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OCTOBER 9, 1942.

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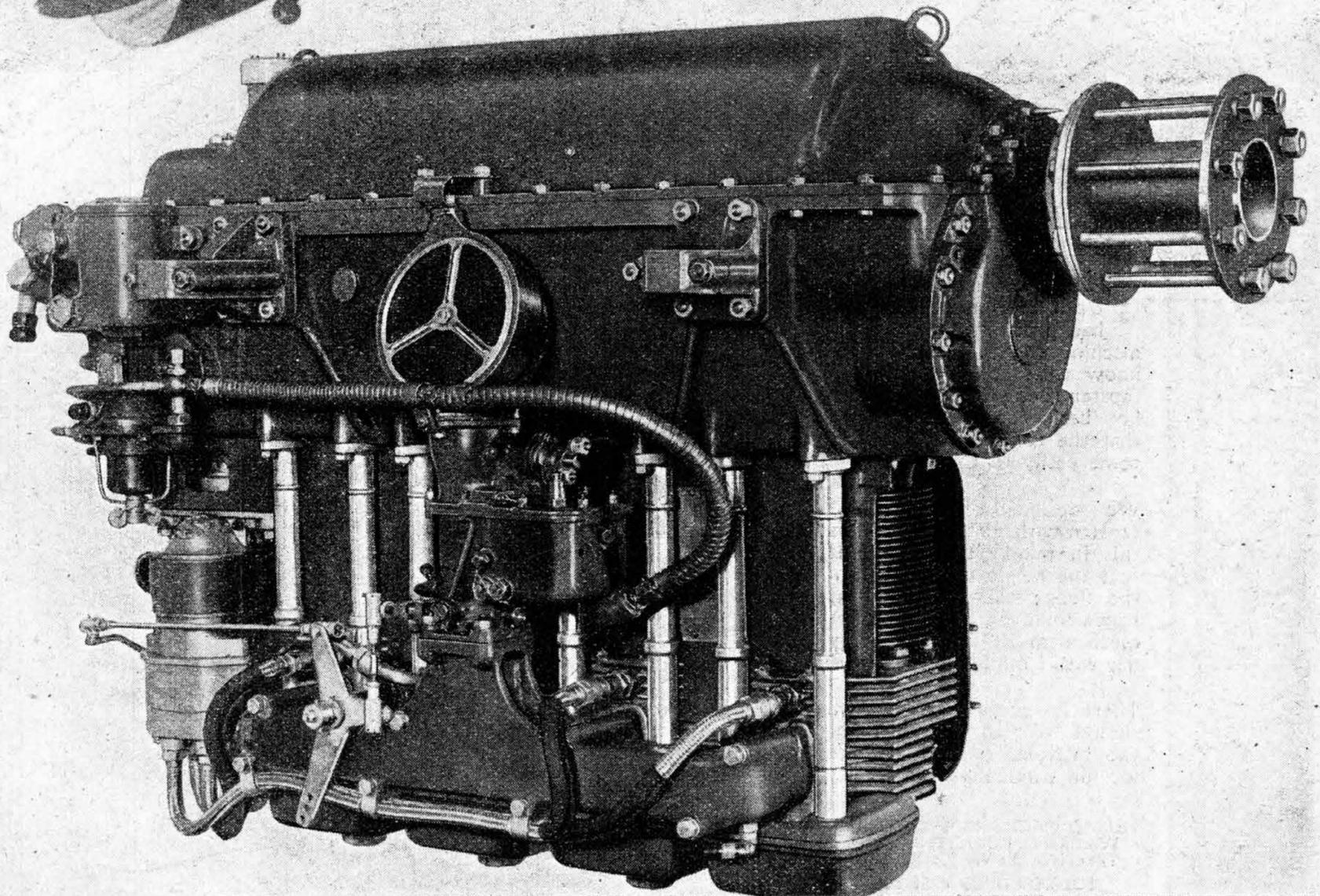
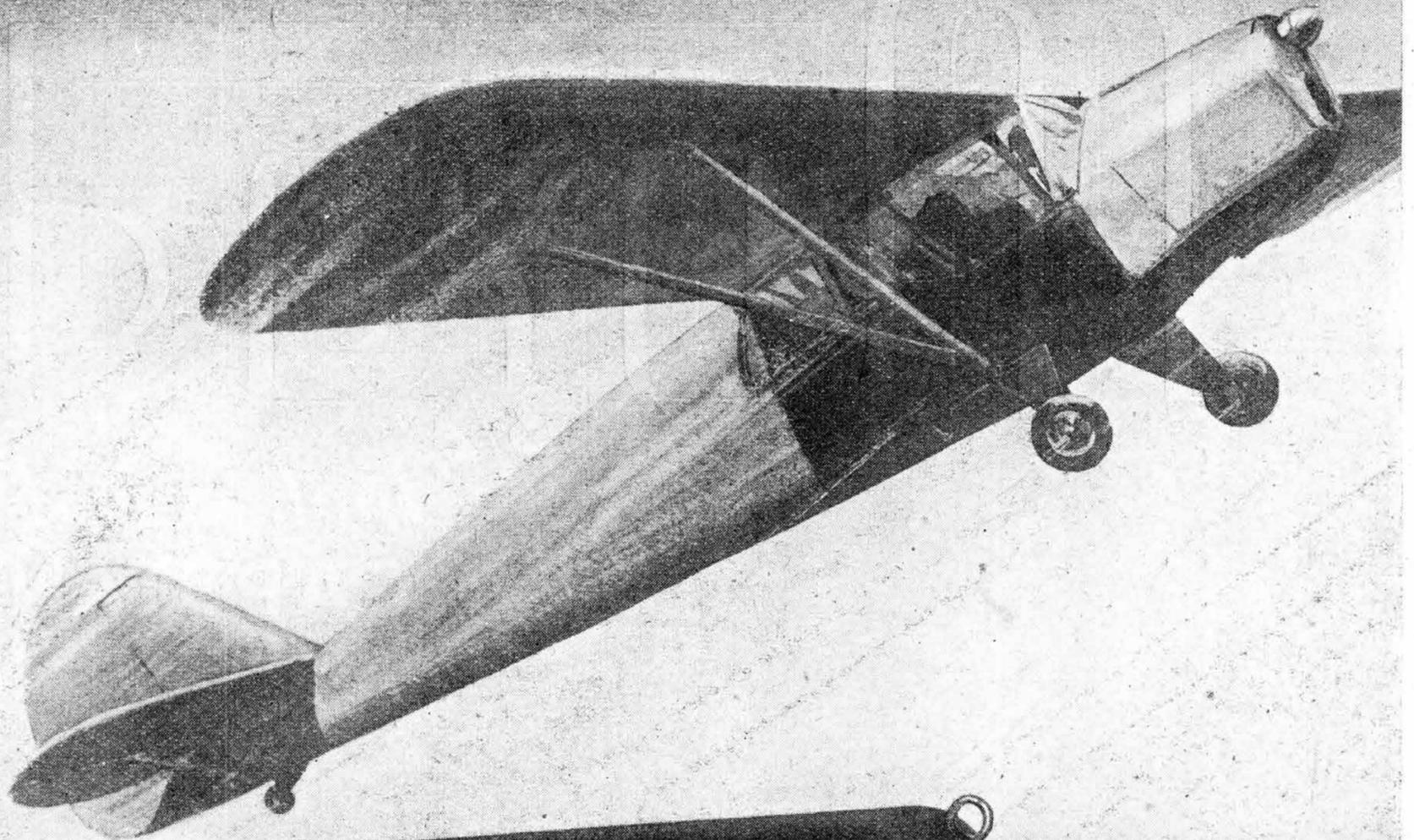
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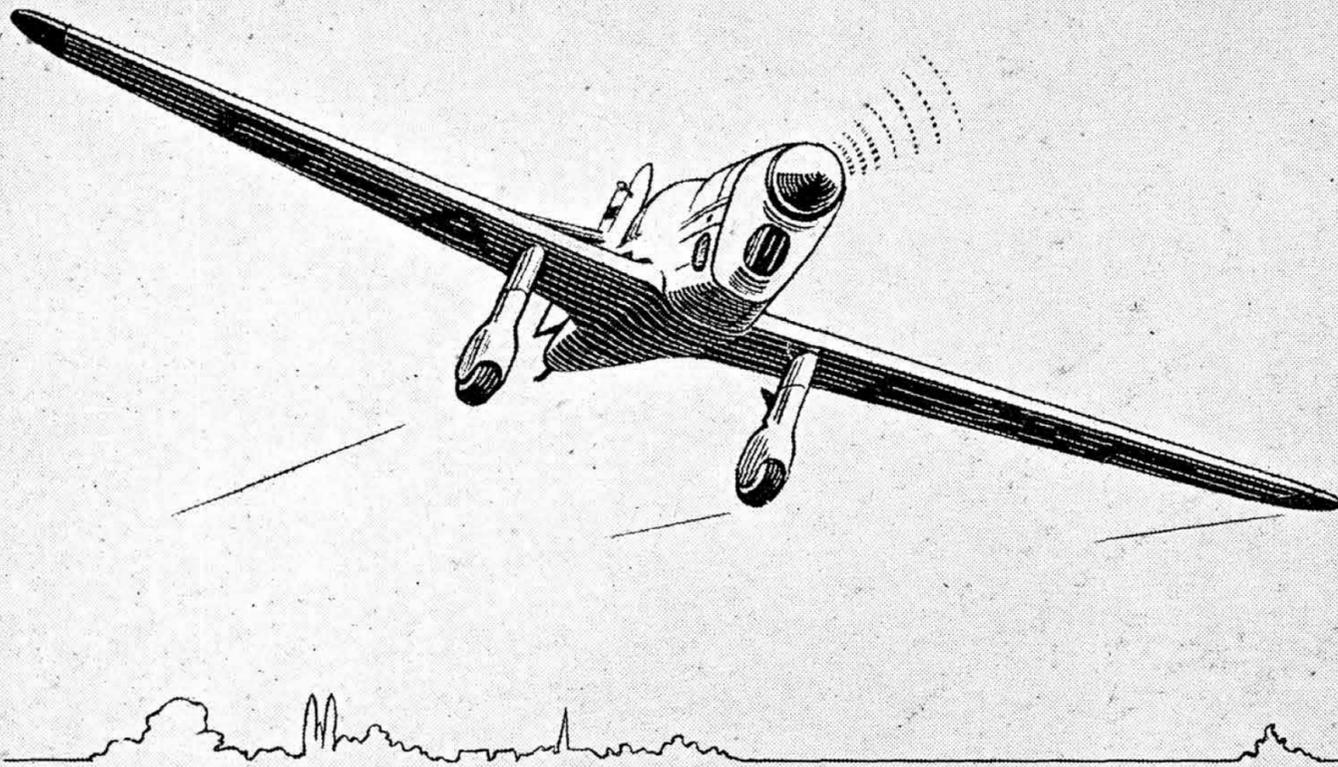
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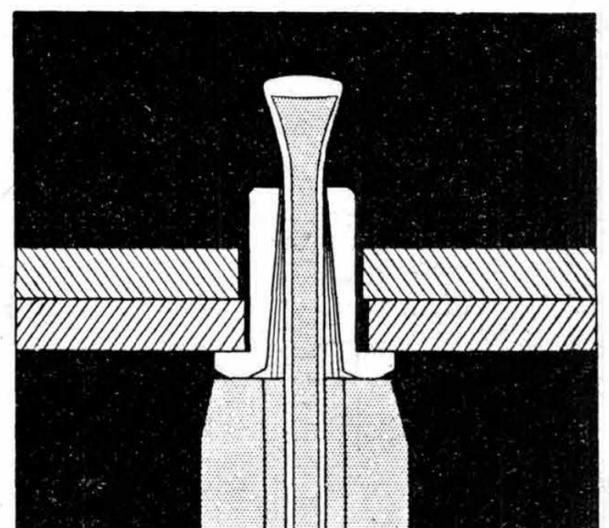


Fig. 1. RIVET PLACED & READY FOR EXPANDING

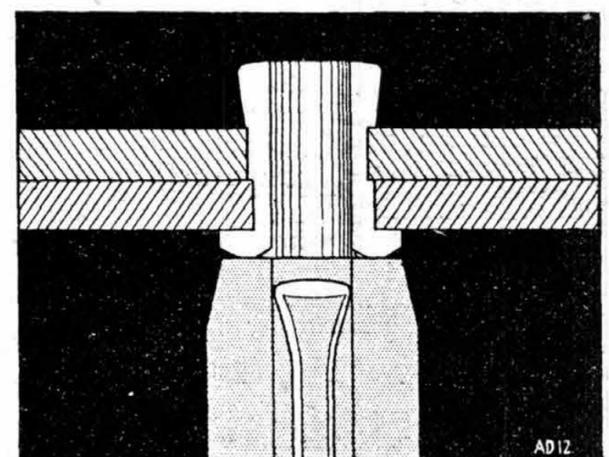
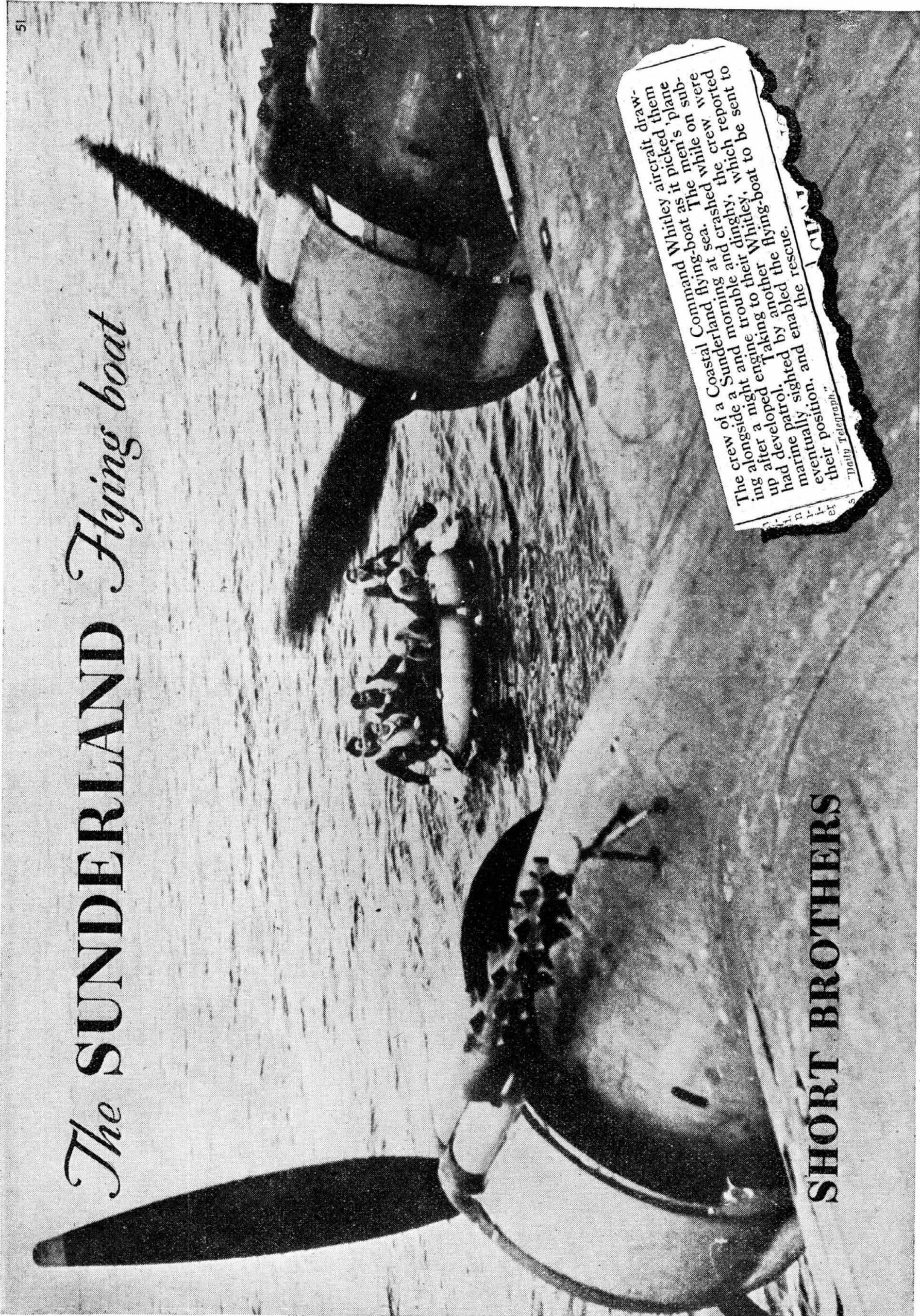


Fig. 2. RIVET EXPANDED AND TIGHT

AD12

The SUNDERLAND Flying boat



SHORT BROTHERS

draw-
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 crew were
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 to be sent to
 the crew of a
 Coastal flying
 at sea. The
 flying boat
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 along side a
 Sunderland
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 trouble and
 dinghy, which
 reported
 up after a
 night engine
 to their
 Whitley,
 had developed
 patrol. Taking
 by another
 the flying-
 boat to be
 eventually
 sighted by
 the crew
 and enabled
 the rescue.
 their position,
 "Daily Telegraph."

51

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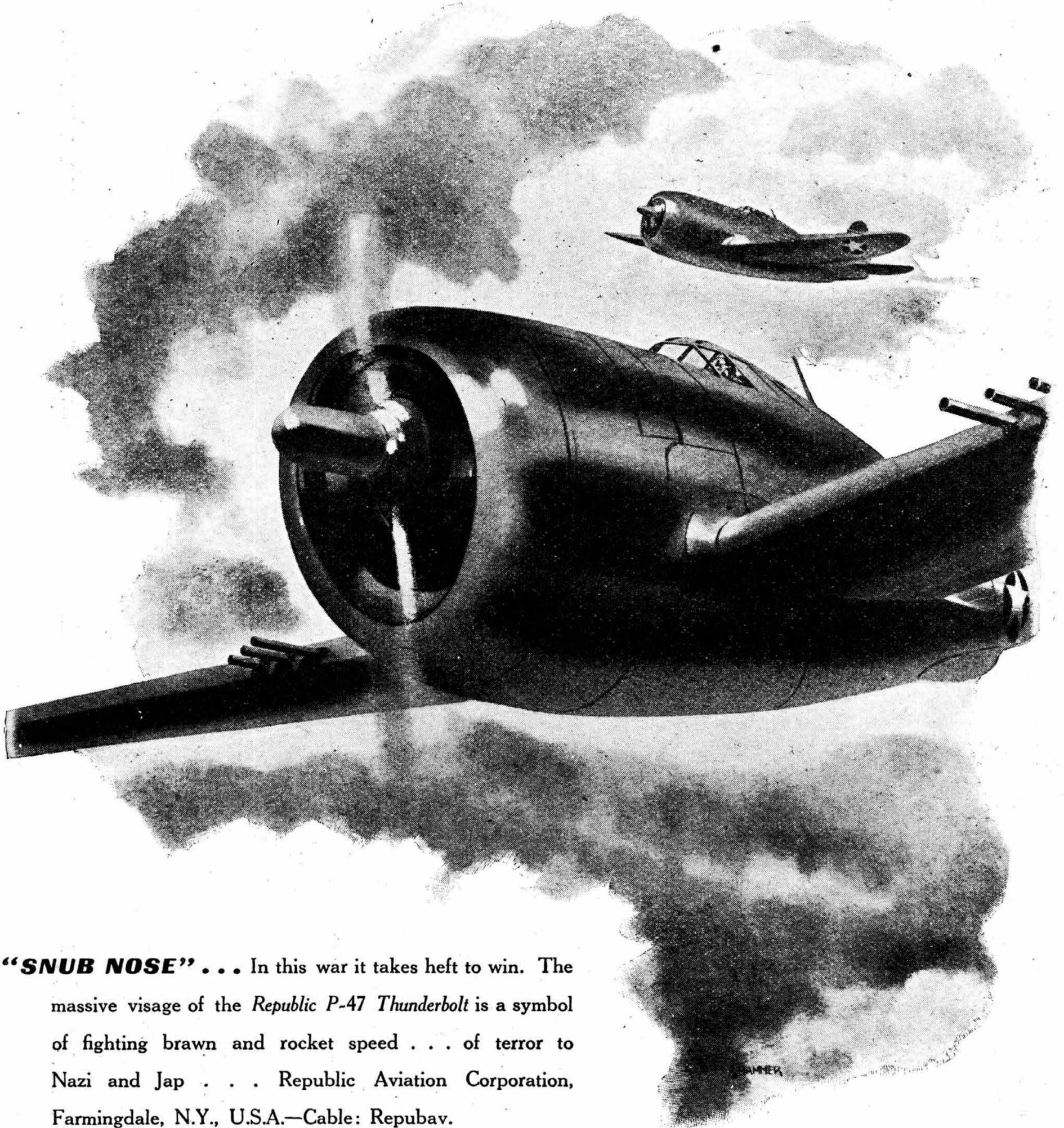
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MATTERS OF MOMENT

The Spectre of Immobility

COMMUNICATIONS are the primary concern of the Germans. The subject of roads and railways kept peeping out from the speech of the German Führer when he launched his people into their fourth Winter of war-time hardship. They had previously been promised more locomotives for the coming Winter. Once again the obsession of transport underlay a speech, trimmed with promises and sprinkled with hatred. The shadow of helpless immobility stretched like a sinister background behind the glitter of victories and the warm hope of loot from conquered lands.

Couching such matters in terms of bombast cannot alter the deep conviction of their importance. "We have had to build roads over marshes in Russia." "We have the railway the British built East of Tobruk." "We are not going to have to run all the way back to Benghazi again, so we have had to build roads." Holding the gains and relying on transport to permit that to be done is the main aim of the Germans. Hitherto the greatest carrying problems have fallen on the British. Their task, too, was a holding task, attempted with armed forces too weak to meet the onslaught. The situation is changing. The Germans are impressed with the need to move fast and weightily in response to any external challenge.

Speed in Defence

"Military idiots" are always a nuisance when they are about to choose their own battlefields. "Drunkards and lunatics" can wreck the orderly plans of the gangster who wants to settle down. How happy the Germans could be if they were allowed to draw the tribute of conquest and marshal the slaves of war to minister to the herrenvolk in peace. The strong arm which cast back the curtains and broke down the barriers should now be able to look for support and nourishment. Instead, the strong arm finds a stronger arm feeling its way back, poking a finger here, testing the heat with an elbow there. Of course the strong arm is cross. Its muscles must be kept supple to return blow for blow wherever the blows may be delivered. It must always be able to move fast.

Holding tactics, if once a nation becomes incapable of applying the rule that "attack is the best form of defence," do not allow much scope for invention. In the Great War they resolved themselves into trench warfare and blockade. In this War they depend largely on artillery, both aerial and terrestrial, and on air defences.

Frontiers or front lines have to be held against invasion, and the territory they cover has to be protected against the destruction and invasion which may come from the air. When the frontiers run along thousands of miles and the territory within them is spread over hundreds of thousands of square miles, the defences must be of the mobile kind. They must be such as can fight in the East this week and in the West next week.

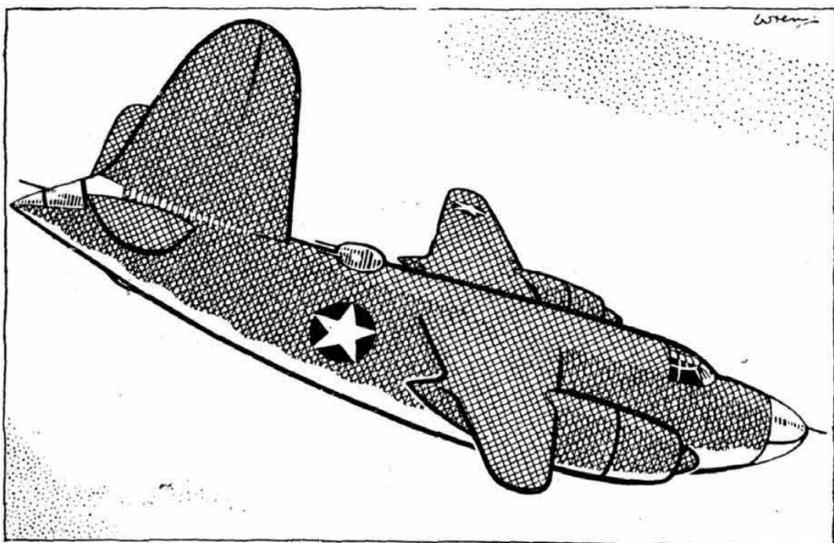
The Importance of Movement

"We have not turned away to meet a second front," says the German leader, implying: "But we could if the need arose." The idea of switching to meet the greater peril, as and when it declares itself, stands high in the German plan for holding. Industries are being moved defensively to the East, says the dictator. Troops must be capable of movement towards the West or the South. British air raids will be answered, says the angry conqueror; therefore air fleets and all that goes with them will have to be moved to the West. So imbecile in the military sense is our opponent, says the master aggressor, that we cannot tell where he may attempt to invade. Never fear, the guns and the aeroplanes will be got to the scene in time.

Plenty of transport with good roads and railways will be indispensable. The conquered peoples are being made to help. Six million of them are said to be working in Germany. Many more millions are working at home for Germany. What they make or grow or mine must be transported. And some of it is produced 1,000 miles away from Berlin. Without a freely running transport system, this expanded unit cannot be made to serve the Reich. The plunder, in that event, would have to rot or rust where it was seized; or worst still, it would feed and supply ungrateful peoples who yet await the chance to stab Germany in the back. If there is one prayer the Germans put up fervently to their Nordic gods, it is: "Preserve to us the means of movement."

Perhaps the few remaining Neutrals can be made to help. Calls have been made on the transport vehicles of France, but Vichy has ships that could help; and Sweden and Spain could provide shipping, rolling stock and motorcars if they would. Switzerland ought to be able to contribute something towards keeping the wheels of victory moving. Even Turkey might be beguiled into reinforcing Germany's power of movement. The Neutrals will not want to be left out of the modern Continental Plan. A judicious mixture of lies, promises,

ODDENTIFICATION—LXXX



From U.S.A. comes this weapon of vigour,
Bold in conception and modern of figure—
A factor to decimate Nippon's New Order,
Such is the B-26 (or Marauder).

bribes and threats will probably be tried by the Germans with the object of making them serve one part or other of the plan to keep the war machine mobile.

Those inner lines of communication have been invaluable to Germany. She has been able to mass her troops and her dumps, to organise her bases and her repair shops just where she wanted them while an enemy running around the outside attempted in vain to keep pace with her. Now that the enemy seems likely to strike at her, she is in danger of having her main forces hundreds of miles away and finding her transport hampered if not cut off. If the enemy can move while her guns and tanks are kept out of the fight, she might as well never have built them. She would be like a hamstrung horse, the possessor of a good but useless limb.

Operating submarines and bombers against the Allied shipping lines, the Germans have shown their appreciation of the value of mobility. They have tried to prevent the flow of arms and munitions to Great Britain, to Russia, to

Egypt and to India. They have seen their reward. They understand the danger of having a similar strategy turned against their land lines. They have seen the work of the fighter-bombers and of the American bombers against railway traffic in France. The Allied Nations make no secret of their attempt to stop the transport which serves Germany's war. Her ships are being assailed along the coasts. Her railway systems are attacked. Places, where locomotives and motor vehicles are made, are heavily raided.

Her answer undoubtedly will be to try still harder to forestall and frustrate the invasion. She cannot stop the British bombers, but she will arrange when the Russian fighting is quieter, to answer them. More submarines are promised to the Germans by their benefactor. That promise stirred them much less than the assurance of direct revenge for bombing. More bombing of Great Britain there will have to be and the Germans will probably try to direct it towards destroying the things which are needed for invasion—ships, barges, port facilities, tanks, guns and aeroplanes. Their defence is an aggressive weakening of the enemy where possible, the erection of fortifications and a high mobility in all arms. And the greatest of these is the last.

German credits were frozen long ago in many parts of the World. The Reich did without them by stealing whatever it wanted that was near at hand. If Germany's winnings should be frozen she could do without them too for a time. The one thing she cannot face is to have the whole pulsating life of her kingdoms and her conquests frozen while the peril advances from without. As the legions of the air are multiplied there will be some chance of confronting her, in part at least, with that situation. That is why her master is so bent on building roads and railways and on making the means of transport.

Air Power has begun to frighten him with the spectre of immobility. An Empire may be lost if the wheels of defence stop turning at every critical moment. The Afrika Korps knows something of how a battlefield can be isolated. Germany has many possible battlefronts; and the Allied Nations will not open a new front without ample air support. The Germans will need transport in enormous quantities if they are to penetrate the sort of barrage that will be put down on their communications.

Air Superiority Afloat

BBETTER AIR SERVICE for convoys was "Naval priority No. 1," said Mr. Noel Baker, Under-Secretary to the Ministry of War Transport, on Sept. 28. He was talking to survivors from ships sunk in the convoy which delivered arms and munitions to Russia. Sea Hurricanes were in action during the passage of that convoy. The Navy has to contrive that more fighters of high performance and fire power are in attendance on convoys while they pass within range of enemy land-based bombers. The only way to provide fighters in sufficient numbers is to carry them in aircraft carriers.

The inference, therefore, is that carriers are being prepared for convoy duty and that they will be packed with fighters while they are engaged on that duty. Close reconnaissance against submarines can be done by the fighters and the rest of that work can be left to the escorting ships. There should be no need to take up valuable space with bombers in the aircraft carriers which accompany convoys. The mixed complement is appropriate in the carrier which attends a battle fleet, for it may expect to meet capital ships of the enemy fleet, but what the convoys need particularly is protection from bombing of every kind.

On the Northern route to Russia, the convoys are still supposed to run some risk of attentions from the Tirpitz, the Gneisenau and the Scharnhorst. We doubt if any of those ships can move out into the Arctic without detection

by routine air reconnaissance. In Mediterranean convoys there is obviously some danger from units of the Italian fleet. Yet, again, air reconnaissance should protect them from the more serious forms of surprise. The bombers are to be expected, whereas the appearance of battleships is relatively unlikely. The best defence against bombers is fighters. Nowadays, they must be good fighters. Bombers like the Do 217 are not to be intercepted and destroyed by anything but modern fighters.

In charging the Admiralty with the duty of making better provision for the air defences of the convoys, the Government must, therefore, have insisted on fighters of high quality, as well as on more ships to carry them. So far, the enemy has not put an aircraft carrier into commission. He cannot oppose fighters to the Navy's fighters so long as the convoys remain out of range of the land-based fighter. That means that he can never have air supremacy above a convoy while it can put its own fighters into the air. Every convoy will take with it its own air superiority when the Navy has found the ships to transport it. Let the Admiralty obtain the finest fighters it can get and send them to sea whenever a convoy must pass through seas which the enemy's bombers can reach. The results should justify all the energy and industry involved in realising the project quickly.

Wing Commander G. H. Stainforth

WING COMMANDER G. H. STAINFORTH, A.F.C., R.A.F., has been killed in action in the Middle East. He was in the Great War as a soldier; he has died in this War and, in between, he became one of the most distinguished pilots in the Royal Air Force. He was one of those men who are destined to do things all their lives and to leave the higher



["Aeroplane" photograph]

direction to those who have the power of self-expression necessary to the passing of examinations and the framing of schemes.

George Stainforth was a fine pilot, cool in emergency, patient in development or training work, careful, persistent and full of enthusiasm which his imperturbability cloaked and disguised. Words were the least important things in George's armoury. He never bothered with them and he was never much impressed by other people's use of them; but no one ever beat him to the starting point when there was special flying to be done. And no one

could compete with George in hanging on to an awkward job until the way to do it had been found, improbable though it might seem that energy and ingenuity could proceed from that tall, loose-limbed body and from that strangely inelastic temperament.

Schneider Trophy training and the making of new records were a delight to him, little as the casual onlooker would have guessed it. He was almost as happy doing another piece of precise work on a rifle or revolver range or chasing free balloons in an aeroplane, shooting them down for the amusement of R.A.F. Display visitors, or sorting out obscure points as Test Pilot at the Royal Aircraft Establishment. He was always better at doing things than at getting them done. We suspect that he was not happy during his days in an aircraft carrier, chiefly because he had no skill, patience or toleration in arguing the point.

In 1928 and again in 1932 and 1934 he appeared in that exclusive company of the King's Hundred at Bisley. On the first occasion after the first 10 shots he was well in the running, but he just missed occupying the historic chair of the King's Prize winner.

For many years he took part in the Inter-Service Rifle and Revolver matches as a representative of the Royal Air Force, usually as its champion shot.

George Hedley Stainforth was born at Beckenham in 1899, and was educated at Dulwich, at Weymouth and at Sandhurst. He was gazetted to a commission in the Buffs in August, 1918, and served abroad in France till the end of the Great War, in India in 1920, in Iraq in 1921, and at Aden in 1922. In that year he retired from the regular Army and in March, 1923, was granted a short service commission in the Royal Air Force, with the rank of Flying Officer and a year's seniority. After a course of flying at No. 5 Flying Training School, Sealand,

he was posted to No. 2 Flying Training School at Duxford.

In April, 1924, he was posted to No. 19 (Fighter) Squadron and in the following June to the Central Flying School for a Flying Instructor's Course. In September, 1928, he started instructing at No. 4 Flying Training School at Abu Sueir, Egypt. His pupils invariably praised his instruction and his deliberate manner of speaking was an advantage in this work. He specialised in aerobatics and in 1927 flew upside down in an Avro 504K (100 h.p. Gnome Monosoupape) for 11 minutes 42 seconds.

Coming home soon afterwards, Stainforth was eventually appointed to the Central Flying School, then at Wittering, as a Flying Instructor, and in 1928 was promoted Flight Lieutenant.

In September of that year he was posted to the Marine Aircraft Experimental Establishment for duty with the High Speed Flight. He was selected as a member of the British team to defend the Schneider Trophy in 1929, but through fuel supply trouble with his Gloster-Napier VI, one of the prettiest aeroplanes ever built, his entry was withdrawn. Three days after the contest he put up a new World's Record in the Gloster with a speed of 336.3 m.p.h. (541.1 kilometres per hour), but this stayed only for a short time because Sqdn. Ldr. Orlebar surpassed the figures on a Supermarine Rolls-Royce S.6.

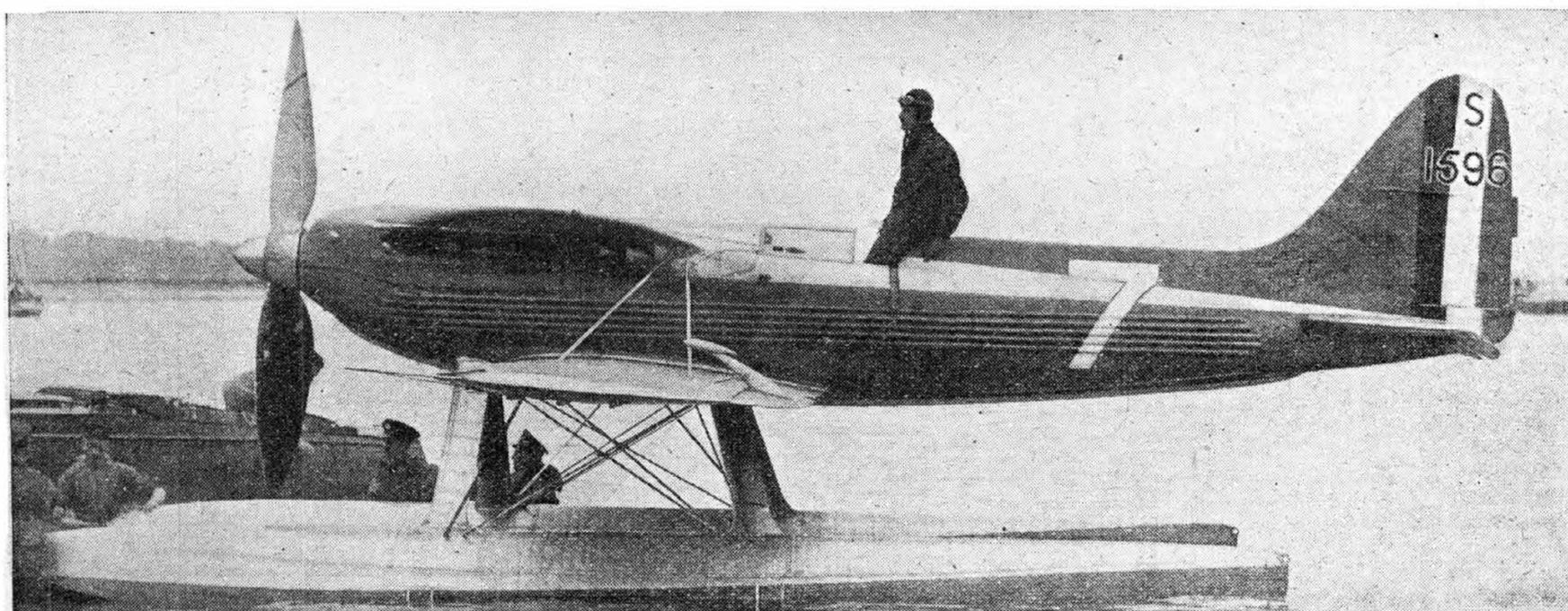
A month later Stainforth was gazetted to a permanent commission, and early in 1930 he was appointed to Headquarters Fighting Area, Air Defence of Great Britain. April, 1931, saw him again with the High Speed Flight at Felixstowe, in preparation for what turned out to be the last Schneider Trophy Contest. On September 13, about three hours after the contest, Flt. Lt. Stainforth raised the World's Air Speed Record to 379.05 m.p.h. (610.01 kilometres per hour), this time on Supermarine Rolls-Royce S.6B No. S1596.

Further fame came to Stainforth on September 29 when he raised his own speed record to 407.5 m.p.h. and so became the first man to fly at 400 miles an hour. He was flying Supermarine S.6B (Rolls-Royce R) No. S1595.

The Air Force Cross was awarded to Stainforth for this work, and he followed Flt. Lt. Waghorn, the 1929 Schneider winner, to the Royal Aircraft Establishment, where he joined the long line of famous Farnborough experimental pilots, which includes such names as de Havilland, Busk, Gooden, Hucks, the Hill brothers, Noakes, Swain and Adams.

In 1935, Stainforth was senior Flight Lieutenant in the aircraft carrier H.M.S. Glorious, and after promotion to Sqdn. Ldr. in 1936 he was posted to Hinaidi Aircraft Depot, Iraq. Eventually he took over command of No. 30 (Bomber) Squadron there. At the end of 1938, he was supernumerary at Uxbridge, but still could not avoid doing notable deeds, for on Empire Air Day, May, 1939, he flew a Spitfire from the South to Scotland and back at an average speed of 273 miles per hour.

On March 1, 1940, he was promoted to Wing Commander, and in recent history went to the Middle East as a night fighter pilot, presumably with a command. The announcement that Wing Commander Stainforth had shot down an enemy raider near Damietta in July came as no surprise to those who knew him. He was buried with full military honours in the British Cemetery at Ismailia.



["Aeroplane" photograph]

RECORD MAKER.—Wing Commander Stainforth in the Supermarine S.6B with which he broke the World's Speed Record in 1931. He achieved 407.5 m.p.h.



["Aeroplane" photograph]

THE EAGLES RETURN.—Air Chief Marshal Sir Sholto Douglas, followed by Major-General Spaatz and Brigadier-General Hunter, inspecting pilots and ground personnel of the three Eagle Squadrons which were transferred from the R.A.F. to the U.S. Army Air Force on September 29. Two of the Squadrons celebrated their first operation after the change-over by destroying in two minutes four out of five Focke-Wulf Fw 190s shot down on October 2.

Eagle Squadrons Transfer to the U.S.A.A.F.

THE THREE American Eagle Squadrons, Nos. 71, 121 and 133, were formally handed over on September 29 by Air Chief Marshal Sir Sholto Douglas, K.C.B., M.C., D.F.C., Air Officer Commanding-in-Chief Fighter Command, to Major-General Carl Spaatz, Commanding General Eighth United States Army Air Force. They will be under the direct command of Brigadier-General F. O'D. Hunter, Commanding General Fighter Command, Eighth U.S. Army Air Force.

Air Chief Marshal Sir Sholto Douglas gave his farewell address to the Eagle Squadrons on the parade ground.

"We of Fighter Command," he said, "deeply regret this parting, for in the course of the past 18 months we have seen the stuff of which you are made, and we could not ask for better companions with whom to see this fight through to a finish. But we realise—as you, too, must realise—that your present transfer to your own country's Air Force is in the long run in the best interests of our joint cause. The United States Army Air Force's gain is very much the Royal Air Force's loss. The loss to the Luftwaffe will no doubt continue as before."

He went on to recount the Squadrons' successes in battles with the Luftwaffe. "The official total," he said, "of destroyed enemy aircraft is, I believe, 73½, the half being part of a Dornier shared with a British squadron—a symbol of Anglo-American co-operation! Of the 73½ enemy aircraft destroyed, 41 have been claimed by the Senior Eagle Squadron No. 71—a record of which they may well be proud, but one which I understand the other two squadrons are determined will not long remain unchallenged."

He added that as a personal memento of their services to the Royal Air Force the Air Council intended to present to each member of the squadrons a medallion. He hoped these emblems would serve as a pleasant reminder of their comradeship with the Fighter Command of the Royal Air Force—a comradeship which he would always remember with gratitude and affection.

Air Marshal Sir Sholto Douglas concluded: "Good-bye and thank you Eagle

Squadrons 71, 121 and 133 of Fighter Command, good hunting to you as Squadrons of the Eighth U.S. Army Air Force."

After a brief address by Major-General Spaatz, and Brigadier-General Hunter, the "Star Spangled Banner" was played by an R.A.F. band and the Stars and Stripes were hoisted to fly beside the R.A.F. ensign.

At the luncheon which followed the celebrating was of the lively kind usual with fighter pilots.

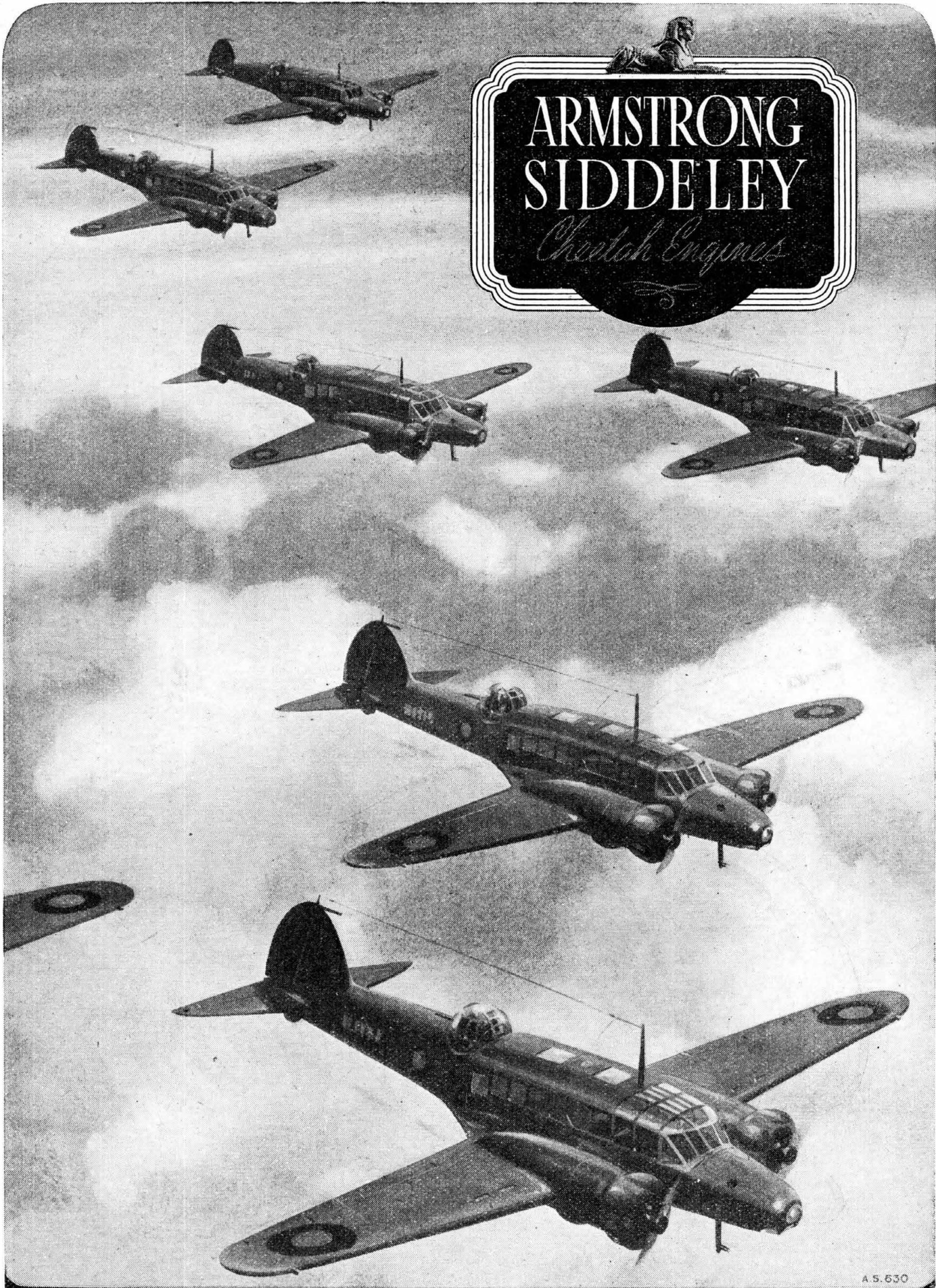
The pilots afterwards paraded in their new U.S. Army uniforms before their Spitfires on the aerodrome, where Brigadier-General Hunter presented them with their Army wings. Their R.A.F. wings are still worn, but on the right.

Commanding the Pursuit Group is Colonel E. W. Anderson. He has a long experience in the U.S.A.A.F., with duty both at home and in Panama. Major C. G. Peterson is Executive Officer and second in Command. He was awarded the D.S.O. and D.F.C. when O.C. No. 71 Eagle Squadron. Leading the U.S. Squadrons are, respectively, Major G. A. Daymond, Major W. J. Daley and Major C. W. McColpin. All have distinguished themselves in operations with the Eagle Squadrons. Major Daymond holds the D.F.C. and bar, and Major Daley the D.F.C. Major McColpin has made 80 operational sweeps and has destroyed nine enemy aircraft.



["Aeroplane" photograph]

A YANKEE SPITFIRE.—The U.S. Army Air Force markings and the squadron letterings on a Spitfire VB. The star is white with a blue background. A narrow yellow band encircles the insignia in the same manner as in the R.A.F. markings.



ARMSTRONG
SIDDELEY
Cheetah Engines

A.S. 530

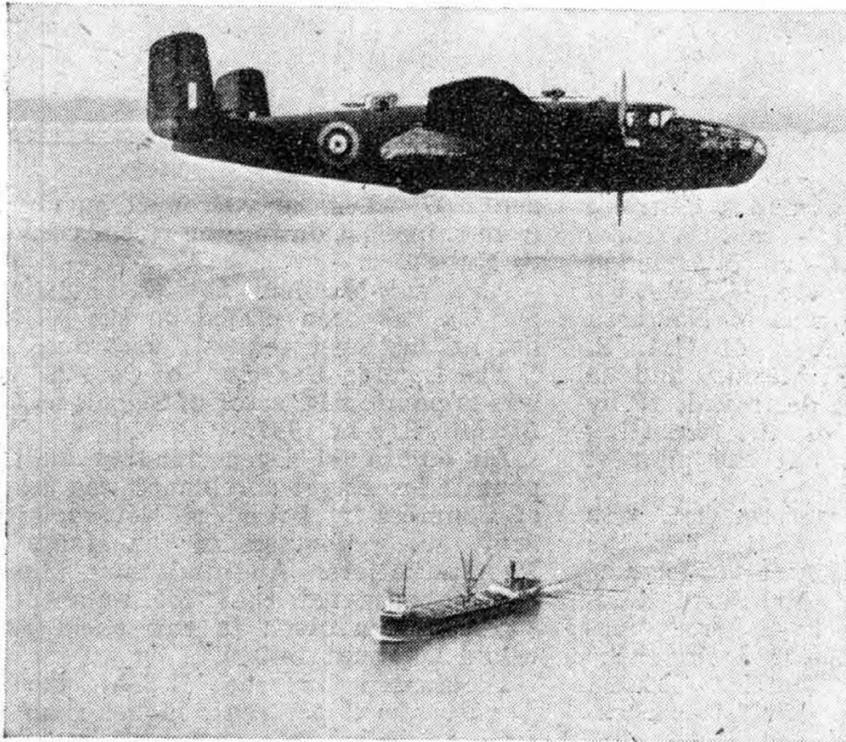
ARMSTRONG SIDDELEY MOTORS LIMITED. BRANCH OF HAWKER SIDDELEY AIRCRAFT CO. LTD.

SPECIALISTS IN MILITARY AIRCRAFT



SINCE 1915

Gloster
AIRCRAFT CO., LTD.



FOR THE R.A.F.—A North American Mitchell in R.A.F. colours beginning its flight from Canada to Great Britain across the Atlantic ocean. The Mitchell, which has a top speed of around 280 m.p.h., is well defended with gun turrets on top and underneath and a hand-operated gun in the nose. The Mitchell has already shown its prowess in the Middle East.

big enemy submarine works. Other targets were found along the Baltic Coast.

The fair weather continued during the sixth day, and the skies of Northern France were again filled with the ominous drone of raiding bombers and their numerous fighter escorts. The bombers were B-17s and Bostons of the United States Army Air Force; the B-17s were bound for the airframe factory at Méaulte and the aerodrome at St. Omer, and the Bostons for the docks at Le Havre. Eighteen Focke-Wulf Fw 190 fighters were shot down in air combat—13 by crews of B-17s. Four of the remaining five fell to pilots of Eagle Squadrons which only a few days before had been transferred from the Royal Air Force to the U.S.A.A.F. The fifth was shot down by a Polish flying officer. These operations were spread over a front of 160 miles.

That night another heavy force of R.A.F. bombers visited the Rhineland, concentrating chiefly upon the textile and manufacturing centre of Krefeld. Mist hampered the attackers, but many fires were started, and the Germans admitted that damage had been done in the town.

Following their spectacular daylight raid on Oslo in the previous week, Mosquitoes last week made an evening attack without loss to themselves on an iron and steel works at Liège.

Raids by the Luftwaffe on Great Britain showed no increase either in intensity or frequency over those of recent weeks. One bomb from a day-time raider hit a boys' school in Sussex and caused the deaths of 29 pupils and three adults, including the headmaster. Other raids caused few casualties and little damage.

A summary of the offensive operations of the Fighter, Coastal and Bomber Commands of the Royal Air Force and of the Eighth U.S. Army Air Force appears below.

Diary of the Week

Offensive Operations of the Fighter, Coastal and Bomber Commands of the Royal Air Force and of the Eighth U.S. Army Air Force. From September 27 to October 3, 1942

None reported. Sunday, September 27
 None reported. Monday, September 28
 None reported. Tuesday, September 29

Wednesday, September 30

DAY .. Three enemy aeroplanes shot down by R.A.F. fighters. One (a Ju 88) fell on the beach at Cap Gris Nez; another (also a Ju 88) crashed into the sea off Holland. Both had been chased from the English coast.

Thursday, October 1

DAY .. Single bombers of Bomber Command attacked the chemical works at Sluiskil in Holland and an oil refinery at Ghent.
 NIGHT .. Main target: the submarine works at Flensburg and other objectives on the Baltic coast of Germany. Aeroplanes of Coastal Command attacked enemy shipping off the Dutch coast. 17 bombers lost.

Friday, October 2

DAY .. B-17s escorted by fighters attacked airframe factory at Méaulte (near Albert), Northern France, and the aerodrome at St. Omer. Fighter-escorted Douglas Bostons of the U.S.A.A.F. attacked the docks at Le Havre. Eighteen enemy fighters were destroyed, 13 by crews of the B-17s and five by fighters. Six escorting fighters lost, but the pilot of one was saved. Mosquitoes of Bomber Command attacked an iron and steel works near Liège.

Saturday, October 3

None reported.

ADDITIONAL ALLIED LOSSES

Heavy clouds and severe icing caused an R.A.F. offensive fighter sweep over Northern France on Sept. 26 to be abandoned. Eleven fighters failed to return from this operation.

EIGHTH U.S. ARMY AIR FORCE

The Eighth U.S.A.A.F. suffered no losses in bombers or fighters during operations conducted on Oct. 2, and total losses remain at two bombers and seven fighters. Forty-two enemy fighters have been shot down by its fighter pilots and bomber crews since the 8th U.S.A.A.F. began operations.

RED AIR FLEET BOMBER COMMAND

No raids by the Bomber Command of the Red Air Fleet were reported last week.

AXIS AND ALLIED LOSSES—SEPTEMBER 27-OCTOBER 3, 1942

| Date | Axis (N. Europe) | | Axis (Near East) | | Allied (N. Europe) | | Allied (Near East) | |
|---------------|------------------|-----------|------------------|-----------|--------------------|------------|--------------------|-----------|
| | Machines | Personnel | Machines | Personnel | Machines | Personnel | Machines | Personnel |
| 27-9-42 | — | — | 3 | 15 | — | — | 1 | 1 |
| 28-9-42 | — | — | 1 | 1 | — | — | 2 | 5 |
| 29-9-42 | — | — | 2 | 5 | — | — | 2 | 7 |
| 30-9-42 | 3 | 12 | 3 | 12 | — | — | 1 | 1 |
| 1-10-42 | — | — | 6 | 9 | 17 | 110 | 2 | 2 |
| 2-10-42 | 18 | 12* | 7 | 12 | 13 | 50† | — | — |
| 3-10-42 | — | — | — | — | — | — | — | — |
| Totals | 21 | 24 | 22 | 54 | 30 | 160 | 8 | 16 |

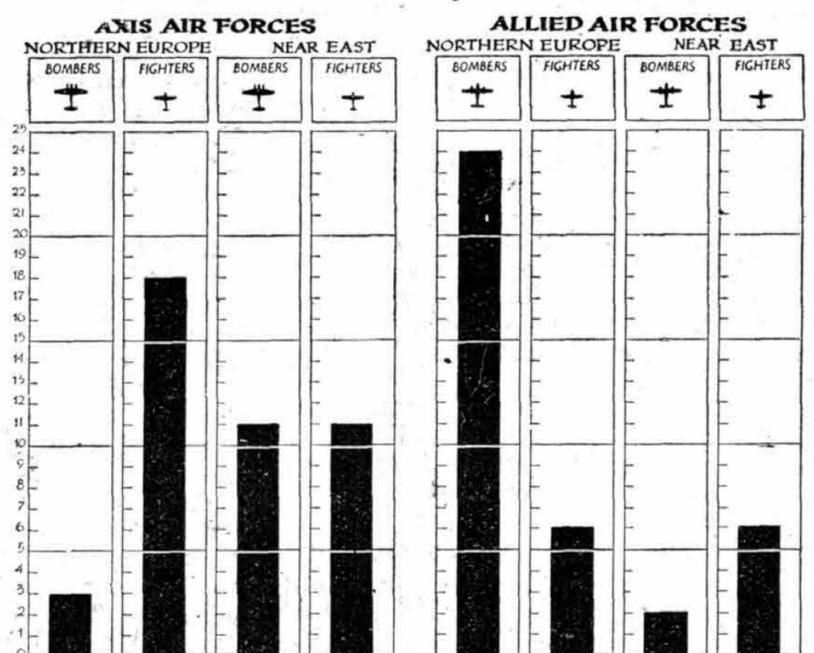
* Excludes six pilots saved. † Excludes one pilot saved.

TOTAL LOSSES IN THE AIR WAR* (To dawn, October 4).

| | Axis Air Forces | Allied Air Forces |
|--|-----------------|-------------------|
| Machines destroyed in combat or by A.A. gunfire .. . | 9,946 | 6,698 |
| Personnel .. . | 26,453 | 20,270 |

* Excluding Russia and the Far East.

THE WEEK'S LOSSES.—Sept. 27 to Oct. 3, 1942.



THE WEEK'S LOSSES AT A GLANCE.—Comparative losses in the Air War for the week September 27 to October 3, 1942, inclusive. The chart does not include aeroplanes destroyed in Russia, or those destroyed on the ground. The figures are: Northern Europe: Axis (daylight offensive) 3 bombers; (defence by day) 18 fighters; Allied (daylight offensive) 6 fighters; (night offensive) 24 bombers. The figures for the Near East are: Axis, 11 bombers and 11 fighters; Allied, 2 bombers and 6 fighters. Approximate personnel losses are: Northern Europe: Axis, 24; Allied, 160. Near East: Axis, 54; Allied, 16.

NEWS OF THE WEEK

CANADA'S Aircraft Industry was placed under the general control of the Government on Sept. 30, when an order was published prohibiting the manufacture of any type of aeroplane except by Government permission. Another order decreed that as from midnight on Oct. 1 all non-essential aeroplanes must be grounded to save petrol.

H.M. The King visited the headquarters of Combined Operations on Sept. 29.

The three Eagle squadrons of the R.A.F. were formally handed over on Sept. 29 by Air Chief Marshal Sir Sholto Douglas, C.-in-C. Fighter Command, to Major-General Carl Spaatz, Commander of the Eighth U.S. Army Air Force, at an aerodrome in England. The Eagle squadrons will serve under Brig-General F. O'D. Hunter, Commanding General, Fighter Command of the Eighth U.S.A.A.F. Sir Sholto Douglas said that the Air Council would give each member of the squadrons a medallion as a memento of his service with the R.A.F.

Aeroplanes of the R.C.A.F. accompanied a strong force of bombers and pursuit aeroplanes of the U.S.A.A.F. in an attack on Japanese positions and equipment at Kiska, Aleutian Islands, on Sept. 25. This is the first mention to be made of R.C.A.F. operations with the U.S.A.A.F. in Alaska.

Allied Air Forces have sunk 60,000 tons of Axis shipping in the Mediterranean and damaged another 80,000 tons since the beginning of June, according to a report issued in Cairo on Sept. 28.

Airborne troops were stated on Sept. 29 to have been used by the Germans against Stalingrad.

Wing Commander D. R. O'B. Hoare, one of the first R.A.F. pilots to take part in "intruder" operations at night, is to train night fighter pilots. He made his first "intruder" flight in January, 1941, and has now completed his 80th intruder patrol.

Arrivals at a Ferry Command base in England on Sept. 30 included Lieut.-Col. Elliott Roosevelt, who had arrived from the U.S.A. to join the U.S.A.A.F. in Great Britain; Mr. Attlee, Deputy Prime Minister, who arrived from Canada in a Consolidated Liberator; and Air Chief Marshal Sir Frederick Bowhill, C.-in-C. Ferry Command, who has been in England on a visit of inspection and was on his way back to Canada. A few minutes later another aeroplane arrived from Montreal with a Canadian Government Mission, which included the Hon. C. D. Howe, Minister of Munitions and Supply, Col. J. L. Ralston, Minister of Defence, Mr. Ralph P. Bell, Director-General of Aircraft Production, and Mr. D. A. Clark, Director-General of Shipbuilding.

Beaufighters, flown by Australians, are in service in New Guinea, according to a statement made by Mr. A. S. Drakeford, Australian Minister for Air on Sept. 30. He announced that the Beaufighters had been in action for some time.

Australian forces, which began a counter-offensive against the Japanese in New Guinea towards the end of September, were stated on Oct. 4 to be nearing Kokoda.

Four hundred fighters and a "strong formation of bombers"—said in some reports to number 80—which included Flying Fortresses of the U.S.A.A.F., operated over a wide area of Northern France on the afternoon of Oct. 2. The Fortresses bombed Méaulte and 18 enemy aeroplanes were destroyed, 13 by the Fortresses. Six of the escorting fighters were missing, but the pilot of one was saved.

U.S. troops were stated on Oct. 4 to have occupied recently positions in the Andreanos group of the Aleutian Islands. Types of U.S. Army Air Force aeroplanes now operating from aerodromes on the islands are said to include the Boeing B-17 Fortress, the Consolidated B-24 Liberator bombers and the Lockheed P-38 Lightning, Bell P-39 Airacobra and Curtiss P-40 Kittyhawk fighters.

Air units in Ceylon have been inspected by Air Chief Marshal Sir Richard Peirse, A.O.C.-in-C., R.A.F., India. Accompanied by the Nawab of Bhopal, he arrived by air at Colombo, according to a report from there on Oct. 2, and was met by Air Vice-Marshal J. H. D'Albiac, A.O.C., Air Forces in Ceylon. The party visited aerodromes and flying-boat stations and inspected bombers, fighters and flying-boats as well as air and ground crews of the R.A.F., the R.C.A.F. and the Royal Netherlands Air Force.

Marshal of the R.A.F. Lord Trenchard, G.C.B., G.C.V.O., D.S.O., arrived at a Middle East aerodrome in a Liberator on Oct. 3 to pay visits to fighter and bomber squadrons in the desert. The Liberator was flown by an officer of the Royal Norwegian Air Force. Air Chief Marshal Sir Arthur Tedder, A.O.C.-in-C., R.A.F., Middle East, headed the official party which met Lord Trenchard on his arrival.

From Oct. 31 the U.S. Army will take over the direct delivery of aeroplanes by air from the U.S.A. to the Allied forces in the Middle East, according to an official announcement at Washington on Oct. 4. The Air Transport Command of the U.S.A.A.F. will handle the ferrying of aeroplanes, both Lend-Lease and others. Presumably the new arrangement will include the taking over of the ferry services from the U.S.A. to West Africa hitherto operated by Pan-American Airways.

Promotions to the rank of Air Vice-Marshal of the following Air Commodores (temp. Air Vice-Marshals) were announced on Oct. 2:—J. H. D'Albiac (Mar. 15), J. M. Robb (July 1), G. C. Pirie (July 15) and A. S. Morris (June 4) (Technical Branch).

Air mail letters intended for Christmas delivery to members of H.M. Forces in the Middle East, India and Ceylon, must be posted not later than Oct. 10.

Airgraphs from India, East Africa and South Africa and from civilians in the Middle East, despatched early in September, are presumed to have been lost with the flying-boat Clare. The Postal Administrators of the countries concerned have been asked to re-photograph and re-transmit the Airgraphs to this country. Letters from members of the Middle East Forces were not involved.

"Better air service for convoys is naval priority No. 1," according to Mr. P. Noel-Baker, Parliamentary Secretary to the Ministry of War Transport on

Sept. 27 when he welcomed survivors from ships lost during the recent convoy to Russia.

Air Vice-Marshal C. W. Nutting, D.S.C., has been placed on the retired list at his own request, according to "The London Gazette" of Oct. 2. He was appointed Director of Signals at the Air Ministry in 1937.

An additional seven hundred million pounds for Naval aeroplanes was asked of Congress by President Roosevelt on Sept. 29. Members of the House of Representatives Appropriations Committee estimated that the number of aeroplanes involved in this extra sum would be about 14,000.

Production in the U.S.A. during August was 8 per cent. higher than in July, according to a statement made by Mr. Donald Nelson, Chairman of the War Production Board, on Sept. 29, but was about 14 per cent. behind the total forecast at the beginning of the month. Compared with July the output of aeroplanes in August increased by 6 per cent.

The minimum age for enrolment in the Air Training Corps has been lowered to 15½ years from 16. Uniforms will be issued to cadets of 15½ provided that they have done three months' service in the A.T.C.

A scheme for reduced fees at public schools for the sons of fallen airmen, which has been prepared by the R.A.F. Benevolent Fund, has been agreed to by Winchester and Radley. Girls' schools are to be asked to make similar arrangements for the daughters of airmen.

The number of commissions in the R.C.A.F. is to be increased. All non-commissioned Canadian pilots serving in either the R.A.F. or the R.C.A.F., who satisfy the prescribed standards for commissions are to be commissioned. All other crew members who have served in an operational squadron for at least two months may also apply for a commission.

A report of the Military Affairs Subcommittee of the House of Representatives, published on Oct. 3, which was investigating the criticism that American aeroplanes, especially fighters, were inferior, stated that American aeroplanes were "more than a match" for those of the enemy. During the 30-day period from Aug. 14 to Sept. 14, seven and one-half enemy aeroplanes were stated to have been lost for each American aeroplane. From Feb. 1 to Sept. 20 American pilots were stated to have brought down on all fronts 279 aeroplanes, whereas enemy pilots brought down only 114 American aeroplanes.

Ten people were killed and eight injured when an aeroplane, presumably a flying-boat, crashed at Botwood, Newfoundland, on Oct. 3. There were 26 passengers and a crew of 11 on board, all believed to be Americans, and the machine was an American type. The official announcement, issued in the U.S.A. on Oct. 4, stated that the hull of the machine split in the crash and the wreckage had been towed to shallow water so that attempts might be made to recover it. No names of the killed or injured were given, nor did the statement say how many were passengers. The cause of the accident was not given.

EVEN I CAN UNDERSTAND—5.

Q. *Why are feathering propellers now considered a necessity on multi-engined aircraft?*

A. When the engine which normally drives a propeller fails while the aeroplane is still in flight, the propeller starts to act as a windmill and produces drag instead of thrust. The amount of drag it produces depends largely on the pitch in which it is windmilling—the coarser the pitch the lower the drag. (On all installations where it is not possible to feather the propeller should be put into positive coarse pitch immediately after engine failure).

The least drag of all is produced when the blades of the propeller are turned edge-on to the direction of flight, i.e., when they are feathered. As the pitch is coarsened, the windmilling r.p.m. are reduced, until when the blades are feathered the propeller finally ceases to rotate at all. Feathering is done

by pressing a button and stops the propeller in a few seconds.

It may surprise some people to learn that the drag of a feathered propeller is not drastically lower than that of a propeller windmilling in a very coarse pitch (although it *is* much lower than that in a fine pitch). Indeed, the greatest advantages of a feathering propeller lie in the fact that it does not rotate. This prevents further structural damage to an engine if the cause of its failure was some internal breakage, and avoids possible vibrations and heavy impulses which may tear an engine out of its mountings. Also the feathered propeller creates less disturbance to the airflow over the wings and tail, and hence may result in a lower aircraft drag with correspondingly better one-engine performance (speed, ceiling, etc.) and better control.



Engine damaged but propeller windmilling :—

1. Further damage to engine is likely.
2. Vibration or heavy impulses may break engine mounting.
3. Disturbed airflow and drag on one side adversely affect performance and control.



Propeller of dead engine feathered :—

1. Further damage to engine avoided.
2. Vibrations or heavy impulses avoided.
- 3(a). Less disturbed airflow over wing and tail on that side.
- (b). Less propeller drag on that side.

This is one of a series of articles on technicalities sponsored by The de Havilland Aircraft Co., Ltd., in the belief that they will prove of interest and use to students and others in the Services and the aircraft industry.



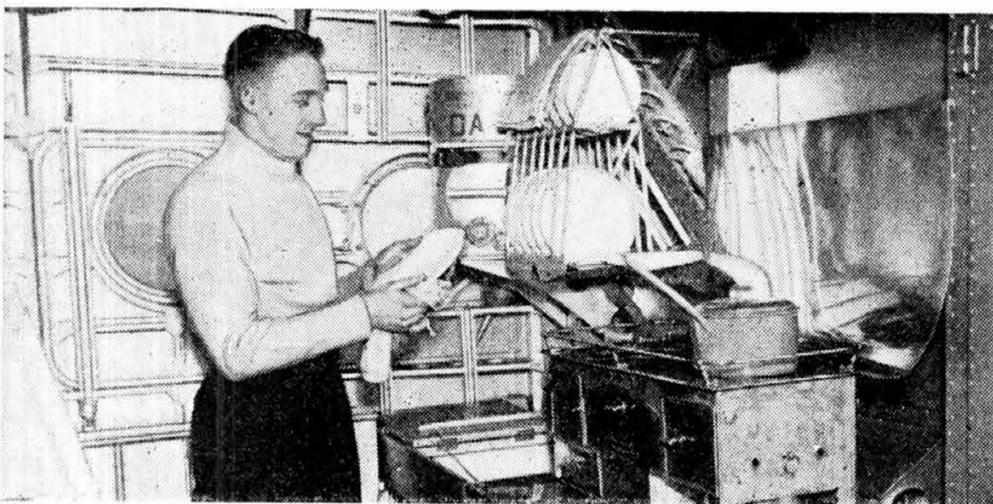
I'M MORTIFIED !

Never did I think I'd live to see the day when human beings would be able to endure cold better than I can. The thought of sixty below makes even *my* hair stand on end — but they tell me that flying men wearing Irvinsuits fly in comfort at even lower temperatures.

Irvinsuit

A product of
THE IRVING AIR CHUTE OF
GREAT BRITAIN LIMITED
LETCHWORTH, HERTS, ENGLAND

Telephone: Letchworth 888
Telegrams: "Irvin Letchworth."



MOPPING UP OPERATIONS.—Washing up in the well equipped galley of a Short Sunderland, where hot meals are prepared to sustain the crew in their long patrols over the Atlantic.

gave one time for a bath and a good dinner before the night was too old.

The afternoon wore on uneventfully, except for a brief incident when another Sunderland arrived to inspect our convoy. He only stayed about 10 minutes and then left to perform some other task.

In what seemed a very short time it was 3 o'clock, which meant we had been flying for nine hours. It was now time to leave, so we signalled the S.N.O., asking him for his 08.00 position the next morning for the benefit of the next escort.

The sea was very rough by this time and, in any case, it would be dark in just over an hour, so we figured that our departure wouldn't matter so much now.

At 15.15 we set course for Base B and flew into the gloom which was just gathering in the East. Since we were well up in a Northern latitude the dusk came early. By 4 o'clock the waves below were disappearing in the half light, and the clouds were merging into the night.

We were flying at 1,000 ft. again and, since we were in clouds most of the time, I gave orders for the bombs to be wound into the hull. This reduced air resistance and gave us an additional speed of 10 knots. The 'midship gunners were told to stand down, and only the rear gunner kept vigil.

Another hour or so would prove our navigation right or wrong, and in 11 hours' flying over the sea, without radio bearings, one could accumulate a large error. This became more important if one was flying at night, since there was always the grim possibility of flying into some Scottish mountain.

A moon was rising above the clouds, which provided sufficient light to see the vague form of clouds passing by.

After a while we estimated that we should be in the vicinity of the coast, and I called up the air gunner officer, who was perched up in the observation dome, to ask him to keep a sharp look-out for any light which would provide a key to our position.

By a strange chance, no sooner had I done this when over the front gun turret I saw a faint blue light. As I watched, it grew brighter, and then, to my horror, sparks appeared to be coming out of the turret. My first reaction was that there must be a short circuit in the electrical system, and a fire was breaking out. I shouted to the second pilot to go below and investigate, but before he could leave his seat there was a violent explosion, accompanied by a blinding flash. For a moment I thought that all the ammunition in the turret had exploded, and that when I regained my vision, having been temporarily blinded by the flash, I should find myself in a seat with no aeroplane around me.

The fact was that we had been struck by lightning, but, fortunately, as far as we could ascertain, no damage had been done. Even the wireless still worked.

CONVERTED TRANSPORT.—The Sunderland is the development of the successful Short Empire flying-boat. It has a single-gun nose turret, a four-gun tail turret and two hand operated guns amidships. The Sunderland's long range has been utilised for many hours of sea reconnaissance with Coastal Command.

This proved to be "the darkest hour before the dawn," for as we flew out of a cloud bank a flashing light beckoned us from the coast ahead. A check of its characteristics proved that we were no more than 10 miles off the track, and we altered course to follow the contour of the coastline.

The land showed up black beneath the moon, and the silver sea shimmered as the waves hurled themselves against the cliffs.

The worst of the flight was over as we sailed over bays and headlands towards Base B. We were all quite content now.

A radio message had been sent off giving our estimated time of arrival, no more than half an hour hence.

The dishes were being washed below, and those of the crew who were not on watch were tidying up. No one wanted to spend longer than was necessary on board once we had landed.

The flare path was visible now in the distance, and as we came nearer we could see the patrol boat fussing about awaiting our arrival.

We flashed our recognition signals to let them know we were a friendly craft, and then circled over the lights to determine which way the wind was blowing and to size up the general situation.

It all looked satisfactory, so we asked for permission to land. As the green flash rose up from the ground I shouted to the crew to prepare for landing.

Making a wide sweep, I turned into wind and began my approach a mile away. Airscrews in fine pitch, throttles pulled back, and flaps half out. We were undershooting intentionally, and when the sensitive altimeter showed 300 ft. I opened up the engines again and brought the nose of the machine well up, as we continued to sink lower.

This was the technique for night landing, which was based on the principle that during the last 200 ft. of the glide it shouldn't matter when one hit the water, as one would always be in the correct attitude for alighting.

The first flare grew brighter as we got closer and, sighting on this, I manipulated the throttles to avoid the possibility of overshooting. The water rose up with the flare, and as it vanished under the port wing I eased the throttles a little.

A slight drag on the keel told me we were down on the water, and the last flare raced towards us and then slowly stopped, as the terrific drag of the water brought us swiftly to a standstill. We were down again.

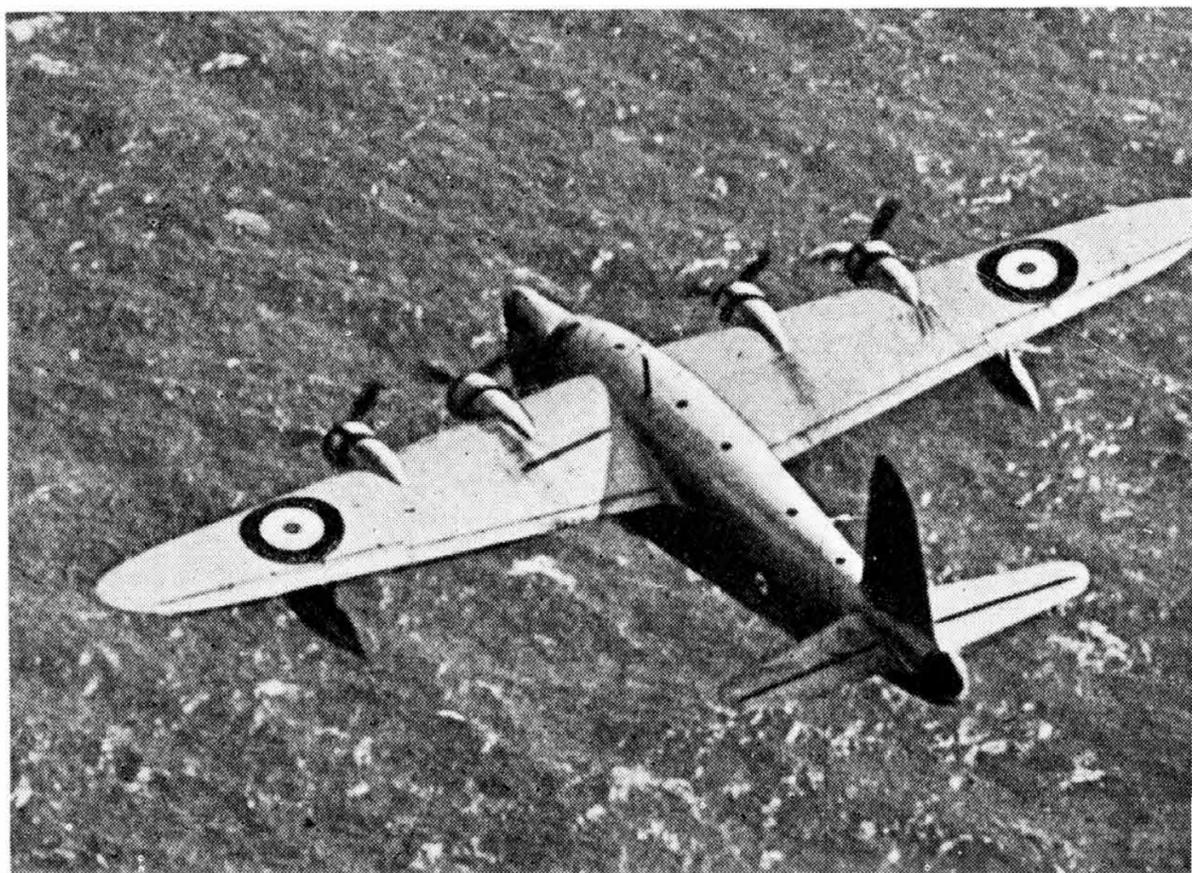
The Silenced Roar

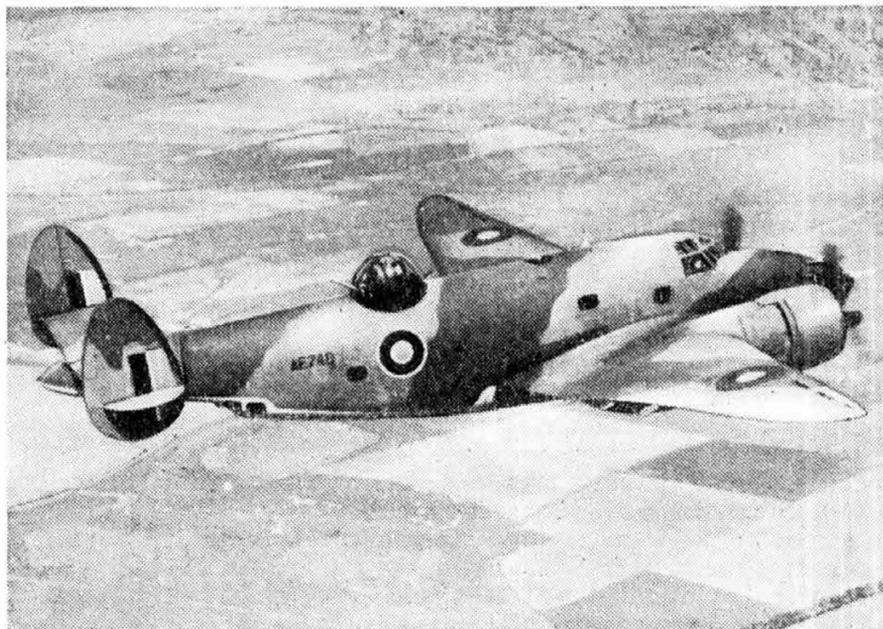
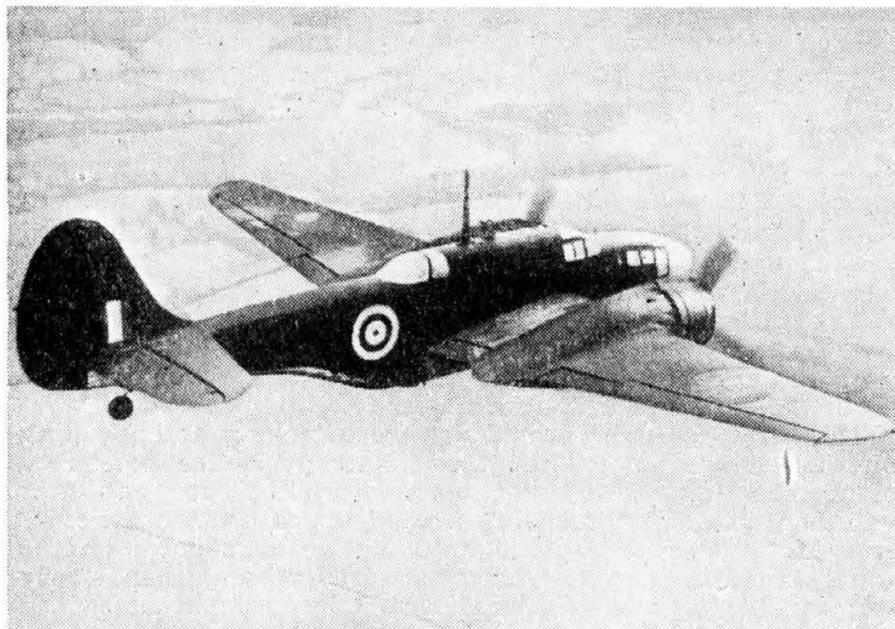
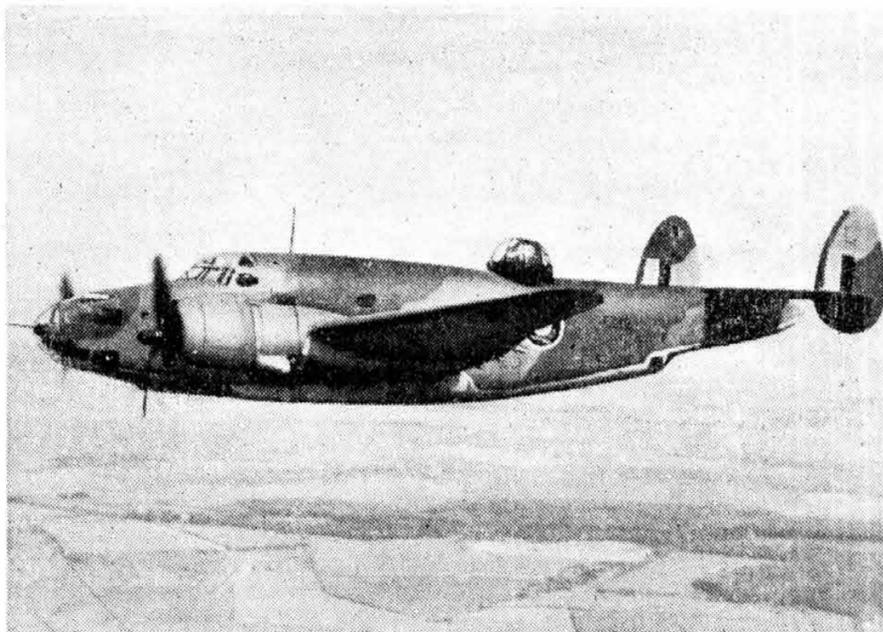
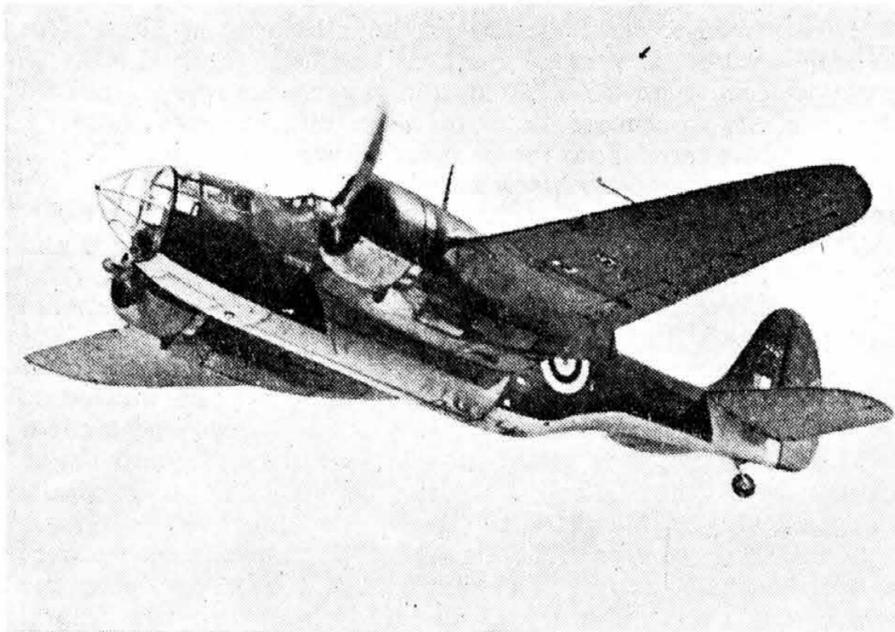
A motor boat led us up to a mooring buoy, and when the riggers had got a line through the wire saddle I switched off all the engines. The peaceful hush, that only those who have lived with noise for hours on end can appreciate, swept through the aircraft, and one talked once more in normal tones.

The riggers were busy attaching a storm pennant, the fitters putting on the engine covers, the armourer covering up the guns and removing all ammunition, and the navigator completing his log. Everyone was working quickly to complete his day's work as a motor boat arrived to take us off.

The time was 18.30 and we had been in the air 12½ hours. It had been a mere routine flight with few incidents, rather boring at times but, on the whole, a good flight.

Now all we wanted was a glass of beer and a good dinner, and this we discussed as we chugged towards the quay. To-morrow was another day, and maybe another flight, but who cared? A fresh, clean bed lay between us and the morrow.





DETAILED ANALYSIS.—The points by which the subjects of the previous recognition problems can be identified are illustrated in the photographs of the Martin Baltimore I (left) and the Lockheed-Vega Ventura I (right) and the drawings on the opposite page.

Aircraft Recognition

THE GLEN MARTIN BALTIMORE I (two 1,600 h.p. Wright Double-Row Cyclone GR-2600-A5B radial motors) and the Lockheed-Vega Ventura I (two 2,000 h.p. Pratt and Whitney Double-Wasp R-2800-S1A4-G radial motors) were the subjects of the previous recognition test. Both are classed as reconnaissance bombers and are in service with the R.A.F. and U.S.A.A.F.

The Baltimore, like its predecessor, the Maryland, is in operational service with the R.A.F. in the Middle East only, although some may be seen flying here.

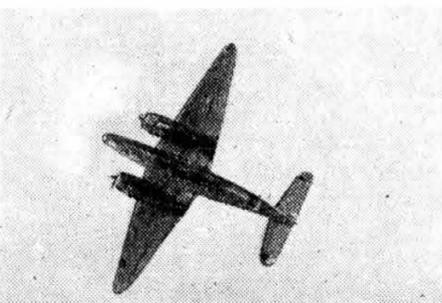
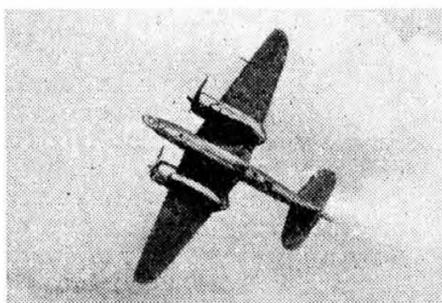
In this view the discernible features of the Baltimore are the straight tapered pointed mid-wings, big radial motors, long slab-sided fuselage, pointed transparent nose, and the

large chord tailplane. Confusion with the Maryland is eliminated by the pointed tips of the nacelles protruding aft of the trailing edge of the wing.

The Ventura is developed from the Hudson and, like its predecessor, is being used in the R.A.F. Coastal Command.

From this viewpoint the twin fins and rudders of the Ventura are hardly visible and so the identity is not very obvious. The distinctive points of recognition are

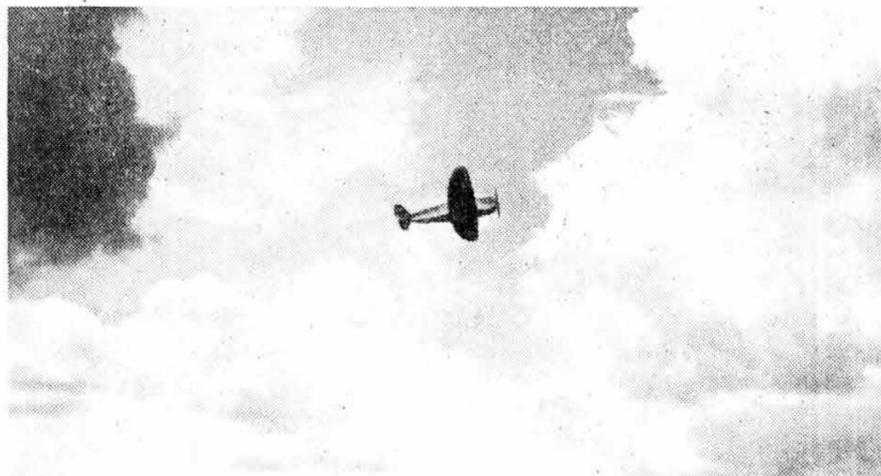
the straight tapered pointed mid-wings, large radial motors, tapered rounded fuselage, and the small chord tailplane with the taper on the leading edge. The kink in the trailing edge of the wing and the under gun position dispels any confusion with the Hudson.



241 PREVIOUS PROBLEMS.—(Left) A Baltimore, and 242 (right) a Ventura.



243



244

FOR IDENTIFICATION CXXII.—Two more photographs to give practice in the recognition of Allied and enemy aeroplanes. What they are and notes on their characteristics will be published with two more photographs on October 23.

- 1310076 Sgt. J. McP. Milligan.
- 1256392 Sgt. J. L. C. Morris.
- 102541 P/O C. R. Morrison-Jones.
- 1161688 Sgt. R. H. Moses.
- 1269969 Sgt. J. F. O'Brien.
- 1165262 Sgt. S. J. Oertel.
- 67662 F/L W. B. Orr.
- 116890 P/O R. M. Patterson.
- 115123 P/O J. D. Peel.
- 1266840 Sgt. N. A. Penstone.
- 37207 W/C M. V. Peters-Smith, D.F.C.
- 1260484 Sgt. G. A. Prag.
- 1380776 Sgt. K. S. Revell.
- 751194 F/Sgt. J. G. Richardson.
- 533044 Sgt. A. J. Roberts.
- 1128848 Sgt. L. Robinson.
- 1260365 Sgt. E. Sarene.
- 980033 Sgt. A. C. Savory.
- 84331 F/O P. C. Sayce.
- 1127995 Sgt. C. T. Shepherd.
- 1073899 Sgt. I. D. Singer.
- 651289 F/Sgt. A. G. Smith, D.F.M.
- 1382139 Sgt. W. Smith.
- 910440 Sgt. L. A. C. Standen.
- 995426 Sgt. J. V. Straffen.
- 108827 P/O G. A. Strasser.
- 755804 F/Sgt. J. T. T. T. T.
- 119148 P/O H. Taylor.
- 655061 Sgt. T. R. Thomas.
- 550874 Sgt. F. A. W. Thorne.
- 65508 Act. F/L F. M. Thorne.
- 994179 F/Sgt. G. T. Thornton.
- 35072 S/L H. R. Tidd.
- 1377265 Sgt. R. Vandersteen.
- 1153790 Sgt. S. W. Walliter.
- 1256886 F/Sgt. L. West.
- 1375371 Sgt. R. C. West.
- 120074 P/O K. J. Williams.
- 924720 Sgt. P. J. Withers.
- 1058548 Sgt. C. Wood.
- 1258982 Sgt. S. Woodman.
- 1072495 Sgt. E. L. G. Woods.
- 1068457 Sgt. A. Alsopp.
- 1376341 Sgt. E. W. Barfield.
- 979996 Sgt. H. Boardman.
- 1256937 Sgt. E. R. Borsberry.
- 1351987 Sgt. R. S. Brandish.
- 919564 Sgt. D. A. Clephane.
- 528782 Sgt. J. Coy.
- 81395 F/O F. M. Davis.
- 628063 Sgt. W. H. Day.
- 122072 P/O R. C. Eldridge.
- 108074 P/O C. MacQ. Farquharson.
- 1065337 Sgt. C. Flint.
- 1288356 Sgt. R. F. G. Grant.
- 37399 S/L N. D. Guthrie.
- 117002 P/O D. W. Hales.
- 624820 Sgt. L. Hammond.
- 101473 P/O L. Harvey.
- 1221261 Sgt. R. K. Heyer.
- 1360376 Sgt. R. D. Horder.
- 553931 Sgt. J. Howarth.
- 1378401 Sgt. M. G. Killingbeck.
- 1309939 Sgt. N. Jackson.
- 963007 Sgt. F. H. Le Vaek.
- 989697 Sgt. J. McL. McIntosh.
- 1386307 Sgt. V. S. Mason.
- 1252152 Sgt. J. Moore.
- 113760 Act. F/L F. G. Neate.
- 37627 Act. W/C R. H. Nven, D.F.C.
- 1386634 Sgt. P. F. O'Shea.
- 102961 Act. F/L D. A. Parkins, D.F.C.
- 1340641 Sgt. J. G. J. Parrott.
- 1016944 Sgt. J. E. Percival.
- 44355 Act. S/L G. A. Powell, D.F.M.
- 540385 F/Sgt. R. J. Preston.
- 1218567 Sgt. P. C. Robson.
- 1198507 Sgt. K. E. Savage.
- 1337030 Sgt. A. G. Silvester.
- 1174907 Sgt. T. C. Stobie.
- 117657 P/O L. B. Thomas.
- 570416 Sgt. A. E. Towler.
- 120670 P/O P. Walker.
- 999625 Sgt. H. Windle.
- 1189953 Sgt. B. T. J. Woodland.
- 1113118 Sgt. H. Unsworth.
- 580987 W.O. C. R. H. Underwood.
- 1209309 Sgt. K. J. Yates.

Killed on Active Service

- 544454 F/Sgt. A. Adderley, D.F.M.
- 1315216 Sgt. W. J. Bagley.
- 1396335 L.A.C. K. J. Barltrop.
- 1384013 Sgt. H. E. Barton.
- 1185743 Sgt. J. W. Bode.
- 1559614 A.C.1 W. S. Boyce.
- 631184 F/Sgt. J. G. Y. Boyle.
- 1633524 A.C.2 J. Bradley.
- 2394911 A.C.1 J. Capp.
- 42804 F/O M. A. Cooté.
- 1006374 Cpl. E. L. Coverdale.
- 1342764 L.A.C. J. Craig.
- 655324 Sgt. D. W. Davies.
- 655442 Sgt. T. W. Dinsdale.
- 1220309 Sgt. A. E. Finney.
- 657174 Sgt. O. D. Hancock.
- 1113610 Sgt. C. Hayton.
- 574386 Sgt. J. A. Henson.
- 1133022 Act. Sgt. R. S. Holden.
- 1178083 L.A.C. A. W. Hughes.
- 115849 P/O E. S. Jenner.
- 1376333 Sgt. L. J. Langan.
- 1088070 Sgt. S. Lightowler.
- 1186278 Sgt. T. L. McDonald.
- 700712 Act. Sgt. S. L. Mason.
- 1079178 Sgt. C. H. Morgan.
- 530795 Cpl. R. C. Morris.
- 1344207 Sgt. J. Munro.
- 46505 F/O T. A. Newton.
- 1532969 L.A.C. J. L. W. Pearson.
- 117648 P/O A. Simons.
- 959023 Cpl. G. W. Virgo.
- 110831 Sgt. A. Wareham.
- 116424 P/O G. P. D. Young.



FIRE RAISER.—Incendiary bombs being hoisted into the three bay bomb compartment of a Short Stirling.

- 655412 Sgt. F. S. Akerman.
- 550708 Cpl. J. McL. Ashley.
- 66512 F/O C. J. E. Boustead.
- 121216 P/O G. M. Brearley.
- 924977 F/Sgt. J. Brooks.
- 656483 Sgt. W. Connelly.
- 1263387 Sgt. N. G. Crabtree.
- 537658 Sgt. H. Curson.
- 967145 Sgt. J. Forbes.
- 1361191 L.A.C. G. Gray.
- 1377625 F/Sgt. D. Gregory.
- 37228 F/L M. W. Hamlyn.
- 656425 Sgt. R. J. Haynes.
- 114001 P/O J. F. Helgason.
- 45077 F/O P. R. E. Jenkins.
- 624199 A.C.1 W. L. King.
- 116403 P/O B. J. Leader.
- 119210 P/O H. M. McKiernan.
- 121319 P/O N. Macleod.
- 121570 P/O P. L. Moxey.
- 650322 Cpl. C. H. Odle.
- 123451 P/O W. T. S. Perryman.
- 1122138 Sgt. G. E. Proctor.
- 1390032 L.A.C. F. Rogers.
- 1112237 Sgt. C. S. K. Shepherd.
- 1162622 F/Sgt. G. J. Smith.
- 1252106 L.A.C. R. L. Smith.
- 42027 F/L R. W. Stokes.
- 912911 Sgt. E. L. Taylor.
- 1186404 Sgt. F. J. Tranter.
- 1312385 Sgt. E. G. Travis.
- 657576 L.A.C. J. S. Williams.
- 1451028 Act. Cpl. J. K. Wray.
- 44567 F/O S. E. Andrews, D.F.M.
- 1388831 L.A.C. A. E. Ayling.
- 1376934 Sgt. H. L. Baker.
- 96043 Sgt. J. G. Barlow.
- 944135 Act. Sgt. J. Bonner.
- 987758 Sgt. D. E. Bottomley.
- 1054766 Sgt. J. E. Browning.
- 1208640 Sgt. M. A. T. Burns.
- 1333409 Sgt. L. Calow.
- 1292442 Sgt. G. E. Carden.
- 1381601 Sgt. D. C. Collins.
- 52854 Sgt. M. L. Donohoe.
- 1153207 L.A.C. C. E. Gray.
- 115324 P/O J. A. Hill.
- 1384501 Sgt. A. E. Harrison.
- 1017442 L.A.C. G. W. Holt.
- 1376656 Sgt. S. J. Hucklesby.
- 1112976 Sgt. E. P. Monaghan.
- 1066475 Sgt. E. Newcombe.
- 1313945 Sgt. C. H. J. Noad.
- 1260384 Sgt. C. A. Pankhurst.
- 1378976 Sgt. A. P. Paterson.
- 1315650 Sgt. P. J. Quigley.
- 641910 F/Sgt. D. N. Rains.
- 1096579 L.A.C. H. Riding.
- 1483197 L.A.C. J. G. Riley.
- 655729 Sgt. G. Rosenthal.
- 1287635 Sgt. R. E. Simkin.
- 629603 F/Sgt. L. M. Smith.
- 1331534 L.A.C. W. J. Stonebridge.
- 1130406 Sgt. J. M. Thompson.
- 1380032 Sgt. J. Unwin.

Previously Reported Missing Believed Killed on Active Service, Now Presumed Killed on Active Service

- 545613 Sgt. C. Dunn.
- 759029 F/Sgt. E. G. Forster.
- 551591 F/Sgt. J. L. Roberts.
- 564418 W.O. F. G. E. Tizard, D.F.M.
- 1256279 Sgt. C. J. S. Buckle.
- 114172 P/O M. E. C. Bird.
- 1104373 Sgt. F. Coakley.
- 66588 P/O J. M. Joyce-Clarke.
- 995062 Sgt. J. B. Riley.
- 999794 Sgt. M. York.

Wounded or Injured on Active Service

- 1322402 L.A.C. C. G. Mead.
- 1575621 L.A.C. C. A. Mortimer.
- 106227 P/O J. C. Morton.
- 1028921 Sgt. F. W. Pinkerton.
- 1303066 A.C.1 A. Sloan.
- 1070902 L.A.C. J. Thomas.
- 537811 L.A.C. V. B. M. Thomas.
- 647826 Cpl. L. Turrell.
- 1031303 Sgt. H. A. Dickinson.
- 1105811 Sgt. W. Ramsden.
- 1195666 Sgt. A. J. Hawksworth.
- 1164438 Sgt. D. Crompton.
- 1406528 A.C.1 G. R. Hagan.
- 961821 Sgt. C. M. Harris.
- 1177575 Sgt. E. J. Higginson.
- 976562 L.A.C. W. A. Howat.
- 1387898 L.A.C. D. L. Kidgett.
- 1215913 A.C.1 R. Millership.
- 1317950 Sgt. G. W. Robins.
- 110588 P/O L. W. White.

Died of Wounds or Injuries Received on Active Service

- 655073 Sgt. A. Baylis.
- 111551 P/O B. C. Cosham.
- 1290036 Sgt. A. R. Merritt.
- 1375230 Sgt. G. C. Holt.
- 1356816 L.A.C. A. E. T. Lookhart.

Missing Believed Killed on Active Service

- 113269 P/O F. R. Hancock.
- 68415 F/O J. D. B. Rigby.
- 1270644 Sgt. B. F. C. Rixon.

Died on Active Service

- 613918 Cpl. L. H. Atkinson.
- 1371754 A.C.1 R. Barron.
- 1419867 A.C.2 V. Bodenham.
- 1284229 A.C.1 W. B. Downing.
- 1507184 A.C.2 F. G. Giannasi.
- 1489443 A.C.2 T. Horne.
- 1029783 A.C.1 R. J. Miles.
- 70282 S/L J. H. C. Harrold.
- 355046 L.A.C. E. D. Jenkins.
- 84836 F/L I. G. Lennox.
- 411320 F/Sgt. E. Taylor.
- 1438461 A.C.1 G. J. Watson.
- 1432286 A.C.2 B. J. Wilmot.
- 1087729 A.C.1 W. Ashton.

- 1066612 A.C.1 J. Cranston.
- 1504712 A.C.2 T. A. Evans.
- 1354111 A.C.1 F. E. Gage.
- 924663 L.A.C. C. J. Harris.
- 1487434 A.C.1 L. Heeley.
- 546938 L.A.C. R. Lawson.
- 1367419 Cpl. R. M. McNeill.
- 1716964 A.C.2 N. E. Miller.
- 358340 L.A.C. M. E. Nicholls.
- 855183 L.A.C. F. O'Brien.
- 517749 F/Sgt. N. E. Ray.
- 1473175 A.C.2 J. Rogers.
- 1476427 A.C.1 R. C. Rogers.
- 1174098 L.A.C. P. Yates.

WOMEN'S AUXILIARY AIR FORCE

- Killed on Active Service**
- 2017315 A.C.W.2 V. E. Roberts.
- Died on Active Service**
- 2078237 A.C.W.2 G. M. Davies.

ROYAL AUSTRALIAN AIR FORCE

- Correction to Casualty List No. 156**
- The Air Ministry regrets that Aus.404581 Sgt. H. E. W. Godfrey was erroneously reported killed in action in the Casualty Communiqué published on September 16, 1942.

- Killed in Action**
- Aus.403797 P/O R. Clark.
- Aus.400689 F/Sgt. R. W. Baxter.
- Aus.406589 F/Sgt. P. Bell.
- Aus.404602 Sgt. D. F. Capel.

Previously Reported Missing, Now Presumed Killed in Action

- Aus.400451 Act. F/L B. J. Adam.
- Aus.404142 Sgt. W. J. Dillon.
- Aus.402651 Sgt. R. W. Fisher.
- Aus.407639 Sgt. W. W. Forgan.
- Aus.407236 Sgt. G. M. Hart.
- Aus.404431 P/O B. P. Hickey.
- Aus.400716 Sgt. V. W. Johnstone.
- Aus.400420 Sgt. C. W. L. Pooley.
- Aus.402191 P/O J. W. Roche.
- Aus.400359 Sgt. M. A. Sullivan.
- Aus.404270 Sgt. P. C. Voller.
- Aus.402457 Sgt. A. W. Chapman.
- Aus.407116 Sgt. J. M. Emery.
- Aus.404542 Sgt. A. H. Ferguson.
- Aus.404112 Sgt. O. W. McLean.

Wounded or Injured in Action

- Aus.401348 Sgt. A. L. Lovell.
- Aus.408161 Sgt. D. W. Beattie.

Missing, Believed Killed in Action

- Aus.407280 Sgt. B. G. P. Balleine.
- Aus.407192 F/O T. H. Bourke.
- Aus.407285 Sgt. R. P. Davis.
- Aus.404353 Act. F/O W. M. Murphy.

Missing

- Aus.403088 Sgt. A. H. C. Batea.
- Aus.404931 Sgt. J. Boyle.
- Aus.402936 Sgt. J. N. Dean.
- Aus.404406 Sgt. C. D. Kennedy.
- Aus.406145 Sgt. J. M. Lefrey.
- Aus.401389 Sgt. F. L. McIntyre.
- Aus.406630 P/O R. S. Spear.
- Aus.403451 Sgt. C. J. Stallard.
- Aus.401264 Sgt. A. Wyles.
- Aus.411063 Sgt. W. A. Allsopp.
- Aus.406312 F/Sgt. F. W. Beste.
- Aus.406344 Act. F/L C. H. Burgess.

- Aus.407637 Sgt. J. H. Caldwell.
- Aus.402159 P/O D. L. Furphy.
- Aus.407711 Sgt. H. E. Gaskell.
- Aus.404785 P/O T. E. Jones.
- Aus.401069 P/O D. P. Leigo.
- Aus.402449 P/O W. A. Lowing.
- Aus.407298 F/Sgt. D. B. Mills.
- Aus.400330 Sgt. W. H. Nettle.
- Aus.405426 Sgt. R. C. Stewart-Moore.

- Aus.403297 Sgt. A. F. Ada.
- Aus.400368 P/O L. P. Hancock.
- Aus.403624 P/O D. J. Richards.

Killed on Active Service

- Aus.401108 Sgt. H. L. Devlin.
- Aus.9239 Act. Sgt. N. L. J. Bundara.

- Aus.408144 Sgt. R. Groom.
- Aus.401708 Sgt. J. J. Manderson.
- Aus.411362 P/O W. Mofflin.
- Aus.416285 P/O C. G. Riley.
- Aus.407833 Sgt. R. D. Roberts.
- Aus.8132 P/O K. Slater.
- Aus.405341 Sgt. B. H. Barton.
- Aus.404524 Sgt. C. T. McLoughlin.

Previously Reported Missing Believed Killed on Active Service, Now Presumed Killed on Active Service

- Aus.400288 P/O E. R. Parke.

Wounded or Injured on Active Service

- Aus.406305 Sgt. A. E. Browes.

ROYAL CANADIAN AIR FORCE

Killed in Action

- R.60429 F/Sgt. W. R. Scott.
- R.78498 Sgt. G. R. C. Davis.
- R.75116 F/Sgt. A. J. McPhee.
- R.86622 F/Sgt. McCausland.
- R.57743 Sgt. F. W. Nixon.

Previously Reported Missing Believed Killed in Action, Now Presumed Killed in Action

- J.15126 P/O F. B. Grundy.
- R.51638 Sgt. J. M. Thompson.

Previously Reported Missing, Now Presumed Killed in Action

- R.59294 Sgt. J. Cormack.
- J.3271 P/O A. J. Fraser.
- R.59371 Sgt. D. L. Henderson.
- R.67798 Sgt. W. S. Tyler.

Wounded or Injured in Action
R.87920 F/Sgt. W. E. Egrl.

Died of Wounds or Injuries Received in Action
R.71718 Sgt. J. M. McDonald.

Missing, Believed Killed in Action
R.82945 Sgt. S. S. Glasscock.
R.55398 F/Sgt. J. Beaupre.
R.58352 F/Sgt. J. M. Jamieson.

Missing

R.72663 Sgt. P. B. Andrews
R.85348 Sgt. K. J. Aronson.
R.68413 Sgt. A. F. Conway.
J.6400 P/O G. V. Desourdy.
J.7790 P/O M. Edwards.
R.85957 Sgt. R. E. Fahey.
R.77576 F/Sgt. L. Foster.
R.59536 F/Sgt. D. C. Hinks.
R.80311 Sgt. G. C. Hooper.
R.67534 F/Sgt. D. C. Imeson.
R.80184 Sgt. G. H. Lyons.
R.71574 Sgt. D. A. Macaulay.
J.7523 P/O M. H. D. MacDonald.
R.67152 Sgt. J. A. McWilliams.
R.74456 W.O. N. M. Moore.
R.66308 F/Sgt. W. V. Pickering.
J.5670 P/O D. H. Sargent.
R.59112 Sgt. C. R. Spratt.
R.98121 Sgt. R. E. Stageman.
R.81424 Sgt. G. K. Sutherland.
R.71744 Sgt. J. O. Waltenbury.
R.83646 Sgt. E. A. Anderson.
R.69242 Sgt. J. K. Baker.
R.78076 Sgt. W. E. Brown.
R.71572 F/Sgt. H. E. V. Bruce.
R.62938 F/Sgt. F. Y. Campbell.
J.7986 P/O G. A. Cooper.
J.8099 P/O J. F. Day.
R.81079 Sgt. R. S. Doherty.
R.90540 Sgt. J. P. Doyle.
R.91535 F/Sgt. C. E. Evans.
J.15423 P/O W. S. Findlay.
R.123282 Sgt. J. B. Fleming.
R.77348 Sgt. E. J. H. Gurr.
R.64416 F/Sgt. H. R. Hamilton.
R.111773 Sgt. J. W. Irish.
R.70507 Sgt. V. R. Lenichek.
R.59361 Sgt. R. K. McGrath.
J.5484 F/O W. A. McMurchy.
R.56422 Sgt. W. E. Mander.
R.66051 F/Sgt. W. L. Maxim.
J.7067 P/O J. D. Mullins.
J.3703 F/L W. W. Murray.
R.65987 Sgt. R. A. Myers.
R.83558 Sgt. B. V. Pearce.

R.65152 F/Sgt. W. A. Penney
R.67907 Sgt. J. B. Pleasance.
R.70841 F/Sgt. J. V. Potter.
R.105300 Sgt. R. B. Prentice.
R.67269 Sgt. G. W. Roney.
R.76228 Sgt. D. McR. Ross.
R.85385 Sgt. J. Ross.
R.83949 Sgt. H. R. Russell.
R.72286 W.O. W. T. Sargant.
R.54999 Sgt. F. M. Van Geun.
R.58435 F/Sgt. P. O. Webster.
R.84099 Sgt. R. Wishart.
R.79045 Sgt. T. A. Withers.
R.66434 Sgt. J. T. Avedisian.
R.79088 Sgt. R. B. Ayers.
R.88552 Sgt. J. B. Campbell.
R.91184 Sgt. J. R. Collins.
R.83398 Sgt. J. S. Evans.
J.8607 Act. F/L R. R. Graham.
R.58690 Sgt. T. A. Harp.
R.92164 Sgt. R. G. R. Hodges.
R.77406 Sgt. G. W. Jewel.
R.95038 Sgt. F. E. Johnson.
R.77455 Sgt. E. J. Leblanc.
R.95652 Sgt. J. J. Matthew.
J.6970 P/O J. J. Reilly.
R.100818 Sgt. R. A. Russell.
R.76039 F/Sgt. M. A. Schofield.
R.85420 Sgt. V. L. Simonson.
R.93386 Sgt. W. H. Treadwell.
R.101328 Sgt. E. L. Wagner.
R.85938 Sgt. E. G. White.

Killed on Active Service

R.93436 Sgt. D. G. Allen
R.71058 F/Sgt. S. Bocking.
R.76229 Sgt. R. M. Boates.
R.86394 Sgt. W. N. Reeves.
R.74926 Sgt. A. F. Roberts.
R.97987 Sgt. R. P. Davies.
R.95238 Sgt. W. P. James.
J.15314 P/O R. B. McIntyre.
R.81078 Sgt. R. L. Mellish.
R.79053 Sgt. J. H. O'Connor.
R.64476 F/Sgt. J. P. Speakman.
R.78150 F/Sgt. E. A. Russell.
R.72085 F/Sgt. J. H. A. Ryan.
R.94722 Sgt. C. Torunczuk.
R.98787 Sgt. H. H. Way.

Previously Reported Missing, Now Presumed Killed on Active Service
R.76125 Sgt. H. J. Kelley.

Wounded or Injured on Active Service

R.56419 F/Sgt. W. G. T. McKay.
R.107605 Sgt. J. L. W. Mackenzie.

Died of Wounds or Injuries Received on Active Service
R 85669 Sgt. B. W. McClennau.

Died on Active Service
R 89659 Sgt. A. T. Morgan.

ROYAL NEW ZEALAND AIR FORCE

Killed in Action

NZ.405221 F/O J. T. Blease.
NZ.403768 F/Sgt. N. R. Rowe.

Previously Reported Missing, Now Presumed Killed in Action

NZ 404531 Sgt. P. F. M. Cooke.
NZ.404996 Sgt. M. J. Cronin.
NZ.401763 Act. F/L A. G. Herbert.
NZ.403463 Sgt. J. F. Lewthwaite.
NZ.401730 Sgt. D. L. Rhodes.
NZ.402159 P/O S. W. S. Beedie.
NZ 39067 Sgt. W. N. Hendry.
NZ.404876 P/O N. F. McLean.

Wounded or Injured in Action

NZ.404068 Sgt. J. H. Hodsell.

Missing

NZ.404623 Sgt. I. G. Stewart.
NZ.405340 Sgt. A. G. Sutherland.
NZ.411104 Sgt. A. O. Tabor.
NZ.40859 F/Sgt. N. A. Bryson.
NZ.402437 Sgt. L. T. Cairns.
NZ.403941 Sgt. N. E. R. Carrel.
NZ.40736 W.O. B. M. Cook.
NZ.301697 Sgt. R. P. Coppersmith.
NZ.402444 Sgt. R. M. Gawith.
NZ.403603 F/O N. E. Hodson.
NZ 404912 Sgt. C. V. McPherson.
NZ.403985 Sgt. A. W. Pierard.
NZ.41359 Sgt. S. D. Ross.
NZ.404420 P/O P. C. Spittal.
NZ.411358 Sgt. T. S. Barclay.
NZ.411204 Sgt. R. H. Briscoe.
NZ.404016 Sgt. G. E. Caithcheon.
NZ.391857 Sgt. A. Campbell.
NZ.403569 Sgt. R. F. Davis.
NZ.411758 Sgt. W. G. L. Inglis.
NZ.412593 Sgt. H. W. Sampson.
NZ.404950 Sgt. S. H. Schofield.
NZ.411110 Sgt. R. J. Waring.
NZ.41970 F/Sgt. V. K. Westerman.
NZ.402475 Act. F/L P. J. Wilson.

Killed on Active Service

NZ.403566 Sgt. J. W. Beaven.
NZ.412664 P/O K. H. I. Easton
NZ.405739 Sgt. J. W. Keane.
NZ.411919 P/O A. D. Mackay.
NZ.405331 Sgt. W. H. Smeaton.
NZ.412010 P/O R. K. A. Andrew.
NZ.411856 Sgt. W. S. Burns
NZ.41622 Sgt. A. L. Hopkins

Wounded or Injured on Active Service

NZ.411915 Sgt. J. A. McInosh.
NZ.413539 Sgt. T. O'Meara.
NZ.41525 Sgt. T. K. Paul.

SOUTH AFRICAN AIR FORCE

Killed in Action

203185 Major D. V. D. Lacey.

Missing Believed Killed in Action

28205 Lt. A. M. Duncan.
103980 Lt. F. L. Stevens.

Missing

102710 Capt. K. R. Coster
211807 Air Sgt. E. D. King
103453 Lt. L. H. Murrell.
102223 Lt. E. F. Wakeling.
205663 2nd Lt. C. H. Allen.
84626 2nd Lt. H. J. P. Lemmer.
208765 Air Sgt. S. Liastam.
97578 Lt. A. D. V. Morum.
97793 Air Sgt. L. Murray.

Killed on Active Service

02399 Lt. D. Geddes.
102563 Lt. W. H. Martin.

Previously Reported Missing, Now Presumed Killed on Active Service

102454 Air Sgt. R. S. Daniels.
47231 2nd Lt. E. W. J. Fripp.

Wounded or Injured on Active Service

136572 2nd Lt. R. E. Lefeuve.

Died of Wounds or Injuries Received on Active Service

105092 Lt. F. C. P. Swart.

INDIAN AIR FORCE

Killed in Action

229 Sgt. G. J. Arya.
P/O Z. B. Sanjani.

ROYAL AIR FORCE AWARDS

HIS MAJESTY THE KING has approved the following awards for exceptional leadership and efficiency in command; for gallantry and devotion to duty during flying operations over Norway, Germany, occupied Europe and Dieppe; and for reliability and efficiency during long-distance ocean reconnaissance flights:—

Distinguished Service Cross

Group Captain A. Constantine.

Bar to Distinguished Flying Cross

Squadron Leader W. W. McConnell, D.F.C., R.A.F.V.R.—No. 23 Squadron
Squadron Leader P. R. W. Wickham, D.F.C.—No. 111 Squadron.
Flight Lieutenant D. A. G. Parry, D.F.C., R.A.F.V.R.—No. 105 Squadron.
Flight Lieutenant T. P. E. Barlow, D.F.C., R.A.F.V.R.—No. 44 (Rhodesia) Squadron.
Act. Flight Lieutenant H. G. Hazelden, D.F.C., R.A.F.V.R.—No. 83 Squadron.

Distinguished Flying Cross

Wing Commander H. P. Jenkins—No. 31 Squadron.
Act. Wing Commander W. H. Burbury, A.F.C.—No. 31 Squadron.
Act. Wing Commander M. E. Pollard—No. 14 Squadron.
Squadron Leader K. F. Mackie—No. 31 Squadron.
Squadron Leader I. P. Grant, A.F.C.—No. 115 Squadron.
Squadron Leader E. D. Griffiths—No. 102 Squadron.
Act. Squadron Leader N. H. Bretz, R.C.A.F.—No. 402 Squadron.
Act. Squadron Leader L. V. Chadburn, R.C.A.F.—No. 416 (R.C.A.F.) Squadron.
Act. Squadron Leader P. B. G. Davies, R.A.F.V.R.—No. 19 Squadron.
Act. Squadron Leader D. G. Smallwood—No. 87 Squadron.
Act. Squadron Leader E. R. Thorn, D.F.M.—No. 32 Squadron.
Act. Squadron Leader W. S. Fielding-Johnson, M.C., R.A.F.V.R.
Act. Squadron Leader R. A. Miles—No. 59 Squadron.
Flight Lieutenant P. J. C. Harper, R.A.F.V.R.—No. 101 Squadron.
Flight Lieutenant I. H. Edwards, R.A.F.V.R.—No. 19 Squadron.
Flight Lieutenant W. Gilmour—No. 156 Squadron.
Flight Lieutenant E. D. Leven, R.A.F.V.R.—No. 7 Squadron.
Flight Lieutenant D. B. Barnard—No. 142 Squadron.
Act. Flight Lieutenant L. D. Britain, R.A.F.V.R.—No. 25 Squadron.
Act. Flight Lieutenant S. R. Edner, R.A.F.V.R.—No. 121 (Eagle) Squadron.
Act. Flight Lieutenant J. Shepherd, R.A.F.V.R.—No. 118 Squadron.
Act. Flight Lieutenant H. E. Tappin, R.A.F.V.R.—No. 3 Squadron.
Act. Flight Lieutenant A. H. Baird—No. 26 Squadron.
Act. Flight Lieutenant W. H. Baldwin, R.C.A.F.—No. 405 (R.C.A.F.) Squadron.
Act. Flight Lieutenant E. E. Brown—No. 228 Squadron.
Act. Flight Lieutenant A. K. Gatward, R.A.F.V.R.—No. 236 Squadron.
Act. Flight Lieutenant A. Lambert, R.C.A.F.—No. 405 (R.C.A.F.) Squadron.

Act. Flight Lieutenant R. J. Lane, R.C.A.F.—No. 35 Squadron.
Act. Flight Lieutenant H. L. Lindo, R.C.A.F.—No. 103 Squadron.
Act. Flight Lieutenant S. D. Jones—No. 35 Squadron.
Act. Flight Lieutenant J. E. Scott—No. 614 Squadron.
Act. Flight Lieutenant W. E. Blench, R.A.F.V.R.—No. 57 Squadron.
Act. Flight Lieutenant H. Swetman, R.C.A.F.—No. 405 (R.C.A.F.) Squadron.
Flying Officer J. Henderson, R.A.F.V.R.—No. 19 Squadron.
Flying Officer W. R. Butterfield, R.A.F.V.R.—No. 7 Squadron.
Flying Officer G. L. Finlayson, R.A.F.V.R.—No. 106 Squadron.
Flying Officer J. G. Macdonald, R.C.A.F.—No. 83 Squadron.
Flying Officer A. C. B. Morgan, R.A.F.V.R.—No. 150 Squadron.
Flying Officer J. D. Waterman, R.C.A.F.—No. 207 Squadron.
Flying Officer R. E. S. Smith, R.A.F.V.R.—No. 61 Squadron.
Act. Flying Officer A. B. Greig, R.A.F.V.R.—No. 218 Squadron.
Act. Flying Officer F. K. Hindle, R.A.F.V.R.—No. 114 Squadron.
Act. Flying Officer J. Vivian, R.A.F.V.R.—No. 106 Squadron.
Pilot Officer F. T. Brown, R.A.F.V.R.—No. 118 Squadron.
Pilot Officer R. J. McNair, R.A.F.V.R.—No. 87 Squadron.
Pilot Officer L. F. Austin, R.C.A.F.—No. 57 Squadron.
Pilot Officer D. J. Bright—No. 156 Squadron.
Pilot Officer J. B. Burbidge, R.A.F.V.R.—No. 115 Squadron.
Pilot Officer W. G. Campbell, R.A.F.V.R.—No. 419 (R.C.A.F.) Squadron.
Pilot Officer V. G. Robson, R.A.F.V.R.—No. 105 Squadron.
Pilot Officer H. J. Carter, R.A.F.V.R.—No. 156 Squadron.
Pilot Officer A. Chambers, R.A.F.V.R.—No. 7 Squadron.
Pilot Officer S. J. Cybulski, R.C.A.F.—No. 420 (R.C.A.F.) Squadron.
Pilot Officer D. Gauntlett, R.A.F.V.R.—No. 206 Squadron.
Pilot Officer P. T. L. Hallett, R.A.A.F.—No. 460 (R.A.A.F.) Squadron.
Pilot Officer B. S. Hammond, R.C.A.F.—No. 114 Squadron.
Pilot Officer H. A. Hitchcock, R.A.F.V.R.—No. 408 (R.C.A.F.) Squadron.
Pilot Officer N. A. Knyvett, R.A.A.F.—No. 150 Squadron.
Pilot Officer P. E. M. Leith, R.C.A.F.—No. 405 (R.C.A.F.) Squadron.
Pilot Officer S. G. Matkin, R.A.F.V.R.—No. 7 Squadron.
Pilot Officer I. C. B. Slade, R.A.F.V.R.—No. 115 Squadron.
Pilot Officer D. Sloan—No. 614 Squadron.

Distinguished Flying Medal

Flight Sergeant J. W. Brooks—No. 174 Squadron.
Flight Sergeant G. P. A. Yates, R.C.A.F.—No. 40 Squadron.
Flight Sergeant J. L. Burnham, R.A.A.F.—No. 10 (R.A.A.F.) Squadron.
Flight Sergeant P. S. O. Brichta, R.C.A.F.—No. 419 (R.C.A.F.) Squadron.

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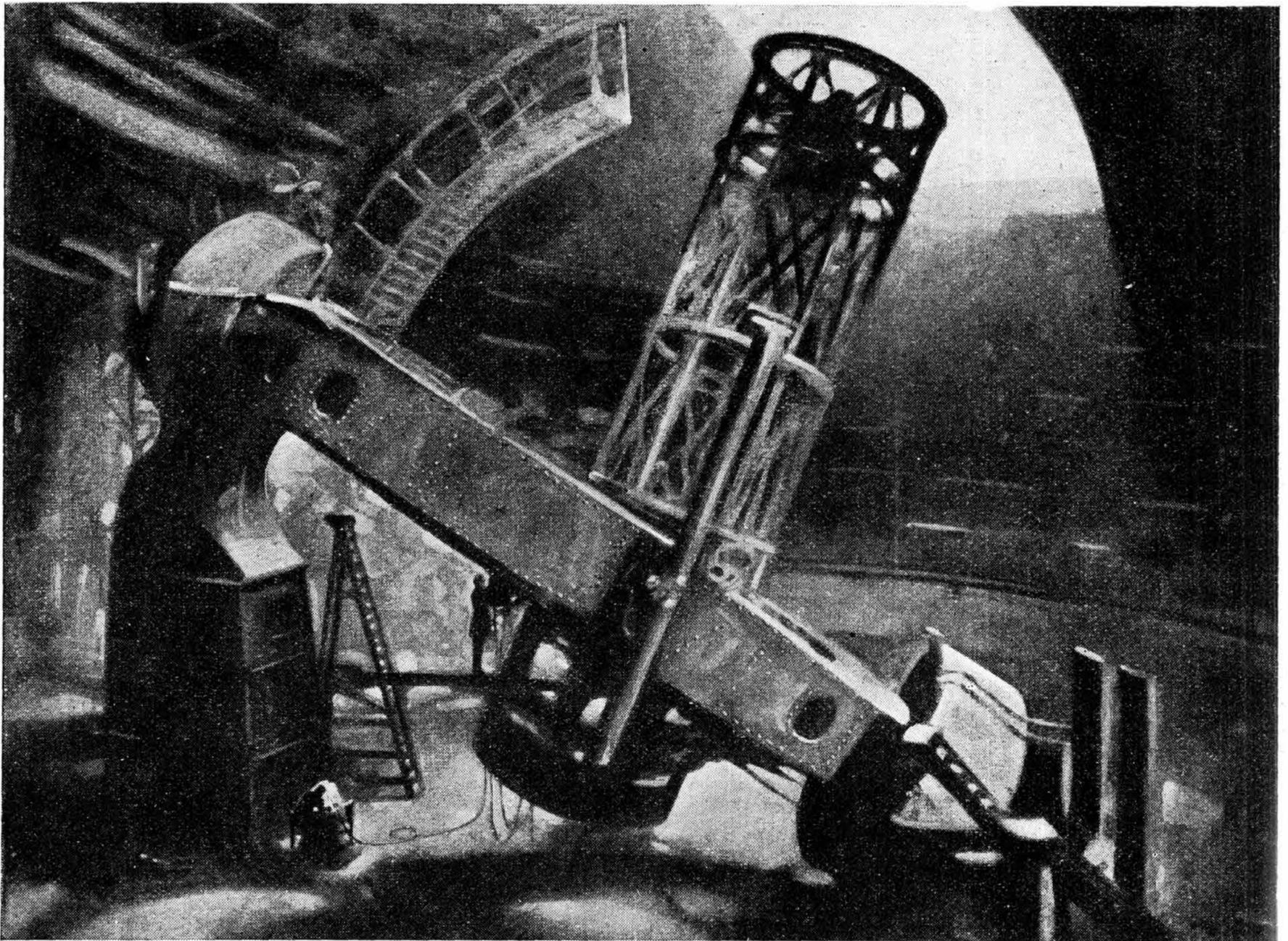


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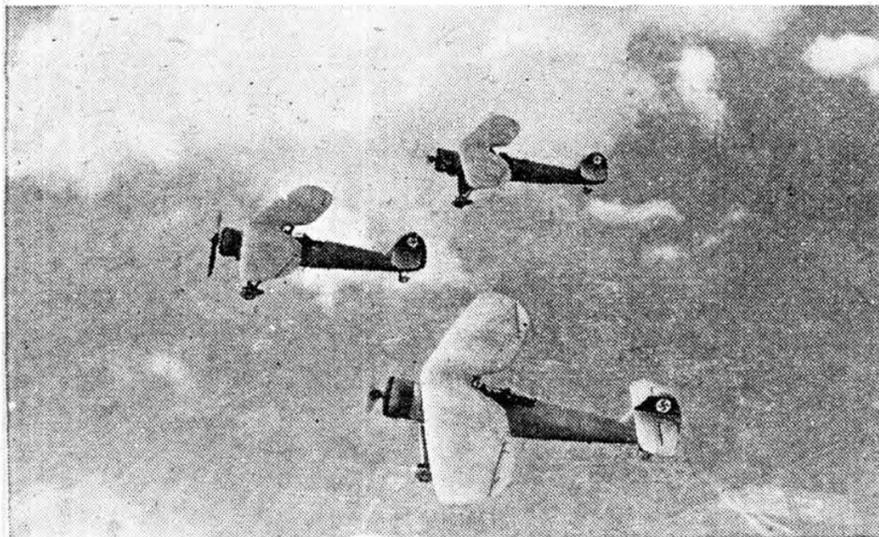
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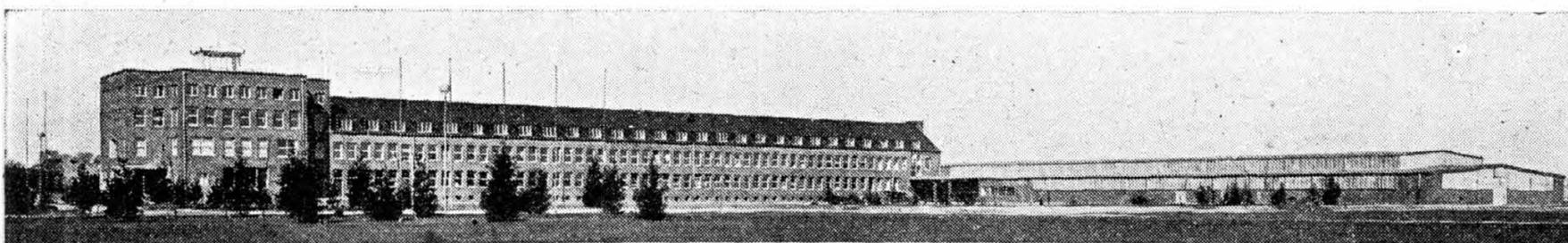
SIDELIGHTS FROM THE PAST—XL



Henschel 122 Parasol monoplanes.



A Henschel 123 dive bomber.



The Henschel Works—1936.

WHEN BOMBER COMMAND subjected Kassel recently to one of its strong-force raids the Air Ministry announced that Kassel was an important centre of the German locomotive-building industry. Principal builders are Henschel und Sohn, A.G., who have built locomotives there since 1848. But Henschel make other war material—in the Great War they made rail trucks for mounting guns, mobile AA-gun motor trucks; they make snow-ploughs of the modern fan type for rail and road (which must be of importance in the Russian areas in winter); and industrial plant. They are also makers of aircraft, but their aircraft plant is situated not at Kassel, but at Schönefeld, near Berlin.

Henschel und Sohn did not build aircraft until Hitler came to power and began the drive to build up the Luftwaffe. But two months (to the day) after Hitler became Chancellor of Germany, Henschel aircraft activities began experimentally in Kassel under the title of Henschel-Flugzeugwerke A.G. In that same year of 1933 they took over sheds at Johannisthal, and there the earliest Henschel types were built. In the Autumn of 1934, on a new site obtained at Schönefeld, work was begun on the construction of an aerodrome and factory.

The new Henschel-Flugzeugwerke factory was in operation in the Summer of 1935, and by the end of 1936 it was employing about 7,000 workers who were engaged in the manufacture of Henschel 123 dive bombers and Junkers 86K medium bombers. The moving line system of erection was used from the beginning and each unit of the factory possessed its own air raid shelter with sloping entrance ramps down which workers could run quickly to take cover.

There the Henschel 123, the first dive bomber to go into extensive production for the Luftwaffe, was built. It was a single-seat, single-bay sesquiplane of metal construction, with fabric covering to the trailing edges of the wings and to the movable surfaces. The pilot was housed in an open cockpit. The undercarriage was the two-leg, cantilever, non-retractable type. The 800-830 h.p. BMW nine-cylinder air-cooled radial engine drove (in the later models) a three-bladed V.P. airscrew. There were bomb rack attachment fittings below the fuselage and under each wing. The total laden weight was 4,884 lb.

This aeroplane was not fitted with air brakes. Its own natural resistance was designed from the beginning for a diving speed of 350 m.p.h. All other performance considerations, of speed and climb, were subservient to this cardinal aspect in design. That was said to be the reason for the choice of a biplane design. Top speed, without bombs, was about 220 m.p.h.

For every purpose but that of dive bombing the Henschel 123 was obsolete before the War began. It

could dive bomb only when the Luftwaffe produced a suitable set of conditions. When the Polish air force was overwhelmed, it fulfilled its purpose in the brief Polish campaign; it appeared occasionally in France; it was reported on the Russian front from time to time.

Henschel appears to have been the first firm to design and build an aircraft specifically for the dive condition for the German Air Ministry. It would be interesting to know whether the idea of the use of the dive bomber as a battering-ram for conquest originated with the military leaders of Germany, or within the minds of the staff of the firm of Henschel. Whichever is correct, the Henschel 123 indicated the trend of German thought several years before the War began.

In the "Handbuch der Luftfahrt" for 1936 (the first number of the German equivalent of "Jane's All The World's Aircraft," edited by an officer in the Reichsluftfahrtministerium) the only Henschel aircraft mentioned is the type 122, which is there classified as a 1935 civil product. This volume lists no German aircraft within the section for military types; all come under the section headed Zivile Flugzeugmuster. But in the next issue of the handbook, 1937-8, Germany takes its place in the military section; and in this section the same Henschel 122 appears, together with the 123, 124 and 126. (The 126, successor to the 122, was the German equivalent of the Westland Lysander. It was used as a reconnaissance aeroplane in the present War. The 124, a two-motor medium bomber, has a meagre history.)

The story of Henschel aircraft bears witness to the diplomatic camouflage under which the Luftwaffe came into the World, and is evidence that in time of peace the diplomatic world regards camouflage as reality. Before Hitler chose to tell Simon that Germany had an air force, no official diplomatic notice could be taken of the birth of the illegitimate Luftwaffe, nor could the editor of the "Handbuch der Luftfahrt" classify German military aircraft separately from civil aircraft. At that time and in those conditions Henschel entered the aircraft industry and built the Luftwaffe's first dive bomber.

The photographs show, top left, a formation of Henschel 122 reconnaissance type and, right, the Henschel 123, the first dive bomber. Below is a photograph of the Henschel factories as they appeared in 1936, showing the administrative building, design and management block, and the soft alloy extruding press sheds. The main factory buildings consisted of a number of independent hangar-like units, each self-contained for water, light and power, and staggered relative to one another to prevent bomb attack from causing universal damage; thereby indicating the industrialists' disbelief in Göring's boast of the Third Reich's security from bombing.

IN THE AIR

Victor of the Battle of Britain

SIR FRANK SPRIGGS, Chairman of Hawker Aircraft Ltd., sent the following message to the workers making Hurricanes: "Two years ago you provided the backbone of the force which beat the Luftwaffe. Carry on the good work."

In Memory of a Flying Observer

A DONATION of £50 has been given to the Royal Air Force Benevolent Fund by employees of the Bristol Aeroplane Co. as a tribute to the memory of Mr. E. R. Staniland, who was killed on Aug. 26 while flying an experimental aeroplane. Mr. Staniland had been an experimental test flying observer on Bristol motors for several years and had many friends in the Aircraft Industry.

Scrap Metal to be Disclosed

UNDER a new Order, occupiers of all premises in England, Scotland and Wales on which there are three or more tons of metal suitable for scrap must inform the Ministry of Works and Planning by October 21, 1942, and within 30 days of any subsequent date on which such an amount of metal is accumulated. The only metals excluded from the Order are aluminium and magnesium and their alloys. Metal in or forming part of any building, structure, plant or article which is disused, obsolescent, redundant or otherwise serves no useful purpose is deemed to be scrap.

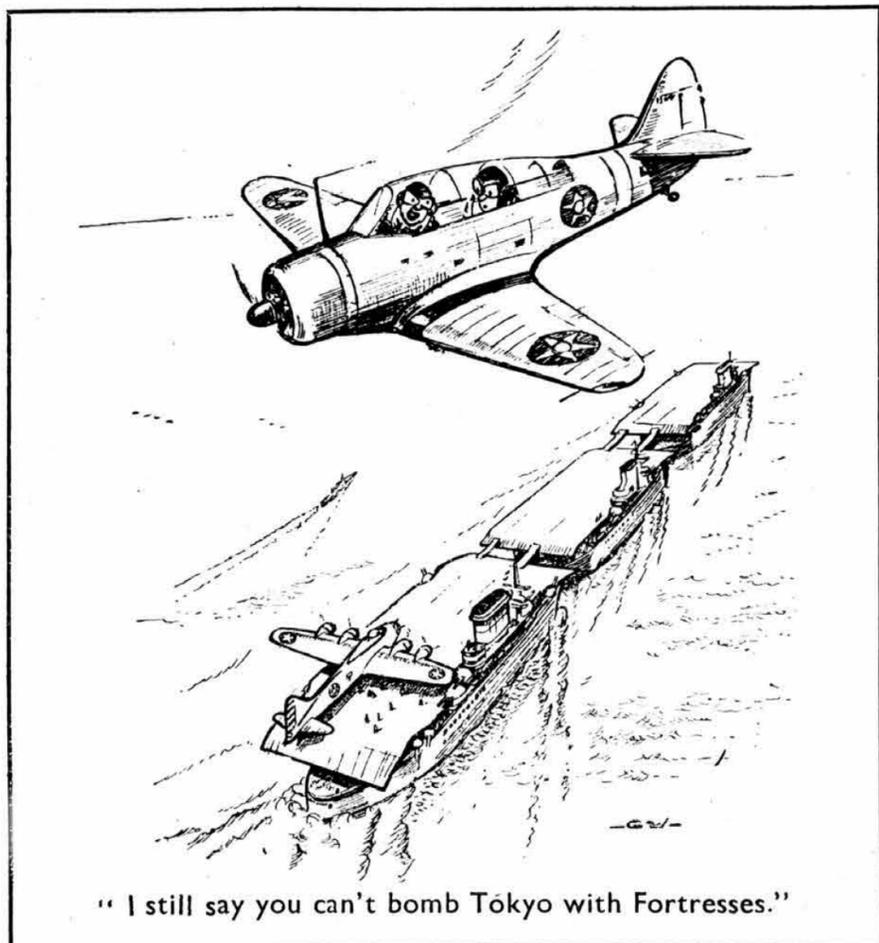
The information must be given on a special form which may be obtained from "Scrap Recovery," Ministry of Works and Planning, Sanctuary Building, Great Smith Street, London, S.W.1.

A Golden Jubilee

FOR 50 years Mr. H. Bell Thompson has been associated with Sternol Ltd., the oil refiners and lubricant manufacturers, first with Sterns Ltd., the parent company, in 1892, and then as Managing Director of Sternol Ltd., when it was formed in 1928. He has represented the lubricating oil trade on the Grand Council of the Federation of British Industries for many years.

"The Air Pilot"

AN APPEAL for the most recent issue of "The Air Pilot," which is now out of print, is made by Flight Lieut. D. Martin Butcher, R.A.F., Pembroke Dock, South Wales.



"I still say you can't bomb Tokyo with Fortresses."

The Training of Foremen in Industry

HIGH TRIBUTE was paid by Mr. R. C. Rootes, of Rootes Securities, Ltd., to the training given under the "M" scheme of the Ministry of Labour and National Service at the Acton Technical College when he recently presented Certificates to 51 students who had successfully completed the Tenth Course. Under the scheme, selected men in industry are trained to fill positions of responsibility as foremen and works supervisors.

The courses at the Acton Technical College are directed by Mr. G. E. Still, Production Superintendent of the Associated Equipment Co., Ltd., and the students of the Tenth Course expressed their appreciation of his part in their training by presenting him with an embossed parchment and a piece of engraved silverware. Members of the previous nine courses have formed a Foremen's Discussion Centre and hold meetings at the Acton Technical College.

Many prominent officials of various Government Departments, and several from the Rootes Group of companies, attended the presentation ceremony.

To Prevent "Binding"

A NEW fibrous lubricant intended to prevent "binding" of light alloy threaded components when assembled is manufactured under the name of Anti-seize by Guyson Industrial Equipment Ltd., 423, Kirkstall Road, Leeds, 4, who will send samples on request. This compound is said to be non-solvent, non-hardening and indestructible up to 320 degrees C. It is used on aeroplanes to prevent the seizure of duralumin studs in hydraulic system and as a lubricant and seal for petrol tank caps.

Wild-Barfield Anniversary

AN ANNIVERSARY celebrated this year is the 25th of Wild-Barfield Electric Furnaces Ltd., which was founded in the Great War by Mr. L. W. Wild and the late E. P. Barfield as a part of the 1914-18 war effort.

Anodising Aluminium

A NUMBER of different processes for protecting aluminium and aluminium alloy parts by anodising and other treatments are described in a recent Research and Development Bulletin published by the Northern Aluminium Company. One interesting fact disclosed is that anodised articles can easily be finished by dyeing, painting and the application of other chemical coatings. For instance, airscrews can, with little trouble, be given the standard dull black dye which prevents searchlight glare from being reflected by the revolving discs. Paint finishes are also important in checking salt corrosion in seaplanes.

Off with the Motley

SWIFT DELIVERY for their Offkwik paint remover is guaranteed by Vulcan Products Ltd., Slough, makers of Glossex paints.

First Aid Hints for Motorists

MOTORISTS take a fair toll of human life, but few of them know the first principles of saving it. First aid, promptly and expertly given after an accident, may often preserve a life, or avert a life-long deformity. Hence, the preparation of "First Aid Simple Guide" by the Staff of "The Commercial Motor," was no work of supererogation, and the booklet deserves a wide circulation among those who drive motor vehicles. The application of its directions may be the means of saving the other party to the accident from the worst consequence of his foolishness.

"First Aid Simple Guide" costs 6d. and can be obtained from all bookstalls, or direct from THE AEROPLANE Book Department of Bowling Green Lane, London, E.C.1, postage 1d. extra.

Back Copies of "The Aeroplane"

MR. P. F. WILSON, of 91, Squires Gate Lane, Blackpool, has for disposal every issue of THE AEROPLANE from Oct. 10, 1941, to July 31, 1942.

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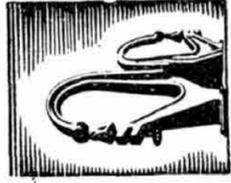
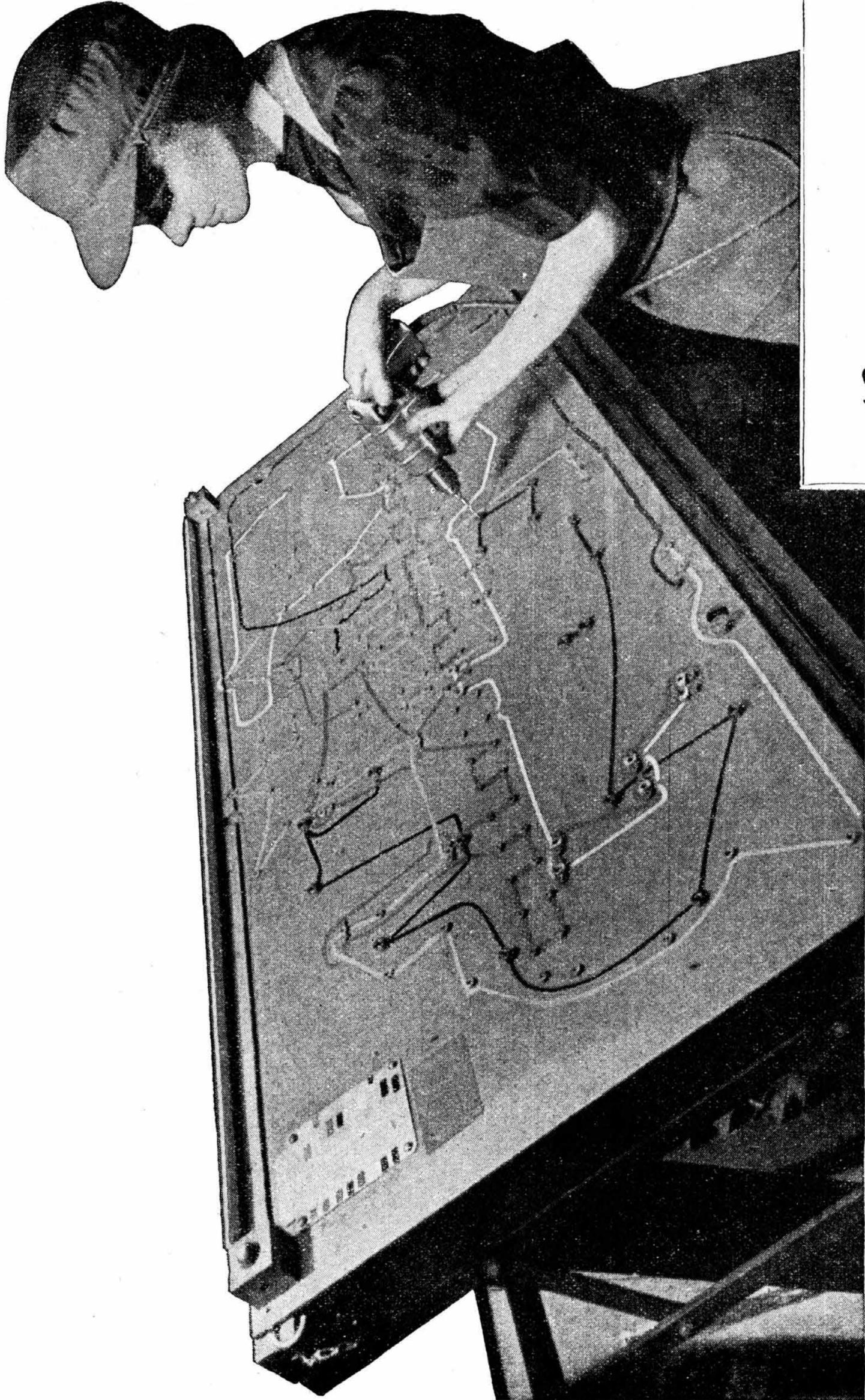
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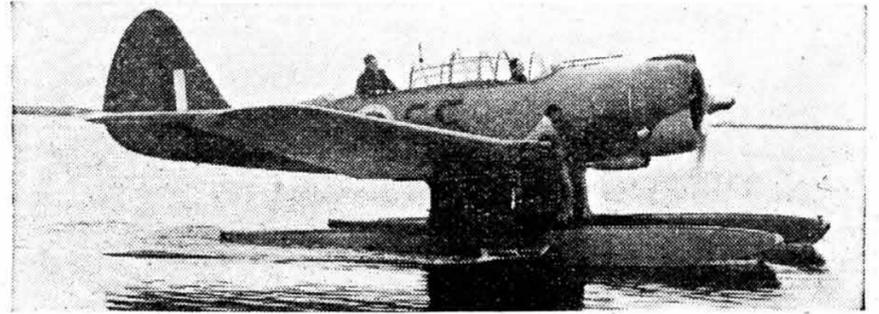
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FORTHCOMING EVENTS

- Oct. 9.—**Nottingham**.—S.C. No. 31 (Nottingham and Notts Raid S.C.).—Meeting at the Co-op. Hall.—18.15 hrs.
- Oct. 9.—**Reading**.—S.C. No. 53 (Reading).—Meeting at Abbey Gate Way.—19.15 hrs.
- Oct. 9.—**Hoddesdon**.—S.C. No. 128 (Hoddesdon).—Meeting at The Clock House.—19.30 hrs.
- Oct. 9.—**Preston**.—S.C. No. 249 (Preston and District).—Meeting at the Central Police Station.—19.30 hrs.
- Oct. 11.—**Shirley**.—R.O.C.C. Branch 2 (Shirley).—Meeting at the "Centre".—10.00 hrs.
- Oct. 11.—**Bury**.—R.O.C.C. Branch 17 (South East Lancs).—Meeting at the Derby Hotel.—10.30 hrs.
- Oct. 11.—**Hornchurch**.—R.O.C.C. Branch 40 (Orsett).—Meeting at Hornchurch.—10.45 hrs.
- Oct. 11.—**Barrow-in-Furness**.—R.O.C.C. Branch 83 (Furness).—Meeting at Instruction Room, Fort Walney.—11.00 hrs.
- Oct. 11.—**Northallerton**.—R.O.C.C. Branch 91 (Northallerton).—Meeting at Black Bull Hotel.—10.30 hrs.
- Oct. 11.—**Bedford**.—R.O.C.C. Branch 191 (Bedford).—Meeting at the Igranic Works, Elstow Road.—15.00 hrs.
- Oct. 12.—**Lewes**.—R.O.C.C. Branch 66 (Lewes).—Meeting at All Saints Parish Room.—19.00 hrs.
- Oct. 12.—**Hanwell**.—S.C. No. 111 (Ealing and District).—Meeting at Drayton Manor County School; Drayton Bridge Road.
- Oct. 12.—**Hendon**.—S.C. No. 124 (Hendon).—Meeting at Hendon Technical College.—19.30 hrs.
- Oct. 13.—**Southend**.—S.C. No. 1 (Southend-on-Sea).—Meeting at the A.R.P. Training Centre, 37, Southchurch Road.
- Oct. 13.—**Newport**.—S.C. No. 40 (Newport).—Meeting at the Newport Corn Exchange.—19.30 hrs.
- Oct. 13.—**N. London**.—S.C. No. 156 (Islington).—Meeting at the Northern Polytechnic, Holloway Road, N.7.—19.00 hrs.
- Oct. 13.—**Ratcliffe**.—S.C. No. 331 (Ratcliffe College).—Meeting at Ratcliffe College.
- Oct. 14.—**Hastings**.—S.C. No. 47 (Hastings).—Meeting at White Rock Pavilion.—19.30 hrs.
- Oct. 14.—**Dudley**.—S.C. No. 113 (Dudley and District S.C.).—Meeting at the Hen and Chicken Inn, Castle Street.—19.00 hrs.
- Oct. 14.—**Sheffield**.—S.C. No. 178 (Sheffield and District R.S.C.).—Meeting at Messrs. George Senior and Sons, Ltd., Ponds Forge, Sheaf Street.—19.00 hrs.



R.A.F. FLOATPLANE.—A Northrop N-3PB float seaplane taxis out from its Iceland base before an Arctic patrol. These aeroplanes are flown by a Norwegian Squadron operating with R.A.F. Coastal Command. Though not so spectacular as the exploits of Bomber and Fighter Commands, the ceaseless activity of Coastal Command is no less valuable in the struggle against the Axis.

New Patents

APPLICATIONS ACCEPTED

- 547,397—B. W. Millichamp.—Method of controlling an aircraft by variable incidence.—Mar. 18, 1940.
 - 547,403—Bristol Aeroplane Co., Ltd., A. H. R. Fedden, F. M. Owner, F. M. Thomas and S. W. Mansell.—Power plants for aircraft.—Jan. 17, 1941.
 - 547,404—Bristol Aeroplane Co., Ltd., A. H. R. Fedden and F. M. Thomas.—Cooling systems for air-cooled internal-combustion engines.—Jan. 17, 1941.
 - 547,405—Bristol Aeroplane Co., Ltd., A. H. R. Fedden and F. M. Thomas.—Multi-engined aircraft.—Jan. 17, 1941.
 - 547,426—Bristol Aeroplane Co., Ltd., A. H. R. Fedden, F. M. Owner, F. M. Thomas and S. W. Mansell.—Power plants for aircraft.—Jan. 17, 1941.
- Opposition period expires Nov. 9, 1942.
Printed specifications available Sept. 24, 1942.

PERSONAL NOTICES

BIRTHS

- Amlot**.—On Sept. 22, at Bulawayo, Southern Rhodesia, to Ruby, wife of Wing Cmdr. D. L. Amlot, D.F.C.—a son.
- Bright**.—On Sept. 26, at Fulmer Chase, to Monica, wife of the late Sqdn. Ldr. V. M. Bright, R.A.F.—a daughter.
- Chalmers**.—On Sept. 23, at Shifnal, Salop, to Wing Cmdr. and Mrs. Alan Chalmers—a son.
- Darlington**.—On Sept. 28, at Bowdon, to Grace (née Banks), wife of Flg. Off. Darlington, R.A.F.—a daughter.
- Eaden**.—On Sept. 27, at Looe, to Aileen Roy (née Chase), wife of Lt. (A) H. D. B. Eaden, R.N.V.R.—a daughter.
- Earle**.—On Sept. 28, at Milborne Port, near Sherborne, Dorset, to Bridget (née Sherston), wife of Sqdn. Ldr. Guy Earle, A.A.F.—a son.
- Fenton**.—On Sept. 28, at Northwood, to Pauline (née Trotman), wife of Sqdn. Ldr. F. J. Fenton, R.A.F.—a son.
- Flett**.—On Sept. 17, at Melbourne, Australia, to Laurie, wife of Sqdn. Ldr. Harald Flett, R.A.A.F., and Orient Line—a daughter.
- Howard**.—At Nakuru, Kenya Colony, to Betty (née Grant), wife of Plt. Off. A. S. Howard—a daughter.
- Hunt**.—On Sept. 21, at Crowborough, to Paddy (née Williamson), wife of Flt. Lt. A. E. Hunt, R.A.F.—a daughter.
- Jones**.—On Sept. 23, at Priory Court, Whitchurch, to Irene (née Penfold), wife of Flg. Off. W. W. R. Jones, R.A.F.V.R.—a daughter.
- King**.—On Sept. 26, at Cirencester, to Heather, wife of Flt. Lt. John King, R.A.F.V.R.—a son.
- Pound**.—On Sept. 20, at Exmouth, to Nada (née Tilke), wife of the late Flt. Sgt. D. C. Pound—a son.
- Mayfield**.—On Sept. 11, at Cambridge, to Thelma, wife of the Rev. Guy Mayfield, Chaplain R.A.F.V.R.—a son.
- McConnell**.—On Sept. 18, at Aberdeen, to Cynthia (née Falkner), wife of Wng. Cmdr. R. H. McConnell, D.F.C.—a daughter.
- Moiony**.—On Sept. 30, at Woking Maternity Home, to Carmen (née Dent), wife of Act. Sqdn. Ldr. J. T. Moiony—a daughter.
- Montgomery**.—On Sept. 24, at Gerrards Cross, to Margaret Elizabeth (née Haigh), wife of Plt. Off. J. Q. Montgomery, R.A.F.V.R.—a son.
- Murgatroyd**.—On Sept. 26, at Rugby, to Barbara (née Davies), wife of Flt. Lt. R. J. Murgatroyd, R.A.F.V.R.—a son.
- Nurton**.—On Sept. 24, at Guildford, to Rhoda, wife of Flt. Lt. F. J. Nurton—a daughter.
- Rooke**.—On Sept. 23, at Middlesex Hospital, to Gwendoline (née Spoor), wife of Flg. Off. Philip Rooke, R.A.F.V.R.—a son.
- Rowe**.—On Sept. 26, at Andover, to Jeanne (née Milwood), wife of Gp. Capt. H. G. Rowe, R.A.F.—a daughter.
- Smallbone**.—On Sept. 23, at Reading, to Joan (née Warden), wife of Sgt. J. R. Smallbone, R.A.F.V.R.—a daughter.
- Thompson**.—On Sept. 21, at Oxford, to Dorothy (née Woodhouse), wife of Flt. Lt. O. N. Thompson, R.A.F.V.R.—a son.
- Thorne**.—On Sept. 28, at Fulmer Chase, Fulmer, to Evelyn (née Bedwell), wife of Flt. Lt. K. L. Thorne, R.A.F.V.R.—a son.
- Towler**.—On Sept. 20, at Stamford, to Joan (née Morgan), wife of Sgt. Plt. David Towler, R.A.F.V.R. (reported missing)—a son.
- Troop**.—On Sept. 22, at Farnham, to Irene (née Sercombe), wife of Wng. Cmdr. C. L. Troop, R.A.F.—a daughter.
- Wilson-Smith**.—On Sept. 29, at "Clovelly," Torrington Park, N.12, to Joan (née Bristol), wife of Alan Wilson-Smith, R.A.F.V.R.—a daughter.

FORTHCOMING MARRIAGES

- Carmoox-Sheriston**.—A marriage has been arranged and will shortly take place between D. C. J. Carmoox, R.A.S.F., only son of Mr. and Mrs. J. M. Carmoox, of Edgbaston and Cornwall, and Eva Sheriston, W.A.A.F., only daughter of Mr. and Mrs. W. Sheriston, of Rainworth, Notts.
- Drew-Kaye**.—The engagement is announced between Edmund, younger son of Mr. and Mrs. H. R. Drew, of Bigbury, Devon, and Flt. Off. E. M. Kaye, W.A.A.F., only daughter of the Rev. A. E. and Mrs. Kaye, of North Willingham, Lincoln.
- Beck-Masters**.—The engagement is announced between Lieut. David Beck, M.C., R.H.A., younger son of Sir Raymond and Lady Beck, of Castle Point, Salcombe, and Assistant Section Off. Angela Mary Masters, W.A.A.F., elder daughter of Mrs. M. K. Masters, of Broadstone, Dorset.
- Forbes-Wrench**.—The engagement is announced between Dr. Robert A. Forbes, R.A.F.V.R., of Belfast, and Margaret E. T. Wrench, of Cromer, Norfolk.
- Gough-Foster**.—An engagement is announced and the marriage will shortly take place between Plt. Off. G. W. Gough, R.A.F.V.R., younger son of the late Capt. Wilfred Gough, of Llangynog, and Rosamond Evelyn, elder daughter of Mr. and Mrs. Gerald Foster, of Wetherby, Yorks.
- Hood-Bradley**.—The engagement is announced between Flt. Lt. Michael D. S. Hood, D.F.C., nephew and adopted son of Mr. and Mrs. Lund, of Sidmouth, and A.S.O. Patricia J. P. Bradley, W.A.A.F., only daughter of the late Canon W. H. Bradley and of Mrs. Bradley, of Bangor.
- Jacobs-Cobbold**.—The engagement is announced between Plt. Off. John O. H. Jacobs, R.A.F.V.R., only son of Major C. J. Jacobs and Mrs. Jacobs, of Osterley, Middlesex, and Naomi M. Cobbold, W.R.N.S., only daughter of Lt.-Col. Clement Cobbold (retired) and Mrs. Cobbold, of London.
- Lewis-Taylor**.—The engagement is announced between Plt. Off. J. C. North Lewis, R.A.F.V.R., third son of Mr. and Mrs. H. North Lewis, of South Ascot, and Margaret Taylor, elder daughter of Mr. and Mrs. Robert Taylor, of Brampton.
- Macalaster-Rowlandson**.—The engagement is announced between Ian Kenneth, son of Mr. and Mrs. J. M. Macalaster, of Muirholm, Paisley, and A.S.O. M. P. Rowlandson, W.A.A.F., daughter of the late Edward Rowlandson and of Mrs. Rowlandson, of Whitefield, Lancs.
- Moore-Boughy**.—The engagement is announced between Victor Moore, R.A.F., only son of Mr. and Mrs. Donald Moore, of St. Annes-on-Sea, and Miss A. M. Boughy, only daughter of Mrs. Marsden and stepdaughter of Mr. W. S. Marsden, of Hoylake.
- Morrow-Joy**.—The engagement is announced between H. L. Morrow, R.A.F.V.R., late of Rome, elder son of Mr. and Mrs. A. E. Morrow, of Builth Wells, Breconshire, and Sylvia Nancy, elder daughter of Mr. and Mrs. Frank Joy, of Bentley, Hampshire, and late of Bedale, Yorks.
- Moulding-O'Connor**.—The engagement is announced between Flt. Lt. P. M. Moulding, R.A.F.V.R., younger son of the late Mr. and Mrs. James Moulding, of Grindleford, Derbyshire, and Eileen O'Connor, only daughter of Mr. and Mrs. John O'Connor, of Dore, Sheffield.
- Seyd-Sidebotham**.—The engagement is announced between Lieut. R. V. Seyd, R.A., elder son of Mr. and Mrs. H. O. Seyd, of Pinner, and Pamela Sidebotham, Section Officer, W.A.A.F., only daughter of Mr. J. B. Sidebotham, of Haslemere, and Mrs. C. O. Campbell, of Godalming.
- Smith-Debenham**.—The engagement is announced between Wing Cmdr. I. S. Smith, D.F.C., R.A.F., of Auckland, New Zealand, and Joan Debenham, elder daughter of the late Mr.

- A. S. Debenham and of Mrs. Debenham, St. Leonards, Ingatestone, Essex.
- Steel-Kelly**.—The engagement is announced between Major P. C. Steel, The King's Shropshire Light Infantry, son of Mr. and Mrs. W. C. Steel, of Woodbridge, and Patricia Kelly, W.A.A.F., daughter of Mr. and Mrs. Maurice Kelly, of Ash Green, Surrey.
- Thorpe-Bailey**.—The engagement is announced between Lt. (A) Michael Thorpe, R.N., son of Mr. and Mrs. W. B. Thorpe, of Bromley, Kent, and Margaret P. Bailey, W.R.N.S., daughter of Mr. and Mrs. W. H. Bailey, of Leeds.

MARRIAGES

- Alexander-Seale**.—On Sept. 23, at Upavon, W. T. H. Alexander, R.A.F., only son of Capt. and Mrs. Howard Alexander, of Upavon, to Betty Seale, widow of Sqdn. Ldr. W. T. Seale, and second daughter of Mr. and Mrs. W. Forge, of Bridlington, Yorks.
- Bass-French**.—On Sept. 23, at Harlow, Warrant Off. K. B. Bass, R.A.F.V.R., elder son of Mr. and Mrs. C. B. Bass, of Broxbourne, to Margaret Eileen, younger daughter of Mr. and Mrs. A. G. French, of Harlow.
- Bomford-Mowels**.—On Sept. 24, at All Saints, Evesham, Capt. E. R. Bomford, R.A., second son of Mr. and Mrs. E. J. Bomford, of Evesham, to Asst. Sect. Off. J. M. Mowels, W.A.A.F., only daughter of Lt.-Col. and Mrs. John H. Mowels, of Birkdale.
- Corben-Lewthwaite**.—On Sept. 19, at Twickenham, Capt. C. E. Corben, son of Mr. and Mrs. A. H. Corben, of Twickenham, to Florence E. J. Lewthwaite, W.A.A.F., daughter of Mr. and Mrs. J. G. Lewthwaite, of Twickenham.
- Cressell-Ruxton**.—On Sept. 26, at Holy Trinity, Brompton, Plt. Off. I. G. Cressell to Margaret, daughter of Dr. and Mrs. Ruxton, The Mall, Brentford.
- French-Harrisson**.—On Sept. 24, at Bath, Plt. Off. Martin J. French, R.A.F.V.R., elder son of Mr. and Mrs. C. O. French, of Bath, to Margaret Jane, only child of the late Mr. J. C. Harrisson, of Holbeach, and Mrs. Harrisson, now of Bath.
- Kerrison-Hastings**.—On Sept. 21, at Wokingham, Sub-Lieut. R. E. F. Kerrison, R.N.V.R., Fleet Air Arm, son of Mr. and Mrs. R. F. Kerrison, of Burgh Hall, Aylsham, to Anne Edmonstone, daughter of Major and Mrs. Lewis Hastings, of White House, Wokingham.
- MacLean-Carlsson**.—On Sept. 23, at Edinburgh, Lt. (A) Neil Gordon MacLean, R.N.V.R., elder son of Mr. MacLean, F.R.I.B.A., and Mrs. MacLean, of Hassocks, Sussex, to Annalisa, younger daughter of Disponenten Chr. Carlsson and Fru Carlsson, of Hjaltevad, Sweden.
- Murphy-Greig**.—On Sept. 24, at Sutton, Sqdn. Ldr. Patrick Murphy, younger son of Mr. D. Murphy and the late Mrs. Murphy, of Cork, to A.S.O. J. K. Greig, elder daughter of Mr. and Mrs. K. C. Greig, of Cheam.
- Naylor-Cowie**.—On Oct. 3, at Kirtlington Church, Oxfordshire, Flg. Off. J. F. H. Naylor to Mary Francis Cowie.
- Stanger-Boothroyd**.—On Sept. 24, at St. Edmunds, E.C., Lt. Frank Stanger, R.A.P.C., son of the late N. J. Stanger, A.R.I.B.A., and Mrs. Stanger, of Bromley, to A.S.O. E. M. Boothroyd, W.A.A.F., second daughter of Ernest Boothroyd and the late Mrs. Boothroyd, of Bromley.
- Swain-Mardon**.—On Sept. 19, at Middlesbrough, Plt. Off. G. A. Swain, R.A.F.V.R., to Miss Ellen Mardon.
- Titlow-Kemp**.—On Sept. 21, at Aldringham, Suffolk, Sgt. Pilot M. R. Titlow, R.A.F., second son of Mr. and Mrs. E. W. Titlow, of Leiston, Suffolk, to Constance Doreen Kemp, W.A.A.F., only daughter of Mr. and Mrs. H. G. Kemp, of Aldringham.

CORRESPONDENCE

"Stiffy" or "Pussy"

ALLOW me to clear up the controversy about Flight-Lieutenant Wombwell. To N.C.O.s and men he was known as "Stiffy," but amongst officers he was known as "Pussy." Probably there will be some argument about this, but my statement can be vouched for by someone who should know—Wombwell's son who, I understand, intends to write to THE AEROPLANE when he comes home on leave. Your correspondent, "Just One of the Fledgelings," in stating that Wombwell was a Sergeant Major at the School of Military Aeronautics, Oxford, in 1918, is wrong. By that time he was a Lieutenant, a rank he had held from July, 1917. He was originally in the Lincolnshire Regiment. In referring to the Assistant Commandant at Oxford your correspondent spells his name incorrectly. He was Major G. G. Adeley (not Adderley). Like Air Chief Marshal Sir Edgar Ludlow-Hewitt, he was appointed to the R.F.C. from the Royal Irish Rifles.

GRENVILLE G. O. MANTON.

A Word for the Ground Crews

BEING a regular reader of THE AEROPLANE, I was pleased to read your excellent articles on A.T.A. You have dealt with the many difficulties which had to be overcome by the flying personnel and other departments alike. But what of the men and women who kept the Ansons, Harvards, Hurricanes, Blenheims and all the rest of them flying?—the men and women who worked day in and day out so that the pilots could carry on. Are they not worth a little more mention than your very misleading remark about their being more inquisitive than qualified when dealing with new machines and engines? The fact that the new machines are serviceable after leaving an A.T.A. pool ought in itself to be sufficient proof that the engineers are perhaps more qualified than inquisitive.

ENGINEER.

[If "Engineer" had taken as much care in reading our articles as he doubtless takes in preparing the aeroplanes, he would have understood that the reference to inquisitive ground crews applied to the R.A.F.—Ed.]

"The First of the Few"

RE Mr. C. W. Arnold's letter in THE AEROPLANE of Sept. 18 in criticism of Mr. Masfield's review of the film "The First of the Few," I would like to make the following comments:—It is no doubt correct that the average member of the Royal Observer Corps does not know the difference between a Supermarine S.5 and the S.6B, but that surely does not justify mistakes of a technical nature which could easily have been avoided, as Mr. Masfield suggests, by the use of authentic newsreel sequences.

I consider that one would expect to find the technical side of a film discussed in a technical journal. If Mr. Arnold wants a description of the film's acting or photography he should read "Film Pictorial" or "Woman's Weekly," which would probably even give him the colour of the dashing young pilot's eyes.

Let us have more constructive criticism of the type that Mr. Masfield gave us. Then, perhaps, one day the film companies will realise that some people are interested in other things besides "glamour."

JOHN W. R. TAYLOR.

War on Communications

TAKEN as an average over the whole period of the War, our most critical considerations have centred round the U-boat menace to our extended lines of transportation. As a contrast to conditions in England itself, Germany's extended lines of transportation lie right in the centre of her homeland. From our own tragic experience of the Atlantic graveyard, we should follow with colossal vigour a more forceful attack on these German extended lines of transportation with widely dispersed air attacks daily, knowing full well that in the air we must expect appalling losses as those suffered by the Nazi U-boats, yet at the same time being convinced of the great returns for so solid an investment.

We all know the success of intruder raids, but can these attacks compare with the dogged persistence of the Nazi U-boats?

IAN CUNNINGHAM.

Fuel Cocks

I HAVE READ with interest the description of what is described as an efficient tapered fuel cock in THE AEROPLANE of Sept. 18 on p. 350.

I cannot do better than inform you that during the years 1916-17, whilst employed at the Royal Aircraft Factory, Farnborough, Hants, I produced a cock similar to the one described in your recent issue. I have to admit that shortage of work

at the Establishment allowed me to manufacture the cock in, so to speak, my "spare time." The then Works Manager, Mr. Hall, caught me on the hop, but became so interested that he gave me instructions to produce a three-way cock on the lines of my development.

I also, like Aircraftings, experienced difficulty in overcoming abrasive properties of dirt particles, aggravated by petrol, which is, of course, not a lubricant.

By a minor change of application I overcame these difficulties, and after fully testing in the presence of Mr. Hall, it was suggested that I produce simple drawings and submit to the Department of Munitions, controlled by Mr. Lloyd George. I did so, and had an acknowledgment in the usual Civil Service terms, but since then I have heard no more.

One of these cocks was fitted to either an R.E.8 or R.E.9, and commented upon favourably by Captain Gooden, who was then Chief Test Pilot at Farnborough. The machine did not fly with the cock, as the bore was much too small.

JAMES GOW.

Aircraft Tonnage

COULD WE not find a better yardstick for measuring aircraft strength on production than giving a number of machines? We are told that U.S. production is 5,000 machines per month, that of Germany 2,500, while that of Italy has dropped to 45 per month.

Shipping is measured in tonnage. While a ton may be too large a unit for aeroplanes, it at least has the virtue of a familiar figure. The great advantage would be the bringing out of our own enormous production, now so highly concentrated on heavy bombers. Big bombers measured on so many a month do not appear impressive, unless one does a mental calculation, but if we boldly stated that our production was, say, 25,000 tons a month, boldly using all-up weight as the basis, we should appear in our true colours.

W. NEWMAN ALCOCK.

P.S.—I suppose we can figure out the crew strength as one man for every five tons of aircraft. Perhaps someone else can work out the number of tons to unit ground staff.

Early Operators at Croydon

I WAS interested to read in your correspondence columns of the references to the Avro Andover.

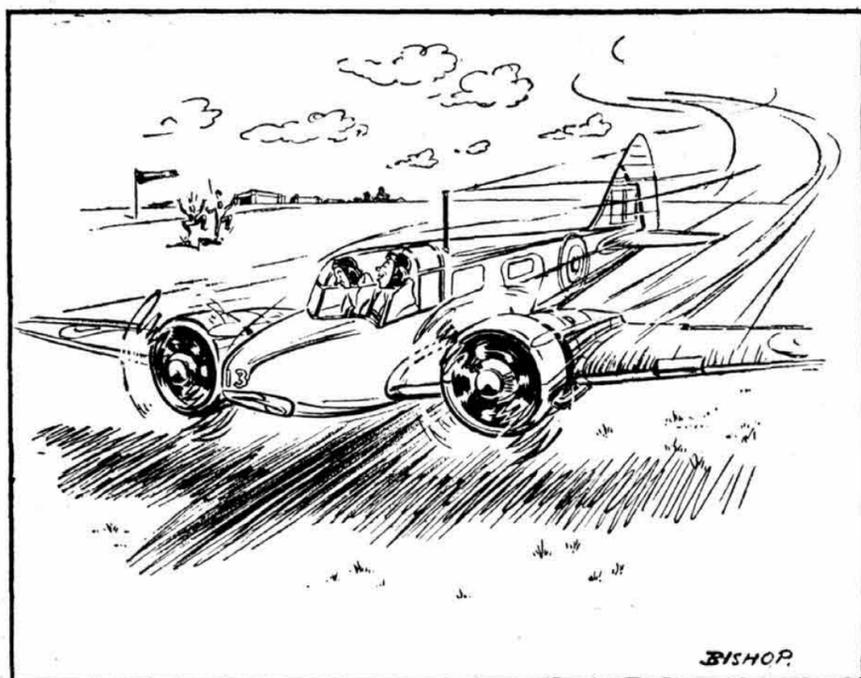
I saw this machine myself at Croydon aerodrome in April, 1925, and I remember being told at the time that it was fitted with a Rolls-Royce Condor engine and was used as a freighter. I believe Imperial Airways were using it on loan from the Air Ministry.

At the present time, I am collecting data and information of the activities of the commercial air lines operating from Croydon aerodrome round about 1920 to 1929 and I am desirous of obtaining some illustrations of certain types and I wonder if you or some of your readers could help me with illustrations and any information of the following types:—Bristol 10-seaters of 1920 (G-EAWY) and 1923 (G-EBEV) and also a photograph of the Avro Andover.

9, Alexandra Road,
Clevedon, Somerset.

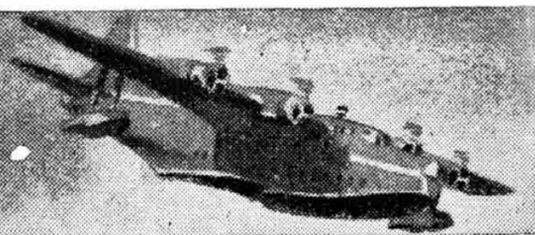
K. A. WINKLEY.

PERILS OF THE TRAINEE—VI

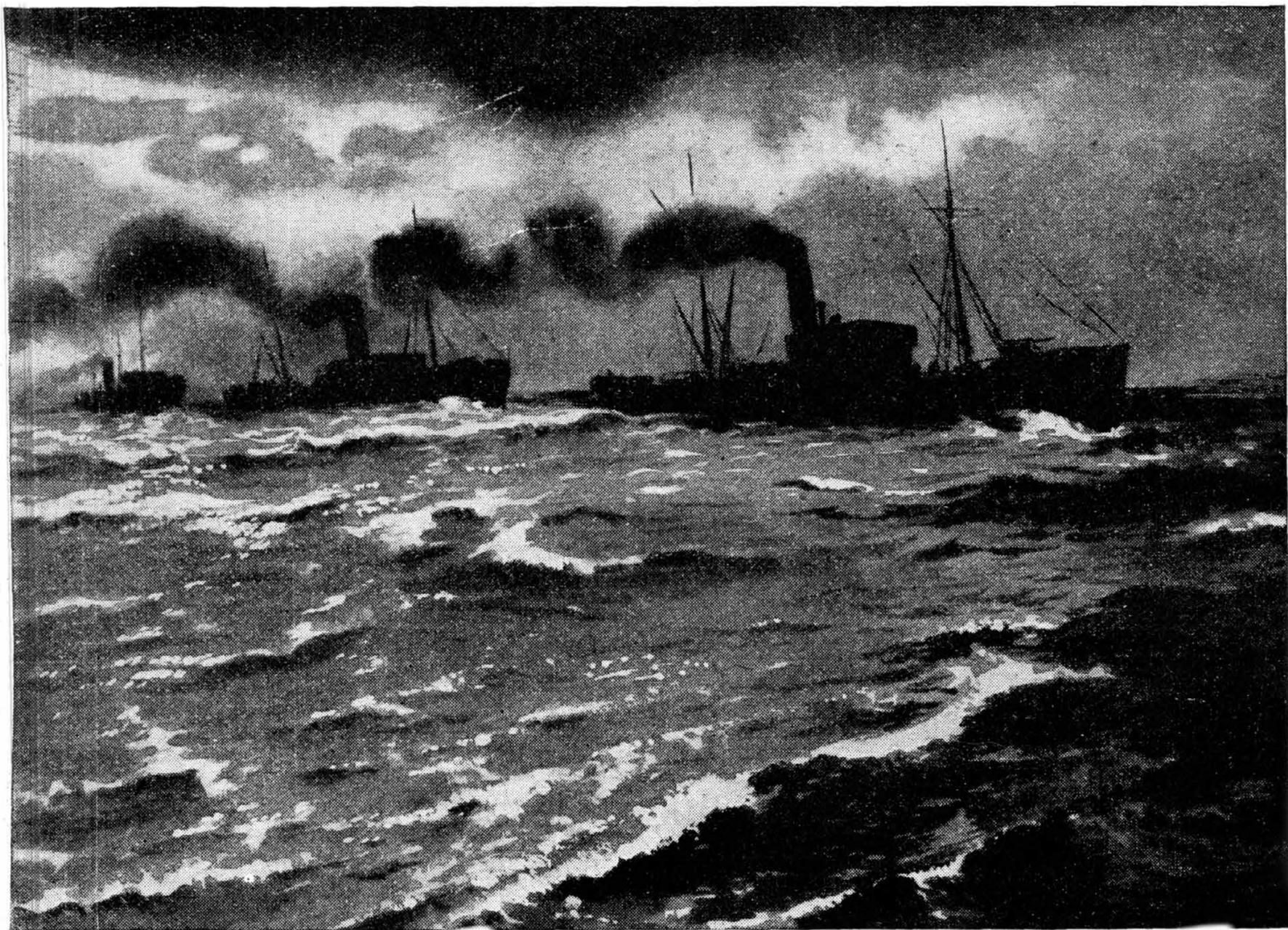


"Undercarriage? What about it?"

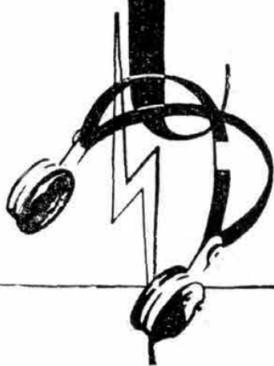
Up above are the eyes...

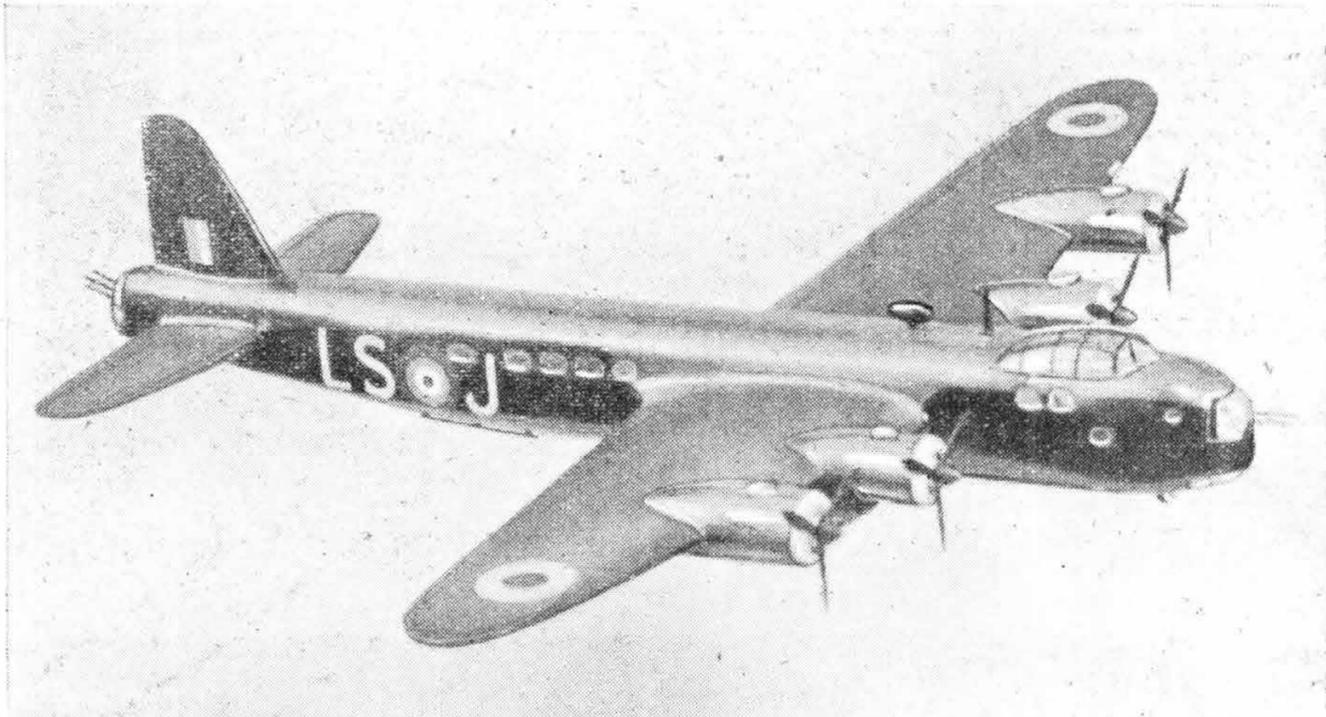


. . . down below are the ships. In touch, through fair weather or foul, by wireless communication that guides and warns and directs the convoy on its journey; keeping open the long sea lanes . . . bringing our cargoes to safe harbour.



MARCONI





Competition Awards.

H.M. FORCES CLASS:
H.M. Coastguard T. Whitelaw,
Scotland.

A.T.C. CLASS:
Cadet W. H. Clout,
Weston-s-Mare.

No entries were received from Spotters or Observers. Therefore, prize for this class has been awarded as Second Prizes as below:

H.M. Forces (2nd Award):
Sgt./Pilot P. Montgomery, Scotland

A.T.C. (2nd Award):
Cadet D. Jenkins, Gainsborough.
Award for best entry in any class goes to Cadet Clout whose entry is reproduced on left.

New Contest.

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| s. d. s. d. | | s. d. s. d. | | s. d. s. d. | | s. d. s. d. | | s. d. s. d. | | s. d. s. d. | |
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| N.A. "Mustang" | 2 6 | 2 3 | Westland | | | Heinkel He 111k Va | — | 4 6 | | | |
| Bell "Airacobra" | 2 6 | 2 3 | "Whirlwind" | 3 6 | 3 3 | A.W. "Whitley" V | — | 4 6 | | | |
| Me 109F | 2 6 | 2 3 | Me 110 | 4 0 | 3 6 | Focke-Wulf "Kurier" | 7 6 | 6 6 | | | |
| Curtiss "Kittyhawk" | 2 6 | 2 3 | Bristol "Beaufighter" | 4 0 | 3 6 | Focke-Wulf "Condor" | 7 0 | 6 6 | | | |
| Focke-Wulf Fw 190 | 2 6 | 2 3 | Junkers Ju 88-A1 | 4 0 | 3 6 | Short "Stirling" | 8 6 | 7 0 | | | |
| Junkers Ju 87B | 3 0 | 2 6 | Lockheed "Hudson" | — | 3 6 | H.P. "Halifax" | 9 6 | 7 0 | | | |
| Focke-Wulf Fw 187 | — | 3 6 | Lockheed "Lightning" | 4 0 | 3 9 | "Lancaster" | 9 6 | 7 0 | | | |
| Fw "Zerstorer" | 3 6 | 3 3 | Bristol "Blenheim" IV | 4 3 | 3 6 | | | | | | |

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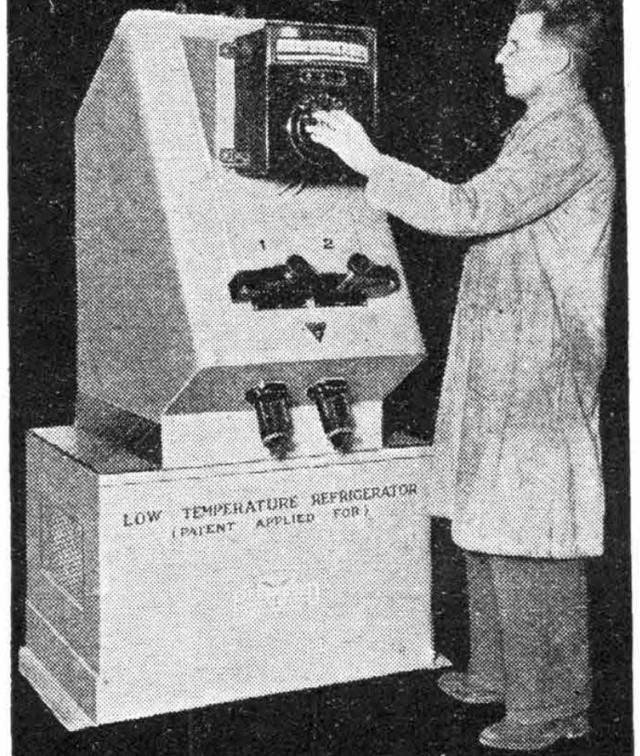
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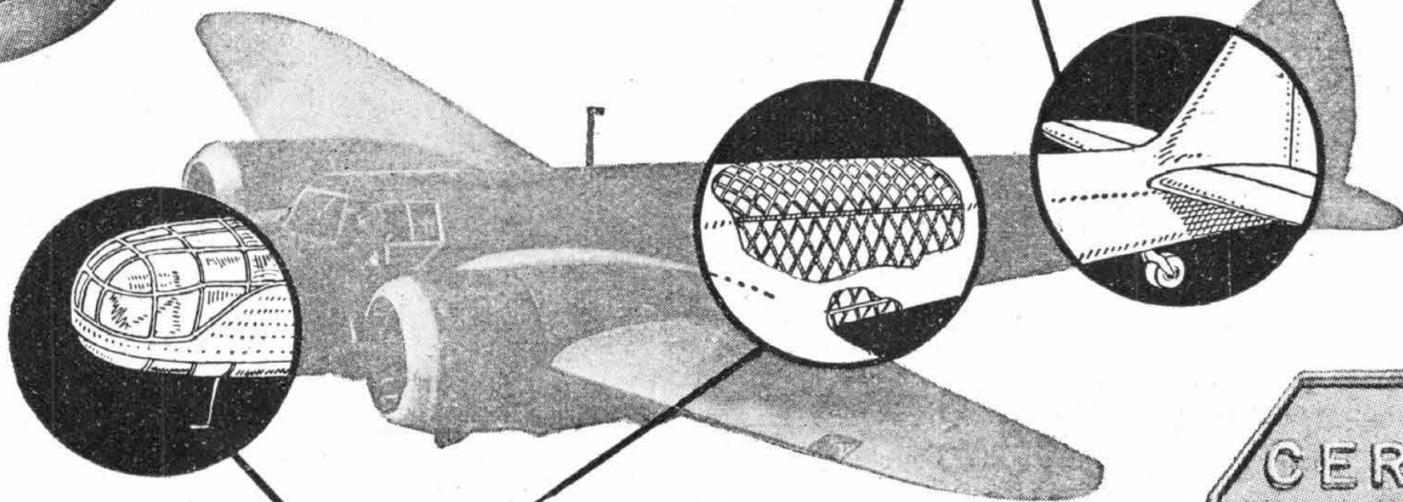
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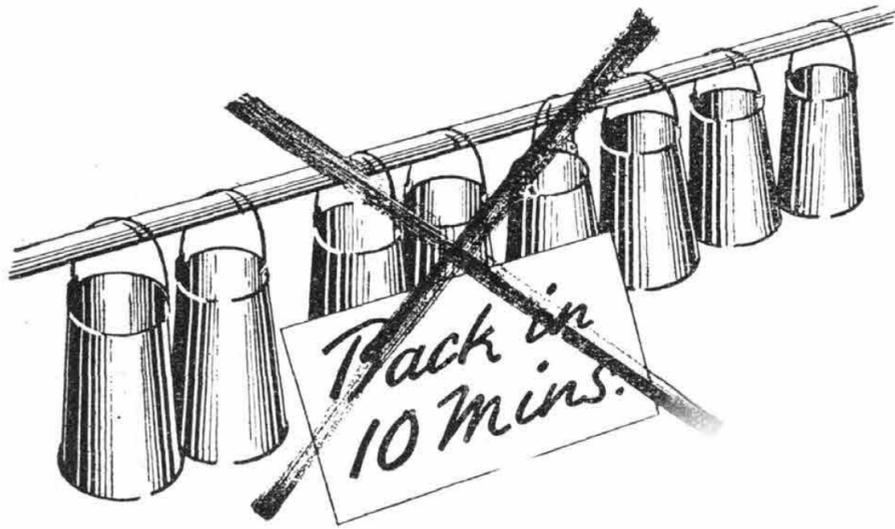
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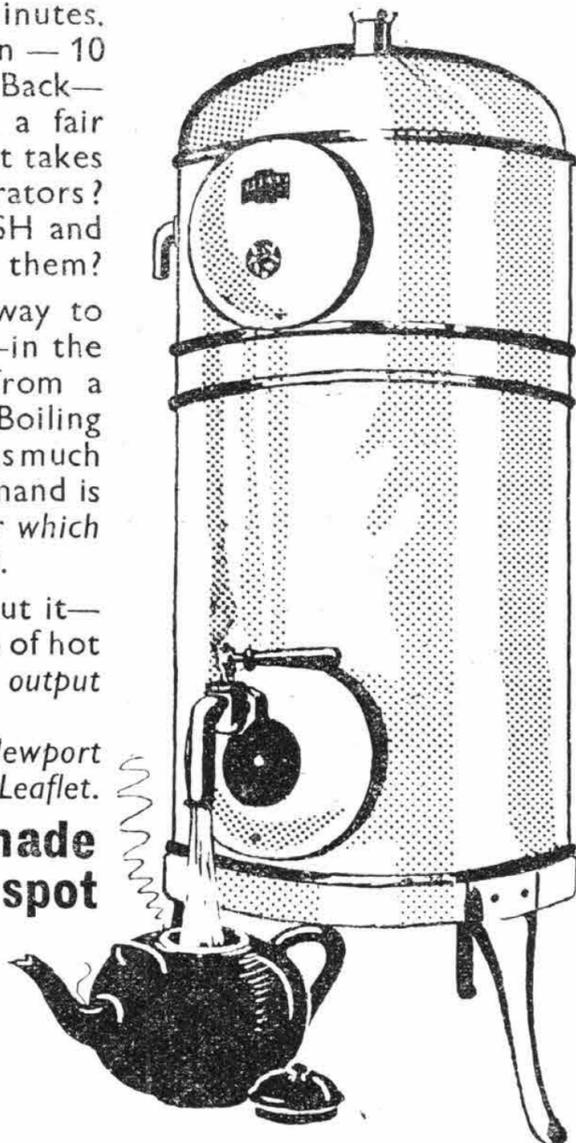
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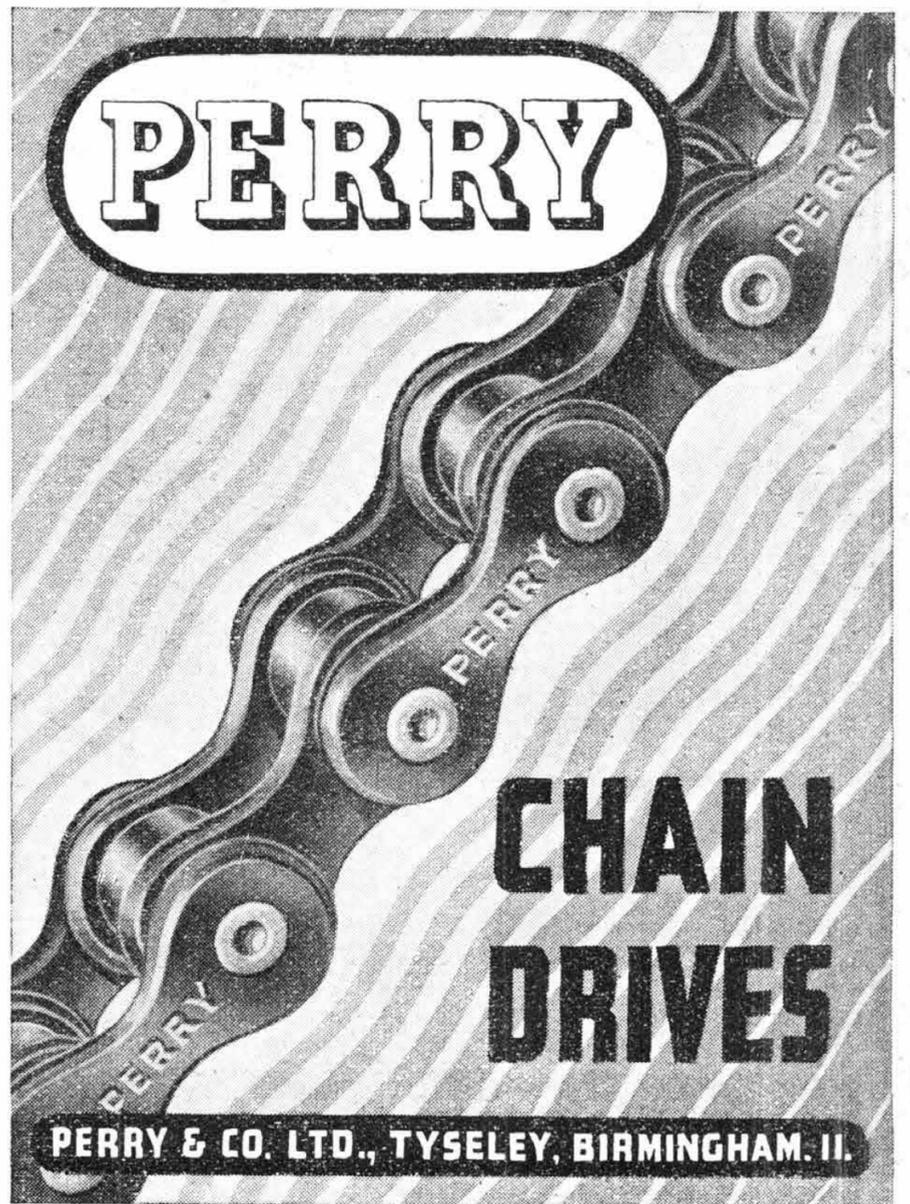
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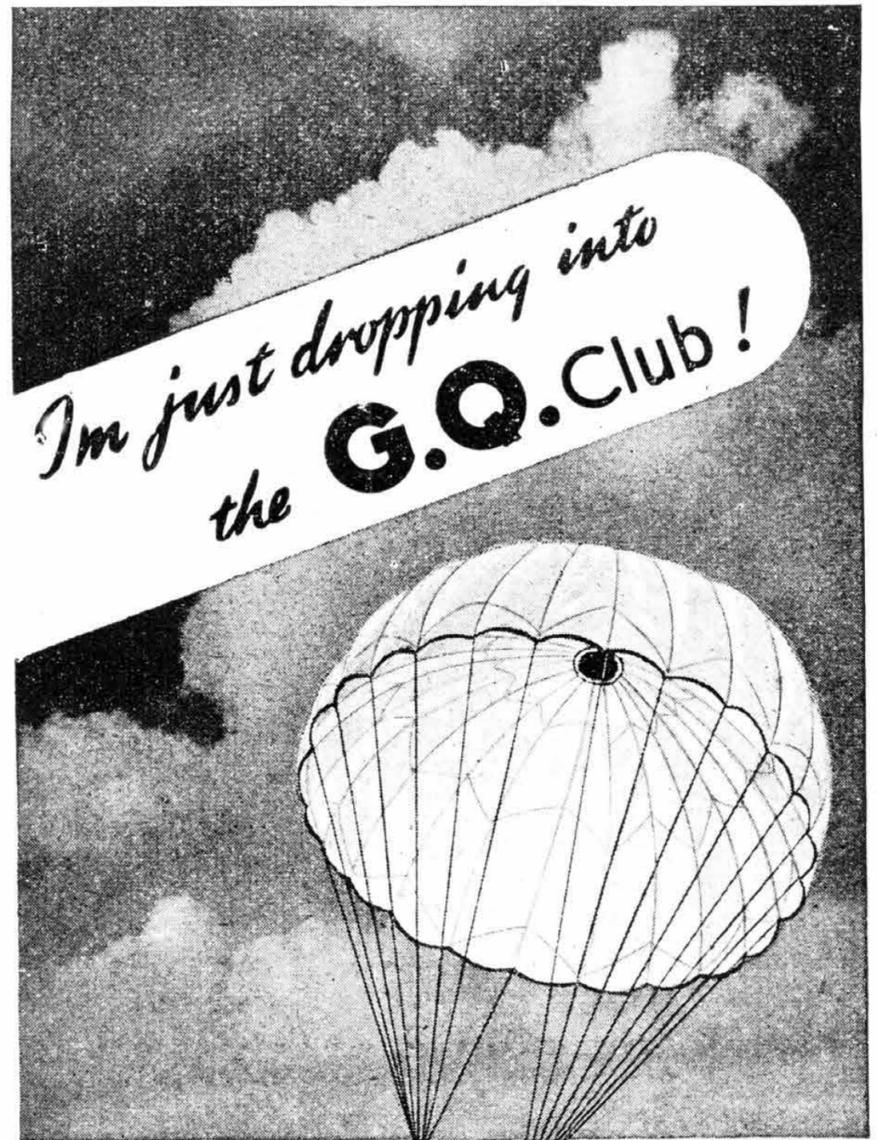


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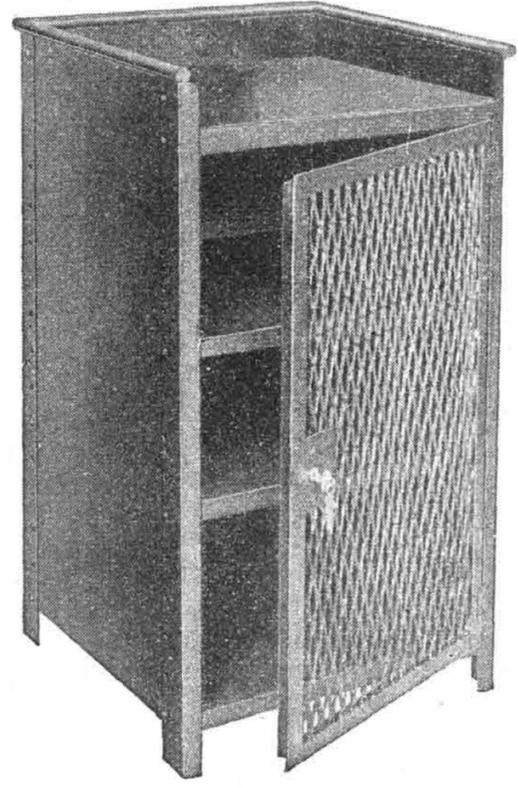
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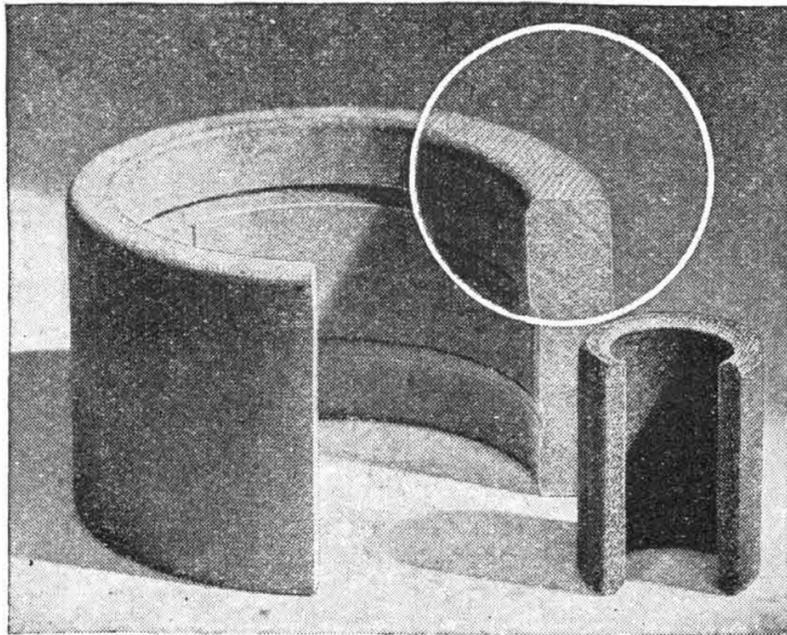
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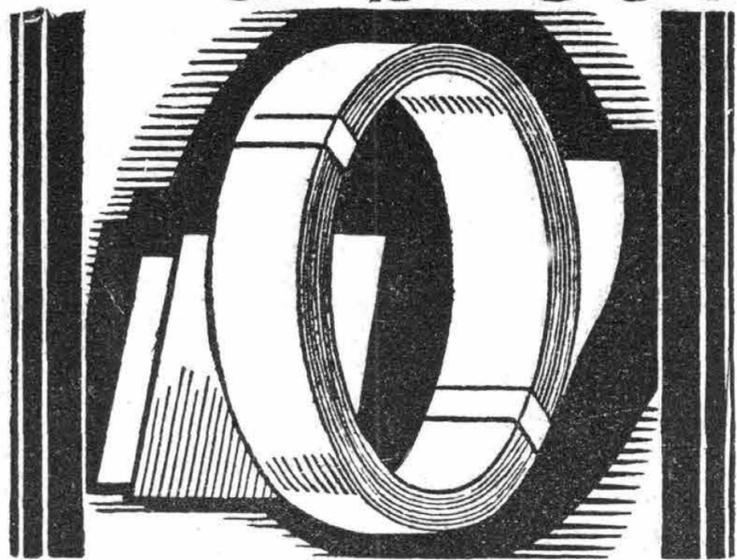
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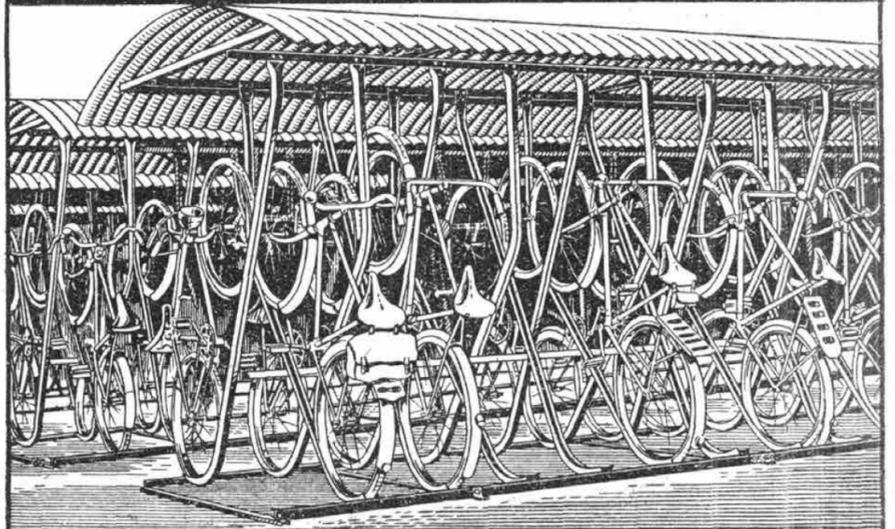


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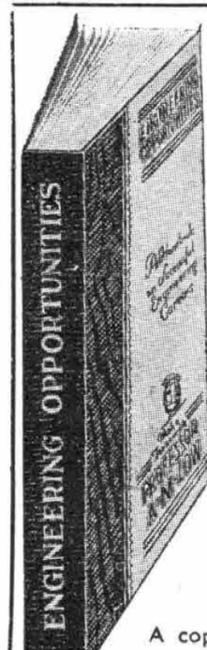
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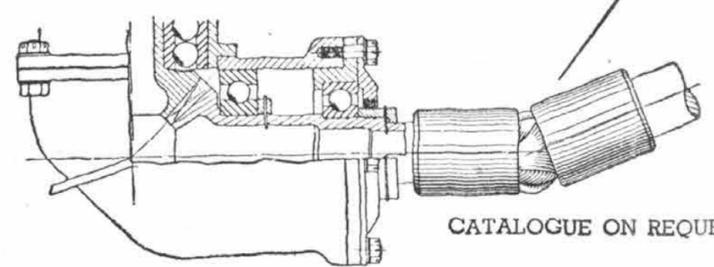
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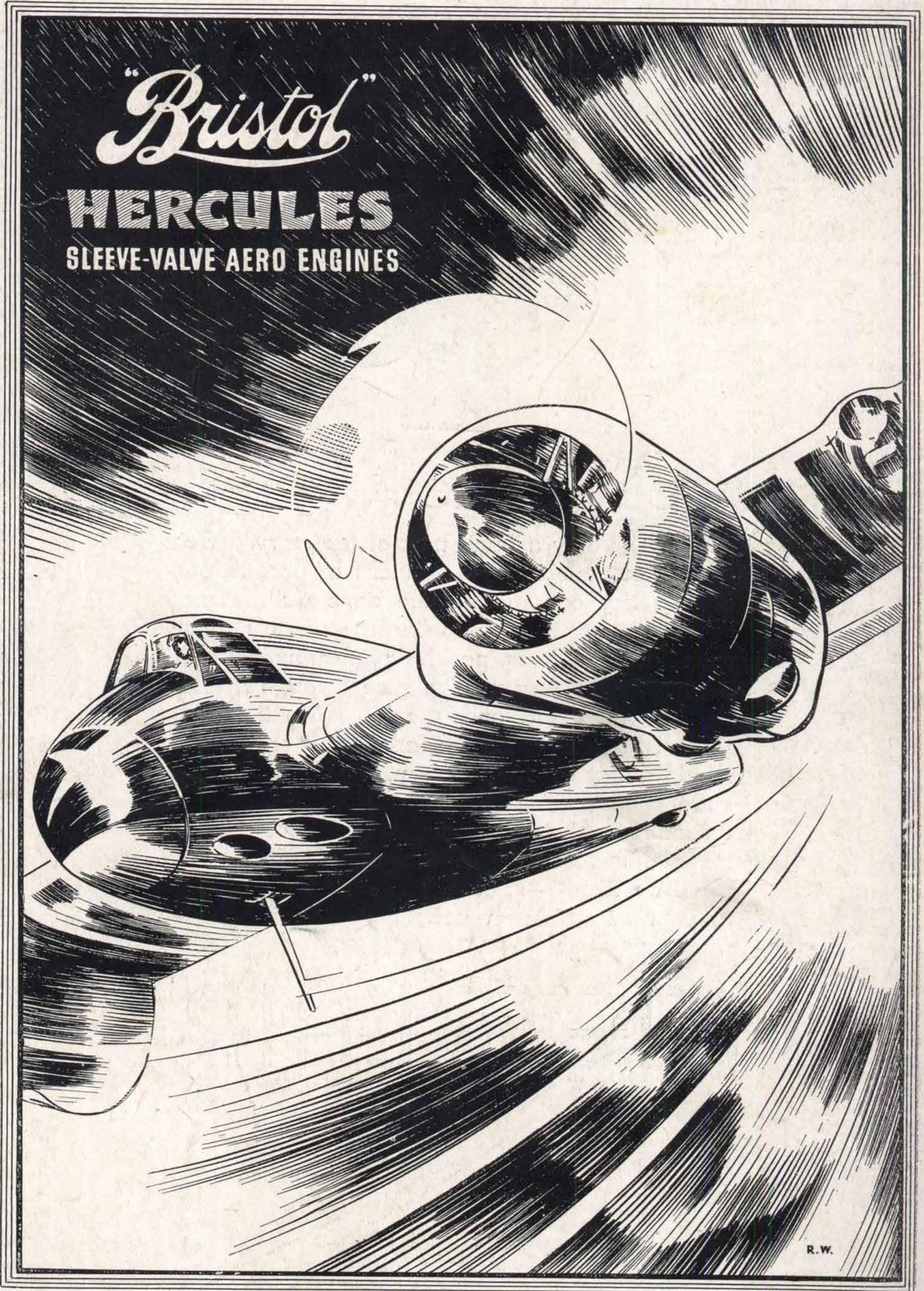
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