/showthread.php?17305-RAF-fatalities-1925">http://www.rafcommands.com/forum/showthread.php?17305-RAF-fatalities-1925</a>
Beatty	HL	Osborne, Dartmouth	Midshipman on entry		Naval; KFA 15/2/35 Messina Fit Lt Henry Longfield	Huxham	GH	Newbury GS	Prize Cadet on entry		Recoursed to S30; Graduated Aug 22. Gp Capt George Herbert
Bernard-Smith	GCB	Sherborne			KOAS 254 Sqn; Blenheim IV V5801; based at Dyce; aircraft accident near Forfar. 10/12/41 T/Sqn Ldr George Christopher Bernard	Lacey	EVS	St Cuthbert's Worksop			KFA Kenley 20/6/23 Fit Lt Ernest Vair Sleigh
Bonham-Carter	DWF	Winchester College	Cadet Nomination	CB; DFC; MiD	Ret'd 27/2/53 Air Cdre Donald William Frederick <a href="https://www.rafweb.org/Biographies/Bonham-Carter_DWF.htm">https://www.rafweb.org/Biographies/Bonham-Carter_DWF.htm</a>	Mackay	MB	St Edward's School Oxford			Ret'd 2/5/50 Gp Capt Malcolm Bruce
Boyd	EA	Wellington College	King's Cadet on entry		Withdrew (Eyesight) 27/7/21	Mangles	RAR	Radley College, Abingdon			Ret'd 27/9/48 Gp Capt Roland Arthur Ross
Brook	WAD	Rugby		CB; CBE; MiD*	KFA 17/8/53 AVM (S) William Arthur Darille <a href="https://www.rafweb.org/Biographies/Brook_W.htm">https://www.rafweb.org/Biographies/Brook_W.htm</a>	Mills	GH	Berkhamsted School Prize Cadet on entry	<u>Abdy Gerrard Fellowes Student Scholar of College</u>	GCB; KCB; CB; DFC; MiD*	AGF SSC; ret'd 18/9/62 ACM George Holroyd <a href="https://www.rafweb.org/Biographies/Mills_G.htm">https://www.rafweb.org/Biographies/Mills_G.htm</a>
Brookman	HG	Osborne, Dartmouth	Midshipman on entry		Naval; died 22/4/36 Fit Lt Herbert Geoffrey	Mitchell	FGS	Municipal Tech College Brighton		CB; CBE; OBE; LoM(Off)	Ret'd 29/7/58 AVM Frederick George Stewart <a href="https://www.rafweb.org/Biographies/Mitchell_FGS.htm">https://www.rafweb.org/Biographies/Mitchell_FGS.htm</a>
Brown	JR	Eagleshurst College			Ret'd 7/2/55 Tfird to Eqpt Branch Gp Capt (S) John Redvers	Murphy	TCE	Bedford School			Withdrew (Disciplinary) 1/6/20? Terence Cyril Edmund
Burton	EA	Osborne, Dartmouth	Midshipman on entry		Naval Withdrew (Eyesight) 3/2/21 Midshipman Edward Angerstein	Peck	JG	Osborne, Dartmouth	Midshipman on entry		Naval; KFA Duxford 3/3/24 Fg Off Jasper Godfrey
Collingwood	CJ	Osborne, Dartmouth	Midshipman on entry	OBE; DFC	Naval; ret'd 28/4/48 Gp Capt Cuthbert John	Pontifex	RW	Cheltenham College			KFA Iraq, believed shot down by rifle fire; 18/4/25 Rupert William
Combe	G	King's College Wimbledon		CB; MiD; LoM(Cdr)	Ret'd 31/5/55 Tfird to Eng Branch. AVM (S) Gerard <a href="https://www.rafweb.org/Biographies/Combe_G.htm">https://www.rafweb.org/Biographies/Combe_G.htm</a>	Porter	NA	Cheltenham College			Withdrew (Flying Unfit) 9/6/20 Nicholas Arthur
Conolly	SG	St. Beinfaces College Plymouth Technical College			Recoursed to S20; KFA Egypt 27/1/37 Graduated Aug 22. Fit Lt Sylvanus George	Prance	DC	Osborne, Dartmouth	Midshipman on entry		Naval; ret'd 6/8 42 Tfird Tech Branch. T/Wg Cdr Dennis Caldwell
D'Aeth	NH	Osborne College, Dartmouth	Sub Lt on entry	CB; CBE; DSC; MiD**; Polar Medal; LoM(O); CMM	Naval; ret'd 25/6/56 AVM Narborough Hughes <a href="https://www.rafweb.org/Biographies/D'Aeth.htm">https://www.rafweb.org/Biographies/D'Aeth.htm</a>	Revington	AP	Plymouth College		CB; CBE; OBE; MiD**	Ret'd 4/1/54 Air Cdre Arthur Patrick <a href="https://www.rafweb.org/Biographies/Revington.htm">https://www.rafweb.org/Biographies/Revington.htm</a>
David	EHM	Wellington Dartmouth	Midshipman on entry	CBE; OBE	Naval; ret'd 29/5/50 Gp Capt (S) Edward Hugh. Markham	Rowe	FCT	Barnstaple GS			Ret'd ill health 14/8/33 Sqn Ldr Frank Charles Thorne <a href="https://www.the-saleroom.com/en-gb/auction-catalogues/jefferys/catalogue-id-srje10014/lot-97524964-be4a-45d4-98e9-a51d00a931c0#lotDetails">https://www.the-saleroom.com/en-gb/auction-catalogues/jefferys/catalogue-id-srje10014/lot-97524964-be4a-45d4-98e9-a51d00a931c0#lotDetails</a>
Desmond	TJ	Presentation College Cork			Ret'd gazetted 31/1/50 Gp Capt Thomas Joseph	Shepherd	GC	King William's College IOM	Prize Cadet on entry		Relinquished A/Gp Capt 14/3/49 Tfird Tech Branch. Gordon Carruthers
Drabble	JEL	Osborne College, Dartmouth	Midshipman on entry		Naval; ret'd 14/12/32 Crashed Avro, Spitigate, 1923 losing leg below knee Fit Lt John Edward Layard	Spaight	RHS	Allhallows School		CBE	Ret'd 21/8/50 Commissioned in 1923, delayed by cycle accident <a href="https://www.rafweb.org/Biographies/Spaight.htm">https://www.rafweb.org/Biographies/Spaight.htm</a> A/C Robert Henry Seymore
Falconer	CL	Edinburgh Academy	<u>Sword of Honour</u>	CBE; OBE; MiD*; LoM(O)	SoH; ret'd 1/4/49 Air Cdre Colin Logan <a href="https://www.rafweb.org/Biographies/Falconer.htm">https://www.rafweb.org/Biographies/Falconer.htm</a>	Spencer	GRC	Osborne Dartmouth	Midshipman on entry	CB; CBE; OBE MiD*; Leoll (GO); CdeG	Naval; Ret'd 10/7/56 AVM Geoffrey Roger Cole <a href="https://www.rafweb.org/Biographies/Spencer_GRC.htm">https://www.rafweb.org/Biographies/Spencer_GRC.htm</a>
Foote	HW	Tonbridge School	Midshipman on entry		Naval; reserve of air Force Officers 26/7/27 Fg Off Henry Wells	Springfield	CMOO	Greshams Holt Norfolk			Died 4/9/24 after bizarre incident nearly freezing to death in the Scind Desert, contracting malaria in 1922Cecil Montague Oakes Osborn
Forster	EB	Christ's Hospital Horsham			Recoursed to S20; died 26/5/28 Graduated Aug 22 Fg Off Edward Beresford	Stone	CJ	Lancing College	Cadet Nomination		Transferred to Army 12/6/29 Fg Off Cecil John
Garnons-Williams	MH	Osborne Dartmouth	Midshipman on entry		Naval; ret'd 31/10/47 Tfird Tech Branch T/Gp Capt Miles Herbert	Stone	RAB	College of St Columbo/a Dublin			Ret'd 13/12/46 Gp Capt Ralph Ashinhurst Bird
Gay	GW	Westminster			Ret'd 26/9/46 Sqn Ldr George William	Waite	RN	Repton School		CB; CBE; MiD	Ret'd 19/9/53 Air Cdre Reginald Newnham <a href="https://www.rafweb.org/Biographies/Waite.htm">https://www.rafweb.org/Biographies/Waite.htm</a> <a href="http://www.bbaa-airlift.org.uk/page20.html">http://www.bbaa-airlift.org.uk/page20.html</a>
Gore	CW	Imperial Service College Windsor		OBE; MiD	Died 19 April 1975 Stores Branch. Gp Capt (S) Charles William <a href="https://www.rafweb.org/Biographies/Gore_CW.htm">https://www.rafweb.org/Biographies/Gore_CW.htm</a>	Weedon	CW	Osborne Dartmouth	<u>Student Scholar of College Midshipman on entry</u>	KBE; CBE	Ret'd 2/9/52 Air Mshl Colin Winterbotham <a href="https://www.rafweb.org/Biographies/Weedon_CW.htm">https://www.rafweb.org/Biographies/Weedon_CW.htm</a>
Hancock	CG	Clifton College Osborne College Dartmouth	Midshipman on entry		Naval; dismissed GCM 1/8/29 Fit Lt Cecil George	Whelan	RD	Trent College			KFA Enfield 3/12/27 Fg Off Robert Darley <a href="http://sussexhistoryforum.co.uk/index.php?topic=16251.0">http://sussexhistoryforum.co.uk/index.php?topic=16251.0</a>
Hare	BWT	Osborne College Dartmouth	Midshipman on entry		Naval; ret'd 15/6/35 T/Sqn Ldr Bertram William Trelawney	Wynne-Edwards	RG	Osborne Dartmouth	Sub Lt on entry		Naval. Withdrew (Eyesight), returned to RN, Jul 20. Reginald George
Hawtrey	JG	Eton College		CBE; MiD	Died in civilian hospital at San Remo 26/10/54 AVM John Gossett <a href="https://www.rafweb.org/Biographies/Hawtrey.htm">https://www.rafweb.org/Biographies/Hawtrey.htm</a>	Yale	WC	Osborne Dartmouth	Midshipman on entry		KFA Fort Sandeman - died of injuries 4/9/36 Fit Lt William Corbet

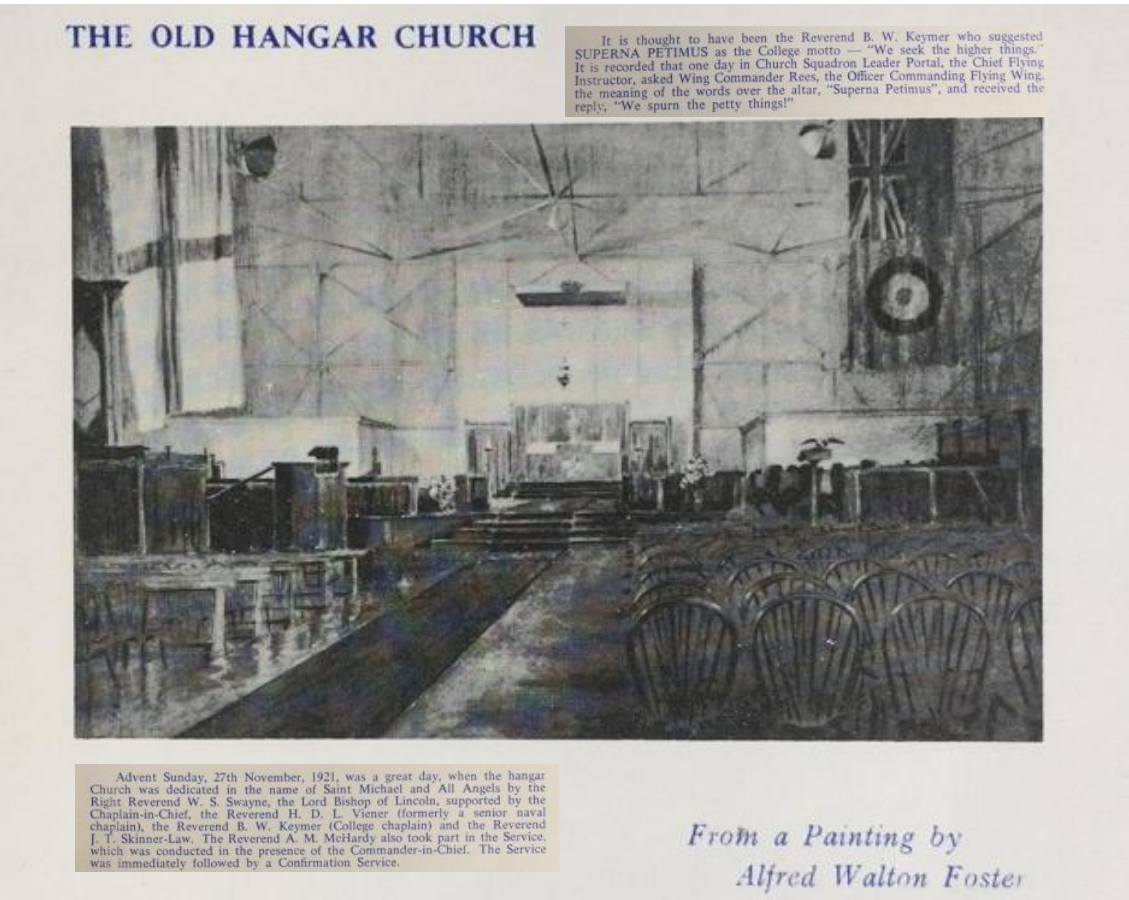
Underlined text in Table above signifies links to supplementary information. Courtesy to Malcom Barrass for [rafweb.org](http://rafweb.org) career details.

*[To open these links in a separate browser tab and thus not lose your place in this e-document, press control+click (Windows) or command+click (Apple Mac) on the underlined word or image]*

Of the 48 successful graduates, 16 were killed or died in Service; some 14 had distinguished careers, reaching Air rank. 17 of the graduates received honours and awards, including three DFCs, 20 MiDs, three knighthoods and 21 CB/CBEs.



# College Life 1920/21 - Captured by the College Journal





# Flying 1920/21 - The 'Kites'

In 1920, each cadet would be expected to undertake elementary flying training on the College workhorse, the Avro 504 K, and was expected to have mastered flight in this aircraft before moving onto operational types in his second year. Depending on their aptitude and flying ability on the Avro, the cadets would be streamed onto single-seat fighters, day bombers, or Army Co-operation aircraft. In the 1920s, these operational aircraft employed at Cranwell were the SH9a, the Vickers Vimy and the Sopwith Snipe. Cadets would undergo training in basic maintenance.



Avro 504, K & N



The Flying Home - 1918



DH 9a Trainer



Vickers Vimy Bomber



Sopwith Snipe

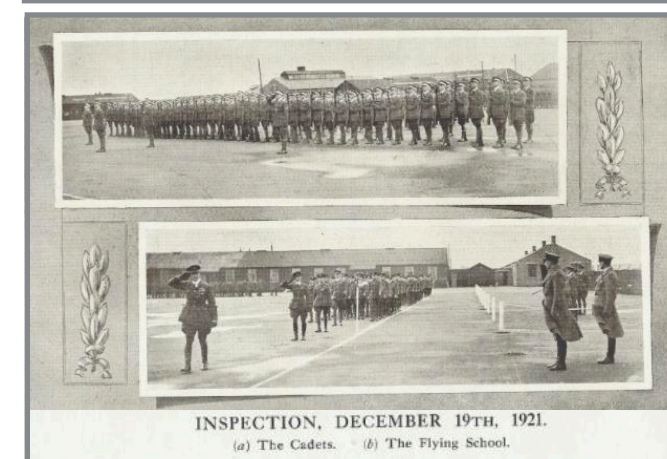
Click on the above graphics to view short videos of each aircraft type and on the underlined text to obtain a basic description

*[To open these links in a separate browser tab and thus not lose your place in this e-document, press control+click (Windows) or command+click (Apple Mac) on the underlined word or image]*



# 1921 Prizewinners & Graduation

The former naval cadets having departed by December 1920, 29 remaining cadets graduated on 19 December 1921, another four continuing studies until August 1922. The three prize winners shown here are Colin Falconer (Sword of Honour), George Mills (Abdy Gerrard Fellowes Mem Prize) and Neol Hayter-Hames (RM Groves Memorial Prize).



Halter Hames was killed in a flying accident on 21 March 1925 in a DH.9a of 27 Squadron, in Waziristan, now a region of Pakistan. Falconer completed nearly 30 years service, was mentioned in despatches twice during WWII, awarded a CBE in 1945 and retired on 1 April 1949 as an Air Cdre. Mills completed 42 years service, was also mentioned in despatches twice and awarded the DFC during WWII, and retired in the rank of ACM with a CB(1945), a KCB (1954) and a GCB (1959) to his name.



# 1921 Graduation Parade of 'F20'



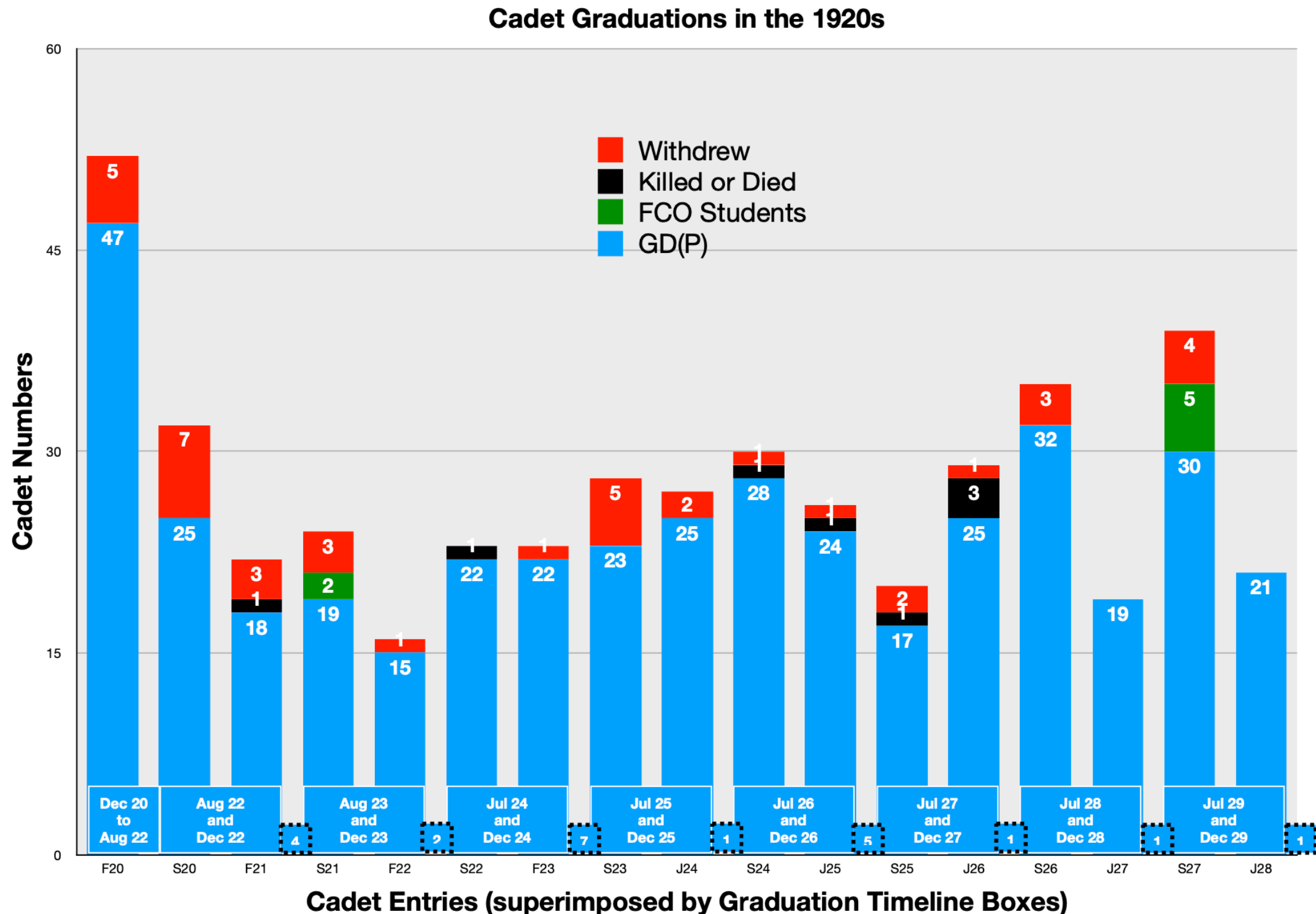
INSPECTION, DECEMBER 19TH, 1921.

(a) The Cadets. (b) The Flying School.

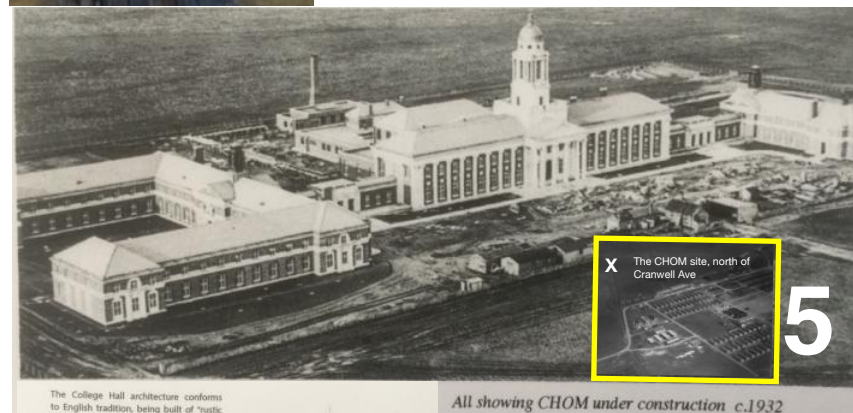


# Flight Cadets System Output - 1920s

The alleged objective of 50 pilot recruits per course, two courses a year, does not appear to have been maintained over the first decade, the average being near 28. The pass rate seldom fell below 80%; re-coursed cadets averaged at three every two courses; there were eight fatalities, an average of one every two courses. By any standard, these are remarkable statistics, given the 1920s was a period of austerity, with little public appetite for a military career following the traumatic experiences of the Great War. Trenchard's vision had materialised.



# Evolution at the RAF College - 'CHOM'



1. Realising Trenchard's vision for an RAF College on the lines of Sandhurst and Britannia, RAF Cranwell was officially formed on 1 November 1919 and opened for business on 5 February 1920.
2. The decision to replace the existing corrugated iron huts was made in 1922.
3. By 1929, plans had been drawn up, the final version of which produced the building which we see today. The Secretary of State for Air in Stanley Baldwin's Government, Lord Hoare, was highly supportive. The problem was that a general election (which Baldwin was expected to lose) was imminent and so Hoare pulled off what he described as "an act of bluff": Lady Maud Hoare - his wife - laid the foundation stone on 29/04/29 to the left of the entrance, in front of worthies that included Viscount and Lady Trenchard, AVM Longcroft (1st Commandant) and Sir James Grey West (Architect). The event was noted in the Statute Book and so, when the new Government was formed by Ramsay Macdonald, it seems that approval was assumed and building went ahead.
4. A tinned steel time capsule, held within the foundation stone, holds a record of all present and a special edition of the RAF Journal Vol IX No 1 with details of every cadet who passed through the College since its inception in Feb 1920.
5. Constructed in 1932, the RAF College design was based on St Pancras Station and the dining room on the long room at the Royal Hospital, Chelsea. The station canopy of the branch line terminus joining the main Cranwell station (currently the guard room) can still be seen from behind the kitchens.
6. The new College was first used by cadets in 1933, but not formally opened until 11/10/34 by HRH Edward, Prince of Wales - the honorary Air Commodore in Chief of the Auxiliary Air Force
7. The Foundation & Commemorative Stones can be seen either side of the front entrance



## Part 2 - Transition To and From WWII

Just as Flight Cadets were just getting used to their new College Hall Officers' Mess (CHOM), Germany was going through its own transition. In January 1933, Adolf Hitler had assumed control as Chancellor. At the March 1933 elections, no single party secured a majority. Hitler required the vote of the Centre Party and Conservatives in the Reichstag to obtain the powers he desired. On 23 March 1933, he called on Reichstag members to vote for an Enabling Act, which granted him plenary powers "temporarily" and freedom to act without parliamentary consent and without constitutional limitations. The rest, as they say, is history.

Despite Chamberlain's attempts at appeasement, the UK was plunged into a second world war on 3 September 1939. Flight Cadet training was suspended immediately and was not reinstated until 1947. As immediately, the RAF College became a Service Flying Training School (SFTS), all assets being transferred to the new 'College SFTS'.

The last Flight Cadet Entry to complete on schedule, in July 1939 and unaffected by the outbreak of war, was S37. Thereafter, there were five Entries - J38, A38, S38, J39, A39 and S39 (which became A40) that were materially affected:

- J38 with 28 cadets started in January 1938; 23 graduated in September and October 1939; one cadet withdrew;
- A38 with 21 cadets started in April 1938; 19 graduated in October 1939; two cadets withdrew;
- S38 with 29 cadets started in September 1938; 23 UK cadets and three FCO cadets graduated in December 1939; three withdrew;
- J39 with 25 cadets started in January 1939; all graduated between December 1939 and April 1940;
- A39 with 25 cadets started in April 1939; two were killed in flying accidents; 19 graduated in March/April 1940; four withdrew;
- A40 (which was supposed be S39 starting in September 1939) actually started with 22 cadets in April 1940, they having already been sent *pro temps* to 9 Elementary FTS at Ansty; one was killed in a flying accident; in July 1940, their Flight Cadet designation ceased all 20 transferring to a College SFST Course as AC2/LACs to complete advanced flying training.

From our research, we believe that the College SFTS flying curriculum changed at least twice during WWII, responding to the demands as the war unfolded. Initially, the priority demands were for fighter pilots (for the Battle of Britain) and then bomber pilots as Bomber Harris took the war to Germany. On average, the College SFTS initiated one flying course a month, lasting 4½ months, delivering basic and advanced flying training to two sqns of trainees, each initially comprising up to 20 students. As the war progressed and demand increased, intakes grew to as many as 25 pr sqn. By 1942, intakes started to include pilots from different services and allied countries - see <https://www.cranwellian-ian.com/alumni/ewExternalFiles/Vol1IntCranwellians1.0.pdf>.

On 13 March 1944, the College SFTS moved out of CHOM to Bristol Wood Officer's Mess near Plantation Road and the old North airfield; they reformed at 17 FTS. They delivered 50 to 56 Courses to the College SFTS curriculum, seven GST courses and 16 Refresher Courses before handing over to 19 FTS and transferring to Spitlegate on 1 May 1945, a week before VE Day. As the war came to an end, 19 FTS delivered 11 courses to 310 aircrew, before the Flight Cadet training system was reinstated in 1947.



# College Journal Extracts - Spring 1939

With just weeks to go before war was declared, the College Journal issued its Spring 1939 edition that included *inter alia* some notes by the Editor on Old Cranwellians' progress. Reference to cadets of F20 are highlighted in the extract here, that includes a timely 'sitrep' on those who were the first to have reached the rank of Wg Cdr.

"In conclusion, Herr Doktor (whom God preserve for many years!), I was glad to receive through Flight Cadets P. A. Major and J. E. Preston two generous motions from the College Debating and Literary Societies.

"I should have liked to acknowledge publicly—as I have acknowledged privately—I do not know how many other generous messages, notably those from Squadron Leaders E. C. Dearth and H. R. Dale, and Flying Officer Patrick Gibbs, all of whose letters to me have gone into cold storage.

"I greatly enjoyed two small reunions at 'The George' at Grantham, though I detected a serious decline in the appetites of 'the young gentlemen of the College,' as Mr. Pepys would have called them. Flight Cadet Henry Breese could barely manage four doughnuts—

*Timeo Danaos et Doughnut Ferentes*

—Flight Cadet N. D. Hallifax surrendered, *sans phrase*, to his dozenth cake; and Flight Cadet J. E. R. Hayter, despite a long perusal of *The New Statesman*, could manage only five cups of tea.

"Please give Mr. D. E. Williams and his good lady my best salutations. All hail!—or heil! if you prefer the modern vogue, though I resist to the last ditch any totalitarian innuendo.

"Yours sincerely,  
"R. DE LA BÈRE."

\* \* \*

Squadron Leaders H. M. Mellor, M.V.O., and R. K. Hamblin have been nominated for the Staff College, Camberley, for the course commencing in January, 1940.

\* \* \*

Wing Commander S. H. Ware, who once ran the Beagles at the College, has assumed command of the R.A.F. station at Helwan, Egypt. He was in command of No. 211 (Bomber) Squadron, which in April last was moved from Grantham to Helwan.

\* \* \*

Squadron Leader H. F. G. Southey has taken up signals duties at the air station at Ismailia.

\* \* \*

Flying Officer D. E. Bennett has been assisting at the R.A.F. stand at the Paris Aero Exhibition.

\* \* \*

Among the R.A.F. team who recently beat the Rump Club in a squash rackets match at Kensington County Club were the three Old Cranwellians Squadron Leaders J. W. C. More and M. G. Philpott, and Flight Lieutenant J. McM. Hughes, and Flight Lieutenant A. W. Sweeney of the College.

\* \* \*

Flight Lieutenant M. F. B. Read has joined the administrative staff in the Aden Command.

Congratulations on their promotion to Flight Lieutenant to:—

H. M. Styles, E. M. T. Howell, L. Rose, H. C. Sawyer, J. L. Crosbie, B. A. C. Wood, H. D. Fraser, D. H. S. Rusher, I. C. Jackson, L. C. Bicknell, D. H. Lee, F. M. Smith, D. B. Hatfield, D. F. Dixon and J. A. Tuck.

\* \* \*

We regret to announce that the following have retired from the active list on account of ill-health: Flight Lieutenants H. H. Leech, H. G. Richards and F. L. P. Henzell.

\* \* \*

We offer our congratulations on their engagements to:—

Squadron Leaders G. Stanley-Turner, E. J. Corbally, G. R. C. Spencer, L. W. Dickens and W. P. Welch, Flight Lieutenants W. A. Hughes, D. P. Hanafin and G. C. Eveleigh, and Flying Officer W. I. C. Inness.

\* \* \*

We are delighted to congratulate the first Old Cranwellians to reach the rank of Wing Commander. *The Times* commented on the promotions as follows:—

"A feature of the New Year promotions is the inclusion of the first officers to be promoted to the rank of wing commander from among cadets who were trained at the R.A.F. College, Cranwell.

"The college was opened by Lord Trenchard on February 5, 1920, and of the 63 members of the first year who completed the course and were commissioned as pilot officers seven are promoted to wing commander from January 1. They were promoted to squadron leader between December 1, 1935, and April 1, 1936. Wing Commander C. W. Weedon (the first to become a squadron leader) is an engineer specialist, and is now serving at the School of Aeronautical Engineering at Henlow. Wing Commander Gerard Combe specialized in armament duties, and is now experimental officer at the Chemical Defence Station. Wing Commander W. L. Dawson is serving with No. 216 (Bomber Transport) Squadron in Egypt. Wing Commander E. A. Hodgson, now commanding No. 1 Coast Artillery Co-operation Unit at Gosport, is probably the only officer with flying service in the War who afterwards became a cadet at Cranwell; he was originally in the R.N.A.S. Wing Commander G. R. C. Spencer, who was a midshipman in the Navy during the War, now commands No. 47 (Bomber) Squadron at Khartoum. Wing Commander G. H. Mills is on the staff of the Deputy Directorate of Operations at the Air Ministry; and Wing Commander R. N. Waite commands No. 224 (General Reconnaissance) Squadron at Leuchars."

\* \* \*

We are glad to record that an old squadron commander, Air Vice-Marshal C. F. A. Portal, has been awarded the C.B., and Wing Commander A. G. Bishop has been promoted to Group Captain.



# RAFC Transition to and from War

Whilst researching the College archive in 2018, we by chance stumbled on a file entitles “Airmen of WWII”, in which we found listings of those trainee pilots who underwent basic and advanced flying training at the College SFTS (renamed 17 FTS in March 1944). Amongst the listings was the “anonymous” brief below, which is the only explanation found in the college of the transition of College training to and from WWII. We it was prepared for one of the Cmdts shortly after WWII and was prepared in two parts. The first bounded in red was a two page summary of the impact of WWII on training operations; the second bounded in black an appraisal of training assets deployed at Cranwell and its satellite airfields.

## BRIEF NOTES ON ROYAL AIR FORCE CRANWELL OCTOBER 1939 TO MAY 1940

All Instructional Staff and Flight Cadets were recalled from leave to the College on 30 August 1939 in view of the grave international situation. Immediately after the declaration of war against Germany, the Royal Air Force College ceased to function as such and was formed as the Royal Air Force College Flying Training School. There was no change of staff or students, but the normal Flight Cadet syllabus was dropped and all emphasis was on Flying Training. The FTS had an Intermediate Training Squadron and an Advanced Training Squadron.

The last PROPER Flight Cadet Entry to pass out was the September 1937 Entry which passed out on 28 July 1939. The following entries were at various stages of instruction (normally the Flight Cadet Courses lasted 2 years) at the outbreak of war:

January 1938 Entry.  
April 1938 Entry.  
September 1938 Entry.  
January 1939 Entry.  
April 1939 Entry.

The Entry due in in September 1939 was already recruited and in the pipeline; this was sent initially to No 9 Elementary Flying Training School at Royal Air Force Ansty. Later they came back to Cranwell in April 1940 to join the FTS and was called the April 1940 Entry.

All the Flight Cadets in these 6 entries were listed as Aircraftmen 2 (AC2) on 7 September 1939, then on 8 September 1939 as Leading Aircraftmen (LAC).

The Senior Flight Cadet Course, ie January 1938 Entry, were posted at the outbreak of war to Specialist Courses or to Operational Training Units. The rest of the 5 Flight Courses formed the nucleus of the first 5 Courses of FTS at Cranwell.

These 6 Flight Cadet Courses did NOT complete the proper Flight Cadet Training Course.

These first 5 FTS Courses were a mixture of ex-Flight Cadets, Royal Air Force Volunteer Reserve Pilots and ex-University Air Squadron Pilots.

The last ex-Flight Cadets (ie April 1940 Entry) were trained on No 9 Course FTS and were joined by 16 Australians. They passed out late August-early September 1940.

The May 1940 Course, ie No 10 Course FTS, were recruited from the Initial Training Squadrons and Elementary Flying Training Schools.

Pilots of many nationalities were a notable feature at Cranwell and in May 1942, for example, countries represented included Belgium, France and Turkey. British Army officers transferred to the RAF were also given training here. During 1943 Refresher Courses were introduced for pilots who had been on non-flying duties and during the latter half of the war a regular flow of Turkish aircrews passed through the School, and carried out an abridged operational training course on special flights of Spitfire and Blenheim aircraft. By 1943 the original Relief Landing Grounds at Fulbeck and Barkston Heath had been earmarked for development by Bomber Command and the satellite airfields at Caistor and Wellingore were taken over in their place. Coleby Grange airfield was also adopted as a relief landing ground in the autumn of 1944 when it had ceased to function as an operational night fighter station.

The SFTS was moved out of the College buildings in January 1944 and a few weeks later was redesignated 17 SFTS. Following the Invasion in June it was required to deal with increasing numbers of aircrew released from POW captivity and the trainin

given to these pilots, as well as to aircrews from a number of countries overseas, including Iraq and Persia, formed the main duty of the unit in the last months of war. During this period the complement of Oxfords and Masters was augmented by Harvards, Blenheims and Spitfires and immediately before VE day the unit moved to Grantham (Spitalgate). Its place was taken by 19 FTS which commenced to form with Harvard aircraft on 1<sup>st</sup> May 1945.

The departure of No 2 CFS in June 1941 had meanwhile left room for the arrival of No 3 (Coastal) Operational Training Unit which was reformed at Cranwell in August as a lodger unit. Wellingtons and Whitleys formed the principal equipment of the unit, which also used a number of Ansons, and its function was to train crews for Operational Squadrons in Coastal Command.

In addition to conversion training on to large aircraft, the bombing and gunnery practice, the 3 OTU syllabus included long cross country and overseas training flights from Cranwell; one regular exercise route extended out to Rockall and required some 980 miles of flying.

It was a Whitley of 3 OTU which, during night flying on 18<sup>th</sup> March 1942, crashed into the roof at the west end of the College, killing its crew of three and causing extensive damage to the building. A year later the last Whitleys were withdrawn from service, and the unit received additional Wellingtons, some of which were equipped with Leigh Light equipment. No 3 OTU remained at Cranwell until June 1943 when it moved to Haverfordwest.

Returning to September 1939, Cranwell was also the home of No 1 Electrical and Wireless School, which was responsible for the training of airborne Wireless and Radar Operators and ground electrical and wireless tradesmen. The Schools' flying activities were carried out by the Signals Squadron, which in 1939 was mainly equipped with Wallace aircraft and was located on the North aerodrome. Other types

used included Magisters and DH 86s as well as one or two ancient Valentias, which continued in use as flying classrooms until the last was retired in February 1942.

The flying element of 1 E&WS became part of No 1 Signals School during a reorganisation in August 1940, and shortly afterwards its fleet of Wallaces was replaced by more modern Proctors. These bore the brunt of airborne W/O P training and were assisted by a smaller number of DH 86 and DH 89 aircraft. The unit was again redesignated in January 1943 becoming No 1 Radio School, but its functions and equipment remained the same and it continued its training programme until it was disbanded in may 1944.

Before the war Cranwell had become one of the first airfields to be equipped with a concrete runway, which was provided for the experimental long distance flights made by Wellesley aircraft in 1938. This facility subsequently proved valuable for trials of aircraft requiring a long take-off run, such as the massive Hamilcar glider which carried out some of its early flying from here. On 15<sup>th</sup> May 1941 an event of the utmost importance took place. On that day the Gloster E28/39 prototype was wheeled out of a guarded hangar and after running up its experimental jet engine took off from the runway for its flight. Though few were there to witness it at the time because of the need for top security, this was to be a historic moment not only for Cranwell but for the whole of British aviation. Trials with this aircraft continued at Cranwell and elsewhere and within two years a number of F9/40 development aircraft were ready for trials. One of these was also sent to Cranwell and on 5<sup>th</sup> March 1943 made its first flight here. Fourteen months later Meteors were joining the squadrons as the first jet aircraft to enter service in any of the allied Air Forces.

### CRANWELL

#### COMMAND

21 Group Training Command 1939-40  
21 Group Flying Training Command 1940-45

#### SATELLITE AIRFIELDS

Barkston Heath 1941-43  
Fulbeck 1941-42  
Caistor 1943-44  
Wellingore 1943-45  
Coleby Grange 1944-45

During the Second World War, Cranwell was one of the largest training centres in the RAF and housed up to 5000 personnel. Courses were conducted for both air crew and ground staff and large numbers of flying instructors, pilots and airborne wireless operators, as well as many crews for Coastal Command squadrons were trained here.

In September 1939 the RAF College and No 1 Electrical & Wireless School were the principal occupants of the Station. At the outbreak of war the College's Flying Wing was mobilised as a Service Flying Training School and was equipped with Audaxes, Hinds and Oxfords, plus a smaller number of Harts and Furies. As such it was split into Intermediate and Advanced Training Squadrons, and in the first six months of war part of the course was carried out by detachments at such stations as West Freugh and Warmwell where bombing and gunnery training was undertaken. During May 1940 Master Aircraft were introduced and in that fateful summer the school took on a further changeable appearance when it was rapidly reorganised, firstly to drop Advanced Training and double the Intermediate output in order to accelerate the flow of replacement pilots to the squadrons, and shortly afterwards to give up its single engined aircraft and concentrate on twin engined training with Oxfords. The Luftwaffe were not slow to realise the importance of the Station and several raids were made on Cranwell during June and September that year.

No 2 Flying Instructors' School was formed in September 1940 alongside the College SFTS for the purpose of training selected pilots as instructors which were urgently needed as the Air Force rapidly expanded. The new unit was equipped with Oxford and Tutor aircraft and after a few weeks was renamed No 2 Central Flying School. It quickly became an important unit in its own right, and moved out in June 1941 to a new airfield at Church Lawford.

The College SFTS meanwhile was growing both in size and importance, and by the Spring of 1941 was operating a fleet of over 150 Oxfords. To relieve the consequent congestion and facilitate night flying, Relief Landing Grounds were therefore brought into use at Fulbeck and Barkston Heath. In January 1942 the function of the unit was again changed to provide half single and half twin-engined training, and a number of Oxfords were replaced again by Master aircraft.

At some time early in this period (I cannot trace the actual date) the title of Royal Air Force College Flying Training School changed to Royal Air Force Service Flying Training School (RAFSFTS).

The length of the Course in Intermediate Training Squadron was 6 months, and concentrated on Flying Training with some ground school studies (navigation etc).

The Advanced Training School length of Course is not known, but they made detachments to West Freugh and Warmwell for gunnery and bombing practice. During May 1940 the Advanced Training School was dropped and the Intermediate Training School doubled in size to accelerate the flow of replacement pilots to the squadrons.

The average Course was about 39 students and the pilot wastage was approximately 25%.

The aircraft flown were:

Hawker Audax.  
Hawker Hind.  
Hawker Hart.  
Hawker Fury.  
Hawker Hector.  
Miles Master.  
Airspeed Oxford.  
and the single-engined aircraft were given up cMay 1940 in favour of the twin-engined Oxfords.

Accommodation was in the College Hall Building. The 'old' single rooms of the Flight Cadets were now double rooms. The larger rooms like the games rooms, lecture rooms etc were used as dormitories - there was gross overcrowding in all rooms. With the overcrowding, life in the Mess was a lot more informal and less rigid.

Cooks and dining hall staff were mainly all Women's Auxiliary Air Force (WAAF's). There was almost continuous flying, therefore meals were at all times. Strict food rationing was in force in the UK and meals were difficult to produce, eg early diners got meat, later ones got gravy!! Local farmers were asked to supply extra produce, meat and vegetables, for the 'War Effort'.

In the time span of October 1939 to May 1940 there was a particularly hard winter. From 1 to 25 February 1940, instructors and pupils were give leave because of the thick snow and the ice-bound state of the airfield.

\* \* \* \* \*

The above facts were gleaned from various notebooks, journals and papers deposited in the Royal Air Force College archives - there is no ONE definitive source. Indeed, as the College was officially closed and SFTS records were taken with them when they left in 1944, it is very difficult to piece together accurate details of College life 1939-1944.

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# July 1939 Prizewinners & Graduation

S37 was the last Flight Cadet Entry to graduate on scheduled before the outbreak of WWII. Prize winner, Under Officer Neville Stack shown below) was to become the 18th College Cmdt in 1967. Barnwell and Harris were both KIA in 1940; Martin won the DFC and Bar in WWII.

Of the five remaining Flight Cadet Entries to commence training before the outbreak of WWII, J38 graduated soon afterwards. We cannot be certain, but we suspect that the next four Entries (A38, S38, J39 and A39) completed flying training with the newly formed College SFTS as its first four courses whilst retaining their original Flight Cadet Entry designations, for the first official College SFTS Course was designated Course No 5. A couple of Flight Cadets from A39 Entry, including future CAS and CDS AH Humphrey, joined this No 5 Course. Cadets whose Flight Cadet (Entry A40) records were annotated "**War Years**" were inducted on No 9 Course of the College SFTS, to undertake their flying training. This hypothesis is consistent with the briefing notes of previous earlier slide.



**PRIZE-WINNERS.**

F./C. R. F. Martin.  
(Flying)

F./C. J. S. Barnwell.  
(King's Medal, Science and Service Subjects)

F./C. Cpl. R. E. Harris  
(Engineering)

F./C. U./O. T. N. Stack  
(Sword of Honour and Imperial and War Studies)



**VI TERM.**

*Back Row*—F./C. M. D. Lyne. F./C. G. F. Harding. F./C. C. V. Beacon. F./C. Cpl. R. V. Herbert.  
*3rd Row*—F./C. Cpl. J. B. Holgate. F./C. J. S. Barnwell. F./C. P. E. A. Carr. F./C. A. Bouwens. F./C. R. B. Knowles. F./C. J. D. Willis. F./C. H. S. P. Halton. F./C. H. C. Randall.  
*2nd Row*—F./C. R. F. Martin. F./C. V. J. Pattison. F./C. P. L. Gordon-Dean. F./C. P. A. Hughes. F./C. J. E. R. Wood. F./C. J. M. Taylor. F./C. D. H. T. Dowding.  
*Front Row*—F./C. Cpl. P. W. Cook. F./C. Cpl. B. G. Mace. F./C. Sgt. M. H. Franklin. F./C. Sgt. J. E. Preston. F./C. U./O. P. A. Kington. F./C. U./O. T. N. Stack.  
F./C. U./O. W. Beringer. F./C. Sgt. J. W. Carmichael. F./C. Sgt. J. Tillet. F./C. Cpl. J. Child. F./C. Cpl. R. E. Harris.  
F./C. Sgt. C. I. D. Halliday (absent—sick).



# SFTS No 5 Course Sqns 1 and 2, plus additions

As mentioned earlier, Course No 5 is the first recorded College SFTS course found in the College archive. Note, neither Humphrey of Bilderdeck, both cadets of Entry J39 and attached to Course No 5 to complete their flying training, appear in any of the Intake photos for Course no 5 shown below. This page also shows the “understated” declaration of war entered in the Cranwell Station ORB. Kenneth Campbell on 2 Sqn No 5 Course was one of five Cranwellians to be awarded a VC.



OPERATIONS RECORD BOOK				
of (Unit or Formation).....			R.A.F. Form 540	
Station Headquarters, CRANWELL.			No. of pages used for day.....	
Place.	Date.	Time.	Summary of Events.	References to Appendices.
CRANWELL.	1.9.39.		Lieutenant T.A. Tindle assumes the duties of Station Defence Officer. Education Officers - members of the Royal Air Force Volunteer Reserve - recalled for duty. Aerodrome Council School closed owing to evacuation.	D.R.O. 170.  D.R.O. 168.
	2.9.39.		Lighting restrictions introduced, and guards posted at entrances to the Station.	
	3.9.39.		Receipt of message stating that War has been declared on Germany by the Allied Powers. Group Captain Strugnell, MC., posted to Command (A/Cdre Post). Royal Air Force College becomes a Flying Training School, and is self-controlled.	A.M.P.L. 319.





# SFTS 52, 53, 54, 55 & 56 Course Sqns 1 and 2

No 52 Course

Lt. M	AKCAY
Lt. N	AKCIN
Lt. N	AKDAG
Lt. K	AKKAYA
Lt. J	AKKOC
Lt. B	ALATLI
Lt. S	ALAYBAYOGLU
Lt. F	ALKANAT
Lt. V	ALTINAY
Lt. S	ALTINOK
Lt. Y	ANABOLU
Lt. F	ANG
Lt. C	ATAY
Lt. S	AYDINLIOGLU
Lt. S	AYKILIC
Lt. L	BIBEROGLU
Lt. A	CANISIZOGLU
LAC T	CARTWRIGHT
Lt. N	CELIK
Lt. R	CELIKCAN
Lt. I	CETINBINICI
Lt. I	DARICI
Lt. I	DIVIL
Lt. M	DIZDAR
Lt. E	DONMEZ
Lt. K	ERENEL
Lt. H	ERORHUN
Lt. E	ERSAN
Lt. F	FALAY
Lt. C	GOREN
Lt. M	GOREZ
Lt. I	GOZDE
Lt. N	GULETKIN

No 52 Course (Cont'd)

LAC FR	LEADON
Gr. RH	LEPERS
Lt. K	MADASOGLU
Lt. S	NASUH
Lt. C	ORHUN
Lt. I	OZER
Sgt. TA	ROBERTS
Lt. M	SARP
Lt. S	SIRBAS
Lt. M	SOMMER
Lt. H	TAMER
Lt. H	TOROS
Lt. F	TUNCER
Lt. F	TURKAN
Lt. M	UNALP
Lt. M	KYAR
LAC JT	WILKINSON
LAC SJE	WOODHAMS
Lt. A	YILDAM
Lt. C	YONER
Lt. K	ZEREN

No 53 Course

LAC RE	ATTWELL
AC2 WEE	AUCHINCLOSS
AC2 DS	BAMJEE
AC2 TIY	BARKLEY
AC2 GP	BARRY
AC2 IT	BERNARD
AC2 WF	CORFIELD
P/O HG	COX
AC2 HAR	EDWIE
AC2 WCT	EASTERBROOK
P/O JC	EVELEIGH
ALA HNM	FISKE
F/Sgt L	FOX
F/Sgt G	GOLAY
F/Sgt RC	GREEN
AC2 GE	GREGORY
Lt. Col. H	GULANSHAH
AC2 D	HENDLEY
Gr. LM	JAMES
Lt. M	KASSIM
Sgt J	KING
LAC JH	KINGSBURY
AC2 RG	LAVELL
AC2 JC	LAWSON
LAC SW	LEITCHFORD
Lt. A	MAHMOOD
AC2 RCR	MANSFIELD
AC2 W	MCPHERSON
AC2 DAR	NORDOTT
AC2 H	OLIVER
LAC J	PEUDLE
AC2 HN	PITCHER

No 53 Course (Cont'd)

Lt. A	RAZZAQ
LAC FJ	ROBERTS
AC2 DJ	ROWSON
AC2 JPK	SCRINGEOUR
WO A	SHARP
LAC TL	SHOESMITH
Sgt F	SLEZAK
LAC K	SLOOF
AC2 RN	SMITH
AC2 J	SNOWDEN
LAC RJ	TITCOMB
Gr. H	TOUFANIAN
F/O JE	TOWNSEND
LAC MH	WILLIAMS
F/O RS	WALMSLEY
Gr. HJM	WARREY
Lt. PE	WEBSTER
AC2 RWC	WINTERBOTHAM

No 54 Course

Lt. H	ADJUDANI
Lt. AM	AKSAVAS
AC2 LJ	ALLISTON
Lt. R V	ATAKAN
Lt. H	AYAR
Lt. H	AYBEY
Lt. A	BASAT
P/O YJ	BEEK
Lt. F	BEKEN
Lt. M	BAYIK
AC2 IS	CLAYDEN
P/O JWR	CHADWICK
AC2 MR	CHARLES WORTH
Lt. I	DINGER
P/O WA	EDMONDSON
Lt. N	EREL
LAC J	EVANS
Lt. M	EZILER
F/Sgt DB	GIBSON
Lt. L	GUNDOSDU
LAC WA	HALL
AC2 FE	HATCHARD
Lt. AA	JAHANBIN
AC2 ETR	JONES
Lt. H	KADAVICIOGLU
Sgt RA	KEMPE-ROBERTS
Lt. S	KESKINER
Lt. M	KHATAMI
Lt. A	KHOSROVA
AC2 DW	LEVY
P/O RP	LOUANT
AC2 AJ	MILLS
P/O ND	MORTON

No 54 Course (Cont'd)

2d Lt. J	OZAYDIN
Lt. F	OZSU
AC2 FP	PACMER
F/Sgt J	PERRY
F/Sgt LE	PUTMAN
AC2 WR	RENDELL
WO L	RUDKIN
Lt. S	SALT
Lt. N	SHAHAKH
Lt. C	SISMANTEK
WO H	SMITH
LAC G	SPENCER
Lt. I	TANBOGA
2d Lt. K	TAT
Lt. S	TAVACOLI
Lt. S	TAVAZAR
Lt. M	UYAR
Lt. M	VERDIOGLU
Lt. I	YALCIN
Lt. A	YETKIN
Lt. N	YILMAZ

No 55 Course

F/O DV	BEADON
F/Lt B	BEECHY
WO WJ	BENTON
F/O VD	BIDDULPH
P/O JW	BLACKMORE
WO EJ	BOARDMAN
AC2 CA	BOIM
AC1 FW	BOOTLE
AC2 D	BRADSHAW
AC2 ED	BRAGE
F/Lt HWG	BURTON
P/O JD	CLEWES
F/O BC	COATES
F/O JG	COPELAND
AC2 A	CREIGH
F/O JH	CRIDGE
F/O P	DRONSFIELD
P/O AA	EDMONDSON
F/O AF	EGERTON
WO R	ELEY
WO HG	FILER
WO LF	GREEN
AC2 E	GUITT
F/O C	HALL
P/O M	HAMNETT
AC2 H	HITCHENS
LAC JD	HOGG
F/Lt M	HOYLE
WO A	ISBISTER
LAC H	JAMES
AC2 YA	KERR
AC2 G	LA HEI

No 55 Course (Cont'd)

P/O ANH	LADGE
AC2 E	MEAD
LAC OR	MESSUM
LAC RC	MILLER
F/O GV	MORTIMER
F/O LJ	MORTON
F/Lt RBG	MURPHY
AC2 HT	O'BRIEN
WO AM	PEASE
F/O R	ROOK
Sgt DJF	ROXS
WO RA	SMITH
WO JH	STEWART
F/O CW	STOKES
AC2 WFER	TEN RAA
F/Lt FC	THOMAS
WO RS	THOMPSON
WO ED	THORN
AC2 D	VANDENBERG
AC2 L	VAN GELDER
Sgt RM	VAN LUYK
R/Lt EE	WILLIAMS
AC2 DR	WORGAN

No 56 Course

P/O JL	BAYLEY
F/Sgt RS	BREEZE
AC2 AC	CHIN
F/Sgt GW	COLVILLE
LAC MS	CORNISH
AC2 F	DE GROOT
AC2 JC	DODD
AC2 NF	FELTON
S/L AA	FLETCHER
AC2 M	FRASER
AC2 BV	HARRIS
LAC HE	JONES
AC2 D	KOTALAWALA
Gr. RFC	LAXEN
P/O LY	LEE
AC2 A	LEHETA
P/O HT	MACKIE
P/O GAM	McHATTIE
AC2 AJ	MARTIN
AC2 LJ	MAURO
AC2 W	MURCHIE
P/O BR	MUSGRAVE
LAC N	OKKER
AC2 FG-S	PHELAN
AC2 C	PICKERING
AC2 HK	PIERCE
AC2 F	PINNOCK
F/Sgt JB	PORTERFIELD
AC2 GF	RANDAG
Lt DG DA	RUSSELL
AC2 E	SCHIFF
AC2 RM	SCOTT

No 56 Course (Cont'd)

AC2 A	STEWART
AC2 WG	STRACHAN
AC2 JH	STRAKER
AC2 JF	STUBBS
AC2 EA	TAYLOR
AC2 L	TINEKHAM
ALA CF	VAN EENDENBURG
ALA J	VAN KUIJK
AC2 CA	VAN ROSSUM
LAC JE	WALKER
P/O AM	WILSON
P/O GN	ZEYLMANS

32 Aberdeen Place, St. John's Wood, N.W.8. (58)

19 December, 1944.



Dear Mrs. Gibson,

I have been awaiting an opportunity to write to you about the loss of your husband. I can assure you that I write in no formal sense.

I had a great admiration for him - the glorious Dam-buster. I had hoped that he would come into Parliament and make his way there after the stress of the war was over, but he never spared himself nor would allow others to spare him. We have lost in this officer one of the most splendid of all our fighting men. His name will not be forgotten; it will for ever be enshrined in the most wonderful records of our country.

May I express to you my profound sympathy in the loss you have incurred, and my earnest hope that you will find in yourself those resilient and heroic qualities of which your husband was the proud possessor.

Yours very sincerely,  
WINSTON S. CHURCHILL.

Mrs. Guy Gibson.



# Emergence of WWII Training Assets at RAFC

Using the data from the anonymous “Cmdt’s Brief”, the WWI training aircraft are depicted here with links to videos (graphics) and descriptions (titles)



Hawker Audax



Miles Master



Spitfire Mk V



Bristol Blenheim I



Havard



Westland Wallace



Hawker Hind



Airspeed Oxford



Hawker Hart



Hawker Fury



DH 86 Express



Airspeed Envoy



Vickers Valentia



DH 89 Dominie



Avro Tutor



Vickers Wellington

[To open the links in a separate browser tab and thus not lose your place in this e-document, press control+click (Windows) or command+click (Apple Mac) on the underlined word or image] 2-7

## CRANWELL

<u>PRINCIPAL UNITS</u>							
From	Date	Unit	Aircraft	Mark	Code	Date	To
-	-	RAF College Service Flying Training School				20.3.44	Redesig
			Audax	(9.39-40)			
			Hind	(9.39-40)			
			Oxford	(9.39-3.44)			
			Hart	(9.39-40)			
			Fury	(9.39-40)			
			Master	(5.40-9.40) (1.42-3.44)			
			Spitfire	(43-3.44)			
			Blenheim I	(43-3.44)			
					det West Freugh	23.9-22.10.39	
					det West Freugh	6-21.12.39	
					det West Freugh	10.1-6.2.40	
					det Warmwell	21.2-6.4.40	
					det Warmwell	26.4-9.5.40	
					det Dumfries	25.8.43-9.43	
					det Dumfries	23.11.43-12.43	
From	Date	Unit	Aircraft	Mark	Code	Date	To
RAFC	20.3.44	17 Service Flying Training School				1.5.45	Spitalgate
SFTS			Oxford	(3.44-5.45)			
			Master	(3.44-5.45)			
			Spitfire	(3.44-5.45)			
			Blenheim I	(3.44-5.45)			
			Harvard	(9.44-5.45)			
			Blenheim V	(3.45-5.45)			
-	-	1 Electrical and Wireless School				1.8.40	Redesig
			Wallace	(9.39-40)			
			Magister	(9.39-40)			
			Mentor	(9.39-40)			
			DH.86	(9.39-40)			
			Envoy	(9.39-40)			
			Valentia	(9.39-40)			
			Harvard	(9.39-40)			

## CRAIL

From	Date	Unit	Aircraft	Mark	Code	Date	To
1 E&WS	1.8.40	1 Signals School	Wallace	(8.40-40)		1.1.43	Redesig
			Proctor	(11.40-1.43)			
			DH. 86	(8.40-42)			
			Dominie	(40-1.43)			
			Valentia	(8.40-2.42)		31.5.44	Disbanded
1 SS	1.1.43	1 Radio School	Proctor	(1.43-5.44)			
			Dominie	(1.43-5.44)		14.11.40	Redesig
Formed	10.9.40	2 Flying Instructors School	Oxford	(9.40-11.40)			
			Tutor	(9.40-11.40)		15.6.41	Ch Lawfd
2 FIS	14.11.40	2 Central Flying School	Oxford	(11.40-6.41)			
			Tutor	(11.40-6.41)		20-23.6.43	Havfdwest
Reformed	6.8.41	3 Operational Training Unit	Wellington	(8.41-6.43)			
			Whitley	(8.41-4.43)			
From	Date	Unit	Aircraft	Mark	Code	Date	To
			Anson	(8.41-4.43)			
			Lysander	(8.41-43)			
			Martinet	(43)		det Templeton	30.11.42- 22.6.43
Reformed	1.5.45	19 Flying Training School	Harvard	(5.45)		-	
			Anson	(5.45)			
			Tiger Moth	(5.45)			
<u>OTHER UNITS</u>							
-	-	21 Group Communication Flight				44	Spitalgate
Shawbury	25.10.41	11 SFTS	Oxford	II		11.41	Shawbury
Snailwell	8.43	2 Heavy Glider Maintenance Unit				44	



Bristol Blenheim V



Miles Magister

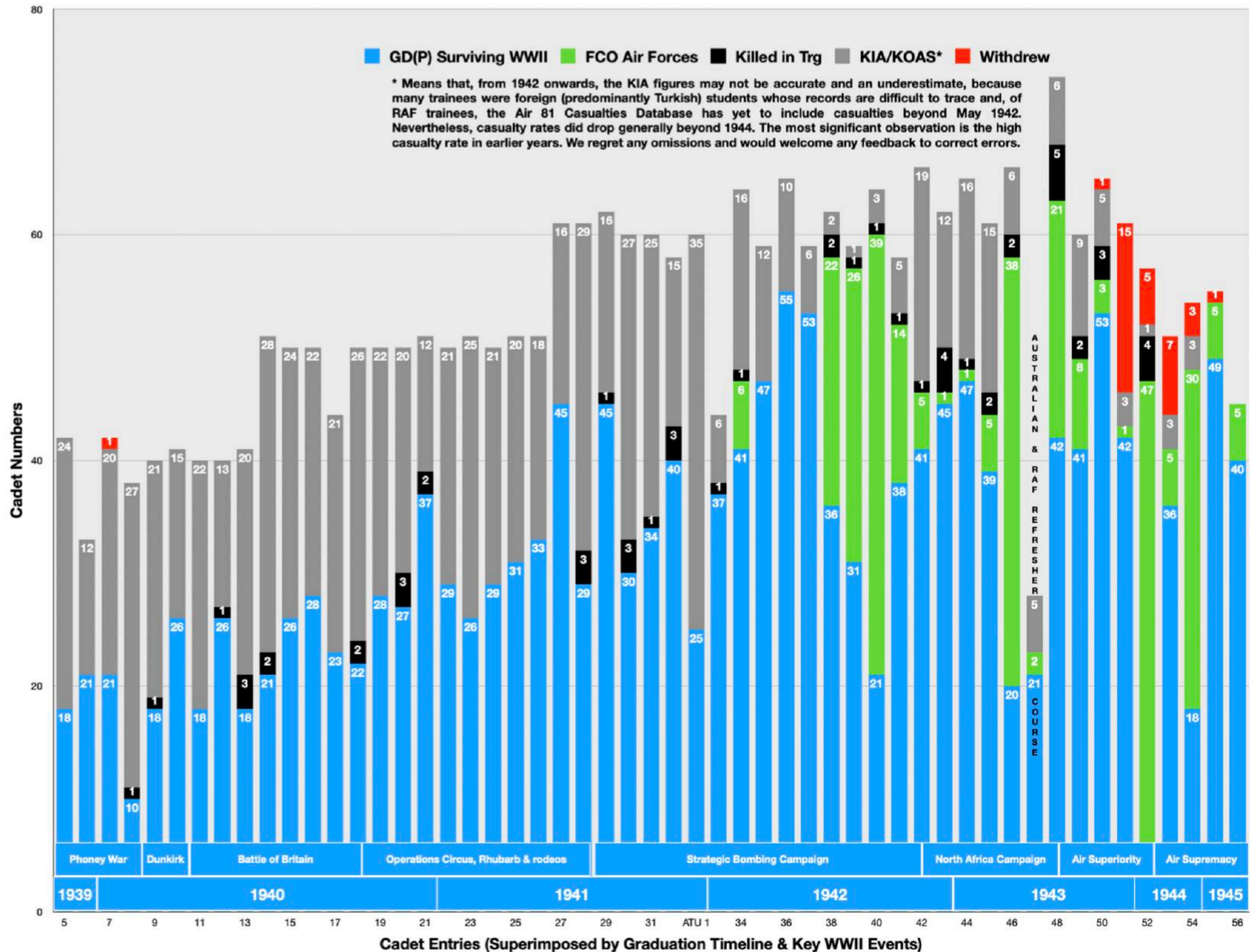


Gloster Meteor



# War Years Training Statistics - College SFTS

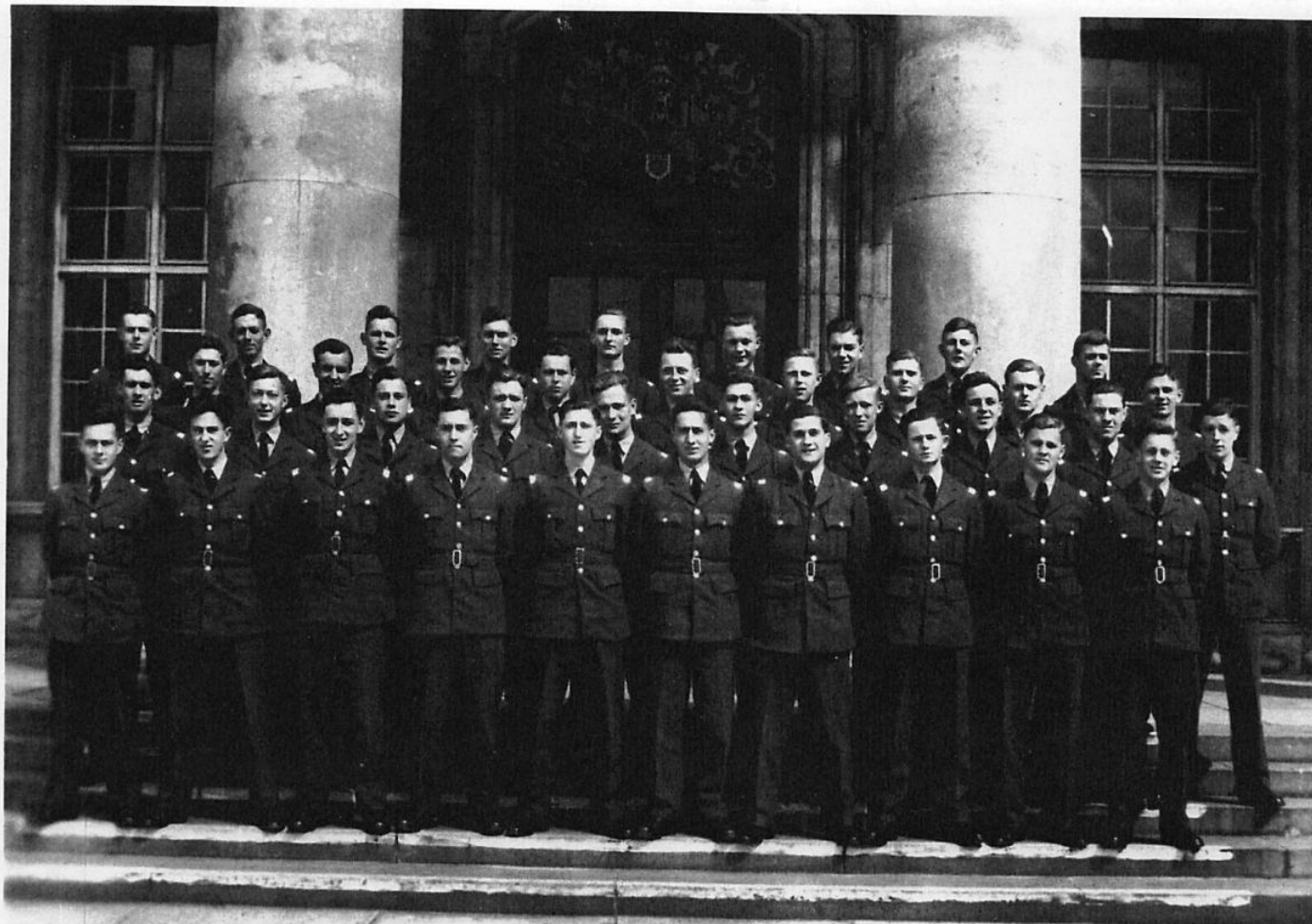
SFTS Trainees 1939 - 1945





# Nos 10 & 11 Courses 19 FTS

At the cessation of war, 17 FTS moved to RAF Spitalgate, near Grantham. Flying training at RAF Cranwell was then vested in 19 FTS who ran eleven courses before the College was re-opened for officer training of Flight Cadets. It appears that members of the last two 19 FTS courses were given the option to complete a further 3 months officer training on what became 45 and 46 Flight Cadet Entries.



Hermitage Levy Hopkins King Nicholls Ferguson Lines Morris Burton  
Goldman Bubbs Wyborn Newell White Langford Page Seringsworth Jelly  
Hughes Saker Davidson Vaughan Dobson Hamley Squires Lomas Twigg Scott  
Bailey Allman Gaywood Newman Pascoe-Watson Butt Burgoyne Hards Bore More

R.A.F. OFFICIAL  
CROWN CO. RIGHT RESERVED

R.A.F. CRANWELL  
REFERENCE 9104

No 10 Course 19 FTS

19 FTS No 11? Course Commissioned 14 April 1947

BUSBY, G L

TOSELAND, M F

MAYES, D J

HARKER, D A

REDMAYNE, P W

BRAND, R S.

ROSEWELL, K R

NEWMAN, A T

BROWN, K W

LEACH, R W

COTTAM, J C

CHARPLE, H B

HOWARD, T A

BAVIN, A C

McNEILE, M A

SMITH, A E

PARTRIDGE, F A

ABREY, P J

WILLIAMSON, T R J

ALLAN, J R

PIHEYSEY, G H



SENIOR TERM, MARCH, 1948

Back Row: F.C. Corps. J. W. Morrice, D. B. D. Hamley, H. R. W. Morris, C. M. Bruce, H. W. Cafferata, A. K. McGrigor.  
Front Row: F.C. Sgts. C. F. A. Curtis, C. M. A. Vallance, F.C. U.O.s. M. M. J. Robinson, L. S. R. Smith, J. E. Y. King,  
F.C. Sgt. R. L. Tavanyar, F.C. Corp. G. M. Hermitage.



No. 46 ENTRY, SENIOR TERM, MAY, 1948—APRIL, 1949

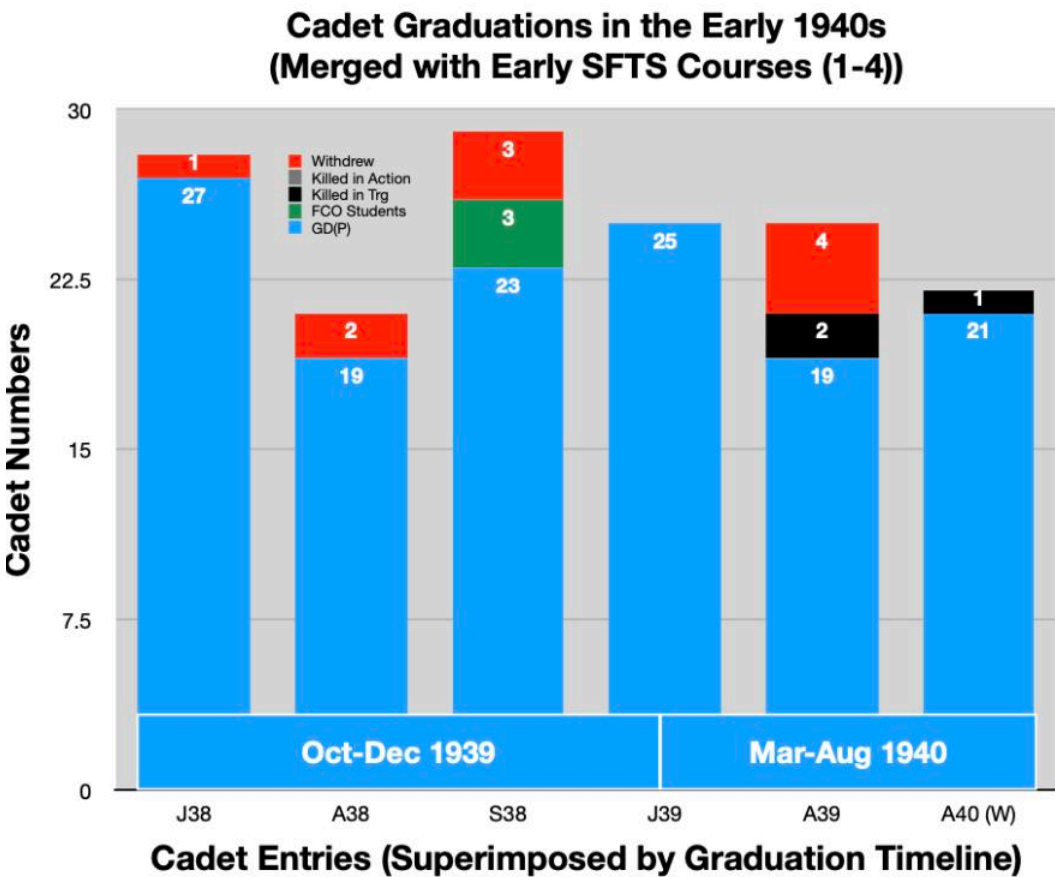
Back Row—F.C. Cpl. P. R. Sanderson, F.C. Cpl. L. G. Ludgate, F.C. Cpl. J. G. Burns, F.C. R. F. Read, F.C. A. J. L. McFarlane, F.C. W. R.  
F.C. J. E. Davies, F.C. P. W. Fines, F.C. N. B. Harben, F.C. Cpl. G. R. K. Fletcher, F.C. Cpl. A. B. Stinchcombe, F.C. Cpl. R. V. Stephenson, F.C. Cpl. D. J. Muff  
Centre Row—F.C. G. R. K. Fletcher, F.C. Cpl. A. B. Stinchcombe, F.C. Cpl. R. V. Stephenson, F.C. Cpl. D. J. Muff  
Front Row—F.C. Cpl. W. A. Slater, F.C. Sgt. E. D. Finch, F.C. Sgt. H. A. Caillard, F.C. U.O. T. L. Kennedy, F.C. U.O. P. V. Pledger, F.C. U.O.  
Four Trench—F.C. Sgt. J. M. Robertson, F.C. Sgt. P. C. Skinner, F.C. Sgt. R. A. Pendery, F.C. Sgt. J. M. Crowley.  
Absent—F.C. L. L. Tuke.



# College Flight Cadet & 19 FTS System Output - WWII Years

Covering the transitions to and from WWII, the graphs summarise the number of flight cadets caught up in the abrupt suspension of their officer training at the College and the corresponding phasing out of flying training - Course Nos 1 to 11 - by 19 FTS at the end of the war.

## Transition Years - Immediate Pre & Post War Year Training Statistics



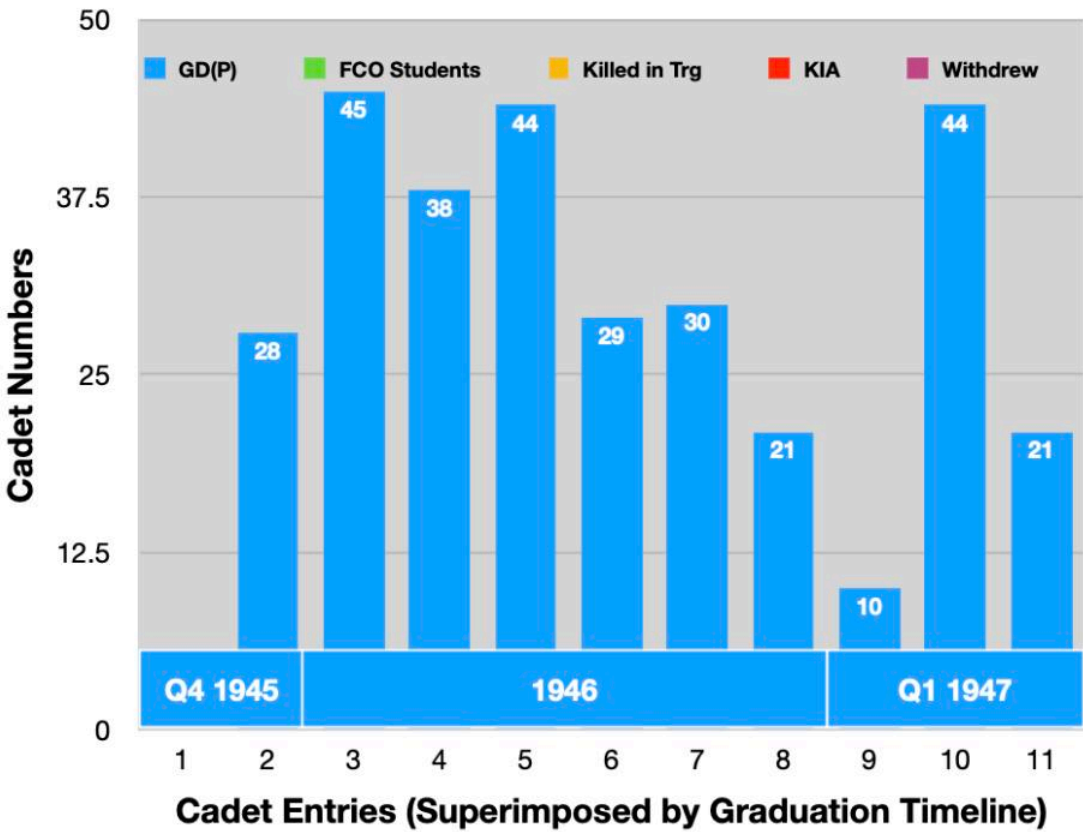
**OPERATIONS RECORD BOOK**  
of (Unit or Formation) Station Headquarters, GRANWELL.

Place.	Date.	Time.	Summary of Events.
GRANWELL.	1.9.39.		Lieutenant T.A. Tindle assumes the duties of Station Defence Officer. Education Officers - members of the Royal Air Force Volunteer Reserve - recalled for duty. Aerodrome Council School closed owing to evacuation.
	2.9.39.		Lighting restrictions introduced, and guards posted at entrances to the Station.
	3.9.39.		Receipt of message stating that War has been declared on Germany by the Allied Powers. Group Captain Strugnell, MC., posted to Command (A/Cdre Post). Royal Air Force College becomes a Flying Training School, and is self-controlled.

**OPERATIONS RECORD BOOK**  
of (Unit or Formation) NO. 17 S.F.T.S., SPITALGATE.

Date	Time	Summary of Events
MAY	45	
1		No. 17 S.F.T.S. left Granwell and moved to Spitalgate, Grantham.
5		Half Day unfit flying.
6		Half Day unfit flying.
8		Victory in Europe Day. Parade of whole Station at 09.00 hours and a broadcast given by Station Commander. Remainder of day observed as a holiday and extended to 14.00 hours on 9th May, 1945. No. 17 Refresher Course terminated. No. 19 Refresher Course commenced.
14		Canadian personnel on Unit left for repatriation. Half Day unfit flying.

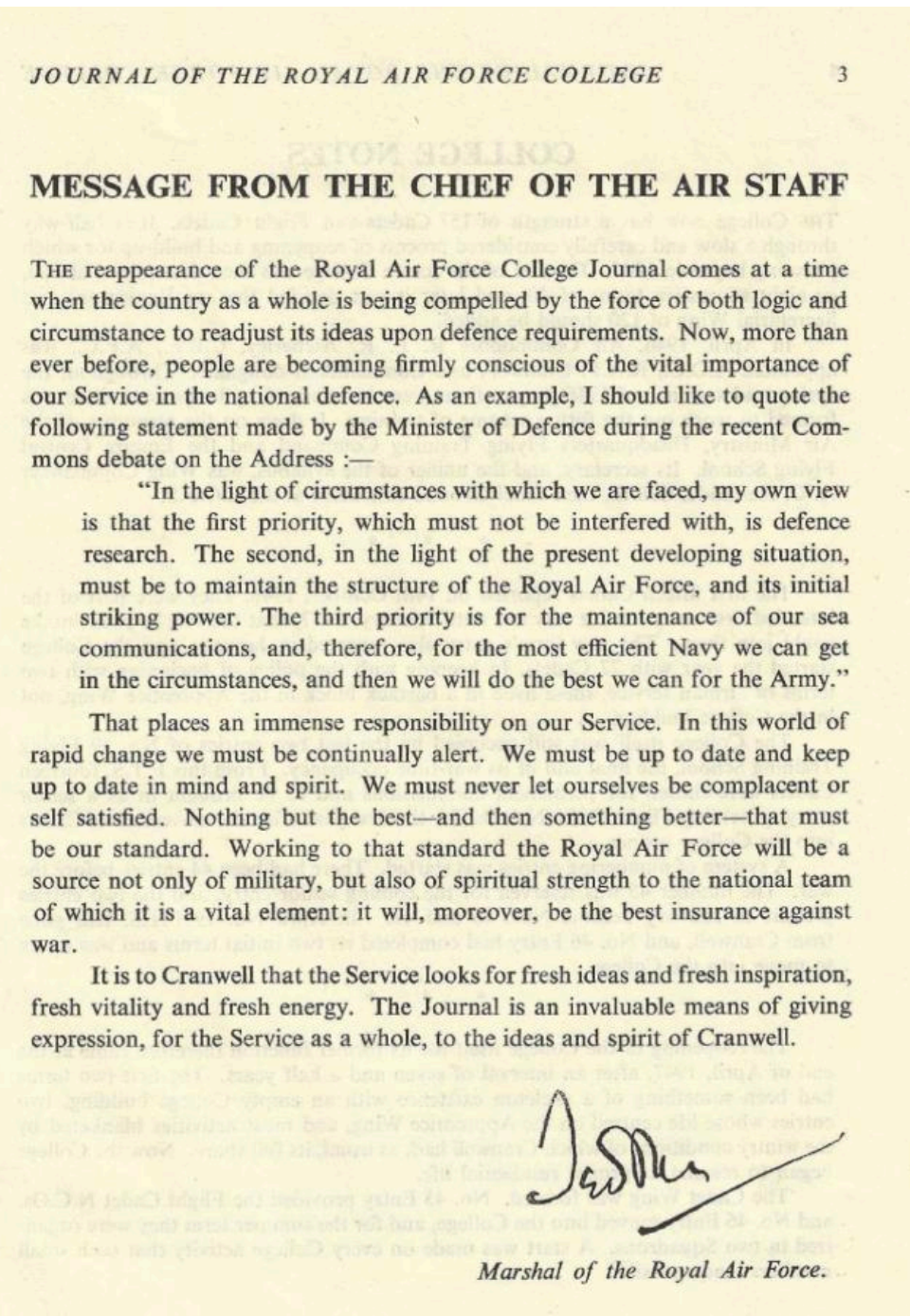
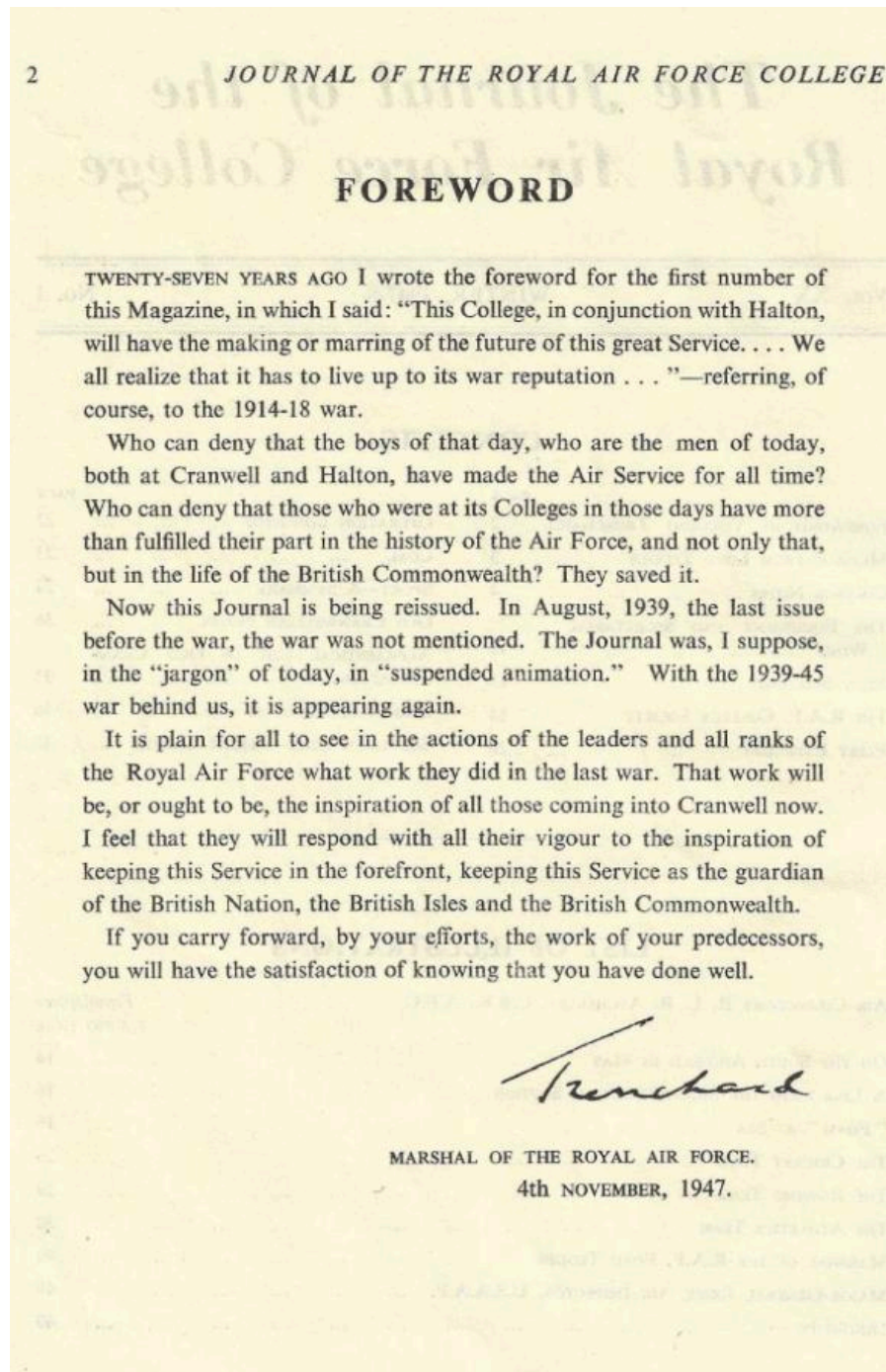
19 FTS Trainees 1945-47





# Part 3 - Reinstating The RAF Flight Cadet System

As evidenced by the extracts below from the Winter 1947/48 College Journal, there was a feeling the RAF College had done its job. Despite early attempts to block the development of an independent air force, the College - according to its Founder, Lord Trenchard - had produced the quality and calibre of officer that had "saved" the British Commonwealth. In restoring business as usual at the College, it was clear that, as the CAS Tedder put it, there was now an expectation that the College would produce "Nothing but the best - and then something better - that must be our standard". Its reputation much enhanced, largely because of the success of Cranwellians during WWII, the College set about rising to that challenge. In the early days, that challenge included mastering a new phenomenon invented by Cranwellian genius Sir Frank Whittle - the jet engine. But first, the College was to enjoy a little royal recognition for its past achievements.







# 1948 Presentation of King's Colour

The recognition of the standards achieved by the College pre-WWII and its alumni during WWII were recognised by HM King George VI. On 6 July 1948, just a year after the College had officially reopened to deliver Flight Cadet officer training, he visited the College to present the RAF, and the College, its first ever King's Colour. The King's speech made clear its meaning and significance.

The title of this slide contains an embedded link that enables access to a video of the ceremony.



[Photograph by the Air Ministry Photographic and Reproductions Branch]  
**THE KING SPEAKING**

2

JOURNAL OF THE ROYAL AIR FORCE COLLEGE

*"Flight Cadets of the Royal Air Force College,*

*"I am very glad to be here today to see you on parade and to present to you this new Colour, the first ever to be borne by the Royal Air Force. I want to tell you what it stands for, before it is carried back to its place in the centre of your parade.*

*"First, it is The King's Colour, and therefore the symbol of the loyalty which you owe to your country.*

*"Secondly, as the Colour of your Service, it enshrines the history, embodies the traditions and represents the ideals of the Royal Air Force.*

*"Finally, it belongs to this College and commemorates the leaders who have gone out from Cranwell and especially those who have laid down their lives.*

*"Just as this Colour has been consecrated, so, too, you yourselves in saluting it are dedicating yourselves to the service of all that it represents. Look upon it, then, as your standard of honour and uphold it by your loyal and unstinting service.*

*"You are now at the beginning of your careers in the Royal Air Force. Yours is a calling both arduous and daring. It will demand courage, initiative and a readiness to meet danger in a spirit of adventure. It will demand, also, what for many is more difficult to achieve—the zealous and conscientious performance of your daily tasks and duties.*

*"The way to the stars is not easy, and it is only by application, hard work and devotion to duty, that you will reach the heights. By its daring, for its efficiency and through its sacrifice, the Royal Air Force has won renown throughout the world. It has proved itself our shield and spearhead in war. It stands today as a guardian of peace.*

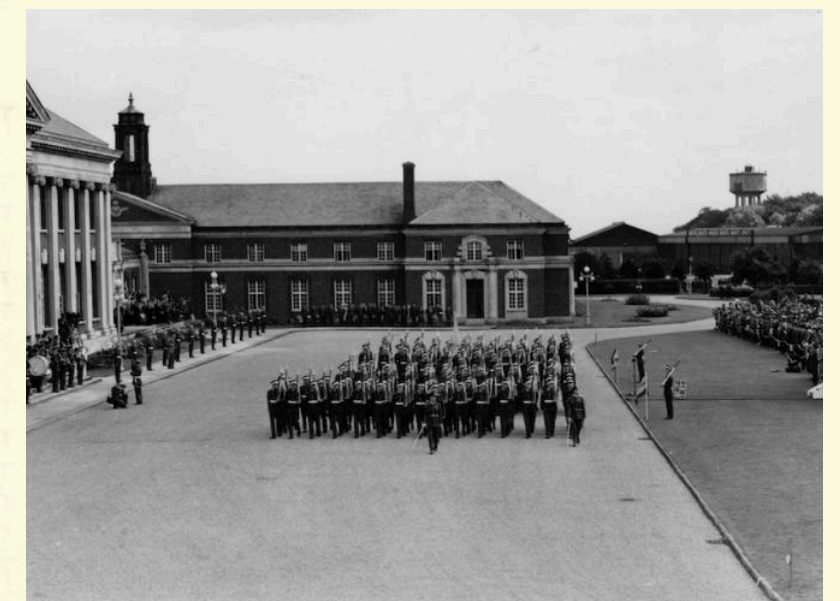
*"I am glad to honour the Royal Air Force and you by giving you this Colour. I commit it to your faithful keeping, in the sure confidence that you will hand it on with added honours to your successors.*

**"GEORGE R."**

**"6th July, 1948."**



**HM King George VI Presenting his  
Colour to Flt Cdt Sgt Caillard**

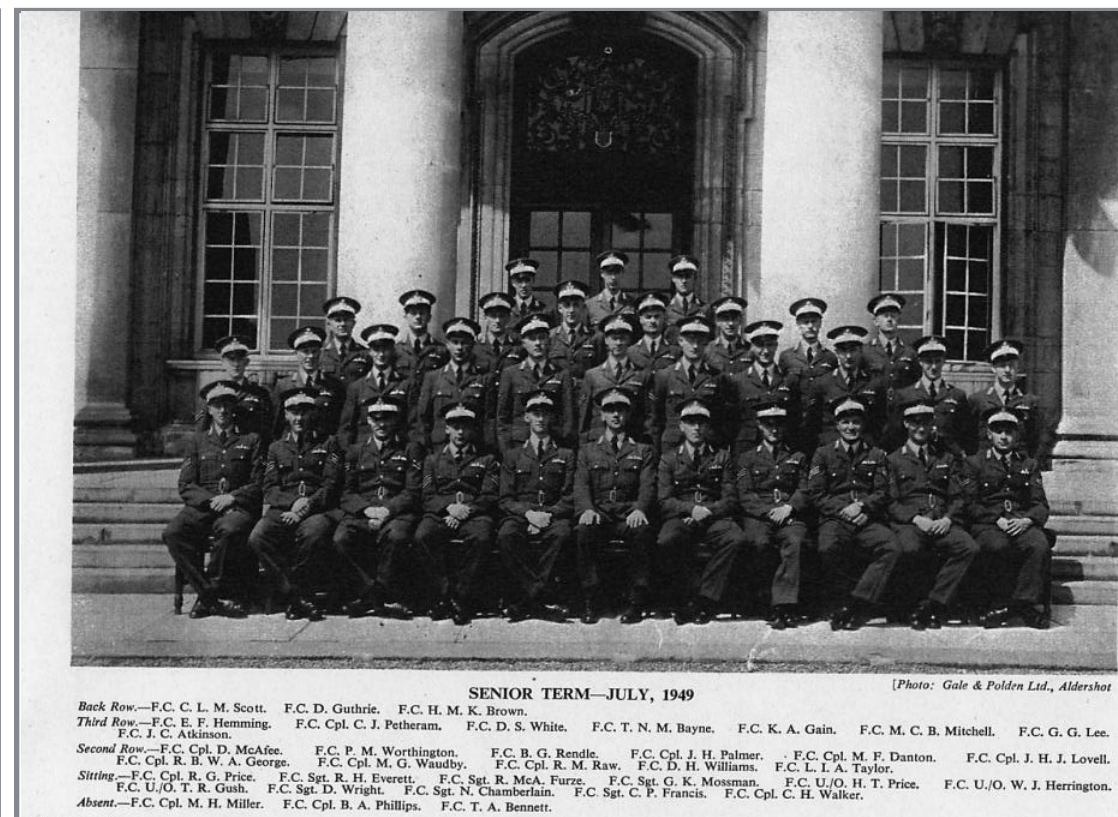
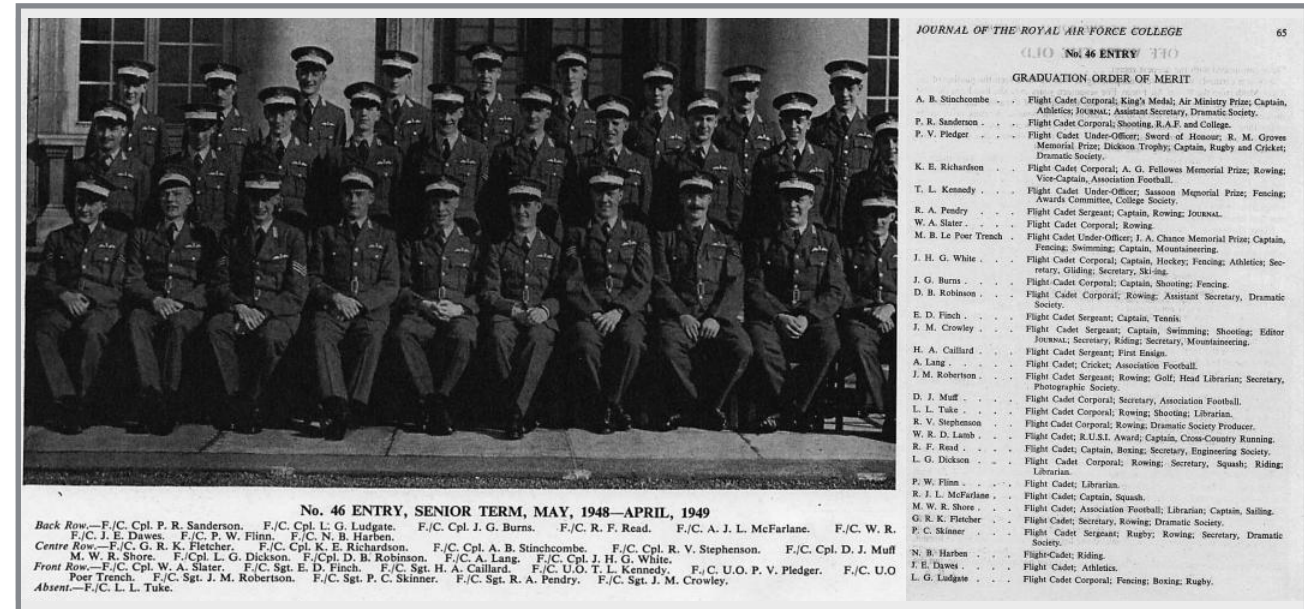
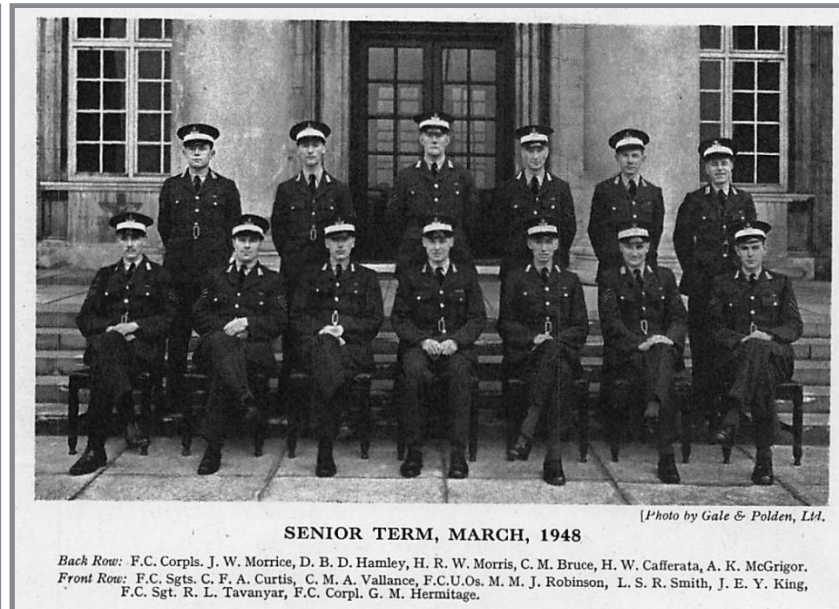


**Kindly Donated by Richard Lockyer (50 Entry)**



# 45, 46 and 47 Entry Prizewinners & Graduations

The smaller 45 Entry and 46 Entry comprised new recruits through the obligatory competitive examinations and the seven graduates from 19 FTS who took up the option to undertake officer training as a flight cadet. 47 Entry turned out to be the first course of *ab initio* training for newly recruited flight cadets to be run at the RAF College since its closure in September 1939. It was probably also the last flight cadet course not to include formal training of the new jet aircraft. Unlike designations pre-war, where entries were given the prefix of the month and year of intake (e.g. F20), the numbering of entries followed sequentially after 47 Entry regardless of the year of the intake until the final entry, 101 Entry, which graduated in 1973. The graphic and listing of 46 Entry below contain links to films taken at the time.





# Transitioning to the 'Jet Age'

Again, courtesy of an article in the Autumn 1961 edition of the College Journal, we reproduce here an extract that articulates the transition the RAF College made to the Jet Age. The 'stats' at the foot of this page record a marked reduction in Entry size between 1956 and 1958 during this transition.

When the College reopened in 1946, its equipment consisted of the perennial Tiger Moth, and the Harvard. The Tiger needs no introduction, and was much beloved, despite the fact that in winter, when the Lincolnshire north-easter blew, the open cockpit was very unpleasant. The North American Harvard was the advanced trainer, its main characteristic being its peculiar rasping note caused by the high tip speeds of its directly driven propeller.

In the summer of 1948, the ever faithful Tiger Moth departed, not without pangs of regret from instructors and pupils. To replace it, the Percival Prentice arrived, a brand new British trainer. This was a three-seat, low wing monoplane with fixed undercarriage and an enclosed hood, and also with full radio aids, flaps, brakes and variable pitch airscrew, a great advance over the Tiger Moth. However, the usual teething troubles accompanied the Prentice, and an unceasing duel between aircraft and airfield took its toll; tyres burst, stern posts cracked, and the Prentice fleet grew smaller until eventually there were insufficient aircraft to continue the operation, and the Tiger was used again! However, by January 1949 everything had been cured, and the aircraft was demonstrated to the Press. at Cranwell.

In the winter of 1952, the Prentices were replaced by a new primary trainer, the De Havilland Chipmunk. This aircraft, designed in Canada, was powered by a D.H. Gipsy Major engine and used tandem seating. It was a great advance over the Prentice in that it was fully aerobatic, and was much lighter. The noisy Harvard was also due for replacement, and, in 1953, this was replaced by the Boulton Paul Balliol T.2. This machine was powered by a Rolls Royce Merlin 35, had side by side seating, and a maximum speed of 288 m.p.h. at 9,000 ft. It had one Browning machine gun, and provision for four 60 lb rockets. Balliols served only at Cranwell and at one other F.T.S., their production being cut back in favour of the new jet trainers.

Jet aircraft had now appeared at Cranwell in the form of the Meteor 7, of which there were three, despite the fact that no runways had yet been constructed. In November 1954, the Chipmunk was replaced by the Hunting Percival Provost, which remained at Cranwell until 1960. This was a much more powerful aircraft, being sturdily and robustly built, with side by side seating and a maximum speed of 200 m.p.h., and with a service ceiling of 25,000 ft. The aircraft was capable of a rate of roll of better than 90° per sec. and had excellent aerobatic qualities. Provosts flew from the North Airfield during the construction of the runways, and from Spitalgate when Cranwell and Barkston were used by jets.

In 1956, upon completion of the South Airfield's runways, the De Havilland Vampire advanced trainer arrived to replace the Balliol. This was Cranwell's first jet trainer, and it is only just leaving us now. A great advance over anything used before at Cranwell, with glamorous pieces of equipment like "Bang-seats" and bonedomes associated with it, the Vampire had a maximum speed of 550 m.p.h. and a service ceiling of 40,000 ft. Cranwell entered the jet-age at last. The Provost/Vampire scheme of training was now used, in conjunction with the rest of Flying Training Command. Cadets now passed out having completed their advanced training.

Valettas and Varsities were then, and still are, used for navigator training. Meteors still flew from Cranwell, mainly for the benefit of those cadets, who, because of their excess stature, could not squeeze themselves into the somewhat cramped cockpit of the Vampire. In 1960, the next big change took place. The "New System" meant that cadets started straight away on jets; advanced training was carried out after leaving the College. The faithful Chipmunk reappeared on the North airfield, to give once-weekly flights to those who were not yet flying on jets, and has gained quite a reputation. Jet Provosts, the last word in modernity and spaciousness, are taking over from the Vampire, and cadets now start on them. With a maximum speed of about 330 m.p.h. they are excellent aircraft, and will be supplemented later by the Mark 4 version. Finally, there are the weekend aircraft—Tiger Moths, Turbulents and gliders which fly from the North airfield on Saturday and Sunday afternoons making a welcome change from the noisy jets.



**Tiger Moth**



**Chipmunk T Mk 10**



**Gloster Meteor**



**Harvard**



**Boulton Paul Balliol**



**Vampire**



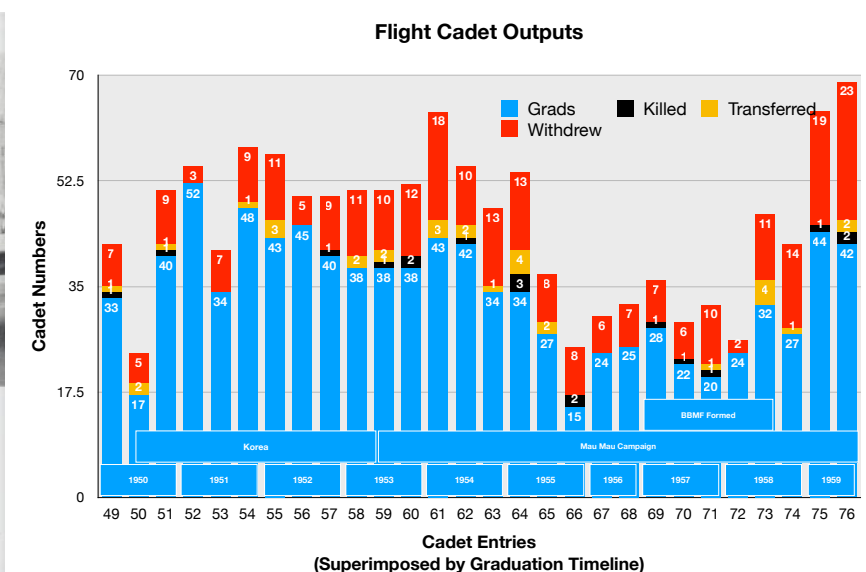
**Percival Prentice T1**



**Percival Provost**



**Jet Provosts**





# Introduction of E&S Wing, RAF Digby

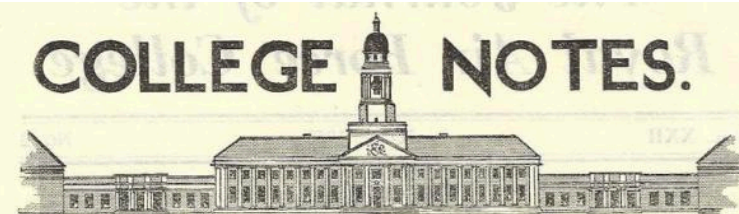
Another major transition to fulfil in the early 1950s was the introduction of Equipment & Secretarial Entries, to pass out with their pilot cohorts at the RAF College. The College (Journal) Notes below of June 1950 explain this innovation. There remain 10 separate graduation photographs of E&S courses displayed in the College, but cadets of those two branches were to be part of flight cadet cohorts until the final 101 Entry which graduated in March 1973. The E&S Wing at Digby would also have its own Asst Cmdt and sense of autonomy until the Wing was absorbed back within the RAF College environment, we believe, after the graduation of 10 E&S in July 1953.



SENIOR TERM, APRIL, 1950  
[Photo: Gale & Polden Ltd., Aldershot]  
Back Row—F.C. Cpl. P. F. Keeling, F.C. Cpl. R. Dyson, F.C. Cpl. R. H. Gidman, F.C. Cpl. R. W. Burgess, F.C. Cpl. M. Short, F.C. Cpl. B. N. Bennett, F.C. Cpl. J. R. Rogers, F.C. Sgt. P. D. Armour, F.C. Cpl. B. J. Bull, F.C. Cpl. A. W. Powell, F.C. Cpl. P. G. Nicholl, F.C. Cpl. K. V. E. Gilbert, F.C. Cpl. G. S. Goodwill, F.C. Sgt. W. L. A. Bull, F.C. Sgt. I. Gordon-Johnson, F.C. Sgt. H. S. Carver, F.C. U/O. D. Mullarkey, F.C. U/O. F. W. Knappier, F.C. U/O. R. Povey, F.C. Sgt. L. A. N. Worby, F.C. Sgt. A. Turner.



No. 1 (E. & S.) ENTRY  
[Photo: Gale & Polden Ltd., Aldershot]  
Back Row—F.C. A. Brooks, F.C. D. C. A. Lloyd, F.C. S. H. D. Weigall, F.C. T. G. C. Caton, F.C. P. M. Randolph, F.C. Cpl. A. B. McGuire, F.C. Cpl. R. J. Longworth, F.C. Sgt. D. C. Robinson, F.C. U/O. D. I. O'Hara, F.C. Sgt. D. F. Bates, F.C. Cpl. P. A. Richardson, F.C. Cpl. M. D. Fenner.



The Spring Term of 1950 was fortunate in its No. 49 Entry and was unique in being the first occasion on which the College sent into the permanent ranks of the Royal Air Force a trained body of officers of branches other than General Duties. No. 1 Entry of the Equipment and Secretarial Wing can claim to have set up an historical landmark.

With especial warmth of feeling, too little reflected in Cranwell's April weather, the College welcomed at this graduation parade Marshal of the Royal Air Force The Lord Tedder of Glenguin, G.C.B. In frequent visits as Chief of the Air Staff, Lord Tedder had watched every phase in the rebuilding of the life of the College since 1946. At the first ceremonial opportunity after his relinquishment of that post, he showed how enduring is his interest in the College. Deeply and personally the College appreciated what it meant to Lord Tedder to be the Reviewing Officer on that day, and to Lady Tedder, *desiderio tam cari capitis*, to watch the graduation of No. 49 Entry.

No. 49 Entry came to Cranwell in September, 1947. In all its predecessors there was an element of the unusual, in composition or in the conditions of their course at Cranwell. The distinction of No. 49 Entry was that it had little or no such particular distinction. It was of approximately standard size, the outcome of the standard system of selection. If its Junior Cadet phase differed a little from the present form, by the time it came into College the College had found its feet. The Entry had sufficient top-weight above it to have no misleading sense of premature seniority. Teething troubles of the syllabus, and even the biplane era, were over before its day. For these reasons the College has reason to be gratified by the quality of its first standard production model, and it confidently wishes a successful career to a lively minded and characterful body of newly commissioned Pilot Officers.

For the flight cadets of the first Equipment and Secretarial Entry to pass out from the Royal Air Force College into the permanent commissioned ranks of the Service, all their course had a pioneer quality. It may well have seemed a long course; four of them came with Cranwell's No. 48 Entry in April, 1947, before the Equipment and Secretarial Wing was established; the remainder came in September of that year. All were expecting a course of five terms, and found it later extended to eight.

The Wing itself opened at Digby in September, 1947. The flight cadets of No. 1 Entry have gone through all the vicissitudes of incipience and experiment, and in the last year have borne the brunt of leadership, responsibility and the foundation of tradition. They are to be congratulated on the high standard that they have attained and on the example that they have set for their successors. The College, and in particular the Equipment and Secretarial Wing, bid them God-speed, assured that they will continue as worthily as they have begun.

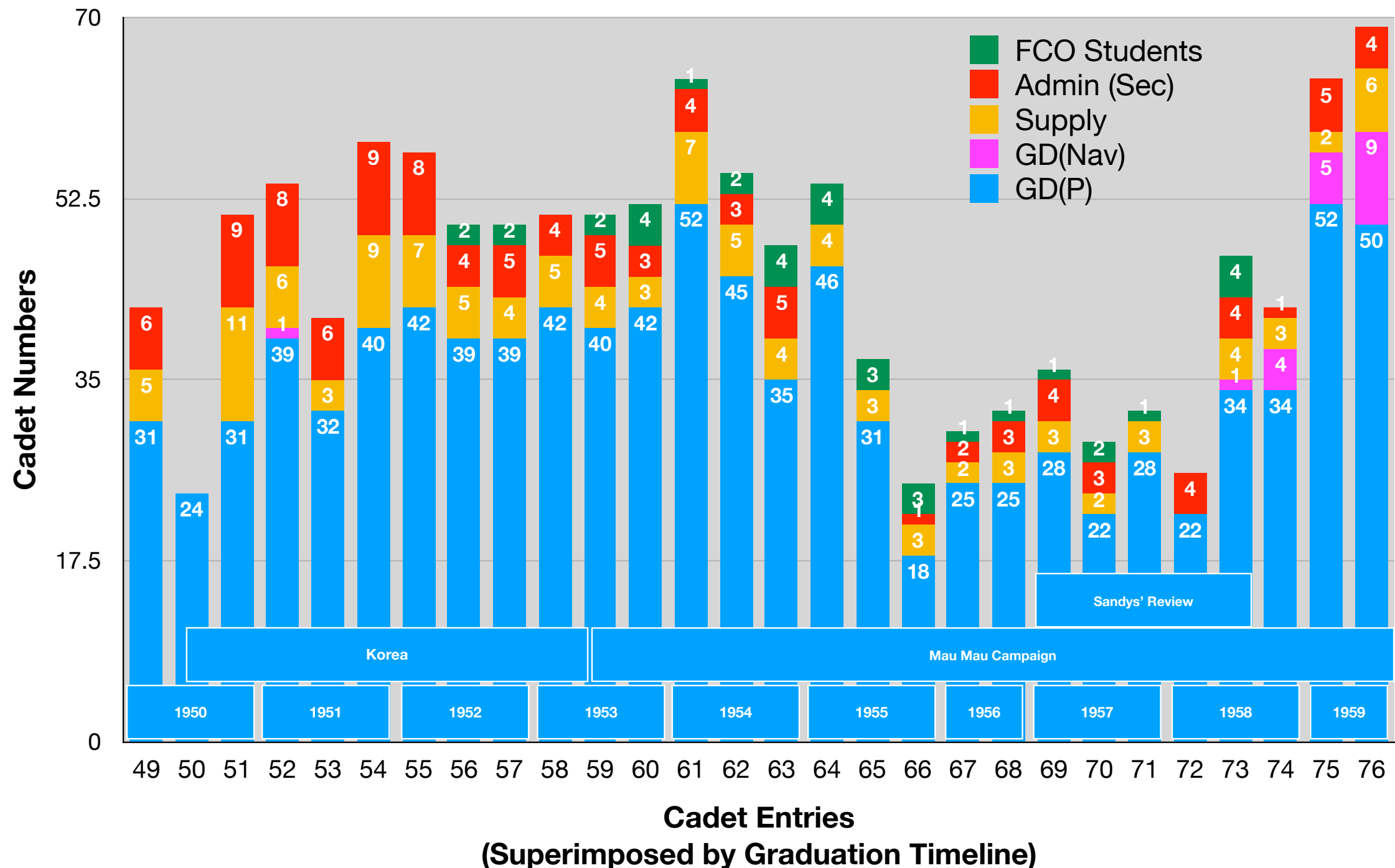
The Air Ministry has inaugurated three special prizes for award to each successive graduation of the Equipment and Secretarial Wing. The Medal of Honour is awarded to the flight cadet who has most distinguished himself in leadership and influence for the good of the Equipment and Secretarial Wing of the College. The first winner of this award was Flight Cadet Under-Officer D. I. O'Hara. The other two awards are the Air Ministry Prizes for Equipment Studies and for Secretarial Studies. These were won by Flight Cadet Sergeant D. C. Robinson and Flight Cadet Sergeant D. F. Bates. We take this opportunity of congratulating these prize winners.



# Expanding Training to Other Branches

The graphic below records the E&S component for each intake during the 1950s. The same reduction in intake size between 1956 and 1958 is reflected in these overall figures by branch, the reduction being *pro rata* by branch and suggesting it was unlikely due to any impact of the jet engine but to the general demand for, or uptake by, recruits. The first Navigators were introduced with 74 Entry on 11 January 1956, most graduating on 16 December 1958.

## Flight Cadet Intakes by Branch





# The Introduction of Engineer Cadets

The move of Engineer cadet training from Henlow to Cranwell was major news in January 1964, with the transfer of the first 32 Engineer cadets to 89 Entry at the College. The expectation of 80 cadets per intake was ambitious; the 'stats' below typify the recruitment that varied widely between 42 and 114 cadets from 89 to 101 Entry. However, this was not a straightforward transition, the Henlow-Cranwell merger having its origins in a debate, and several detailed investigations, on amalgamating GD and Technical Training that started a decade earlier; Haslam gives an authoritative account in Chapters 11 and 12 of his History of Royal Air Force Cranwell.

## THE HENLOW-CRANWELL MERGER

*This article is based on a talk given by Squadron Leader P. B. MacCorkindale, who is responsible for the planning and co-ordination of the merger, at a conference held in the Whittle Hall on 7th January 1964.*

In 1959 the Commandants of the R.A.F. Technical College and the R.A.F. College made a combined study of Air Vice-Marshal Marson's report on the Technical College. As a result of their conclusions, the Air Officer Commanding-in-Chief, Flying Training Command recommended that a merger of the two Colleges was necessary to bring permanent General Duties and Technical Officers together and in particular to start them off in the Service with a common basic training. In March 1961, after the ways and means had been agreed, the Secretary of State for Air announced to the House that the two Colleges would be merged. He said, "Cadets of all branches will be trained together, and, in addition to achieving greater administrative flexibility we believe that the Service and the cadets of both branches will benefit by working under the same roof."

A Committee under the Chairmanship of Air Vice-Marshal, now Air Marshal, Sir John Baker-Carr was formed to continue planning the works service programme, to consider the best means of integrating training, and the organisation necessary for the Cranwell of the future. As the Baker-Carr Committee's proposals are still *sub judice* they cannot be reported here. Nevertheless, whatever organisation is finally decided upon, the cadets of the Technical Branch will be fully integrated into the four existing squadrons of the Cadet Wing. They will all be called flight cadets and will stay at the College for three years. However, owing to the high grade academic content of the course which is complementary to the technical instruction, it is unlikely that any integration can occur in academics, except perhaps in Humanities and War Studies. After the Technical Cadet has been commissioned alongside his contemporaries of the other branches, he will continue his studies for the Diploma in Technology or Higher National Diploma for a further one and a half years. This phase of his course will be done within the Student Technical Officer Element at Cranwell and he will live in the new Student Officers' Mess.

Cadet entries 84 strong are expected to enter the College twice a year — 60 General Duties, Equipment, Secretarial and Regiment and 24 Technical. Discounting wastage, the planned peak cadet population is expected to be 504. The student officers, who will be undertaking engineering courses of varying length and type, some at post-graduate level, should reach a peak of 320 by 1969.

The first of the many building projects is now much in evidence just East of the Taj Mahal (the present Education Section) which is complementary to it. This three storey building will be 150 yards wide and the two wings 100 yards long. The intention is to replace the Taj Mahal and complete the square in ten to fifteen years time. The building will contain the Electrical and Weapons Systems and part of the Mechanical Engineering Wings, now at Henlow, together with Administrative Headquarters.

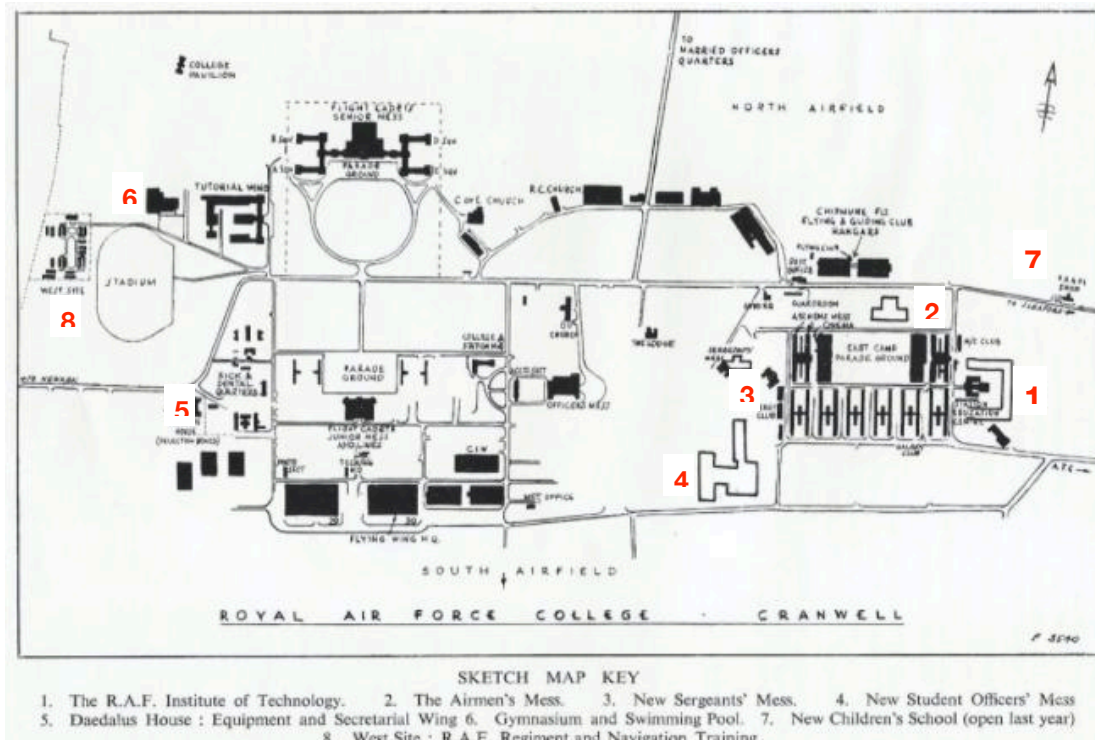
Plans for the building of the Aerothermodynamic Block, the Aircraft Hall, the Instructional Workshops, the new Students' Mess, and the extension of the present Officers' Mess, which were outlined in the Spring 1963 issue of the *Journal*, remain unchanged. 72 Officers' Married Quarters have just been built, 75 more just begun and 15 more approved. A N.A.A.F.I. sub-shop will be built in the area. 54 Airmen's Married Quarters are to be built at Cranwell, 100 will be made available at Winthorpe and 73 at Spitalgate.

To enable it to have its own specialist department and to allow maximum concentration in the Tutorial Wing of academic classrooms, the Equipment and Secretarial Wing has moved into buildings previously occupied by the Royal Air Force Selection Board. The ground floor (West) of Barrack Block 329 will be converted for the use of the Station Education Section. Cadet accommodation will be increased by using Daedalus House, and, it is hoped, by converting two more huts of the South Brick Lines which will be centrally heated. The Group planning staffs will occupy most of the top floor of the existing Headquarters building. The Telecommunications Centre will move out to an adjacent building, where a new automatic exchange will be installed. This will leave the whole of the ground floor and part of the first floor for Station Headquarters. College Headquarters will be housed in the former museum, memorial chapel and fiction library of the main College building.

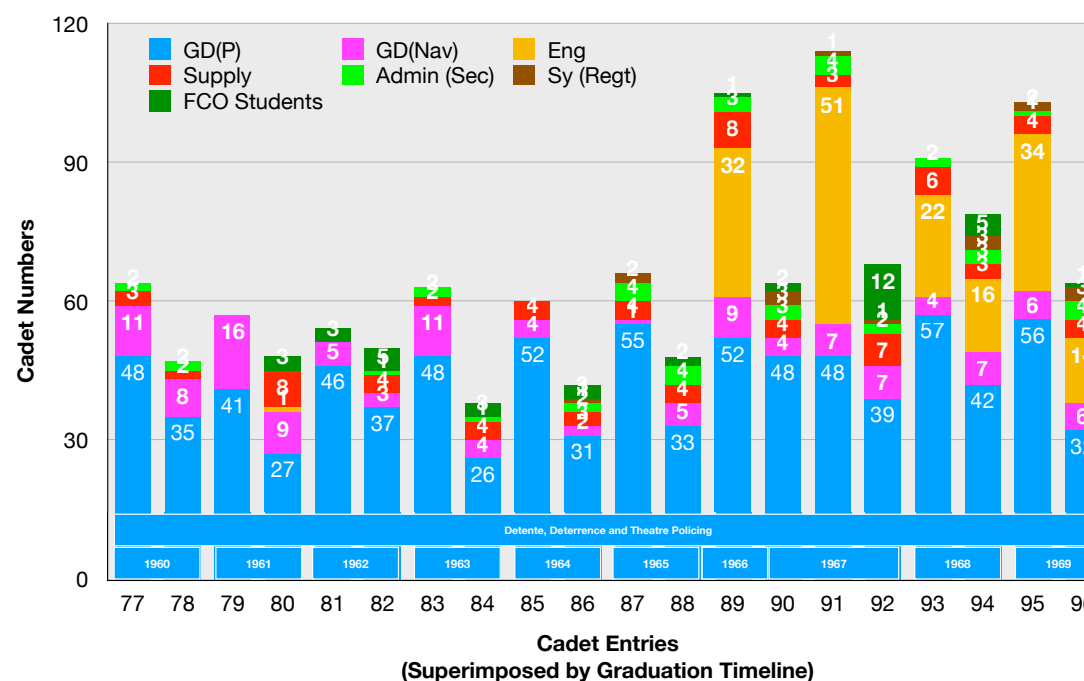
The existing Tutorial Wing, together with all the new engineering instructional facilities to be built for Henlow, will be for the common use of cadets and student officers. Broadly speaking, the Basic Sciences and Humanities will be taught in the Tutorial Wing and applied subjects in the new building.

The task of removing Henlow's vast range of equipment to Cranwell is formidable but plans for the move are already well advanced. Personnel and advance parties of departments will begin to arrive at Cranwell in April 1965, and the Technical Cadets will start training at the beginning of the Autumn term the same year.

The merger will have a significant effect on Cranwell and on the Service as a whole; the amenities will be the envy of all and they will be adaptable for any pattern of Royal Air Force training decided upon for the next twenty years.




Flight Cadet Intakes by Branch





# The Bells, the Bells

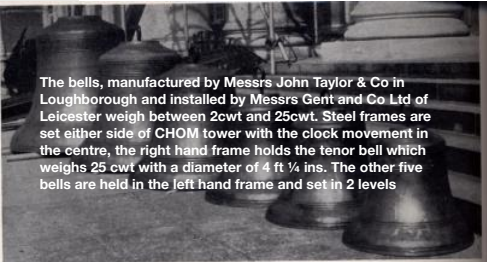
Any review of transitioning during the post-WWII years would be deficient without mentioning the installation of the bells, whose chimes of the ‘Retreat’ three times a day commemorate the Cadets lost during WWII. Our research that there were 331 cadets KIA, KOAS or died in WWII. Any serviceman within earshot of those chimes must stand to attention as a sign of respect, until the chimes have sounded.



1952

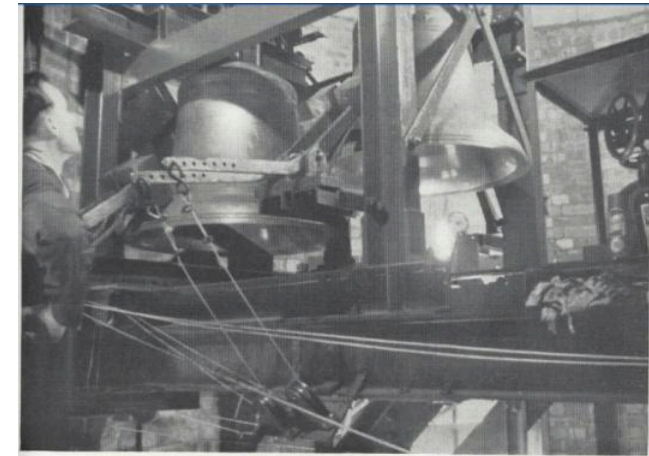
THIS PLAQUE CAST IN THE METAL OF THE BELLS OF THE COLLEGE CHIME RECORDS THE GRATITUDE OF THE COLLEGE TO THE SHELL GROUP

THROUGH WHOSE GENEROSITY THE CHIME WAS PRESENTED AS A MEMORIAL TO THOSE OLD CRANWELLIANS WHO HAVE GIVEN THEIR LIVES IN SERVICE OF THEIR COUNTRY AND AS A DAILY REMINDER OF THEIR GALLANTRY AND SACRIFICE



The bells, manufactured by Messrs John Taylor & Co in Loughborough and installed by Messrs Gent and Co Ltd of Leicester weigh between 2cwt and 25cwt. Steel frames are set either side of CHOM tower with the clock movement in the centre, the right hand frame holds the tenor bell which weighs 25 cwt with a diameter of 4 ft ¼ ins. The other five bells are held in the left hand frame and set in 2 levels

Group Captain Sir Douglas Bader CBE DSO\* DFC\* Flight Cadet 1928-30 Managing Director of Shell Aviation when the Shell Group presented the College Chime 31 July 1952



The Bells—a view inside the College Tower

## THE DEDICATION OF THE BELLS

THE plan of installing a chime of bells in the College tower was discussed as a project for the Old Cranwellian Association's war memorial. When the Association decided to apply its fund to the development of the Chapel scheme, it appeared that the tower must remain silent. But the directors of the Shell Group generously wished to commemorate the close association of the Group with the achievements of the Royal Air Force. To their order bells were cast by the Loughborough firm of Messrs John Taylor & Co., and installed in the tower with the elaborate mechanism necessary to strike the hours, ring the quarter-hours in the Westminster chime, and sound 'Retreat' at the daily lowering of the ensign.

The work of installation could not start until after the day of the dedication of the Chapel, but it was completed before the end of the term.

In the afternoon of 30th July after the Graduation Parade the bells were dedicated by the Lord Bishop of Croydon, the Right Reverend C. K. N. Bardsley, C.B.E., and the day ended with the first ceremonial sounding of 'Retreat'. The College was delighted to welcome at the Graduation Parade a number of those to whom this generous gift was due. Representatives of the Shell Group present included Sir Frank and Lady Godber, Marshal of the Royal Air Force Sir John Salmond, Mr and Mrs R. A. Denne, Mr Guepin, Mr Hill and Group Captain D. R. S. Bader, D.S.O., D.F.C., who had been so active and helpful an intermediary in the whole scheme.

When the Reviewing Officer had driven away, visitors did not disperse, but gathered in the Entrance Hall and corridors of the College for the Act of Dedication. On the west wall of the



The Bells before installation in the Tower. Here all six bells lie at the foot of the steps leading up to the main entrance of the College. The notes and sizes of the bells are: G (1 cwt.), F (1½ cwt.), E flat (1½ cwt.), D flat (2 cwt.), C (1½ cwt.), B flat (1½ cwt.). The four smaller bells are used for the Westminster Chime, the four larger ones for sounding 'Retreat'.

hall a plaque, cast in the metal of the bells and commemorating the gift, had been placed. A small enclosure around this was reserved for the representatives of the donors and for senior visitors, and behind them the hall was thronged and spectators took up their position in the round gallery above. At half past three the Bishop and his attendant clergy emerged from the flight cadets' ante-room and the short service began. After prayers and responses, the Bishop gave an address, recalling the sacrifices of which the gift of the bells was a memorial and the obligation that those sacrifices laid upon all. Then he unveiled the plaque and dedicated it.

The Bishop and clergy withdrew, and visitors moved out to the Parade Ground and the Orange. A squadron of flight cadets had marched into position on the Parade Ground,

with the Band, in readiness for the striking of the hour and lowering of the ensign. As the bells chimed for the hour the squadron came to attention and the advance. When the hour had struck they presented arms. Then, while the ensign was lowered, the bells sounded 'Retreat' in a moving inauguration.

The College has been enriched by a most notable and imaginative gift. The striking of the hours may become, as indeed it is, a convenience, and the chiming of the quarters a welcome but almost unnoticed part of a familiar background. But the daily ceremony of the chime will not lose its significance.

'... You hear the solemn bell At vespers, when the oriflammes are furled. And then you know that somewhere in the world They think of you.'

THE PLAQUE

The plaque reads:

1952

THIS PLAQUE CAST IN THE METAL OF THE BELLS OF THE COLLEGE CHIME RECORDS THE GRATITUDE OF THE COLLEGE TO THE SHELL GROUP

THROUGH WHOSE GENEROSITY THE CHIME WAS PRESENTED AS A MEMORIAL TO THOSE OLD CRANWELLIANS WHO HAVE GIVEN THEIR LIVES IN THE SERVICE OF THEIR COUNTRY AND AS A DAILY REMINDER OF THEIR GALLANTRY AND SACRIFICE

## HOW THE BELLS WERE MADE

HOW were our bells made? This question doubtless crossed the minds of many of us as we watched our peal of six being raised to the Tower towards the end of last term.

Below, through the kindness of Mr Paul L. Taylor, a war-time engineer officer in the Royal Air Force and head of John Taylor and Company, bell founders of Loughborough, it is possible to give an expert's answer to this question.

Mr Taylor writes:

Firstly, the inner mould, or core as it is called, is built up on a strong cast-iron plate. The material used for the building up is bricks jointed with, and coated on, the surface by moulding sand, ground wet and mixed with other matter. The shaping of the core is effected by a stick, temp'le or crook, as it is variously designated. This is a board, carefully cut away and modelled so that its inner shape is the exact shape of the inside form of the bell. This template swings, or revolves, on a pivot in the centre of the base plate, and by this means the moulder is able to build up the core.

Next, the cope or cover is made, again by a swinging template cut to the exact shape of the outside of the bell. By this means the moulder lines an iron case or box, again with loam, until the outer form of the bell is fashioned.

The core and cope are then both finished by hand, and dried thoroughly in a stove constructed specially for this purpose. Finally the cope is placed over the core, the greatest care

being taken that the two are concentric. They are firmly cramped together and thus form what is termed the mould for the bell.

This is the usual foundry practice, but in those cases when a more than usually elaborate ornamentation of the bell is desired, the *cire perdue* (melted wax) process of decorated relief work suggests itself as being the most suitable.

The bell metal is melted in a specially designed furnace, and is tapped out into a ladle, similar to that used by the iron-founders and, as in casting iron, care is taken to run the metal into the mould at the proper temperature.

The time allowed for the cooling of the metal after a bell is cast varies according to the size of the bell. The smaller ones are removed from their moulds the day after being cast, but the larger the bell the longer the time that must elapse.

The next and final process in making a bell is tuning. The bell has been cast as near to the note required as possible, but owing to the moulding technique, the bell when sounded gives a note which is not exactly the right pitch. This error is corrected by placing the bell on a vertical lathe and turning some metal off the inside. This makes the bell thinner and so alters the note. This operation is continued until the correct note is obtained. A point of interest with regard to this tuning is that the bells for the Royal Air Force College, Cranwell, have been made to accord with the pitch of the R.A.F. trumpet (the E flat Cavalry trumpet).

## INSTALLING THE BELLS

AFTER the College Bells had been cast by John Taylor and Company of Loughborough, a number of important technical problems remained to be solved. The bells had to be brought to the College, raised to the Tower, hung and connected up to the mechanisms designed to operate them. The actual work of installation fell to Gent and Co., Ltd., electrical and horological engineers of Leicester, to whose sales manager, Mr E. O. Chapman, we are indebted for the facts contained in the following account and in the captions to the accompanying illustrations.

To accommodate six bells weighing from two

hundredweight to twenty-five hundredweight, and the apparatus required for operating them, was, in itself, a difficult problem to solve. It was decided finally to accommodate bells and operating apparatus in two steel frames. These are mounted on two girders spanning the clock chamber to which, originally, the clock movement had been fitted.

These two girders have been provided with additional supports to carry a total weight of six tons. The two frames containing the bells have been placed on either side of the clock movement driving the exterior hands. One frame carries the large 25 cwt bell and the other frame



Messrs Allsop and Mooney, of Gent and Co., Ltd., adjusting one of the many operating cables connecting the hammers with the striking mechanisms

the remaining bells. There are three motor-driven mechanisms supported by brackets on the underside of the two main girders. One mechanism works in conjunction with a hammer which strikes the large bell for sounding the hour. The second mechanism operates the hammers on the four bells which sound the Westminster quarters, and the third one works in conjunction with no less than 12 hammers, three on each of the four largest bells.

This triplication of hammers at first sight seems puzzling, but it has been necessary for a technical reason. 'Retreat' has to be sounded smartly, and each of the four notes is repeated no less than three times in some part of the tune. Hammers, however, have a considerable amount of inertia and cannot operate sufficiently rapidly to provide for quick repetitions of notes. An escape from this difficulty has been found by increasing the numbers of hammers from one to three on each of the four bells.

Working in conjunction with the first and second mechanisms is a control unit. This unit receives half-minute impulses from the master clock and sets in motion all three mechanisms at the correct times with a provision for the automatic starting of the 'Retreat' mechanism at either 1600 hours or 1630 hours. The actual time is selected by means of a change-over switch in the porters' lodge by the main door of the College. The control unit also 'selects' the chimes to be sounded and ensures that the right number of hammer blows is provided. In

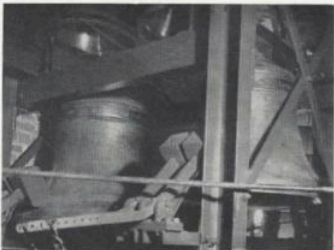
addition the control unit cuts out all operation of the striking and chiming mechanisms during the night and ensures that while the mechanisms are inoperative the correct chime and hour strike is provided when they are put into operation again in the morning.

Provision has also been made in the porters' lodge for silencing all mechanisms during the day by means of a switch. Another cuts out the operation of the 'Retreat' chimes; and a push-button enables the same chimes to be sounded whenever they may be required.

An interesting piece of equipment from the technical point of view is the duration delay which ensures that the chimes of the fourth quarter sound sufficiently ahead of the hour to allow for a five-second interval between the last chime and the first blow of the strike.

Hoisting the bells into position inside the Tower presented quite a problem owing to the fact that there is no direct route for them from ground to the actual clock chamber. It was necessary, therefore, to erect scaffolding in front of the main entrance of the College so that the bells could be lifted to a position level with Admiral's Walk, and taken from there along a special runway laid on the Admiral's Walk itself. Even so the problem was not entirely solved since the windows in the Tower were too small to allow the largest bell of 25 cwt to be moved through in an upright position. It thus had to be manoeuvred through the window on its side, then turned back to the correct position on a very small platform inside the Tower whence it was hoisted into place.

The larger bells, showing the arrangement of the hammers





# Part 4 - Phasing in the GE System

The transition from the Flight Cadet System to the GE system took place between 1970 and March 1973, the graduating Entries being 96 to 101 inclusive and 1/70 GE to 7 GE. The author was privileged to attend 6GE and to witness part of the transition.

As recorded in the January 1970 edition, courtesy of a remarkable piece correspondence to the editor from EA Howell (below), there were graduate entrants to the College in the early 30s, albeit a short-lived initiative. And even before the formal introduction of the GE

System in 1970, selected flight cadets were being offered “pre-university “places as the article on 99 Entry suggests. Again referring to the College Journal, this time the July 1969 edition, the RAF had to adapt to “technological and social changes” and “recruit its direct-entry permanent officers from the universities; see the extract is below.

Henlow and South Cerney were still taking recruits for officer cadet training, but in the Summer of 1970 the RAF College opened its iconic gates to graduates, including a prospective King of England and, for the first time, WRAF cadets destined for the Secretarial and Supply branches of the RAF.

This must have been somewhat of a culture shock for the Di-staff and support staff in the College. On the one hand, they had the remnants of the flight cadet regime in D Sqn, ex-“sixth formers” undergoing academic and military training on their strictly disciplined two year course. On the other, they had the allegedly mature graduates of A and B Sqn, some of them married with families - isolated at Syreston during IOT - embarking on 16 weeks of Phase 1 (IOT) training followed by 32 weeks of Phase 2 (Specialist) branch training. The ‘high jinks’ may have prevailed but attitudes differed.

In December 1968, Mr Gerald Reynolds, Minister of Defence for Administration, announced that the Royal Air Force would in the future recruit its direct-entry permanent officers from the universities. Behind this decision lay new thinking on the evolution of Cranwell's role as the first Air Academy. Lord Trenchard's original concept of it is as valid today as it was 50 years ago, but technological and social changes now dictate changes in the pattern of Royal Air Force recruiting which must be reflected in the internal structure of the College. As flying and professional training have become increasingly complex and expensive, it has become more and more difficult to maintain a challenging academic content in the Cranwell course. Yet the future leaders of the Service require more than ever before a ‘mind-stretching’ exercise early in their careers to prepare them for the increasing complexities ahead. The problem might have yielded to a variety of less drastic solutions, but other factors were working to force the all-graduate decision.

## THE GRADUATE ENTRY SCHEME

### THE INTER-WAR YEARS

Following the publication of the article ‘Thirty Years On’ in the July 1969 *Journal* we are very grateful for the following retrospective view of the life of a Graduate Entrant of the ‘thirties’ from Wing Commander E. A. Howell, OBE, DFC, RAF (Retd.):

Dear Sir,

As a University Entrant (BSc Hons) at Cranwell in the second of three courses held from 1934 to 1936, I read with interest Flight Cadet Hilton's article “Thirty Years On” in the July 1969 *Journal*.

Our Course (1935) was a very happy one and our experience at Cranwell was entirely rewarding. Friendships with the main group of cadets and with some of our instructors proved permanent, though many individuals did not survive the war. Of my course, the only other one alive today, is W. F. Beckwith.

We were all sorry that these courses were discontinued in 1936. My impression was that the mixture of University with other cadets was more an administrative headache than one of incompatibility as the article suggests.

For instance, I had already completed 400 hours as a Flying Officer in the Auxiliary Air Force (602 Squadron) before coming to Cranwell. Others had flown with the University Air Squadrons. So our instruction had to be tailored to suit and we could not be fitted into the general cadet courses.

Whatever the reasons, it was a pity that all regular officers could not enter the Service through Cranwell as we were fortunate enough to do. The new scheme now provides for this.

As a postscript may I add that I enjoyed my 14 years of Royal Air Force service more than somewhat! I was a Flight Commander (16 Squadron) by 1936 and a Squadron Leader by 1939. I commanded 33 Squadron (Hurricanes) in the Battle of Crete

in 1941, was wounded there and taken prisoner. After escaping in 1942 I served on the Air Staff as a Wing Commander at the Air Ministry and in the Pentagon. After Staff College in 1946, war wounds necessitated my retirement. Men like Brian Burnett, Bill Beckwith, Brian Roberts and others enjoyed long and distinguished careers in the Service and amply justified the *raison d'être* of the University Entrants at Cranwell of the Thirties.

Yours sincerely,  
E. A. Howell.

### No 99 ENTRY PRE-UNIVERSITY STREAM UNIVERSITY AND COLLEGE PLACING

Archer J., GD/P, Hull, BA Geography; Attwood D. J., GD/P, Southampton, BSc Aeronautical Eng; Bannister A. J., Equip, Cranwell, BSc, Engineering; Chamberlain D. B., GD/P, Edinburgh, BSc (Ord) Geography; Cheeseman S. B., GD/P, Manchester, BSc Aeronautical Eng; Clifford G. F., GD/P, Southampton, BSc Eng Science; Daffarn G. C., GD/N, City BSc Civil Eng; Edenbrow R. A. O., GD/P, L Chelsea, BSc Geology & Biology; Fry B. G. P., Sec, Portsmouth, BA English & History; Garstin J. C., GD/P, Portsmouth, BSc Economics; Gash C. A., Equip, Portsmouth, BSc (Ord) Elect Eng; Graves D. G., GD/P, Manchester, BSc Aeronautical Eng (4-year); Greeves B. J., GD/P, Exeter, BSc Eng Science; Griffiths R. O., GD/P, Belfast, BSc Aeronautical Eng (4-year); Grigor H. S., GD/N, Edinburgh, BSc (Ord) Civil Eng; Hurrell A. J., GD/P, Strathclyde, BA Hotel & Catering Management; Hutchinson R. D., GD/P, Portsmouth, BA Geography; Jasinski N. Z. R., GD/P, Loughborough, BSc Modern Europe; Johnston M. A. I. GD/P, Sheffield, BSc Electronic Eng; Kenvyn I. P., GD/P, Manchester Inst of Sci/T, BSc Civil Eng; Lannen C. A., Sec, Heriot-Watt, BSc Civil Eng (4-year); Mallaband P. D., GD/P, Manchester, BSc Metallurgy; McCarthy K. R., GD/P, Leicester, BSc Eng; McLean A. H., GD/P, City, BSc Chemistry; Moules P. L., GD/P, Kent, BA Law; Oakley D., GD/P, Bristol, BSc Geography; Oliver J., GD/P, Manchester, BSc Mechanical Eng;

Pedley J. F., GD/P, Reg St Poly, BSc Sociology; Pritchard K. H., GD/P, Southampton, B.Soc. Sci. Economics and Politics; Quick G. J., GD/P, L Chelsea, BSc Human Biology; Rank M., GD/P, City, BSc Aeronautical Eng; Rees G. D., GD/P, Manchester, BSc Aeronautical Eng; Richey F. A., GD/N, Manchester, BSc Electrical Eng; Robinson J. E., GD/P, Durham, BA General; Slater, N. J., GD/P, Southampton, BSc Aeronautical Eng; Smith A. J., GD/P, NW Poly, BA General; Sproates G. N., GD/P, NW Poly, BA English; Stacey P. W., GD/P, Birmingham, BSc Physics; Swann A. H., GD/P, Reading, BA Modern History and Politics; Symes G. D., Sec, Birmingham, BA History; Todd F. W., GD/P, Glasgow, BSc (Ord) Appl Science; Togneri, R., GD/P, Edinburgh, BSc (Ord) Elect Eng; Walker P. B., GD/P, Durham, BA General; Wells T. J. G., GD/P, East Anglia, BSc Maths & Physics; West A. M., Equip, Leeds, BSc (Ord) Fuel Science; Weston D. J., GD/P, Southampton, B.Soc. Sci. Economics; Wilcock, N. J., GD/P, L QMC, BSc Aeronautical Eng; Witts J. J., GD/P, Portsmouth, BA Geography; Yarrow T. B., GD/P, Portsmouth, BSc General.



# 1/70 GE

The graduation photo of 1/70/GE betrays several distinct differences from earlier graduation photos. First, throughout training, the 'cadets' were actually graduate officers; gone were the white-banded hats; the rank granted on entry depended on the class of degree obtained and the branch for which the graduate was being trained. Some would receive antedates for seniority that would see them graduate as Flt Lts. Secondly, 2/70 (Sec & Supply) would contain four WRAF graduates, the first women to be trained at the College. All the graduates were older than their flight cadet counterparts and had experienced the comparative freedom of university life that doubtless presented a new challenge for College Di-staff.



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. Riddett, 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. Back, Fg Off R. A. Walster, Fg Off R. D. Lapraik, Fg Off J. E. M. Mustard.*



However, 1/70 GE was unique. It was the first Entry to include a member of the Royal Family, then HRH the Prince of Wales and now His Majesty King Charles III. The RAF College has always cherished a long and close relationship with the Royal Family and the attendance of the future King is immortalised by a painting of him, in flying kit, hanging in CHOM. The support staff (e.g. batmen, bar and kitchen staff) often retailed with immense pride to later graduates their fond memories of their young royal resident.



# Shared Training Environments

The co-existing flight cadets and graduate officers underwent their initial and specialist training separately, sharing only the aircraft, buildings, sports field, dining hall and experiences. Quite apart from the flight line and iconic CHOM, RAF Cranwell had evolved into an interesting mix of old huts and new, state-of-the-art buildings. For completeness, some of those cherished training assets are shown here, with personal memories of the author.



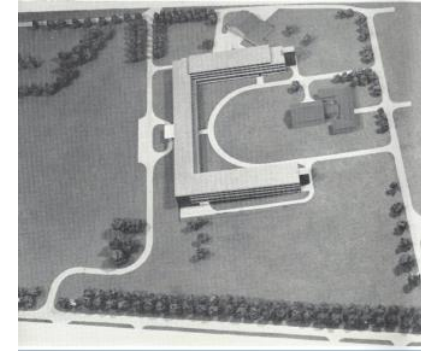
**Whittle Hall**

Opened on 4 October 1962 by Sir Frank Whittle - a former aircraft apprentice and flight cadet at the College and inventor of the Jet engine - opened the new instructional building, which took his name. Here flight cadets and GE officers would receive instruction on leadership, military topics, and RAF administrative and legal procedures, as underpinning, foundation training.



**Jet Provosts**

The Jet Provost Mrs 3 and 5 were a common sight at Cranwell between 1961 and 1989. The station formed its own flying display team, *The Poachers*. [See album signed for Geordie Gaskill.]



**Trenchard Hall**

Trenchard Hall was the purpose-built training centre for Engineers. Students included College flight cadets, GE officers, Henlow graduates and international cadets. In addition to laboratories and lecture rooms, the basement of Trenchard Hall was equipped with an impressive day of jet engines and wind tunnels. RAF Engineers would return to Trenchard Hall for post-graduate aerosystems courses and, a while, it also accommodated the Department of air Warfare. It is now home to the Tedder Academy.



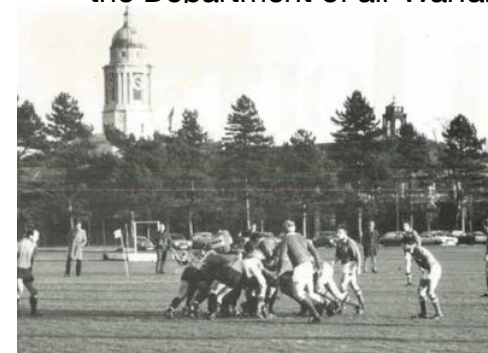
**On the flight line with QFIs**

As an Engineer student of 6GE, my only contact with the QFIs who guided my pilot friends to their wings was for "air experience" trips.



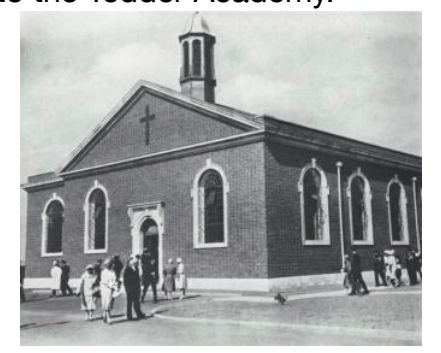
**The Station**

Walked the station perimeter regularly to break in the DMS boots, passing North Rauceby and a white Vulcan V1 parked on the east apron.



**The Sports Field**

Used the rugby and hockey pitches and tennis courts regularly. Lost many a golf ball in an old 9-hole course immediately behind CHOM.



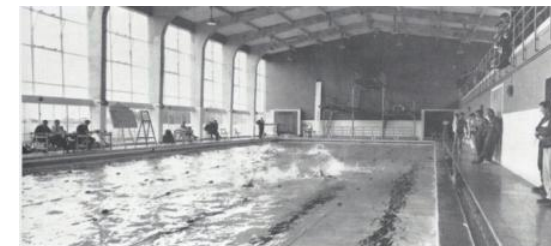
**St Michael's & All Angels**

Used to march down to the College church for Remembrance, Battle of Britain and Queen's Birthday services.



**The College Library**

Fine repository of RAF and College History with such knowledgeable and helpful staff.



**The Swimming Pool**

Learnt to swim in the pool. It's dead easy once you get out of the sack.



# GE and Flight Cadets on Parade Together

When they did parade together, the extra drill experience was self-evident. It was not surprising, therefore, that flight cadets of D Sqn would form the Colour Party throughout the flight cadet to GE transition period.



The Cranwellian taking this parade had no idea that his late father had been given this photo by the College until clearing out his father's personal possessions.

## Royal Salute

Found in the private collection of a cadet's father was this photo of his son commanding a parade in tribute to the death of HRH Prince William of Gloucester on 28 August 1972. A keen aviator, HRH was killed in an air crash when piloting his aircraft in a competition.

The photograph is perhaps unique for two reasons - each a rarity.

First, it shows the Royal Standard, the RAF Ensign and College Flag flying at half-mast above the College entrance.

Secondly, the Parade Commander, one of the first to have passed through the Graduate Entry scheme, leads the 'Royal Salute' in front of the cadets of 101 Entry, the final Entry of the Flight Cadet system to pass through the RAF College and which graduated in March 1973.

Behind the Parade Commander from 6 GE is the 'Colour Party' from 101 Entry. The 'Colour Escorts' at the 'Present' are identical twins John and Peter Herbertson, or is it Peter and John Herbertson? Cadets and Graduates were to parade together for three years and there was much rivalry between them. However, in the opinion of the author, a graduate, the standard of drill from the cadets was vastly superior, reflecting two years of practice as opposed to just 16 weeks.



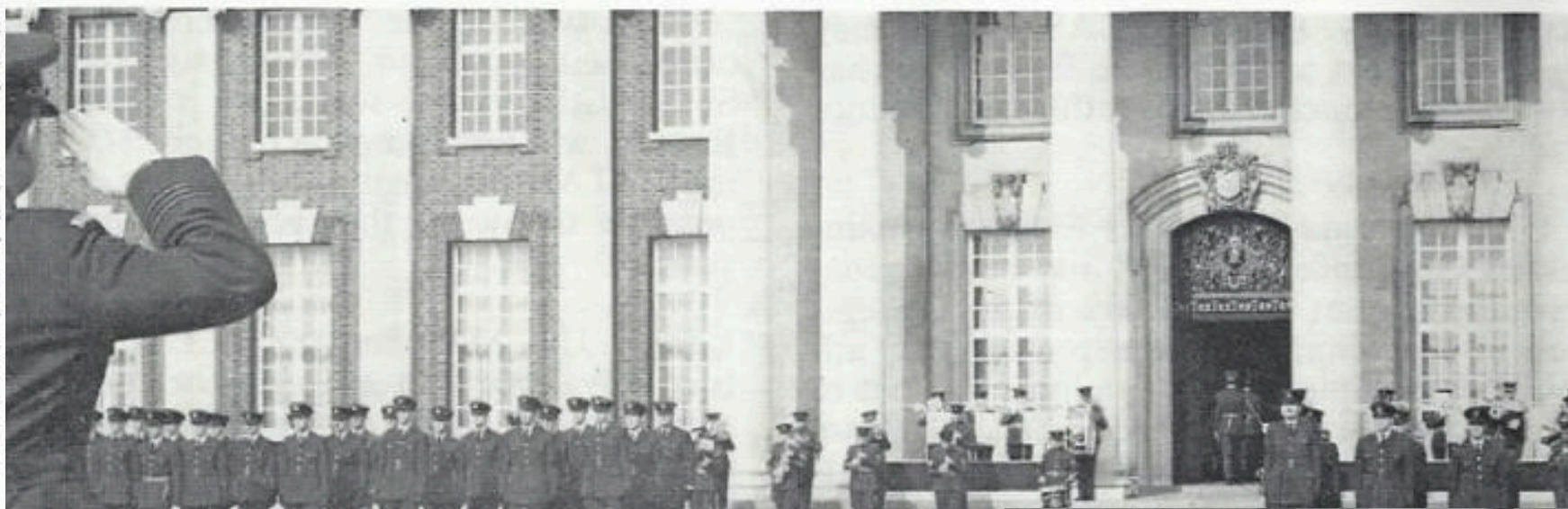
# The Transfer of Responsibility

Notwithstanding the author's personal views expressed on the previous slide, there came the day when the responsibilities of the 'Colour Party' would pass to a graduate entry. The Reviewing Officer was the CAS, ACM Sir Dennis Spotswood who paid special tribute to the passing of the Flight Cadet system at 101's Wings & Prizes Ceremony the day before they graduated. Extracts of his speech are shown here with a link to the full speech superimposed on the graphic title below.

With the reopening of the College in 1946, training expanded to include the Supply and Secretarial Branches, and later, navigators and the Royal Air Force Regiment — and finally in 1966, the Engineering Branch. With the graduation of No 101 Entry, more than 3,500 officers will have passed through Cranwell and on into the Service.

Tomorrow sees the end of an era, but it does not, as one might expect, herald the start of another. In fact, it was in September 1970 that we saw the birth of the new era, when the first graduate students arrived at Cranwell, and, since that time, no fewer than seven entries have completed their officer and specialist training at the College. The Graduate Entrant Scheme is, therefore, in full swing and has been so for some time and, I am glad to say, it is now firmly established.

## *The Last Flight Cadet passes into history*



"From one generation to another."

The transition over these past two and a half years has not been altogether painless — particularly in the early days — but I am now able to report — and I am sure that 101 will back me on this — that the graduate officers are in every way proving themselves to be worthy successors to the flight cadets who have gone before. Here I must pay special tribute to the part played by No 101 Entry in handing over the baton. Your numbers may have been small but your influence has been considerable. For the past twelve months a great responsibility has rested on your shoulders and you have risen to the occasion in a most creditable way. Tomorrow you hand over The Queen's Colour to the graduate officers and I feel sure that you will do so confident that they will follow your good example and bear it with the same pride and dignity as yourselves.



A new generation waiting in the wings.



# The End of an Era

On 16 March 1973, the day after their Wings & Prizes Ceremony, 101 Entry slow marched off the College Parade Ground to the strains of Auld Lang Syne, as the last intake to be trained under a 45-year old Flight Cadet Training System. The end of an era.

## THE GRADUATION OF No 101 ENTRY

The Graduation Parade of No 101 Entry took place on 16 March 1973. The Reviewing Officer was Air Chief Marshal Sir Denis Spotswood, GCB, CBE, DSO, DFC, ADC, Chief of the Air Staff.

It would be foolish of me to deny that, in addition to the pride and pleasure we have today in your Passing-out from the College, we have in mind that you are the last to do so as a Flight Cadet Entry.

I do not wish to dwell on this latter aspect other than to say that there should be no regret that this is so. Nostalgia — yes. Sadness — no.

Rather it is a clear indication that the Service in which very shortly you will hold The Queen's Commission, is a dynamic one. One which is willing to anticipate the need for development, and to act on that need, rather than one which awaits on events.

That is our tradition, just as it has been until now that the hard-core of our officers has gone through Cranwell as Flight Cadets.

But that is the point. Tradition must be a firm foundation upon which to build. It must not become merely folk-lore, or mystique, which so often in many walks of life is used as an excuse to avoid progressive change. Of this we must never be guilty.

Your training here must have impressed upon you the exciting and dynamic nature of your Service. You will have found that the pace of its thinking has to be such that it keeps in step with, indeed anticipates, the almost incredible technological advances of the age in which we live — and particularly in respect of the element in which we have our calling. Yours is indeed an exciting future, probably more so relatively than it was for those of us whose Service started a lengthy time ago.

But I would put it to you that, whatever technology may offer in the future, man—you—will remain its master, provided you match it with the dynamic professional standards, a continued determination to make the best of our resources, and the imagination shown by your predecessors. They were never shackled by the past, while paying a proper respect for it. See to it that you act similarly.

But to show these qualities you have always to strive for excellence in every aspect of your profession. Nothing less will do.

And this brings me to your place as officers. With your Commissions you obligate yourselves to the service of your Queen and country with honour. You dedicate yourselves to a life — and it is a very rewarding one — which will call for your skill, your judgment and determination and, above all, your qualities of leadership. And note that I use the word leadership, not “management” which, I believe, should properly be subsumed by leadership.

Gentlemen, when this College was founded, Winston Churchill said that “he looked forward to the day when those at the College would make the name of the Royal Air Force feared and respected throughout the world”.

He lived to see that day come. And so we have continued — possibly more widely than you can know now. But — and I give it as but an example — last week I visited the Turkish Air Force in which I saw much to be admired and it was good to find that at least some of its strength came from the fact that this College trained no fewer than thirteen of its present Air Officers — and I can assure you that there are none more loud in their praises for what was given them here. And so it is in many, many parts of the free world.

See to it, gentlemen, and you have it in you or you would not be hearing me now, that you follow this fine tradition in your chosen — well chosen — profession.

You have started well, as is evidenced by your bearing on this first class parade, which marks a most fitting beginning to your honoured place amongst Old Cranwellians. On all this I congratulate you. And on behalf of everyone on the Orange I give you our best wishes for your success and happiness in the future.

You could not have hoped for a better start to a career of discovery, challenge and rewarding experience. Well done.



**No. 101 ENTRY, PRIZEWINNERS**

Back Row: SFC A. H. Little, The Battle of Britain Trophy for Aerobatics; SFC T. A. Harper, The Ecole de l'Air Trophy for French Studies; U.O. P. Grimson, The Ministry of Defence (RAF) Prize for War Studies and Humanities and the Royal New Zealand Air Force Trophy; SFC D. Edwards, The Abby Gerrard Fellowes Memorial Prize for Maths. and Science; SFC R. Cullingworth, The Hicks Memorial Trophy for Ground School Subjects; U.O. T. J. Watson, The R. M. Groves Memorial Prize and Kinkad Trophy for Flying; The Philip Sassoon Memorial Prize.

Centre Row: SFC C. D. Edwards, The Abby Gerrard Fellowes Memorial Prize for Maths. and Science; SFC R. Cullingworth, The Hicks Memorial Trophy for Ground School Subjects; U.O. T. J. Watson, The R. M. Groves Memorial Prize and Kinkad Trophy for Flying; The Philip Sassoon Memorial Prize.

Front Row: SFC A. C. Spinks, The Alasdair Black Memorial Trophy for General Service Training; SFC A. D. Maddox, The Sword of Honour and R. S. May Memorial Prize; U.O. T. J. Watson, The R. M. Groves Memorial Prize and Kinkad Trophy for Flying; The Philip Sassoon Memorial Prize.

## COMMISSIONING LIST No 101 ENTRY

AD MADDOX, Senior Under Officer (Pilot); The Sword of Honour and the R S May Memorial Prize.

P GRIMSON, Under Officer (Supply); The Ministry of Defence (Royal Air Force) Prize for War Studies and the Royal New Zealand Air Force Trophy.

T J WATSON, Under Officer (Pilot); The Philip Sassoon Memorial Prize; The R M Groves Memorial Prize and Kinkad Trophy.

M S FLEMMINGS, Under Officer (Pilot).

A J MALCOLM, Under Officer (Royal Air Force Regiment).

C ARMSTRONG, Senior Flight Cadet (Pilot).

R C BAILEY, Senior Flight Cadet (Pilot).

C R BENN, Senior Flight Cadet (Pilot).

R C H BEYER, Senior Flight Cadet (Pilot).

J G BURGESS, Senior Flight Cadet (Pilot).

G P COOPER, Senior Flight Cadet (Supply).

R CULLINGWORTH, Senior Flight Cadet (Pilot); The Hicks Memorial Trophy.

R DAVIDSON, Senior Flight Cadet (Secretarial).

G I DAVIES, Senior Flight Cadet (Pilot).

D EDWARDS, Senior Flight Cadet (Pilot); The Abby Gerrard Fellowes Memorial Prize.

D R E EVANS, Senior Flight Cadet (Royal Air Force Regiment).

C J FORD, Senior Flight Cadet (Pilot).

W J HAIR, Senior Flight Cadet (Pilot).

T A HARPER, Senior Flight Cadet (Pilot); The Dickson Trophy and Michael Hill Memorial Prize; The Ecole de l'Air Trophy for French.

J M HERBERTSON, Senior Flight Cadet (Pilot).

M J HILL, Senior Flight Cadet (Pilot).

P HODGSON, Senior Flight Cadet (Pilot).

A P J KIRKUP, Senior Flight Cadet (Pilot).

A H LEITCH, Senior Flight Cadet (Pilot).

R G LEONARD, Senior Flight Cadet (Supply).

A H LITTLE, Senior Flight Cadet (Pilot); The Battle of Britain Trophy.

P A W MAYHEW, Senior Flight Cadet (Pilot).

P F B PATERSON, Senior Flight Cadet (Pilot).

M J RUDD, Senior Flight Cadet (Secretarial).

D St J SALISBURY, Senior Flight Cadet (Secretarial).

S M S SKINNER, Senior Flight Cadet (Pilot).

A C SPINKS, Senior Flight Cadet (Supply); The Queen's Medal, The Ministry of Defence (Royal Air Force) Prize for Supply Flight Cadets; The Alasdair Black Memorial Trophy and Prize.

J J T TAYLOR, Senior Flight Cadet (Pilot).

C B WALKER, Senior Flight Cadet (Pilot).

J WILLIMOTT, Senior Flight Cadet (Navigator).



**No. 101 ENTRY FLIGHT CADETS — MARCH 1973**

Back Row: SFC D. R. E. Evans, SFC D. S. J. Salisbury, SFC M. J. Hill, SFC C. R. Benn, SFC J. J. T. Taylor, SFC R. C. H. Beyer, SFC R. M. S. Skinner, SFC R. C. H. Beyer, SFC R. Bailey, SFC A. P. J. Kirkup, SFC A. C. Spinks, SFC G. P. Cooper.

Centre Row: SFC W. J. Hair, SFC R. G. Leonard, SFC P. F. B. Paterson, SFC D. Edwards, SFC J. M. Herbertson, SFC G. I. Davies, SFC A. H. Leitch.

Front Row: SFC A. H. Little, SFC C. B. Walker, SFC T. A. Harper, U.O. M. S. Flemmings, U.O. A. J. Malcolm, SFC A. D. Maddox, U.O. P. Grimson.



# The GE Era - 'Mid-Term' Evolution

Whilst researching the College archive, revealing many items and records that had not yet been accessioned or catalogued, the author was directed to a series of 'Red Boxes' used to store graduation photographs, graduation programmes and Admin Orders for the GE era. In the mid-1970s, it was evident from these records that the format for 'Passing Out' changed from a single graduation on completion of Phase 2 training (e.g. Flying, Engineering, Secretarial & Supply) to separate graduations for Phase 1 (IOT) and Phase 2 training. The reasoning was unclear, but represented another minor but highly significant transition in College Training systems.

However, the reasoning is explained by the Commandant, AVM WE Colohan, in his report published in the 1975 College Journal and reproduced here.

## THE COMMANDANT'S REPORT - AS PRESENTED IN THE COLLEGE JOURNAL 1975

He introduced his report by saying that the highlight of the year had been the visit of our Commandant-in-Chief, Her Majesty The Queen, on 30 May 1975 to present the College with a new colour — the third in our history, and a unique honour. At the parade a squadron of direct entrant officers commissioned at Henlow, representing those undergoing initial specialist training at Cranwell had paraded with the graduate students and acquitted themselves well.

He went on to describe inevitable changes caused by the reduced number of graduate students at the College, and the considerable variation according to Branch in the duration of the specialist training courses which follow the officer training phase thereby splitting up entries. This has entirely precluded graduation by Entries, as we have known it, and made necessary the removal of outdoor ceremonial from Graduations.

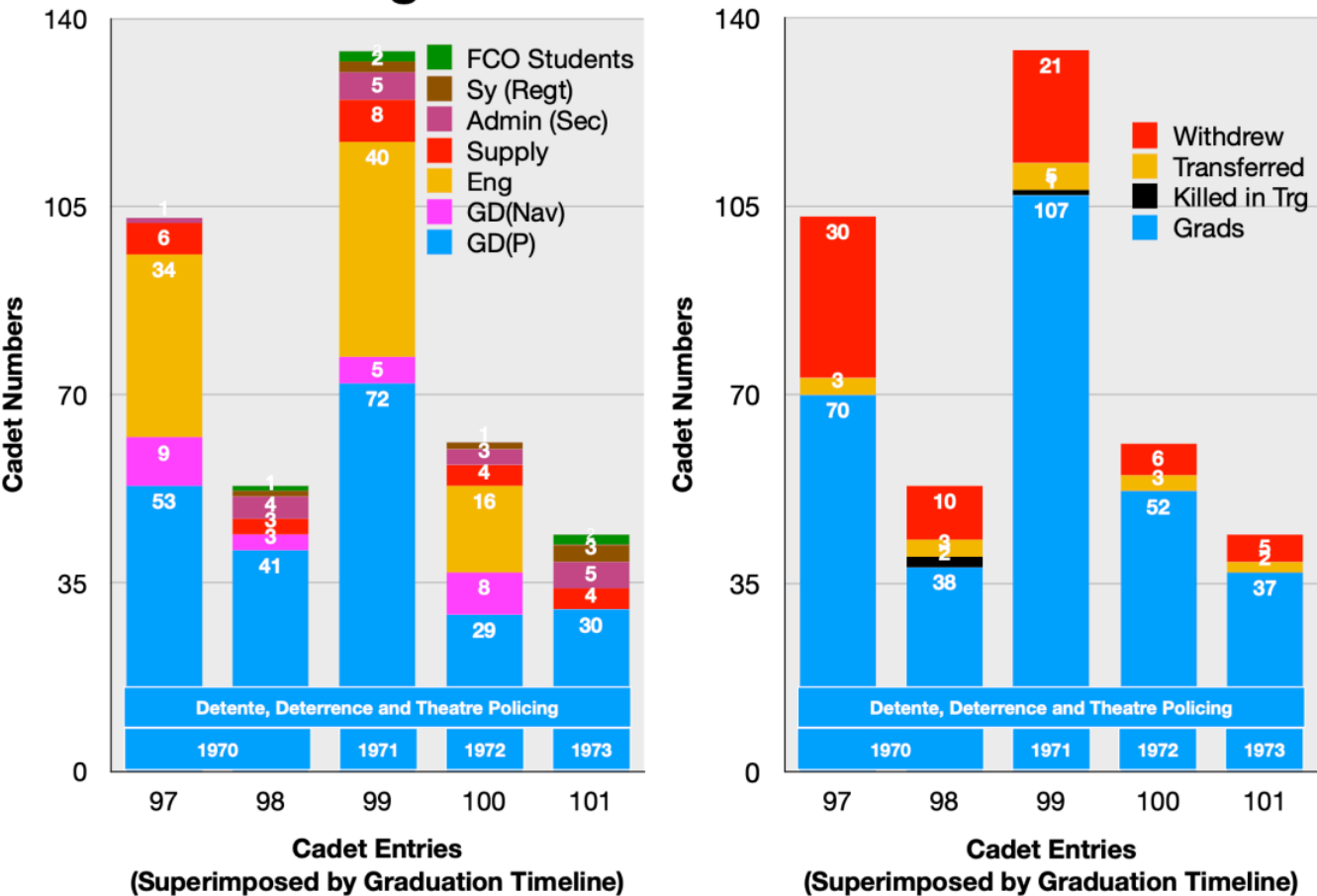
At the end of the Officer Training phase a small ceremonial parade had been introduced, preceded by the traditional service of Dedication in the Memorial Chapel. A full parade of Graduate Entry officers will take place only twice a year and on one of these the major prizes will be presented, included the Sword of Honour which will henceforth be awarded annually, although the flying prizes will continue to be awarded by Entry. Ceremonial parades will still be held on special days such as the Queen's Birthday and Remembrance Sunday, but the completion of the specialist training courses will be marked by indoor ceremonies, similar to the Flight Cadets Wings parade of earlier years.



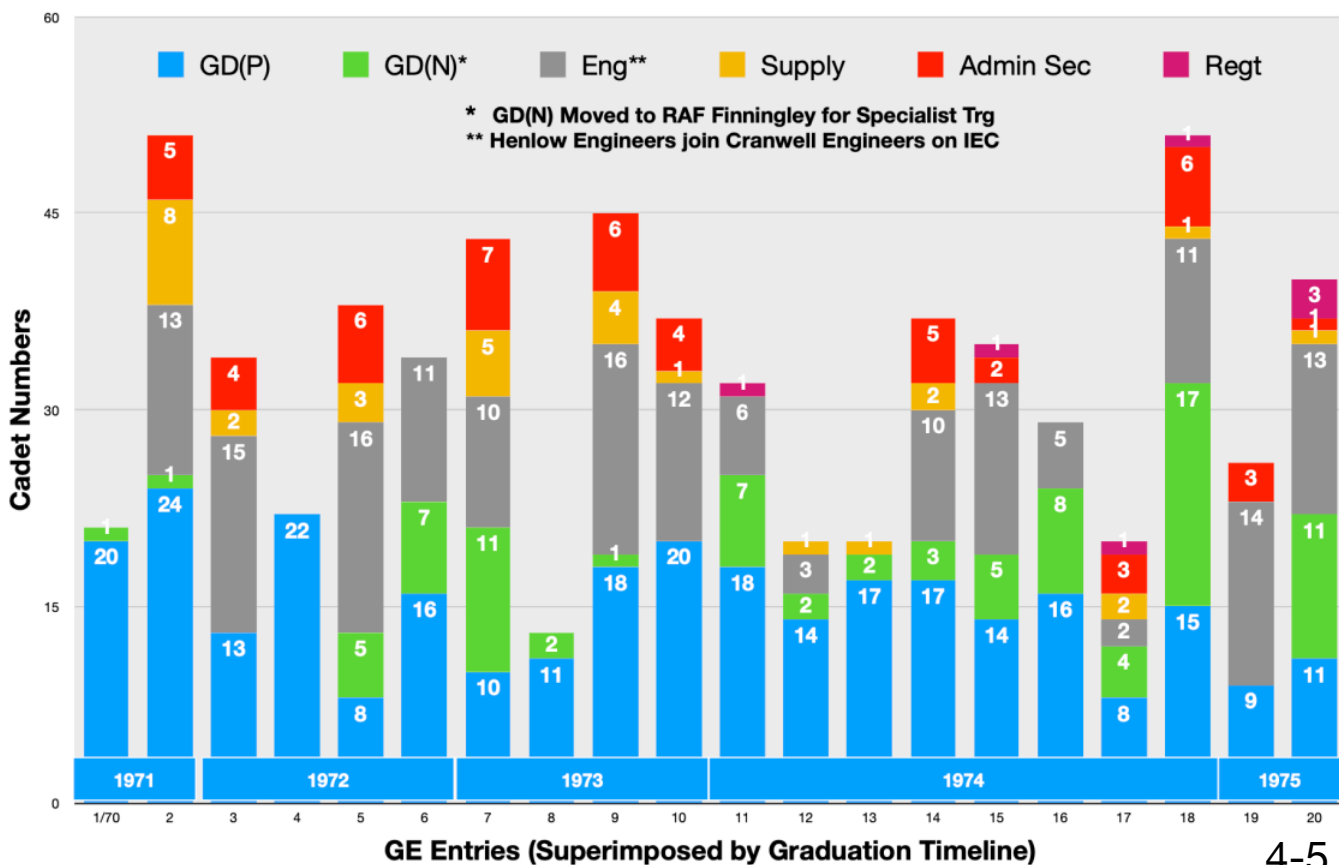
# Comparison of 1970 Training Stats

Throughout the early 1970s, both training systems continued to generate commissioned officers for six branches in the RAF, GD(P), GD(Nav), Eng, Regt, Admin (Sec) and Supply. The frequency of GE graduations was twice that of the Flight Cadet System. That said, the transition was evolutionary, unlike the transition the College would face in 10 years time.

## End of Flight Cadet Era - 1970s Statistics



## GE Era of 1970s - Phases 1 & 2 Trg (1 GE to 20 GE)





# Part 5 - Transformation to the SGIOT Schemes

The Introduction of the Flight Cadet System was revolutionary; its reinstatement in 1946 was evolutionary. The interruption of WWII demanded shorter flying training courses than provided to flight cadets (and without the academics); in effect, the RAF College training operation had been suspended, the College SFTS its replacement.

The transition to the GE System arguably was evolutionary, despite the more mature recruit already educated to degree standard dispensing with the need for formal academic education. Phase 1 and Phase 2 training for most branches remained combined, at least initially, with attendance except for Navigators reduced to 12 months, half the length of the ‘combined’ Flight Cadet courses. Navigators were despatched to Finningley after successful completion of IOT for their specialist training. Broadly speaking, for its first 50 years or so, the RAF College had charted an evolutionary, responsive path.

All of this was to change in 1978 with RAF Henlow OCTU closing, the progressive transfer of all officer training to the College, and, with it, the introduction of SGIOT that would establish a new operational baseline for the IOT, IOTC and Modular IOT (MIOT) systems that followed. SGIOT was a step change: a new business model; a new training model adapted from Henlow’s OCTU; as a consequence, a significant change in culture at the RAF College. This culture change would not be formally acknowledged until the RAF College became RAF Officer Training Academy (RAFOTA), almost 100 years to the day after the RAF College had been formed.

The scope and scale of officer training at the College changed dramatically, particularly with regard to three characteristics:

- **Volume.** Pre-WWII, each Entry comprised an average of 40 cadets aiming to become pilots, the College typically running two Entries a year generating an average of 80 pilots. F20 contained a maximum of 52 cadets and F22 a minimum of 16. Post-WWII, the average intake size rose to 55, with the potential for an average of 110 graduates a year. Of these, an average of 39 per Entry would be pilots, generating 78 or so a year. 99 Entry comprised a peak of 134 cadets, the ‘restart’ 45 Entry and 60 Entry the minima of 14 and 24 respectively. Contrast these figures with the IOT courses. The average course size was 88, of which 26 were earmarked for pilot training, a marked reduction of the Flight Cadet days. However, there would be between seven and nine graduations a year, with the prospect of around 700 graduates a year, of whom around 230 could be pilots.
- **Service Branches.** SGIOT sought to deliver training to officer recruits to all Air and Ground branches in the RAF, some 25 different branches, as well as foreign students (in time, from nearly 60 different countries). Beyond the graduation of 17GE in March 1975, Phases 1 and 2 training would be formally “decoupled”, the College running IOT (Phase 1) and other Directorates at Cranwell running their specialist (Phase 2) courses, each with their own graduations. The last wings ceremony at the College took place in February 1977, with 27GE. So even before SGIOT was initiated, the College’s responsibility had been confined to officer training (Phase 1) alone.
- **Diversity of Entrants.** Not self-evident without detailed research of College archives and helpful feedback from IOT cadets, under SGIOT the College was recruiting from a much wider variety of sources. Gone were the Flight Cadet days of streaming recruits from the UK’s top schools; gone were the GE days of recruiting only the top university graduates. By the time the IOT system had taken hold, the College was training recruits between the ages of 17 and 42 from a diverse range of sources - NCO/airmen, university graduates, university sponsorships, direct entrants, international sources, etc.

Together these three prime factors created a very different set of challenges for the College, necessitating a series of modifications and trials, such as the introduction of the “Pre-IOT” in the mid-80s, to establish a robust and flexible training model. In years to come, that would include a transition to the IOTC system (2005) and the RAFOTA’s MIOT (2020) system of the present day.



# Extract from College Journal 1978

The article below taken from the 1978 edition the College Journal gives a good account of the convergence of previous officer training schemes at Cranwell, Henlow and South Cerney, as the backdrop to the SGIOT initiative. Importantly, it describes the rationalisation of training infrastructure, including DAW, DIOT, DGST and the Flying Wg at Cranwell, ahead of the phased move of Henlow's OCTU to Cranwell. There are two things worthy of note. First, the predicted throughput differs from the reality. Second, the new SGIOT cadet - white hat band reinstated - would only spend six weeks in CHOM, a significant departure from previous training schemes.

## SINGLE GATE INITIAL OFFICER TRAINING

In 1977 the Air Force Board decided that, in future, entry to commissioned service in the Royal Air Force would be through a 'single gate' located at the Royal Air Force College. Since then the phrase 'single gate initial officer training' (SGIOT) has become an essential and constantly recurring phrase in the vocabulary of all those involved in the formulation of future training plans. For an insight into the origins of this important development and an appreciation of the impact it will have upon the Cranwell scene, it is necessary to review some of the related events of the past 15 years and the current organization which has resulted from them.

The Royal Air Force Technical College at Henlow merged with the Royal Air Force College in 1965 to become the Department of Engineering located in the custom-built Trenchard Hall. Technical cadets lived alongside flight cadets and received their officer training in the Department of Cadets. The decision to discontinue both the Flight Cadet and the Technical Cadet Schemes in favour of the University Graduate Scheme led to the arrival in 1971 of the first university graduates to receive their initial officer training at Cranwell. The last of the old-style cadets graduated with No 101 Entry in March 1973.

The year 1973 saw another major development for the College. The Royal Air Force College of Air Warfare at Manby closed and the training conducted there was transferred to the new Department of Air Warfare (DAW) which opened at Cranwell in January 1974. Training accommodation for the DAW was made available in one wing of the Whittle Hall which underwent considerable modifica-

tion in preparation for its new task. Previously, the area had contained laboratories and lecture rooms for the use of the old Basic Studies Wing, part of whose function was to provide a scientific and technical education for cadets. With the introduction of the Graduate Entry Scheme, it proved possible to reduce this commitment significantly and to transfer what remained to the Trenchard Hall.

To these and several other changes, the College has reacted by making the necessary adjustments in organization and redistribution of accommodation and facilities in order to provide for the expanded range of training activities now concentrated at Cranwell. Titles and taskings have changed quite rapidly, the Department of Cadets, for example, becoming the Department of Officer and Flying Training, before assuming its present title of the Department of Initial Officer Training (DIOT), and the Department of Engineering being replaced by the Department of Specialist Ground Training (DSGT). In view of the possible confusion, it may be advisable to remind the reader of the current College organization.

The College, under the command of the AOC and Commandant, has group status within Royal Air Force Support Command. The various training functions are discharged by :

- a. The DAW, which is responsible for the postgraduate training of a wide cross-section of officers drawn mainly from the GD Branch.

- b. The DIOT, which conducts initial officer training and exercises functional control of the 16 University Air Squadrons.

- c. The DSGT, which provides mainly for the professional training of officers of the Engineer, Supply and Administrative (Secretarial) Branches.

- d. Flying Wing, Royal Air Force Cranwell, which is responsible for basic and intermediate pilot training for some 50 per cent of new pilots entering the Service. Royal Air Force Cranwell also provides administrative support for the whole College.

In 1966, the Officer Cadet Training Unit (OCTU) moved from Feltwell to Henlow taking over the accommodation vacated by the Technical College. The Aircrew Officer Training School at South Cerney merged with the OCTU in 1969 and since then Cranwell and Henlow have provided the only 2 points of entry into commissioned service. With the graduation of No 101 Entry from Cranwell in 1973, both establishments were conducting essentially similar initial officer training programmes. Although Cranwell trainees were all university graduates, some university graduates completed their initial officer training at Henlow. The stage was set for the eventual merger of the OCTU and the DIOT.

The decision to introduce SGIOT at the College was based upon studies which confirmed that the syllabus for initial officer training at Cranwell was basically the same as that of the OCTU at Henlow. Furthermore, there was no noticeable difference in

the standard of performance in early appointments between the Cranwell and Henlow products. The merging of the 2 courses at Cranwell will make available to all the unique environment of the College, encouraging the creation of an improved esprit de corps.

Some progress towards the implementation of SGIOT is already evident. The AOC and Commandant assumed responsibility for OCTU training in July 1978 when Royal Air Force Henlow joined the College Group. Ten students who are not university graduates began their training on No 34 Course in the DIOT in December 1978. Plans have been developed for a gradual build-up of activity in the DIOT culminating in the full implementation of SGIOT during 1980. The College is therefore poised on the brink of the most momentous training development of recent years.

At present the DIOT accepts only 2 courses of 60 students at any one time. Sometimes only one course is in residence. By the summer of 1980, it will be possible to accommodate almost 500 students under training continuously, yielding an annual output of approximately 1200 new officers. Clearly the DIOT will need access to a great deal more domestic and training accommodation. The impact of these demands will make itself felt throughout the College. An extensive programme of works services has been scheduled and is already well under way.

The DSGT has been reorganized to release a large volume of training accommodation in the Trenchard Hall. After the necessary

modifications have been completed, the DAW will transfer from the Whittle Hall to this new location. The DIOT will expand into the space vacated by the DAW and will then occupy the whole of the Whittle Hall.

To provide the additional domestic accommodation required by the DIOT, a barrack block in the East Camp is to be made available and the old Junior Cadets' Mess is to be reopened. In the recent past, students undergoing initial officer training in the DIOT have lived in the College Hall Mess together with officers undergoing initial specialist training in Flying Wing or the DSGT. In the future DIOT students will spend their first 6 weeks in the East Camp area, their second 6 weeks in the Junior Lines and their final 6 weeks in the College Hall Mess, which they will fill to capacity. Having completed initial officer training, students remaining at Cranwell to train in Flying Wing or in the DSGT will transfer to the Trenchard Hall Officers' Mess. York House Officers' Mess will be used to accommodate officers attending post-graduate courses and study periods.

There can be little doubt that the impending population explosion will impose a considerable strain upon all the resources of the College. There will of course be some relief if recruitment figures fall below the targets set but this would be most unwelcome in view of the implications for the future of our Service. We must hope that the required numbers will materialize and attempt to find effective solutions for the many attendant problems. The next few years promise to be particularly significant in the continued evolution of the College.



# 34 GE - The First IOT Graduation under SGIOT

As the previous College Journal article stated, the process of OCTU migration from Henlow to Cranwell started with the induction of 10 “non-university graduates” on “34 Course” at the College. And as anticipated by the author of that article, the “population explosion” would cause some strain. An example of early teething problems, Courses 34 to 39 inclusive were referred to loosely as 34 to 39 GE or IOT, causing some confusion as evidenced by Prize Winner and Graduation photos. The dates on the 34 and 35 GE photos are also incorrect. By 1980, it seems the transfer from Henlow was complete and the College IOT system in full swing.



NO 34 GRADUATE ENTRY - 24 JUNE 1977 ???

PRIZEWINNER 15 March 1979

Fg Off J P Crosse BA  
The Hennessy Trophy and  
Philip Sassoon Memorial Prize



No. 34 INITIAL OFFICER TRAINING COURSE 15 March 1979

Back row	Pt. Off. G. P. Badham Fig. Off. K. M. Ward Pt. Off. S. J. Wilson	Fig. Off. N. C. Randle Fig. Off. M. R. Wilson Pt. Off. W. D. Williams	Pt. Off. W. E. Dawson Fig. Off. A. R. F. Clay	Fig. Off. K. J. H. Morris Fig. Off. S. D. Priestley	Fig. Off. C. R. Topham Fig. Off. P. R. Harris	Pt. Off. E. T. Whittingham Pt. Off. C. A. Burreto
Third row	Fig. Off. D. R. Wyatt Fig. Off. T. J. Kerns Fig. Off. L. Warner	Pt. Off. H. R. Pierce Fig. Off. V. J. Treverton	Pt. Off. J. T. Hughes Fig. Off. J. B. Woodbridge	Fig. Off. C. H. Warren Pt. Off. G. R. R. Porter	Fig. Off. B. D. Weatherly Pt. Off. K. V. Danvers	Fig. Off. T. N. Lock Fig. Off. G. A. Humphreys
Second row	Fig. Off. N. J. Scotchmer Fig. Off. S. W. Turner	Fig. Off. K. Dennison Pt. Off. A. Proadlove	Pt. Off. A. J. Roberts Pt. Off. S. K. Dobb	Pt. Off. A. J. Cable Pt. Off. D. Bateson	Fig. Off. I. C. Mackinnon Fig. Off. G. H. Harris	Fig. Off. I. M. Small Pt. Off. R. B. Webb
Front row	Pt. Sgt. O'Connell Pt. Lt. B. J. Maddocks	Fig. Off. J. P. Crosse Pt. Lt. P. K. Weaver	Pt. Lt. D. B. Farquhar Fig. Off. R. B. Cunningham	Pt. Lt. C. D. Evans Fig. Off. D. C. Swaffer	Pt. Lt. C. K. Adams Fig. Off. W. L. Ragg	Squad. Ldr. P. L. Watson



# A Personal Recollection of PIOT

A major contribution to our understanding of the transition to SGIOT is from Gp Capt Rob O'Dell, who was on 100 IOT. He alerted us to the existence of the short-lived Pre-IOT (PIOT) courses that were introduced to enhance the chances of success for younger male recruits under the age of 21. From College Journal extracts, we know that the main IOT course was training men and women of all ages, typically 17 to 40+, and from very different backgrounds. SGIOT had abandoned the concept of the GE officer student and reverted to that of the 'Officer Cadet', white flashes and white head-bands back in again: *non-graduate 'Direct Entrants' graduating as Acting Pilot Officers; "ex-SNCOs (or "Hairies") graduating under the 'Branch Officers' scheme in their former specialisation as Flying Officers; University 'Student Officers' graduating in the rank of Flying Officer or Flight Lieutenant of their chosen profession".* Add to this, the number within any one cohort and the intensity of the 18-week course, it is not surprising that some younger recruits struggled to meet the demands of IOT. Enter the PIOT.

His own PIOT *"started on 10 November 1986, comprised 24 recruits, the youngest being 17 years of age. The majority of his cohort were 18 or 19, joining with sixth-form scholarships; older members were SNCOs between the ages of 35 and 45, selected to receive Branch Commissions. The four-week PIOT syllabus was a 'mini' version of the main IOT and included: basic leadership exercises; camp craft and navigation; service writing; personal admin (ironing and regular 'bull' nights)."*

Pre-IOT was by no means a new concept at the College. In the preceding GE era, for example, some engineer recruits received informal technical training, of varying duration, ahead of their IOT principally to counter the threat of any "late" job offers from industry. However, the four-week PIOT introduced around 1985 was likely the first formal training programme to better prepare younger recruits, regardless of branch, for an intensive period of IOT. *"Despite some initial success, the PIOT initiative was abandoned in 1987";* the reasons are not recorded.

Bob also reminds us that *"IOT as a whole consisted of four 'main sqns' assigned sequentially to IOTs, starting every six weeks (eg C Sqn 100 IOT was followed by D Sqn 101 IOT); PIOT\*s would start 4 weeks prior to the 'main course.' Each sqn wore different coloured cravats when in combat kit and had the same coloured stripe on their white cadet shoulder flashes, and a thin stripe on their 'Thunderbird jacket' and No 1 collar flashes. [A Sqn, red; B Sqn, yellow (B was known universally as an 'Easy' sqn whose standards were lower than everyone else's!); C Sqn, blue (note the cravats and shoulder flashes in Slide 76); D Sqn, green. D Sqn was also known as 'D for Death' Sqn and was notorious for giving their students a hard time and expecting much higher standards."*

*"Supporting these main sqns were:*

***Recourse or 'R' Sqn** who wore purple. Students were re-coursed at the end of their main course and underwent a further six weeks of training under a formal syllabus designed to address their specific areas of weakness (normally leadership related). This was different to those students 'back-squadroned' earlier in the course for academic or behaviour issues.*

***Med Holding Flt** wore white. Students were sent to MHF to recover from injuries which precluded them continuing what was a physically demanding IOTC at the time. When I was at Cranwell, MHF probably had 30+ studies with various injuries, many of whom were undergoing physio. They were often, somewhat unkindly, referred to as 'LMF'!*

***Specialist Entrant and Re-Entrant (SERE)** This was a six-week short course for recruits destined for 'specialist' branches (eg Legal, Medical, PMRAFNS and Dental) and those re-entering the RAF or transferring from another Service. Their course was run separately to the main IOTC but they graduated alongside their related IOTC. Although known as a 'knife/fork/spoon course', SERE guys graduated at flt lt or even sqn ldr rank, as is still the case."*



# SGIOT Mk 1a - IOT Revised

Whilst teething pains may have been sorted out, after 10 years, the RAF College clearly saw the need to adjust the structure and syllabus of IOT, extending the course from 18 to 24 weeks. The article appeared in the March 1997 College Journal highlighting the evolution of SGIOT in the 1990s and the *“need to train young officers with a genuine pride in their Service”*. Either side are links to other commentaries on the IOT system presented in College Journals throughout the 1990s.

NO 6 FLIGHT NO 135 INITIAL OFFICER TRAINING COURSE  
PROJECT WEEKEND - THE 3 PEAKS  
by Officer Cadet Tim O'Brien

March 1992

INITIAL OFFICER TRAINING - A STUDENT'S VIEWPOINT  
By Officer Cadet Andrews

March 1992

## INITIAL OFFICER TRAINING - PRIDE IN OUR FUTURE

By Wing Commander C K Adams OC Cdt Wg

In August 1992 the format and ethos of Initial Officer Training (IOT) was revised and a new syllabus launched which extended the course from 18 to 24 weeks. More recently, several fresh initiatives have recognized the need to train young officers with a genuine pride in their Service. This brief article describes the IOT course and reviews the training ethos which equips our future officers to move to their next phase of training with team spirit and a strong sense of pride as their watchwords.

The cadets' training begins with a 4-week phase called the Basic Induction Module (BIM). The phase is conducted largely by a cadre of high calibre RAF Regiment SNCOs and includes such time-honoured activities as Drill, Ground Defence Training and Physical Training. Here cadets are expected to conform to the firm but fair discipline of the "When I say jump, jump" variety. We also include some training in basic English; perhaps this was unnecessary in the past but many cadets of the 1990s need a hefty dose of English tuition to ensure that their spelling and grammar are up to standard. Needless to say, the principal elements of the BIM are tightly bound together with a large number of inspections of kit, rooms and turn out. The standard is absolute irrespective of age, sex or academic qualifications; indeed, learning basic military skills as a mixed group establishes an early rapport between people of differing backgrounds and previous experience. Although it is unusual, those who do not come up to the mark may be offered one opportunity to repeat the phase. Successful completion of the BIM marks the end of the beginning and cadets proceed to their Squadrons to meet, for the first time, their Flight Commanders and to begin 'officer' training.

The second phase of the course includes General Service Knowledge, Operational Studies, Communication Skills and, as ever, Drill and Physical Training, the major element of the module is devoted to Leadership Training. We believe, unreservedly, that leadership can be taught and we have a graduated and sophisticated programme which takes the cadets from classroom instruction and desk-top exercises through to an 8-day Field Leadership Camp (FLC) at a military training area. FLC is both physically and mentally demanding

and successful completion requires considerable effort and commitment. In the past, the syllabus was overlaid with a very strict disciplinary code where cadets jumped to their feet at the drop of a hat and spent most of their working day at attention in a "Yes sir, no sir, permission to carry on sir" mode. We now place much more emphasis on an appropriate 'officer manner' and require the cadets to relate to each other as if they were fellow junior officers and to their flight commander as if he were a Sqn Ldr. Cadets are treated as junior (very junior!) officers from Week 5 and trained in a way that will allow them to make their mistakes without fear in an environment where the staff are able to correct them without their being embarrassed or having their confidence undermined. We use first names when appropriate, but this does not detract from the discipline which ideally must come from within the person and must be in tune with his or her status as a potential officer. Initial signs are that we are training young people who are self-disciplined and are quickly at ease, both with each other and with colleagues in the Service at large.

After FLC we conduct another appraisal of all the cadets; some may need more training, or may even be deemed unsuitable but the majority will go forward to the third and final phase - the application phase. This final stage comprises academic studies, Operational Studies Presentations and management training; additionally, it provides an opportunity to fly. The emphasis is on developing character, confidence, military awareness, pride, and the application of leadership skills. The phase includes a realistic management simulator where the cadets have to organize and undertake the staff work associated with a major Royal Visit to the College. The Operational Studies syllabus has been completely overhauled and now enables cadets to argue convincingly in support of the effectiveness of air power, culminating in a formal presentation using computer-generated and video display equipment. Pride in our Service is further enhanced by a visit by the RAF Presentation Team as well as several presentations given by front line units. In future the Chief of Air Staff himself will give his vision of the future during the cadets' familiarization visit to the RAF Club in Piccadilly. On the more energetic side, the cadets spend a week at the Outdoor Activities Centre at Grantown-on-Spey

where their confidence and resourcefulness are enhanced by climbing, hillwalking and canoeing. They also visit an operational station, but not for the standard whistle-stop tour of key points of interest. Rather, they spend time 'sitting on the shoulder' of a working junior officer to see his day-to-day job and, more importantly, to see how he relates to his staff, peers and colleagues. Every opportunity is taken to fly in military aircraft and, increasingly, overseas bases are visited to emphasize the RAF's continuing responsibilities abroad. The culmination of the phase is a sophisticated 5-day 24-hour Combined Operations Centre exercise called Peace Keeper. The cadets fill all the posts routinely associated with the setting up and running of a Forward Operating Base in a realistic scenario. The exercise requires cadets to think for themselves and to take responsibility under conditions of stress, urgency and fatigue. It is an excellent training vehicle, being both realistic and demanding. Peace Keeper is the last major element of instruction and, after its completion, decisions on graduation are made. Those who have not recently attended a ceremonial occasion at Cranwell may be interested to know that when the College moves into top gear it is both stylish and impressive; for the successful cadet, marching off the Parade Ground and up the steps of College Hall is a memorable highlight of a proud day.

It is not only the cadets who are proud. We on the DIOT staff take great pride in the quality of our output. Our new officers have more confidence, are prepared to take decisions and, being anything but 'yes men', they are able to disagree in a polite, informed manner. And that is perhaps the nub of what we have tried to inculcate: the ability to relate to their fellows in an appropriate way whilst having enough confidence, style and authority to hold their own as junior officers in the Royal Air Force.

The signs are that today's graduates from IOT are definitely more at home with their officer status than were many of their predecessors. We have been very fortunate to have had a very high quality input of young people into officer training recently. They are highly motivated and intelligent, with vision and determination; they will be an important asset to drive our Service towards a bright future.

THE 24-WEEK INITIAL OFFICER  
TRAINING COURSE

A STUDENT'S VIEW

April 1994

Fg Off P R J Lamb  
No 147 Initial Officer Training Entry



# SGIOT Mk 2 - IOTC

## THE NEW INITIAL OFFICER TRAINING AND SPECIAL ENTRANT AND RE-ENTRANT COURSES

### OFFICER CADET TRAINING REVIEW

The Officer Cadet Training Review (OCTR) was established in April 2003 to identify what would be required of 'Tomorrow's Officer' and recommend the structure and content of an Initial Officer Training Course (IOTC) that will provide the platform for developing Junior Officers (JOs) into the next decade, and thus the senior officers of 2020 and beyond. Today, it is no longer the case of whether JOs will be involved in operations but when; consequently, it is implicit that our future JOs are equipped with the mindset and necessary skills to enable them to support the ethos of war fighter first and specialist second. Thus, the OCTR determined that tomorrow's officer will need to be:

***"military minded and of a courageous and determined fighting spirit; mentally agile and physically robust; politically and globally astute; air minded, technologically competent and able to handle ambiguity; capable of understanding and managing inter-personal relations; flexible, willing to take risks, adaptable and responsive; and able to handle tomorrow's recruit."***

During their research, the OCTR concluded that there were many good features in the 24-week IOTC which, over many years, had produced officers who were proud of their achievements during the course, were well motivated towards their specialist training and had a high degree of teamwork and camaraderie. However, the research also revealed that the leadership style developed was predominantly control based, that the course had a strong assessment (as opposed to learning) culture, and that many graduates had an inability to relate to other ranks in general, and SNCOs and WOs in particular. Furthermore, there was minimal use of IT and a lack of realism in some aspects of the training. At the time of producing the Report, it was evident that the current Officer and Aircrew Cadet Training Unit (OACTU) staffs were vigorously addressing many of the issues, but were constrained by the current course length and design. Overall, the OCTR developed over 100 recommendations for change, of which over 90% have been incorporated within the new IOTC. It was recognised that a complete redesign of IOT would have implications for the Special Entrant and Re-Entrant (SERE) Course; this Course is for officers joining the Specialist Branches ie Doctors, Dentists, Nurses, Chaplains, and Lawyers, and also for officers rejoining the Service, or joining the RAF from other Services. The SERE Course dovetails into the main events of the IOTC therefore it was reviewed concurrently. Although many of the conclusions relating to SERE mirrored those highlighted within the IOTC, a number of other key recommendations emerged. For example, the previous SERE Course produces officers who have not completed Initial Ground Defence Training (IGDT), and so have not been authorised to carry weapons. Yet many deploy on operations only a few weeks after leaving Cranwell which moves the problem to their gaining units. Such practical realities of employing specialist personnel in today's expeditionary RAF mean that the lengthened SERE Course, which is more integrated with IOTC, will produce a better trained and more credible specialist officer who is also IGDT trained.

### THE NEW INITIAL OFFICER TRAINING COURSE

The new IOTC represents considerable change through the development of a new OACTU structure, a refocusing of elements of practical leadership, increased academic study, changes in training methodology/assessment and an impressive new IT/IS base. However, as the previous IOTC already delivered first-class training based on sound and established training principles, the new course builds on these aspects by

taking current best practice and developing it to meet the requirements of Tomorrow's Officer. From the outset the challenge has been not to 'throw the baby out with the bathwater'.

The new IOTC has been designed around 3 terms of 10 weeks core training, with a week's leave at the end of the first and second terms; this has increased the course from 24 weeks to 32 weeks. Moreover, the Basic Air Warfare Course (BAWC), delivered by the Air Warfare Centre, has been incorporated into the final term. Recommendation for graduation is made at the end of the second term, subject to satisfactory continuation in performance, to enable the final term to be transformational in nature; this enhances the individual's transition from Officer Cadet to JO. The course has places for up to 120 cadets with a new course starting every 11 weeks. This gives an annual throughput of up to 540 cadets per year.

The new IOTC also incorporates a revision of the Organisational Development (OD) of OACTU. The flight system that traditionally had a JO Flt Cdr responsible for 8-10 cadets has been radically changed. Flt Cdrs are now supported by a Flight Sergeant as the Deputy Flt Cdr, and between them they have responsibility for up to 30 cadets. Specialist Training Teams (STTs) have been established to provide expertise in particular areas of the course, including leadership, military skills, physical education, and academics. Instructors from the STTs join individual flts for large elements of the IOTC, thereby ensuring that the 1:10 ratio, that is so important for experiential training, is retained. Consequently, cadets experience training by officers from a greater variety of branches and they enjoy improved mentoring from their Flt Cdr and SNCO Deputy Flt Cdr. Essentially, the revised OD effectively decouples training and assessment. Independent testing officers, who have not previously trained or assessed a particular cadet, judge final achievement. In recognition of the need for officers to have a better understanding of airpower and air warfare, an enhanced Academic Department has been formed in partnership with King's College London (KCL). In addition to the existing military Operational Studies staff, 7 lecturers from KCL now lecture to the IOTC, SERE Course and the BAWC students. Each IOTC flt of 30 cadets is allocated a tutor from the Academic Department for the duration of the course.

The concept of empowered leadership, based on the principle of mission command, has been introduced to balance the action centred leadership previously taught. The aspiration is for the cadet to be empowered to think creatively and innovatively and thus develop a personal style of leadership which, in time, will become transformational in nature. During this 'journey', cadets consider not just what they need to do to fulfil the functions of leadership, but who they need to be. The practical exercises throughout the new course have been designed around deployed operations scenarios, with maximum involvement of the wider RAF. The previous Field Leadership Camp, typified by its reliance on pine-poles and ammunition boxes, has been replaced by Exercise MILITARY AID which uses a series of realistic scenarios based around Military Aid to the Civil Authorities. The former final leadership exercise, Exercise PEACEKEEPER, has been replaced by a combined exercise at RAF Syerston, based on 2 Deployed Operating Bases. This involves Term 2 students undertaking a series of Force Protection roles in Exercise DECISIVE EDGE, while Term 3 students are given the opportunity to explore transformational leadership in the Combined Operations Centre (COC) and direct the activity of their junior colleagues.


It is not clear precisely why, but an Officer Cadet Training Review was established in April 2003, culminating in a revision of the IOT scheme and the emergence of an IOTC that involved *"a restructuring of OACTU, a refocusing of elements of practical leadership, increased academic study, changes in training methodology/assessment and an impressive new IT/IS database."* The article (less some graphics) that appeared in the College Journal of 2005 is reproduced here together with photos of the last IOT and first IOTC and video clips about IOTC.

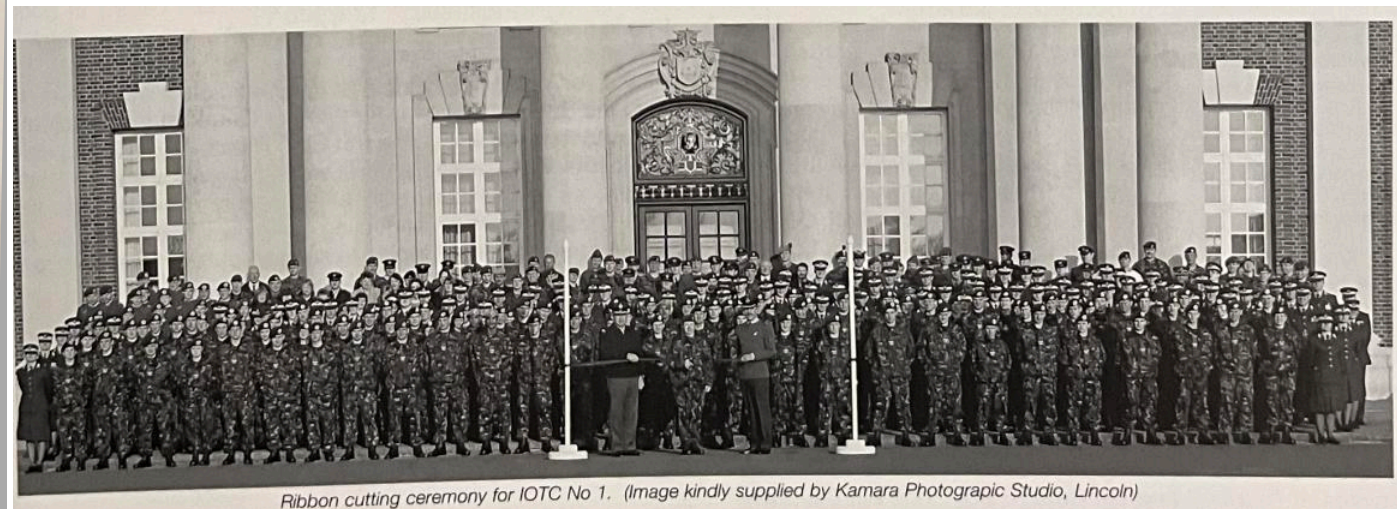
### 216 (E Sqn) IOT Prizewinners & Graduation



[What they went through Part 1](#) 

### IOTC 1 Graduation

[What they went through Part 2](#) 



Ribbon cutting ceremony for IOTC No 1. (Image kindly supplied by Kamara Photographic Studio, Lincoln)







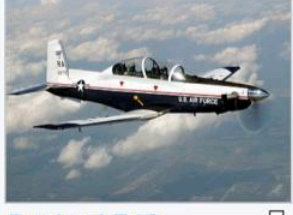



# Outsourced Services

Amongst the many inherent benefits of training at the RAF College during the last century were the support services that turned a place of learning into a domestic home, notably the catering, dining, bar and batting services. In keeping with the trends of modern business and society, however, outsourcing has become commonplace, enabling the 'client' to focus on core business - in the College's case, IOT - whilst non-core functions are outsourced to a 'Service Provider'. The College has not been immune to such commercial trends, with catering, flying and IT services all being outsourced to professional specialist providers.

Arguably the most significant of these outsourced contracts has been the UK Military Flying Training System (MFTS), currently provided by Ascent Flight Training, a consortium of Lockheed Martin and Babcock International under a 25-year Private Finance Initiative (PFI) contract for, and with oversight from, the MoD.

The current Ascent contract provides for 23 Prefect basic trainers, 10 Texan advanced trainers and 5 Phenom 100 jets, although aircraft numbers for the new contract are much lower than the current numbers operating - for instance, nearly 40 Tutors and 7 Beechcraft King Airs provided EFT and Multi-Engine training before the implementation of MFTS, with much of the deficit being covered by synthetic training in simulators and procedural trainers. Ascent's role is to utilise more modern aircraft and training to deliver aircrew at the standard necessary to train onto modern, 4.5 and 5th generation fast jets and other front-line aircraft, such as the Eurofighter Typhoon and Airbus A400M Atlas, as legacy systems often produced a capability gap between training and the frontline because of the outdated nature of the equipment. The Ascent aircraft will all be equipped with digital systems and glass-cockpit displays for compatibility. *[Courtesy of Wikipedia [https://en.wikipedia.org/wiki/UK\\_Military\\_Flying\\_Training\\_System](https://en.wikipedia.org/wiki/UK_Military_Flying_Training_System)]*

Consortium	Elementary	Basic	Multi-engine
BAE Systems, Babcock, Gama and Pilatus	 Grob 115E Tutor	 Pilatus PC-21	 Cessna Citation Mustang
EADS Cassidian, CAE and Cobham	 Grob G 120TP	 Beechcraft T-6C	
Elbit Systems and KBR	 Grob G 120TP	 Beechcraft T-6C	 Embraer Phenom 100

Flying Training ceased to be a 'College/DIOT' responsibility when the IOT (Phase 1) and Specialist Training (Phase 2) were no longer contiguous feature of an integrated Cadet training course. That said, basic flying training continues at Cranwell. The Grob G 120TP, known in RAF service as the Prefect T1, started to operate from RAF Barkston Heath and RAF Cranwell from January 2018. A new Ascent ground training building, incorporating the simulators and synthetic training facilities, was built at RAF Cranwell to accommodate the new MFTS courses. The legacy Tutor courses were to continue into 2018 as the Prefect courses built up to full capacity. In 2018, 3 FTS aimed to graduate 250 aircrew students from all three services, including some 40 students who would undertake training at University Air Squadrons owned by 6 FTS. The normal rhythm for MFTS would initially be 230 students per year. The Phenom 100 aircraft based at RAF Cranwell, deliver multi-engine training following a short multi-engine lead-in course on the Prefect.



# SGIOT Mk 3 - RAFOTA's MIOT

In 2020, just 100 years after the founding of the RAF College, the College was renamed the RAF Officer Training Academy (RAFOTA). The renaming coincided with the launch of the Modular IOT system, whose description is reproduced here (courtesy of the RAF). Still a 24 week course with cadets accommodated in CHOM for the last term of six weeks, the MIOT is designed to deliver the requisite 'tailored' training for each cadet making an allowance for their core competencies on entry.

## Military Induction Module (MIM) – Weeks 1 to 6:

The first 6-week module contains all the basic generic skills and knowledge required to induct a civilian into military service; it closely mirrors the Basic Recruit Training Course undertaken by all non-commissioned entrants into the RAF at RAF Halton. Students who attend this module can expect to study subjects such as; foot drill, military discipline, weapon training, skill at arms, basic field-craft, first aid and use of Chemical, Biological, Radiological and Nuclear (CBRN) equipment, physical training and education, and perhaps most significantly military ethos and our core values (RISE). These activities will support their transition into the military.

### Modular Initial Officer Training Course (MIOTC)

#### Military Induction Module

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Arrival, Kitting, medical, General Service Knowledge, Drill, PEd, RISE	First Aid, PEd, GSK	CBRN, PEd, GSK	Weapons, PEd, GSK	Confirmation of practical training	GSK Exam, RAFFT, move to Dev1

#### Developmental Module 1

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Serving airmen arrive, Self-Awareness, Knowing self, A&S Power, PEd	Teams, leading small teams, self-regulation, A&S Power, PEd, peer review, GSK	RRC Crickhowell - authentic leadership, resilience, followership, team dynamics	RAF Leadership - types and styles, leadership in command, A&S Power, PEd	Team leadership, trust, diversity, innovation, Command, PEd, A&S Power	Practical Exercise

#### Developmental Module 2

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Command functions and tasks, A&S Power, PEd	Command and control, doctrine -principles, mission command, A&S power, PEd, Line Management	A&S Power, PEd, Line management, Stress management, Mini C2 exercise	Air C2 week -(AWS)	Mental Health, Welfare and Care in leadership week	Line manager responsibilities week

#### Consolidation - (Transition and Graduation)

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Air C2 Exercise	RRC Grantown on Spey	Exams	Office Management simulator	Change management, Phase 2 training, Officer development, Drill	Coaching, officer need to know, Graduation

## Developmental Module 1 (Dev 1) – Weeks 7 to 12:

In the Dev1 module the emphasis is on Relational, Individual and Collaborative learning, this is summed up as "Knowing and leading yourself in order to lead others". Cadets will develop their physical and mental resilience and focus on authentic leadership principles, behaviours and capacities. The physical education and training programme will continue to focus on conditioning, nutrition and health. The principles of leadership in command will be introduced, along with working in teams. Supporting this programme will be a trip to the Robson Resilience Academy Centre at Crickhowell; using an AT setting to develop leadership fundamentals. This module culminates in a week-long exercise where the cadets will live in an austere environment and will practice leading small teams in a deployed military scenario. Alongside the leadership programme cadets will begin learning about the use of Air and Space Power. Initially this will be delivered and facilitated by the College's academic partner, Portsmouth Business School and will focus on historical, theoretical and doctrinal studies. Later in the course this knowledge will be brought to life using a realistic Air Command and Control (AirC2) context.

## Developmental Module 2 (Dev 2) – Weeks 13 to 18:

During this module the emphasis shifts to 'Explore Leadership – Practice and Develop', focusing on Command and Control (C2) and in-depth elements of RAF leadership. Mid-way through this module there will be mini-C2 simulated exercise where students will learn to apply the theory in a more practical scenario. In the second half of this module, the course splits and completes a 'carousel' of 3 disciplines; AirC2 in the Air and Space environment, Line Management Responsibilities and finally, Care and Welfare in Leadership. The AirC2 element will be taught off site at the RAFs Air and Space Warfare Centre. The aim of this week is to bring to life the theory they've learned so far and help them understand how they will be tested in the final module. The Care and Welfare Elements will be delivered by our Padres in their training Centre. Here, students will learn how to support staff and protect their health and wellbeing. The Line Management weeks will be delivered at OACTU and concentrate on staff appraisals, discipline, military law, interview techniques, service writing and verbal skills. Students will be expected to maintain their physical fitness as the programme facilitates a shift from directed Physical Training towards more self-directed exercise. Our Physical Training Instructors will provide ongoing education to students so that they have the confidence to maintain their own physical fitness and encourage and promote the same from their future subordinates. Maintaining fitness levels is a key aspect of the course and Cadets will be expected to undertake their own fitness training.

## Consolidation Module (Consol) – Weeks 19 to 24:

The final 6-week module is further divided into the Consolidation Phase and the Transition & Graduation (T&G) Phase. The Consolidation phase is designed to give cadets the opportunity to demonstrate their understanding of the course material through a mixture of practical and written activities. Over a 4-week period the cadets will undertake an Air C2 based exercise, a deployment to the Robson Resilience Centre at Grantown on Spey, a week-long management simulated exercise and finally, a week of academic assessment in Air & Space Power and General Service Knowledge for officers.

The outcome of these activities, when combined with the RISEs assessment scores acquired throughout the course, will give OACTU staff a complete picture of each cadet's suitability and enable them to recommend either graduation, re-training or removal from training. Successful cadets will then undertake the 2-week T&G Phase which will deliver a myriad of just-in-time interventions which aim to support newly commissioned officers in their next appointment. It will offer practical advice on how to get the most from the opportunities that the Service will offer throughout their careers. After a final brush up of drill and ceremonial skills, the graduation parade marks a fitting culmination of 24 weeks of learner centred development. Most importantly the Graduation Parade offers the families and friends of the graduating officers the opportunity to share in their success.

The graduation ball takes place that evening and is considered by many newly graduated Officers to be one of the most symbolic elements of the day as, in addition to the festivities, you will gather in the College Hall rotunda just before midnight to hear your name read out from the graduation scroll along with your commissioned rank, confirming your transformation to a Commissioned Officer in the RAF.



# Part 6 - Supplementary Information

In preparation for the 100th anniversary of the RAF College in 2020, we recompiled our collection of College Journal articles into six different themes. The index to the first volume, 'College Life 1920-2019' is shown below and clicking on it will take you to an online version of the volume. All six volumes may be accessed by clicking on <https://www.cranwellian-ian.com/college-life/college-100-memories.html>.

## Memories that Symbolise College Life in 100 Years

To start any specific article:

1. Click on the slide number shown in red on this page;
2. To return to this contents page, click on 'Return to Contents List' at the bottom of each slide.

- 4. Early Days at RAF Cranwell (1920)**
- 7. The Cranwell Beagles Articles (2) (1920 & 1962)**
- 10. Cadet Impressions (21) (1920, 1964, 1997, 2006/7 & 2010/11/12/13/16)**
- 49. College Contribution to Coronation Day (1953)**
- 52. Cranwell in the Early 20s (1955)**
- 54. Life at Cranwell (1955)**
- 58. Cranwell in the Early 30s (1955)**
- 60. Three Ages of Cranwell (1956)**
- 61. Cranwell in Retrospect (1957)**
- 63. Cadet Wit (1958)**
- 65. The Legend of Byard's Leap (1962)**
- 66. The College Band (4) (1964, 1970, 2012 & 2016)**
- 71. The College Library (2) (1964 & 2016)**
- 73. Cranwell History by AVM Lyne (1982)**
- 75. Battle of Britain Sunday Service (2007)**
- 76. Cranwell 60 Years Ago (2011)**



# Epilogue

The RAF College has undergone a number of changes during its 100 year history, some evolutionary and some fundamental. This album has chronicled those changes by referencing College Journal articles of the time and researching College archived material. That research has revealed five significant and distinct transitions:

- The transition from 1 November 1919 to 5 February 2020 from RNAS Cranwell operated by the RN since 1916;
- The abrupt transition from the pre-WWII RAF College Flight Cadet system to a College SFTS (Service Flying Training School) on the day war broke out, 3 September 1939;
- The gradual transition from 17 FTS (formerly the College SFTS) in 1944 to 19 FTS and thence the re-emergence of RAF College Flight Cadet System by 1947;
- The gradual replacement of the post-WWII Flight Cadet System with the Graduate Entry (GE) Scheme in the early 1970s;
- The introduction of SGIOT (Single Gate Initial Officer Training) between 1978 and 1981, which formed the basis of the IOT, IOTC, MIOT and SERE training schemes that have run ever since.

The transition from RNAS Cranwell included the formation of the first intake, F20, a combination of two former RN Sub Lieutenants and 15 former Midshipmen, 35 entrants by competitive examination, four winning cadetships, and two specially “nominated” cadets. They were to typify the ethos and core values (*Respect, Integrity, Service, Excellence*) of the RAF. Of the 48 successful graduates, 16 were killed or died in Service; some 14 had distinguished careers, reaching Air rank. 17 of the graduates received honours and awards, including three DFCs, 20 MiDs, three knighthoods and 21 CB/CBEs. This trend has continued throughout the College’s history.

The last pre-WWII Flight Cadet Entry to complete on schedule, in July 1939 and unaffected by the outbreak of war, was S37. Thereafter, there were five Entries - J38, A38, S38, J39, A39 and S39 (which became A40) who completed their flying training with the hastily formed College SFTS that took over the flying element of the RAF College during the war. The College SFTS was renamed 17 FTS in 1944 and, moving to Spitalgate in early 1945, transferred FTS responsibilities at Cranwell to 19 FTS. Taking over from 19 FTS, the College resumed Flight Cadet training in January 1947 with 45, 46 and 47 Entries. The smaller 45 and 46 Entries comprised new recruits through the obligatory competitive examinations and seven graduates from 19 FTS who took up the option to complete further officer training as a flight cadet. 47 Entry turned out to be the first course of *ab initio* training for newly recruited flight cadets to be run at the RAF College since its closure in September 1939.

The post-WWII Flight Cadet era ended with the graduation of 101 Entry on 17 March 1973. Building on the successes and reputation of their predecessors - “*by their prowess and their dedication*” {WSC} - the Flight Cadets of the 50s set about meeting the challenges posed by the jet engine, an invention of another predecessor. By the 60s, the College had opened up its ceremonial gates to cadets destined for the Admin (Sec), Supply, Regt and eventually Eng branches. Turning its recruiting priorities to the universities, the College had already started introducing the GE Scheme in 1970, eliminating the academic element of the Flight Cadet two year course, and delivering 16 weeks Phase 1 (initial officer) training in/around Whittle and College Halls and Phase 2 (Specialist) training on the flight line (pilots) in Trenchard Hall (engineers) and Daedalus House (secretarial and supply).

Whereas previous changes could be regarded as evolutionary, SGIOT was to transform the College business and training model, ultimately to deliver MIOT courses as the RAF Officer Training Academy. The cadets now spend only six weeks in CHOM, but we hope they too will look back with fondness and with pride on the day they slow-marched through its doors, to careers as RAF officers.



# Training Throughput - by Era

This graphic indicates the widely differing training throughputs before, during and after WWII, ERA 4 being the SGIOT era.

## Nearly 30,000 Cranwellians - By Era and IOT System

ERA	No of Entrants	% Flying Branches*	% Ground Branches*	% International Entrants
1920-1939	1257	88.07%	0%	11.93%
1939-1945	2832	59.22%	0%	40.78%
1945-1979	4770	66.10%	32.31%	1.59%
1979-2019	20940	38.00%	57%	5%

\*Unknown Branches are split 40-60 Aircrew to Ground Branches, the same ratio as the split between known aircrew and ground branch cadets

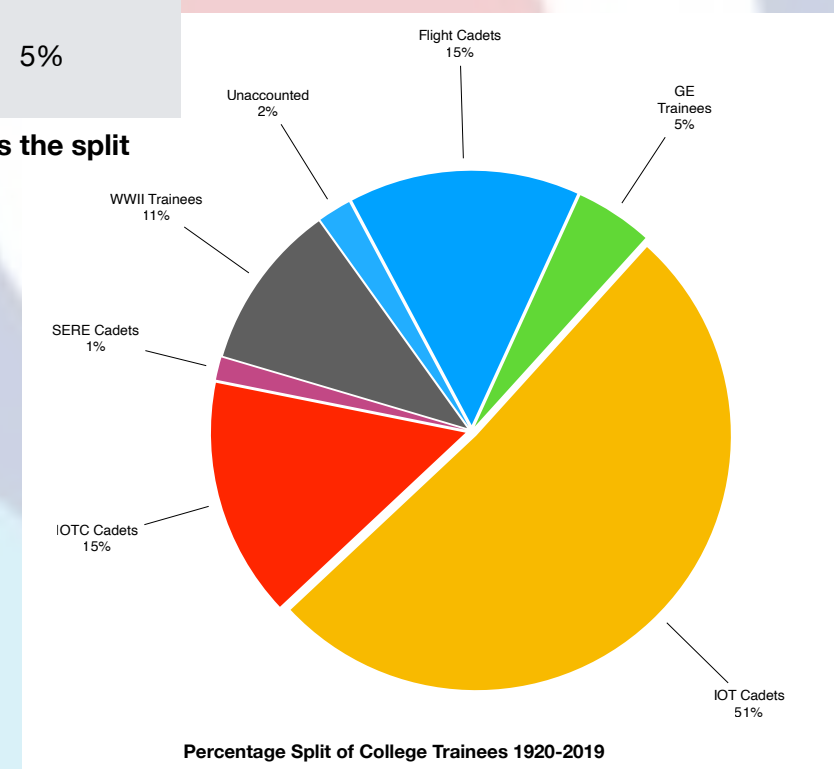
### TRAINING STATS - Click on Dates

[Era 1 Throughput - 1920-1939](#)

[Era 2 Throughput - 1939-1947](#)

[Era 3 Throughput - 1947-1979](#)

[Era 4 Throughput - 1980-2019](#)



Cmd/Ctrl+Click on the underlined text to view era specific stats; from desktop or laptop devices the links go directly to Transitional stats.