


RAF COLLEGE CRANWELL

Group Captain Bill Wilkinson RAF (Retd)




Wishing him a Very Happy 100th Birthday
2018

College Records: E&W School No 26 Entry No 39



AN
APPRENTICESHIP IN THE
ROYAL AIR FORCE



THE FITTERS' AERO ENGINE SHOP.

This pamphlet is in amplification of, but does not replace, Air Publication 134.

E & W School No. 26 (Entry No. 30 Sept. 34 to Jul. 37.)

777's Instrument Makers.							
567239	Allen	P.					
567086	Cameron	L.A.					
567237	Campbell	J.F.					
567964	Campbell	A.			139219	Com.	MID.
566962	Chapman	H.			143784	Com.	
567078	Curtis	A.					Medical Discharge.
566976	Ware	S.E.					
567026	Wilson	G.			45294	Com.	
567238	Wynne	R.			48999	Com.	
567082	Wood	L.A.			40776	Com.	
Wireless Operator Mechanics.							
567235	Allan	J.			89855	Com.	
567066	Armstrong	Laurence	Missing 15/11/42		161581	Com.	
567017	Armstrong	W.					
567166	Barnes	P.C.			47313	Com.	Died 1940.
567046	Boon	E.J.	* Ernest		50048	Com.	
567107	Booth	J.R.P.B.		Pilot.			
567015	Breeze	R.D.					
566989	Brixewood	R.				Com.	
567058	Cordes	J.A.					
567009	Davies	J.E.			158117	Com.	
566975	Dodds	W.		Ag.			MID.
567083	Edwards	C.			110218	Com.	
566973	Fazey	Frank.	*		50201	Com.	
566987	Graham	G.A.			50423	Com.	
567057	Haire	Oscar.			Missing 775qn	12/4/40	MID.
566995	Hill	H.			138940	Com.	
567059	Hind	J.					
567001	Holliday	J.W.					
566936	Humphrey	R.					
567242	Hunter-Rowe	D.H.					
567108	Kennedy	D.C.			101471	Com.	
566983	Knight	V.B.J.				Com.	
567002	Laves	W.F.					Deceased.
567078	Leddra	E.				Com.	
566969	Lewis	R.			47238	Com.	Australia.
566979	MacDonald	A.			113042	Com.	
566988	May	A.	* Alan		48929	Com.	
567076	Moreman	T.K.					
566970	Parker	K.					
566991	Ridd	G.B.				Com.	
567073	Rowbotham	P.V.			45797	Com.	
566984	Scott	N.A.			109147	Com.	Died 1938.
567149	Smith	C.E.H.				Com.	
567007	Smitheman	G.O.	* Oliver				
567039	Spells	H.					
567062	Thompson	A.N.					
567090	Treford	A.					
567080	Vanstone	D.J.	* John		51818	Com.	MID.
567189	Wilkinson	W.	* Bill		51626	Com.	
567082	Wood	L.A.					

567038 MITCHELL R.J. 46700 Com.

Gp Capt Bill Wilkinson recalls.....

In September 1934, 50 young hopefuls arrived at RAF Cranwell, initially known as the 7J Entry, and formed 2 Classes (7J1 and 7J2) to train as Wireless Operator Mechanics plus one Class (7J9) to train as Instrument Makers. Subsequently under a revised Entry Numbering System they were known as the 7M7 Entry (WOMs) and 7J7 Entry (IM). During their training they gained 1 from an earlier Entry, 2 were discharged, and 1 was re-classed to a later Entry. This left 48 to Pass Out in July 1937.

Bill Wilkinson advised that:

"We were the last of the small entries before the expansion. Reasonably good at all sports we were less evidently distinguished in our professional studies, as revealed at our graduation. No cadetships were awarded and there was only one LAC (Humphrey from an earlier entry). The rest of us made AC1 or AC2.

We all hankered after becoming pilots and this meant that we had to qualify to LAC under our own arrangements after we left Cranwell.

To achieve this we had to sit a paper and then to spend a week at West Drayton undergoing practical tests and a few of us did this. Unfortunately having qualified as LAC we became eligible for posting to the Fleet Air Arm, as some of us were to our chagrin. Although some of us had been recommended for pilot training, the RN would not release us to return to the RAF and when we did eventually get back during the war we were told to go away because it was easy to get pilots but there was a great shortage of Wireless Operator Mechanics. So we never fulfilled our ambitions apart from John Vanstone who later received pilot training under a short lived scheme whereby some were selected to become Engineer officers."

Cranwellian Association Records of 7M9

The following photographs were provided by Bill Wilkinson

The 7J, subsequently renamed the 7M7 / 7J7 (30th) Entry



Class 7J1 - Wireless Operator Mechanics - Became 7M7A



Back Row: Lewis, Smith, Brickwood, Vanstone, Wilkinson, Edwards, Davies, Humphrey, Breeze and Dodds
Front Row: Leddra, Rowbotham, Moreman, Scott, Macdonald, Armstrong (017), Boon, Ridd and Lawes

Class 7J2 - Wireless Operator Mechanics - Became 7M7B



Back Row: Trelford, Mitchell, Spells, Smitheman, Thompson, Allan, Haire, Armstrong (066), Hunter-Rowe, and Hill.
Front Row: Cordes, Kennedy, Holliday, May, Booth, Hind, Fazey, Graham, and Barnes.
Not on Parade: Knight.

Class 7J9 - Instrument Makers - Became 7J7



Back Row: Allen, Wood, Campbell A, and Campbell J
Front Row: Cameron, Wilson, Chapman, Ware and Wynne
Not on Parade: Curtis (CT'd) and Richards (FT'd 31st)

E&W School - Entrance Exams - PART 1 Maths

A.A.E.
34 (1)
1

ROYAL AIR FORCE

EXAMINATION FOR THE ENTRY OF AIRCRAFT APPRENTICES

5TH JUNE, 1934

PAPER I.—MATHEMATICS

Time allowed—Two hours

Read carefully the instructions on the front page of your answer book.
EIGHT questions to be answered. Answers should be sent in to ALL questions in Part I, and to any FOUR questions in Part II, but not to more.
Failure to show method and working will involve loss of marks.

PART I

Answer ALL questions in this Part

1. During a continuous voyage the log of a ship recorded that the number of miles sailed on each of 6 successive days were as follows:—498, 515, 510, 483, 517, and 501. Calculate the average speed of the ship in miles per hour.

On the seventh day engine trouble developed, so that by the end of that day her average speed for the 7 days was 19.75 miles per hour. How many miles did she sail on the seventh day?

2. From the formula—

$$h = r - \sqrt{r^2 - c^2}$$

- (a) Calculate the value of h when $r = 37.5$, $c = 30.0$.
(b) Calculate the value of c when $h = 16.0$, $r = 26.0$.

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7. (a) Using logarithms, evaluate—

$$1350 \times \sqrt{\frac{D^2 H}{SL}}$$

where $D = 0.75$; $H = 1.25$; $S = .45$; $L = 100$.

(b) Using logarithms, solve the equation—
 $(2.46)^x = 10$.

8. A , B , and C , are three aerodromes. A pilot flies in a straight line from A to C , and then in a straight line from C to B . C is distant 100 miles from the direct route between A and B , the angle $CAB = 40^\circ$ and the angle $CBA = 25^\circ$. By how many miles does the length of the pilot's route exceed the length of the direct route between A and B .

(This question is to be solved by trigonometry, not by scale drawing.)

9. A rectangular sheet of tin is 30 inches long and 14 inches wide. Four equal squares of side x inches are cut out from each corner and the sides are then turned up so as to form an open rectangular box. The following table shows the volume of the box (V cubic inches) for different values of x :—

x (inches)	1.0	2.0	2.5	3.5	4.0	4.5	5.0	5.5	6.0
V (cubic inches)	336	520	562.5	563.5	528	472.5	400	313.5	216

(a) Plot the above values of x horizontally against V vertically and draw a graph to show how V varies as x varies from 0 to 7 inches.

Use the following scales :— x : 1 inch represents 1 inch.
 V : 1 inch represents 100 cubic inches.

(b) Find from your graph—(i) the greatest volume the box can have; (ii) the size of the pieces which must be cut out so that the box may have a volume of 270 cubic inches.

10. (a) Prove that opposite angles of a quadrilateral inscribed in a circle are supplementary.

(b) $ABCD$ is a quadrilateral inscribed in a circle and the diagonals AC and BD intersect at right angles. The angle $ADC = 108^\circ$ and the angle $ABD = 20^\circ$. Find, by calculation (not by drawing and measurement), the number of degrees in each angle of the triangles BDC and ADB .

2

3. A and B are two wireless receiving stations on a straight coast-line, B being 5 miles due East of A . A ship at sea sends out a distress signal, which, to an observer at A , appears to come from a direction 50° E. of N. and to an observer at B appears to come from a direction 40° W. of N.

(a) By drawing a diagram to a scale of 1 inch = 1 mile, show the position of the ship assuming the above observations to be accurate. Find, by measurement, how far she is from the coast-line.

(b) If, however, the above observations are liable to an error of 10° either way, show on your diagram the locality within which the ship must lie; and find by measurement her greatest and least possible distances from the coast-line.

4. $ABCD$ is a field with four straight sides. B is 40 yards North and 30 yards East of A ; C is 60 yards due North of A ; D is 10 yards North and 20 yards West of A .

(a) From the above data calculate the area of the field in square yards.

(b) Two paths AC and BD run diagonally across the field. Prove, by calculation, that they intersect at a point 22 yards North of A , and, assuming this result if you cannot prove it, calculate the areas of the triangles ABD and BCD .

PART II

Answer any FOUR questions in this Part. All questions carry the same number of marks.

5. Solve the equations—

(a) $\frac{x-4}{3} + \frac{x-3}{4} = 2$.

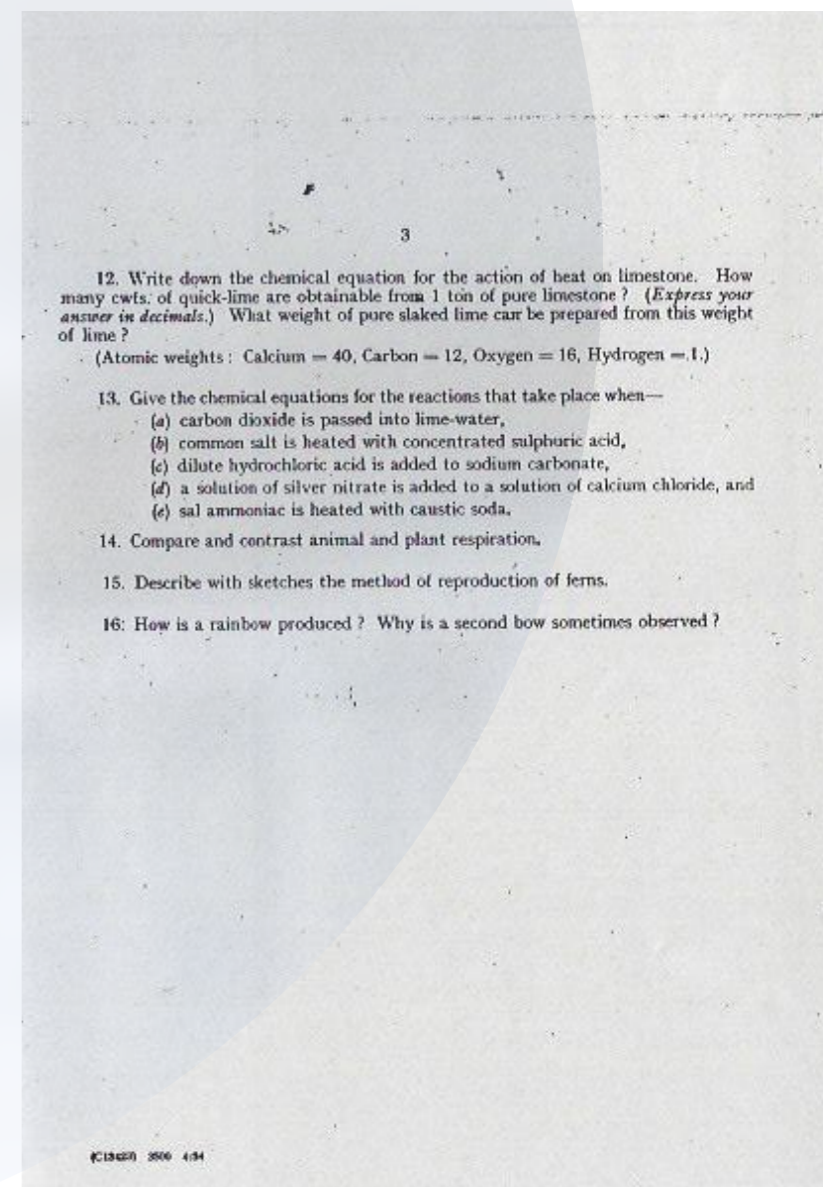
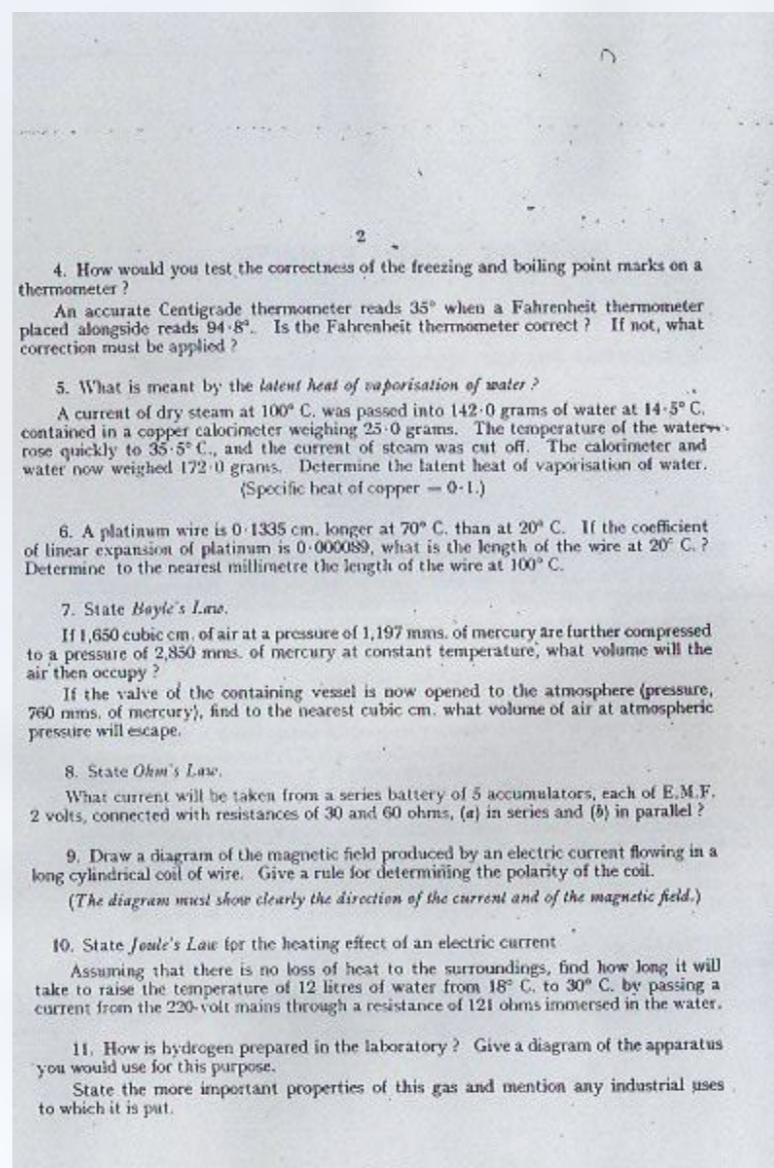
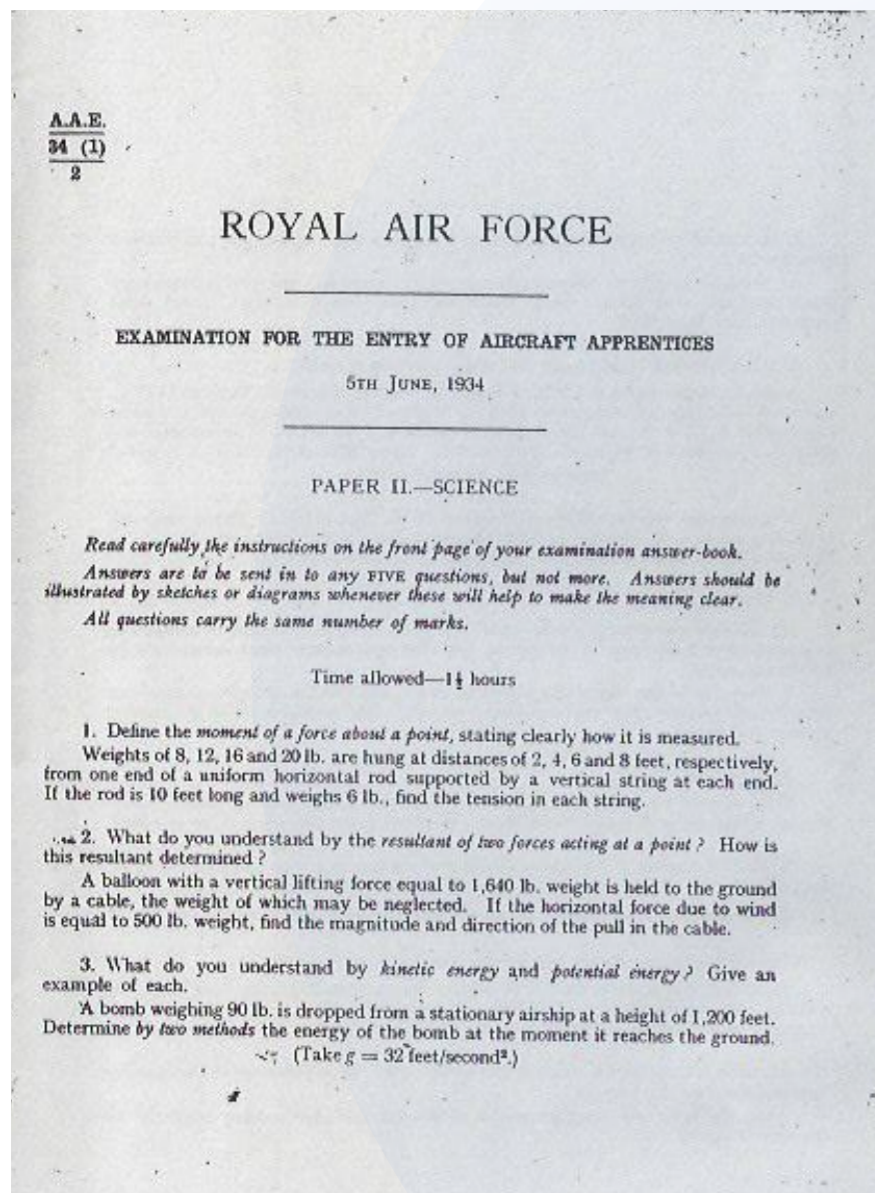
(b) $(x+2)(y+5) = (x-1)(y+3)$;
 $x - 6y = 1$.

(c) $\frac{4}{6x-11} = \frac{x}{18}$.

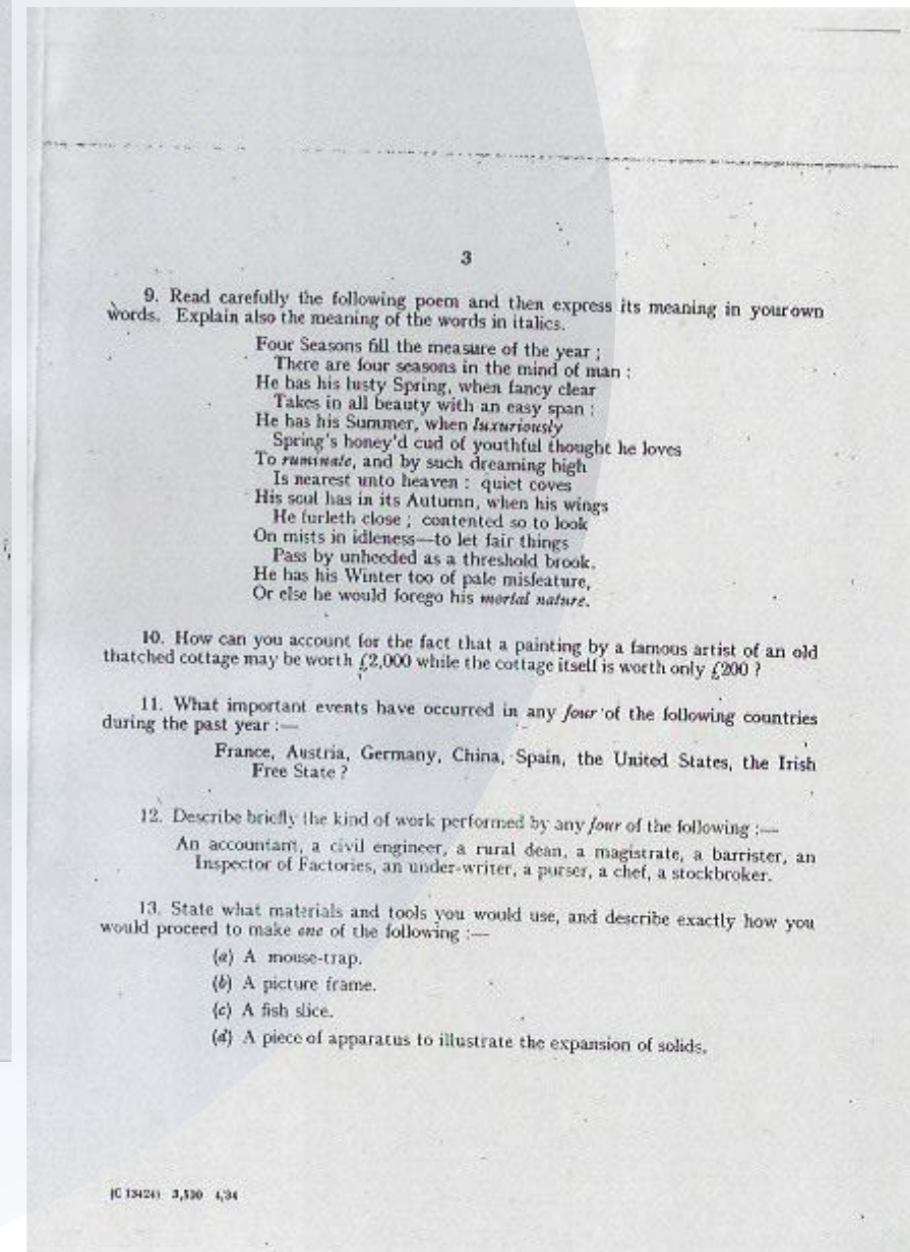
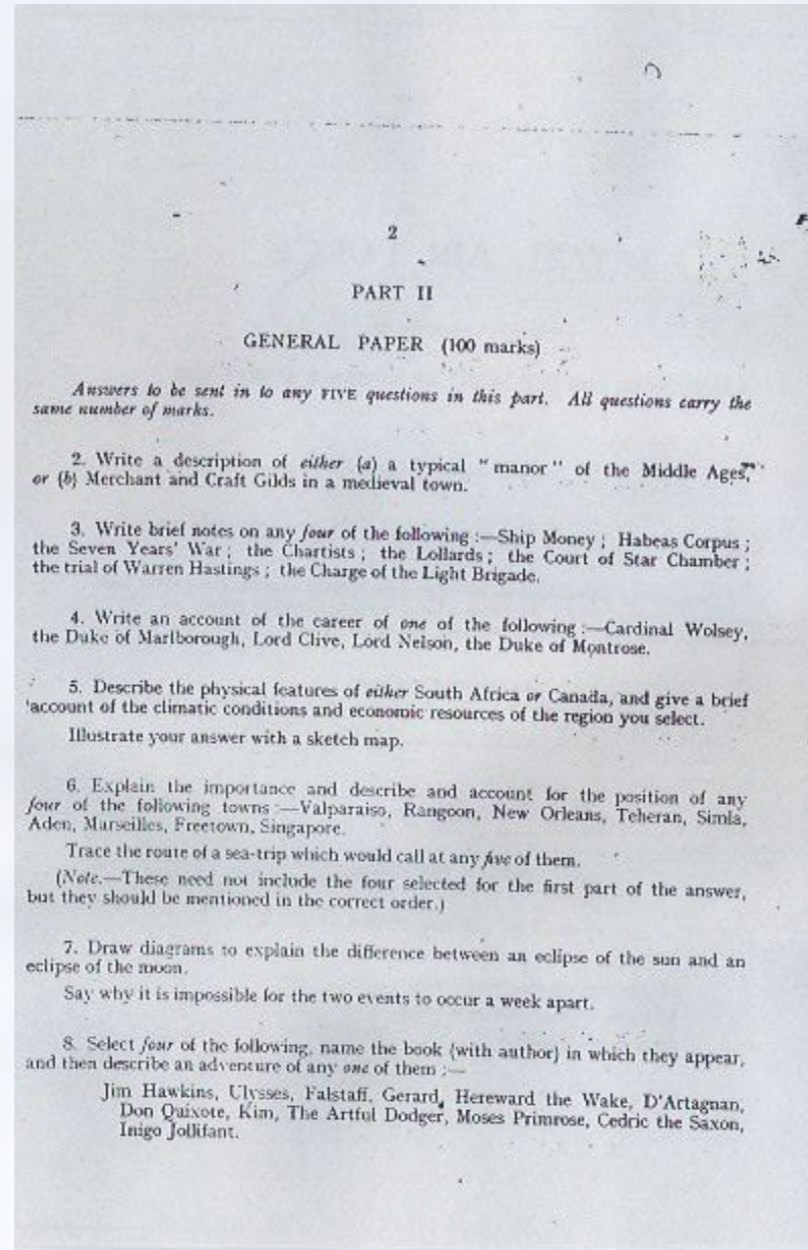
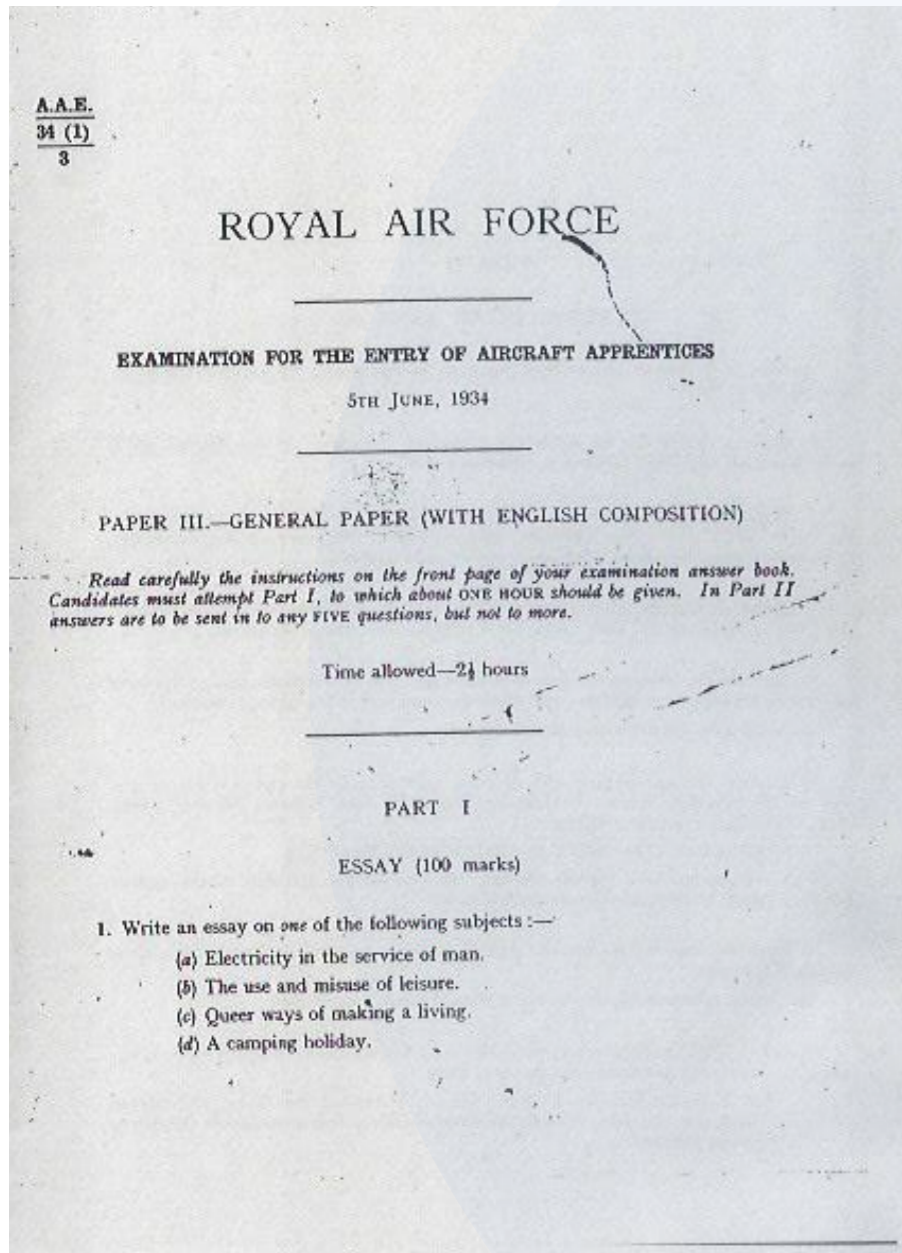
6. (a) P and Q are the points of contact of tangents drawn from a point O to a circle, whose centre is C . Prove that $OP = OQ$ and that OC bisects the angle POQ .

(b) Using a point A as centre draw a circle of radius 2 inches. Draw two radii AL and AM so that the angle $LAM = 80^\circ$. State the steps of a geometrical construction for finding the centre of a circle which shall touch AL , AM , and the smaller arc LM . Perform the construction, draw the circle, and measure its radius.

E&W School - Entrance Exams - PART 2 Science



E&W School - Entrance Exams - PART 3 General



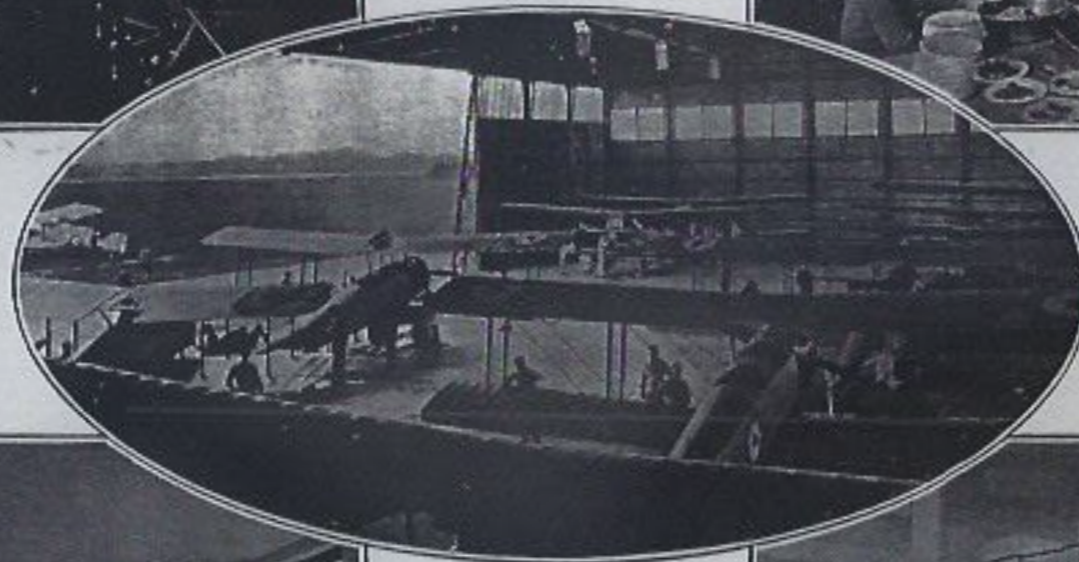
E&W School - Environment



THE BILLIARD ROOM.



THE DINING HALL.



E&W School - Workshops



E&W School - Workshops



E&W School - Workshops



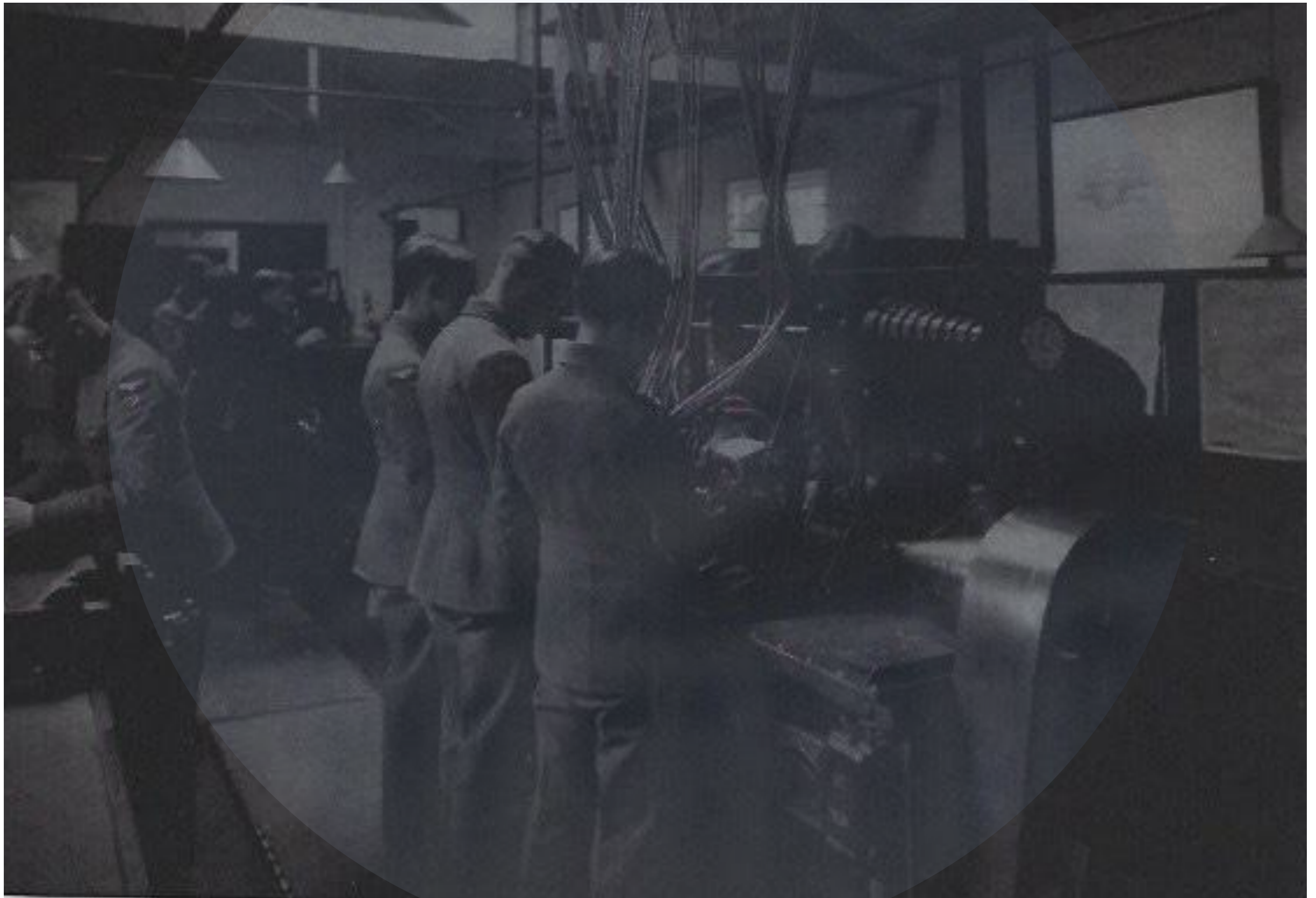
E&W School - Workshops



E&W School - Workshops



E&W School - Workshops



E&W Staff - Only Remaining Photo

