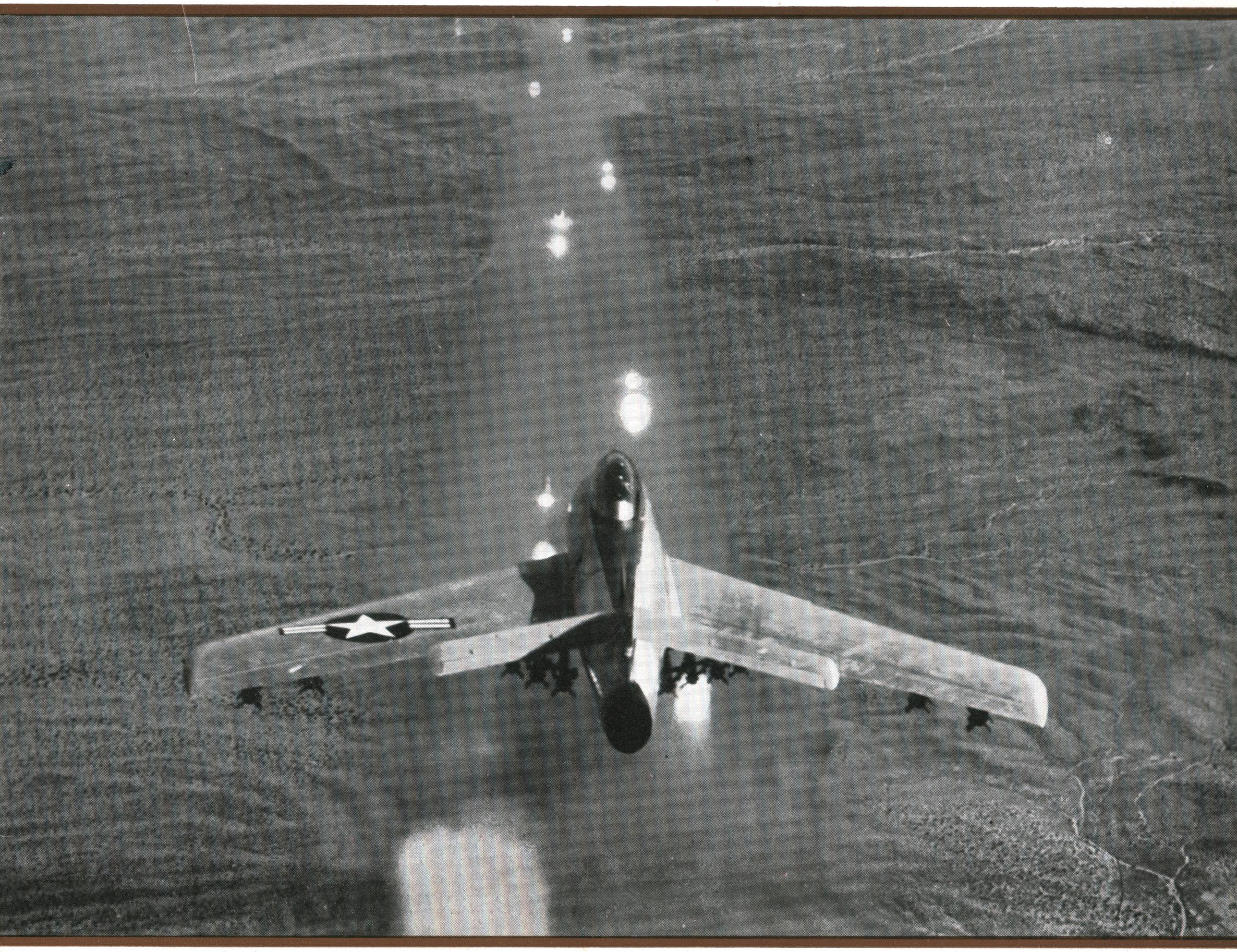
JOINT SERVICES

RECOGNITION

Journal



Vol. 6 JUNE 1951 No. 6





North American AJ-1 Savage *attack bomber on carrier trials about to leave the U.S.S.* Coral Sea (*CV-43* Midway *class carrier*). *Another photograph of this three-engined "twin-type" appears on page* **140**. *Alongside is the silhouette of the Midway class.*

JUNE 1951 Vol. 6. No. 6

JOINT SERVICES RECOGNITION JOURNAL

The *Joint Services Recognition Journal* is a monthly publication prepared and produced by the Assistant Chief of Air Staff (Training), Air Ministry, in collaboration with the Ministry of Supply—Controller of Supplies (Air)—Air Technical Publications. Contributions and correspondence should be addressed to the Editor, *Joint Services Recognition Journal*, Air Ministry, Room 213, Metropole Buildings, Northumberland Avenue, W.C.2.

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INCOME TAX RELIEF

IT is not often that we experience relief when we open the daily paper and read how the taxpayers' money is being spent. But on a recent memorable occasion, when the Vickers 660 four-jet bomber was revealed to us at the breakfast table, we confess not only to great relief, but to a measure of satisfaction, as well as some pride. We shall confess to much more of all of these things when the silhouettes of the " substantial order " for the Royal Air Force, which was mentioned, begin to cloud the sky, and, incidentally, take up space in the *Journal*.

But to talk our own particular brand of " shop ". From the first released views of the Vickers 660 we may say at once that its shape is distinctive. It is in the visual " single " class, for the wings, despite a four-jet installation, seem completely devoid of nacelles or bulges of any kind, the only external evidence of the Rolls-Royce Avon turbojets being the large gridded intake slots in the wing leading-edge near the root.

The wing—reportedly swept—is fitted shoulder-high and appears to have no dihedral angle, though it tapers in thickness to fine proportions at the tip. The fuselage, drooping slightly at the nose and tapering up towards the tail, is, in these views, reminiscent of the Canberra's. The shallow " blister " of the cockpit hood seems to be a more raked and streamlined version of that seen on the Vickers Viscount—the only point of family resemblance, incidentally, to be seen in the whole aeroplane from these views ; though some may, perhaps, see the " 535 " in its fuselage shape.

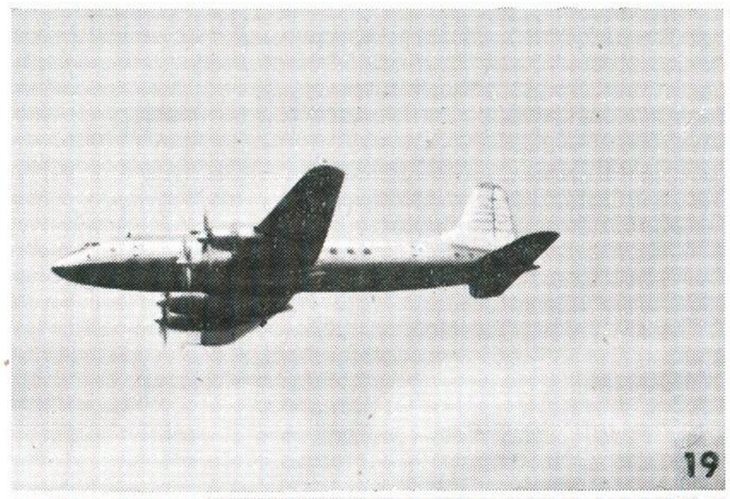
The cruciform tail consists of a back-tapered fin and rudder (it does not appear to be swept though it gives that impression) which carries its tail plane one-third of the way up.

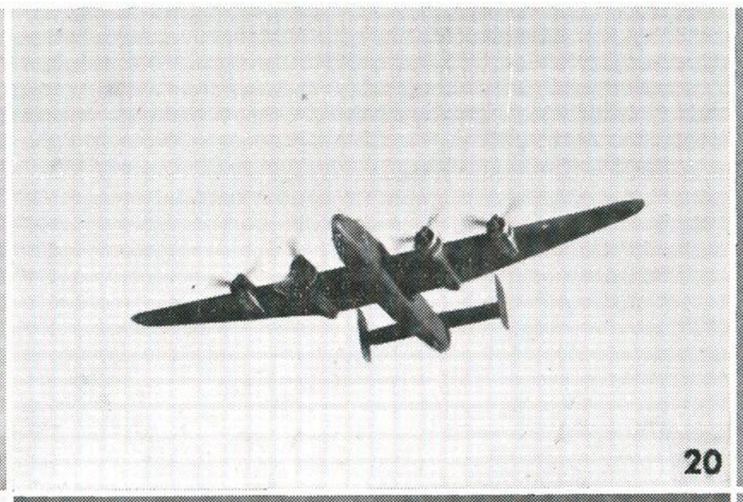
As to the size of the 660, the man standing by the nose-oleo—or is it a belly-oleo ?—makes a good illustration. The main undercarriage wheel arrangement is interesting.

Mr. George Edwards was head of the design team responsible for the Vickers 660, which flew for the first time on May 18th. It is a most impressive aero plane and we feel it will present few difficulties to the spotter. We shall hope to publish further views and details before very long.



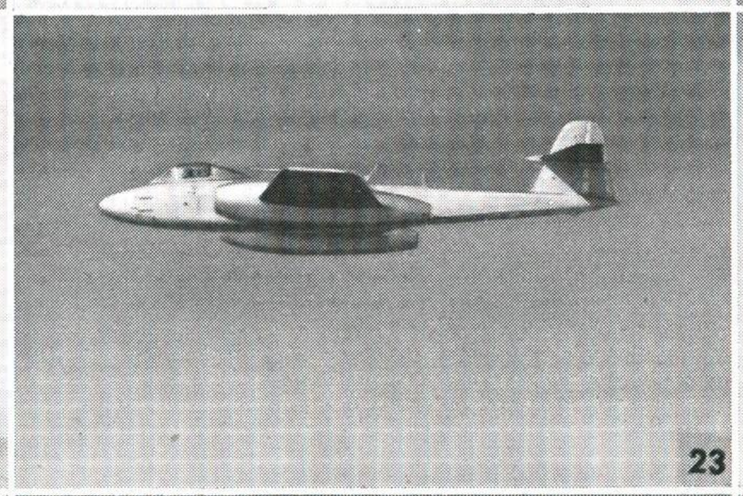


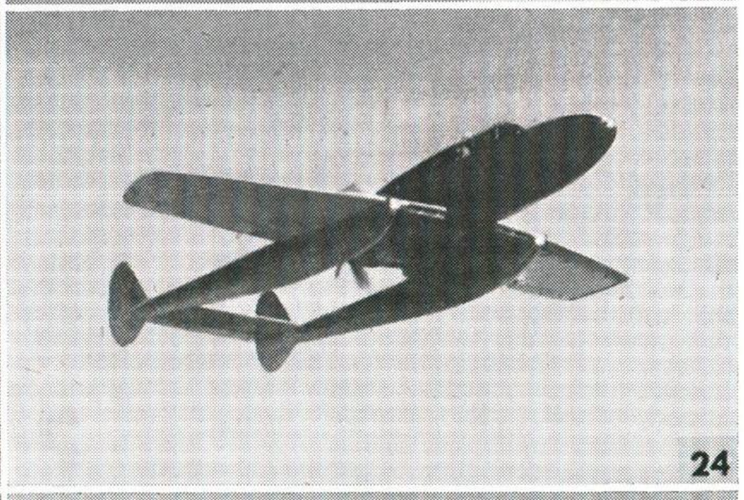

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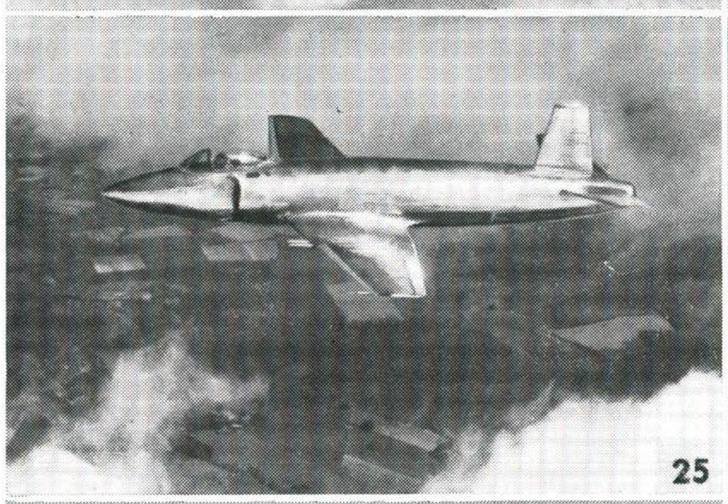

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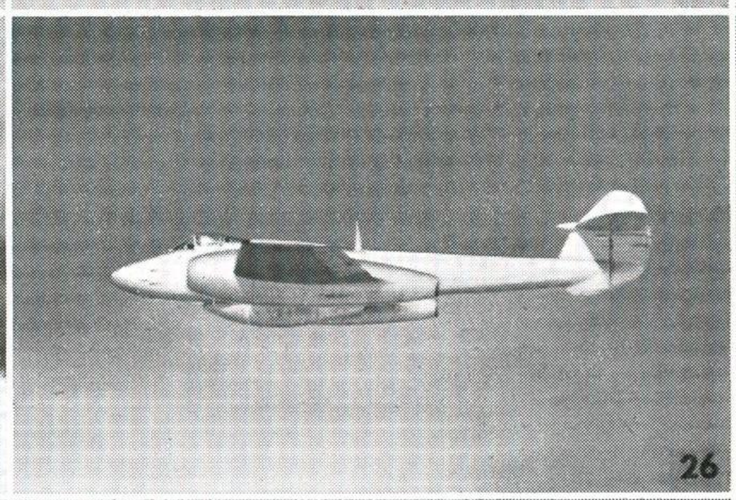

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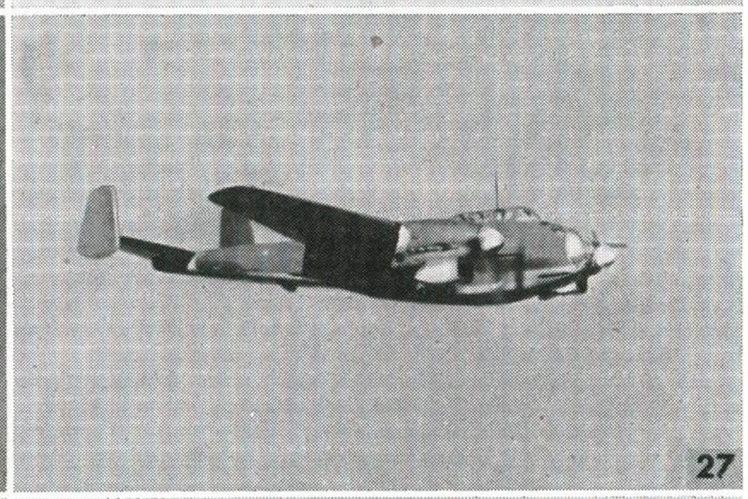

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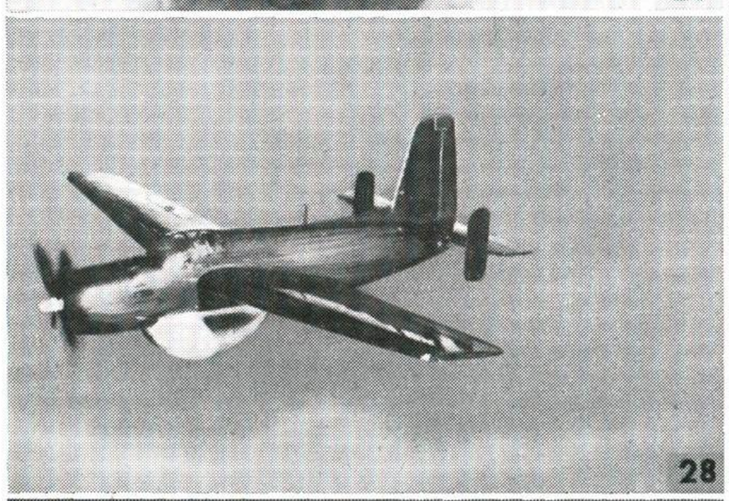

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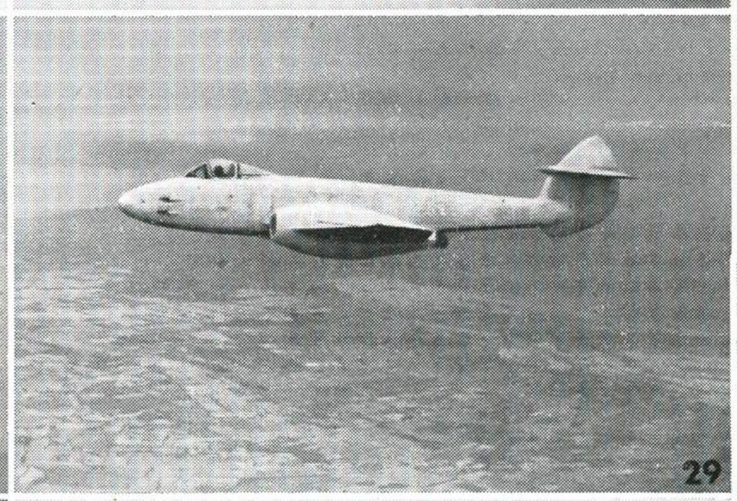

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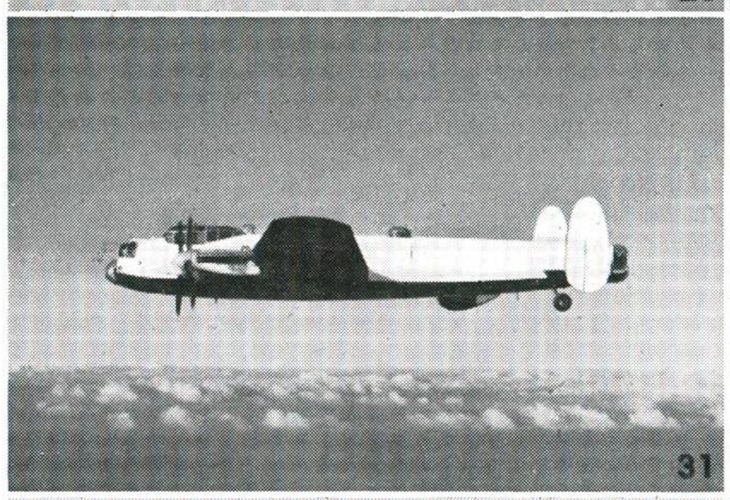

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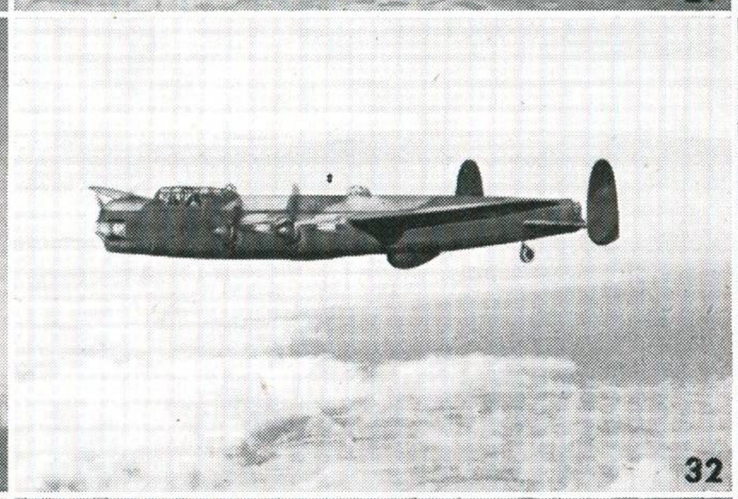

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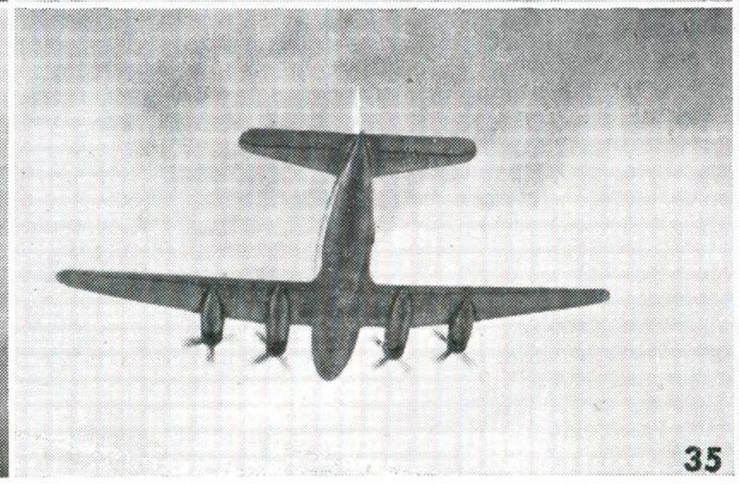

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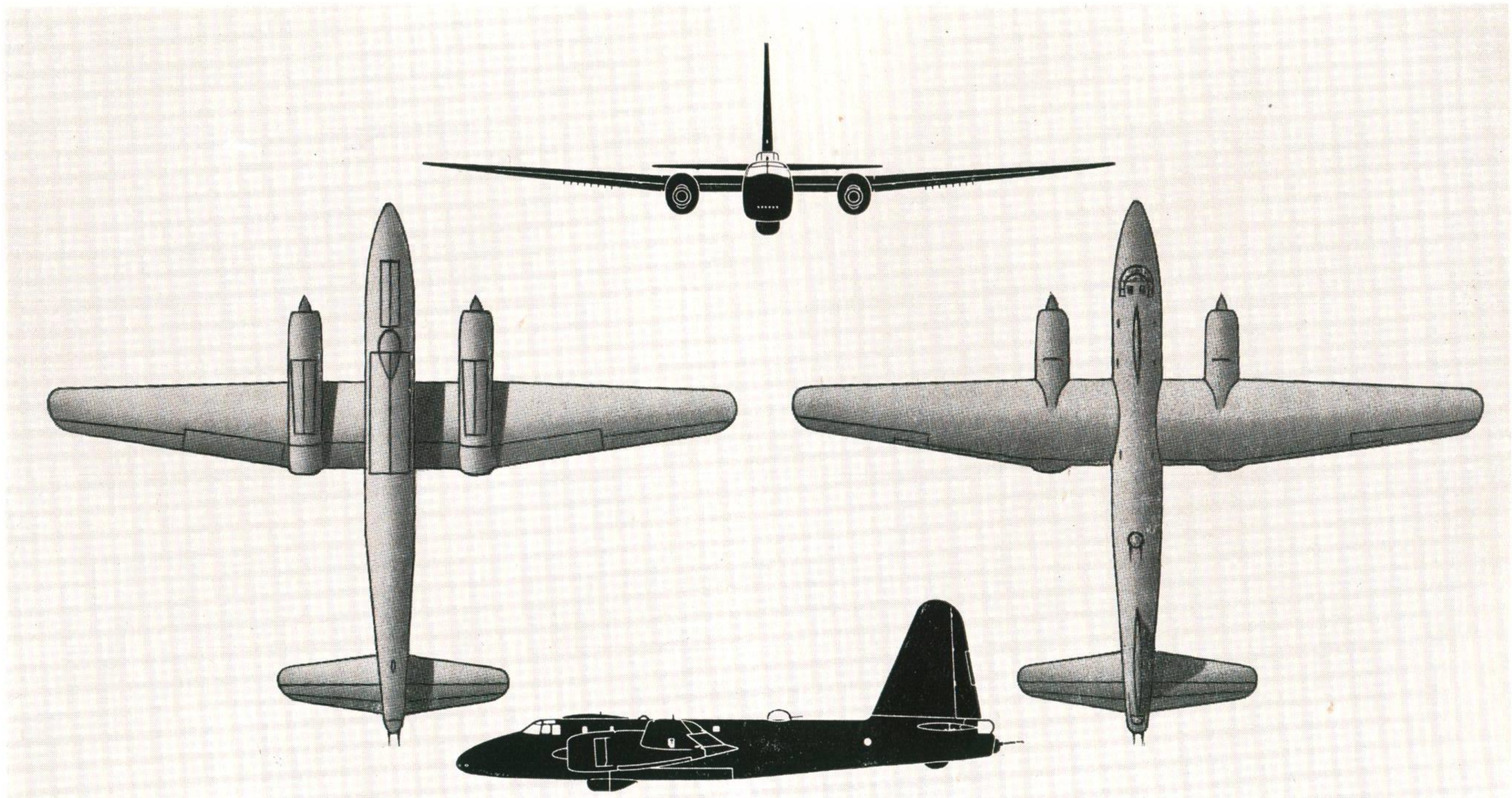

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CHARACTER STUDY — LOCKHEED P2V-2 NEPTUNE

THIS naval gentleman is very conscious of his extremities. He has a prim, rather supercilious face with a superior nose, whose dignity is first upset by a pronounced Adam's Apple to house his radar. But, it is the outsize in tails that finally destroys this seadog's *amour propre*.

The Neptune is a conventional propeller-driven aircraft, wings at shoulder height and two prominent and oval-sectioned radial motors jutting far out in front, with their nacelles making slight protuberances behind. They are well underslung. The high aspect ratio wings have leading edges which seem to have no taper, although in fact there is a fractional taper. The tips have a back-sweeping curve to meet a fairly pronounced trailing edge taper. There is considerable dihedral on the outer wing panels. The centre section has neither taper nor dihedral.

The upper surfaces are only slightly broken forward by the upper curves of the engine nacelles as they fit snugly into the leading edges and fan out a little at the trailing edges. Underneath, the wings are cut across from leading to trailing edge by the nacelles, forming bold parallel-sided shapes and making, with the deep fuselage, a bunched up shadow pattern.

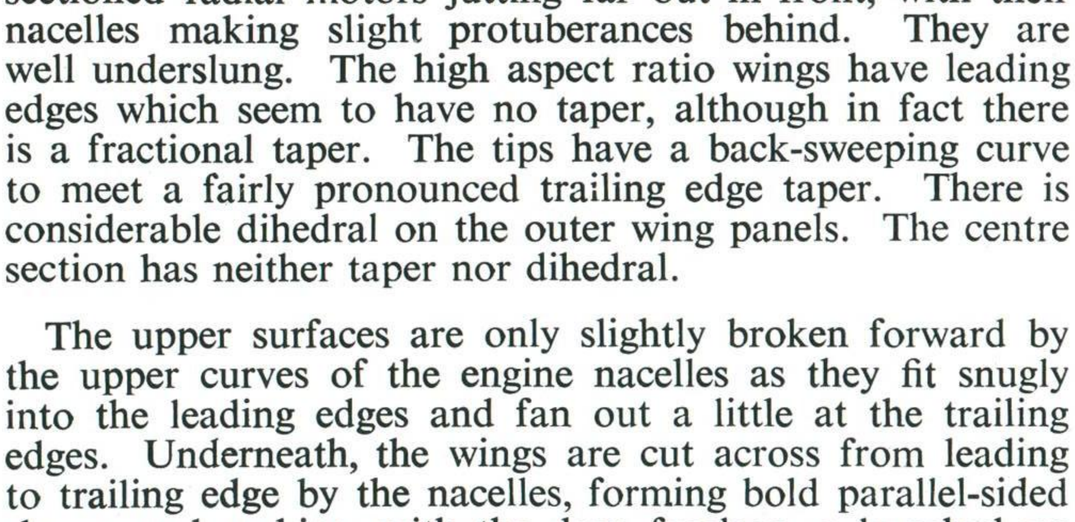
The fuselage is a rather cumbersome deep affair. It is dominated by the long sleek and low pointed nose. Half way aft it slopes up beneath and tapers in plan to become a thick-ended structure with a gun-pimple end. The top line of the fuselage is straight, but broken by a slight coxcomb behind the cockpit, and a gun position further aft. Beneath, there is the radar Adam's Apple, and sometimes another protuberance aft as if the animal has swallowed an egg. A small bump skid is visible under the tail.

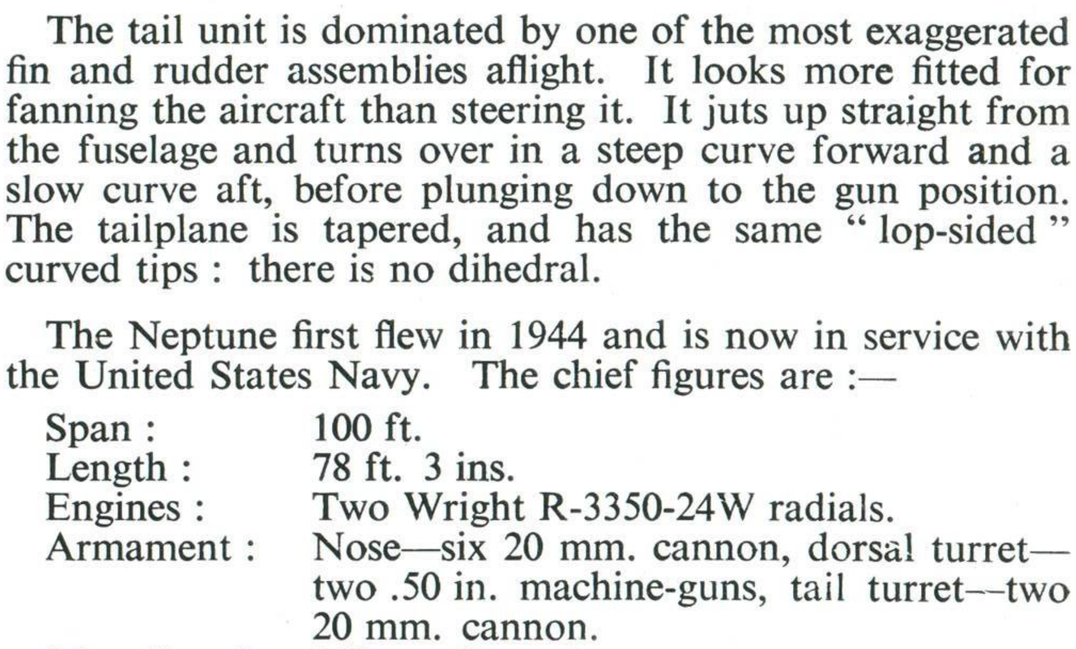
The tail unit is dominated by one of the most exaggerated fin and rudder assemblies aflight. It looks more fitted for fanning the aircraft than steering it. It juts up straight from the fuselage and turns over in a steep curve forward and a slow curve aft, before plunging down to the gun position. The tailplane is tapered, and has the same " lop-sided " curved tips : there is no dihedral.

The Neptune first flew in 1944 and is now in service with the United States Navy. The chief figures are :—

Span :	100 ft.
Length :	78 ft. 3 ins.
Engines :	Two Wright R-3350-24W radials.
Armament :	Nose—six 20 mm. cannon, dorsal turret—two .50 in. machine-guns, tail turret—two 20 mm. cannon.
Max. Speed :	300 m.p.h.
Function :	Patrol bomber.
Maker :	Lockheed.

C. H. GIBBS-SMITH





MERCHANT SHIP RECOGNITION—TERMINOLOGY

Terms common to all ships, which were included in "Warship Recognition—Terminology" in the February *Journal* have not been repeated here.

AFTER CASTLE or POOP

An isolated superstructure at the after end of a ship.

BALLAST

Material carried to give a vessel stability when empty of cargo (usually water or sand).

BOAT DECK

The deck on which the life-boats are stowed. Usually the highest deck in the vessel.

BOOM

A heavy spar used for handling cargo, usually attached to the base of a mast or kingpost.

BOOT-TOPPING

That part of the under-water paintwork visible at the waterline.

BOTTOM

The under-water part of the hull extending from the keel and including the curved part up to the point where the ship's sides become vertical.

BRIDGE

A high athwartships platform on the forward part of a ship's superstructure, often including centrally, a pilot house.

BULKHEAD

A heavily built wall sub-dividing the interior of the hull.

BULWARK

A continuation of a ship's hull plating above the edge of an exposed deck. It is designed to give protection against weather, and to prevent the loss of material and personnel overboard.

BUNKER

A compartment in the hull used for stowage of coal or oil fuel.

CASTELLATION

The "steps" formed at the ends of a superstructure by successively shorter decks mounting one above the other.

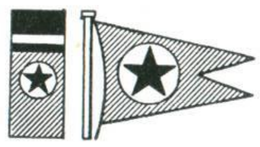


CATWALK or FLYING BRIDGE

A narrow exposed footbridge connecting the hull islands.

COMPANY MARKING

Distinguishing mark on funnel and flag to show ownership. Markings illustrated are of the Blue Star Line.



CROSSTREES

A small platform on the top of a lower mast or kingpost to which the lifting gear may be rigged.

CROW'S NEST

A small barrel or box-shaped enclosure placed high on the foremast to carry a lookout.

DEADWEIGHT TONNAGE

Total disposable load measured in long tons. (*i.e.* 2,240 lb.) including cargo, fuel, passengers, crew, etc.

DECKHOUSE

A housing structure separate from the main superstructure.

DERRICK

A long spar attached to the foot of a mast or kingpost and used crane-fashion for loading or discharging cargo. At sea, derricks are lowered and secured horizontally for safety.

DISPLACEMENT TONNAGE

The all up weight of a ship measured in long tons. Used in referring to warships.

DOCKING BRIDGE

A raised platform erected across the after part of a vessel for use when docking ship.

DRAUGHT

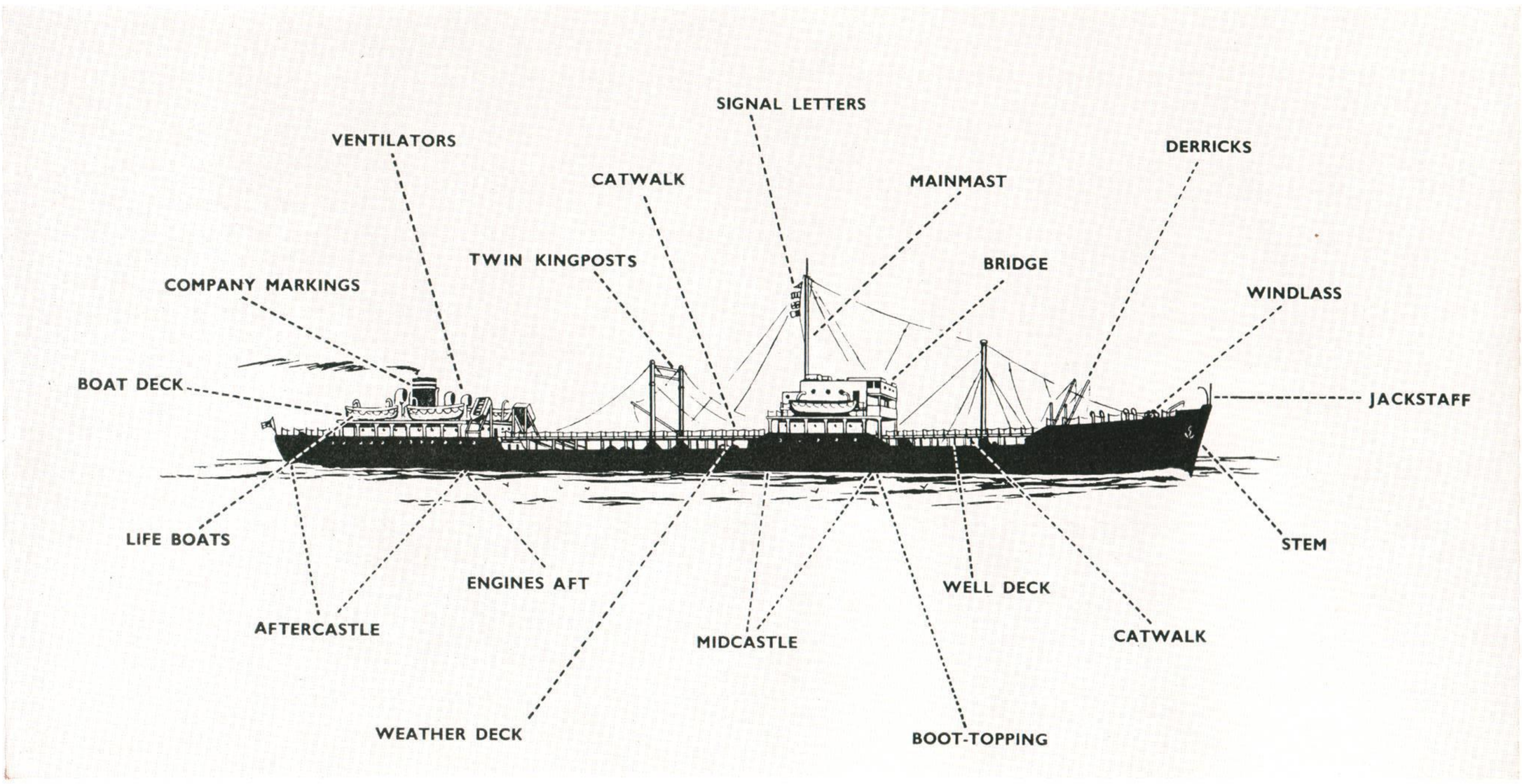
Vertical depth of water between the waterline and the keel or propellers. Figures which indicate draught in feet are painted on the stem and stern.

ENGINES AFT

A term meaning that a vessel's propelling machinery is placed near the stern. This is done to minimise the risk of fire, and also, in the case of tankers, to avoid construction of oil-tight tunnels through the tanks for the propeller shafting. Some colliers have "engines aft".

FLYING BRIDGE

See under "Catwalk".



FLUSH-DECK

A ship's top deck which is free from breaks or irregularities throughout the length of the ship.

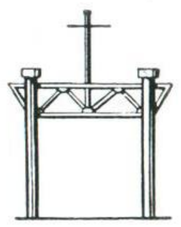


GROSS TONNAGE

A measure of the size of merchant ships. It is found by measuring the cubic capacity of certain parts of the ship ; each 100 cubic feet is then reckoned as one ton.

GOALPOSTS

Double kingposts, athwartships, the tops connected by a light, braced frame, or truss.

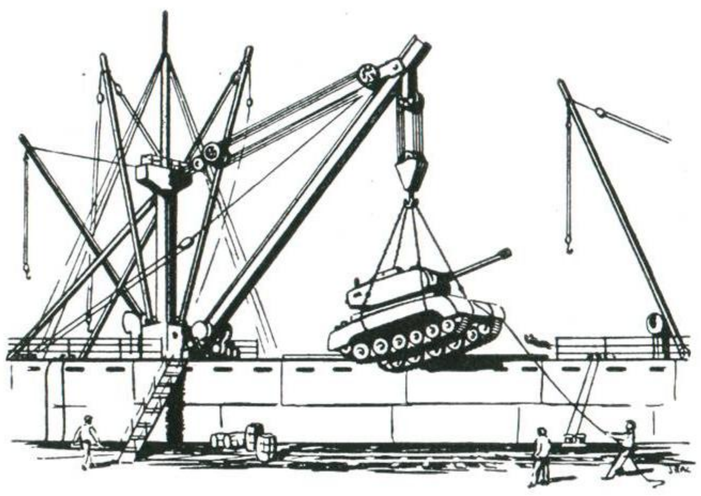


HATCH, HATCHWAY

Apertures in the tops of holds through which cargo is handled. The term is also applied to smaller openings in the deck for passage from one deck to another or for ventilation.

JUMBO DERRICK
or HEAVY DERRICK

Larger and heavier types of derricks. At sea heavy derricks are usually lashed against the mast for safety.



HOLD

A compartment below deck used for stowing cargo.

KINGPOST

Short vertical posts used to support derrick booms ; they may be set up singly or in pairs.

LADEN (VESSEL)

A term used to describe a fully loaded vessel.

LIFEBOATS

Small (motor or rowing) boats carried by all merchant ships. They are usually slung in davits from the highest deck ready for quick lowering into the water.

LIGHT (VESSEL)

The opposite condition of laden ; empty of cargo, though the ship may be voyaging " in ballast ".

LIST

Inclination of a ship from the vertical.



LOADLINE

See Plimsoll Mark.

LOWER MAST

The more heavily-constructed lower portion of a mast.

MAST

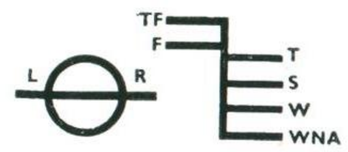
Vertical or raked pole structure, used to support derricks, carry radio aerials, and various kinds of visual signals, etc. From forward to aft the masts are named :— (1) Fore Mast, (2) Main Mast, (3) Mizzen Mast, (4) Jigger Mast.

MIDCASTLE

The central superstructure of a ship.

PLIMSOLL MARK

A safety mark painted on both sides of the hull amidships, to indicate the maximum draught to which the vessel may be loaded.



PROMENADE DECK

An upper deck mainly for the use of passengers. A promenade deck is a feature of the larger class of passenger vessels.

SAMSON POST

See under "King-post".

SHEER LINE

The line of a ship's deck at the juncture of deck and sides.

SIGNAL LETTERS

A group of four letters allocated to a ship for identification purposes ; usually displayed by flags (*see* illustration below).

STERN POST

Vertical rudder post in the stern of the vessel.

WEATHER DECK

The topmost deck exposed to weather, excluding islands.

WELL DECK

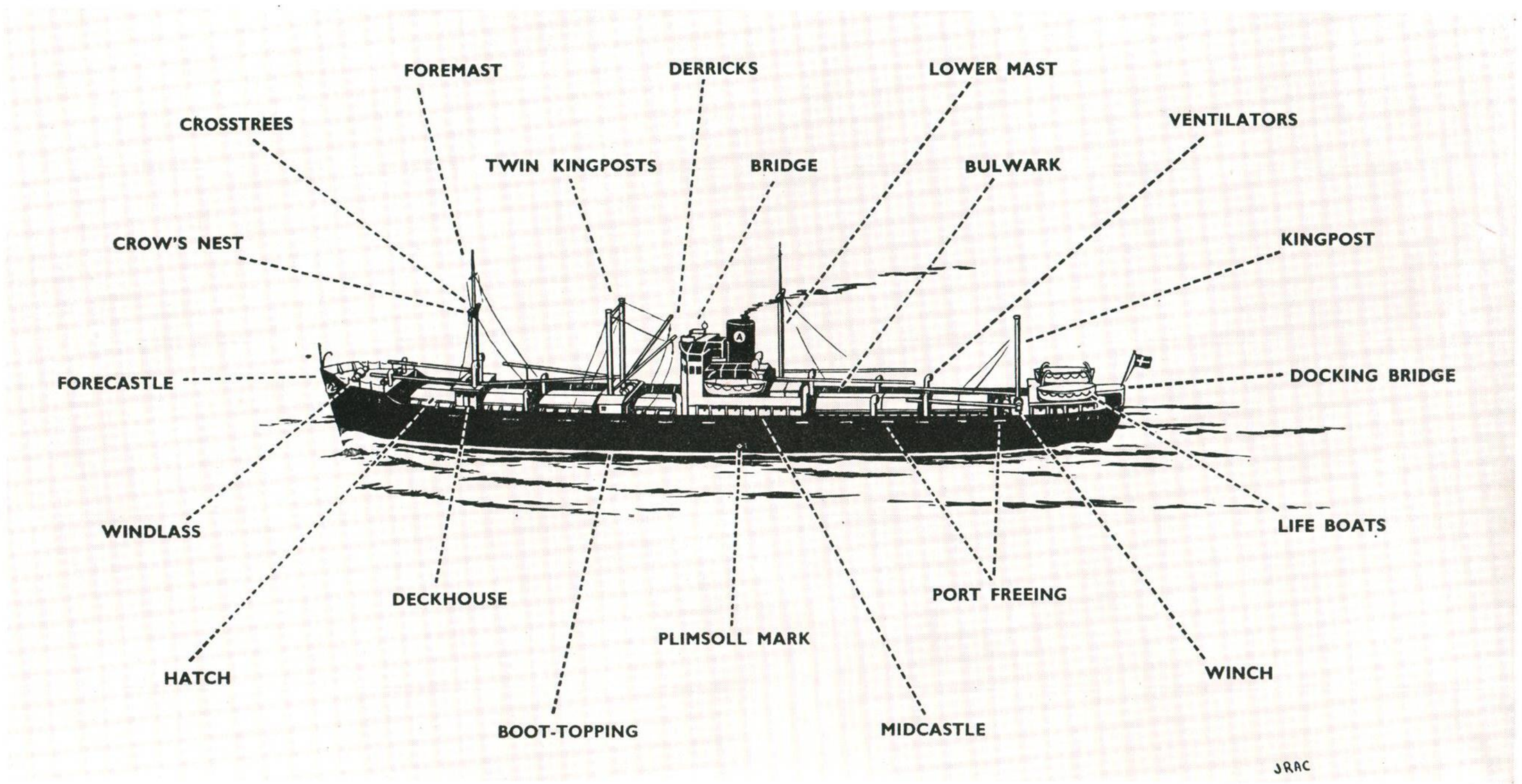
An area of weather deck between hull islands.

WINCH

Machinery mounted on deck for hoisting by winding ropes, cables, or chains, round a turning axle.

WINDLASS

Machinery for raising and lowering the anchors.



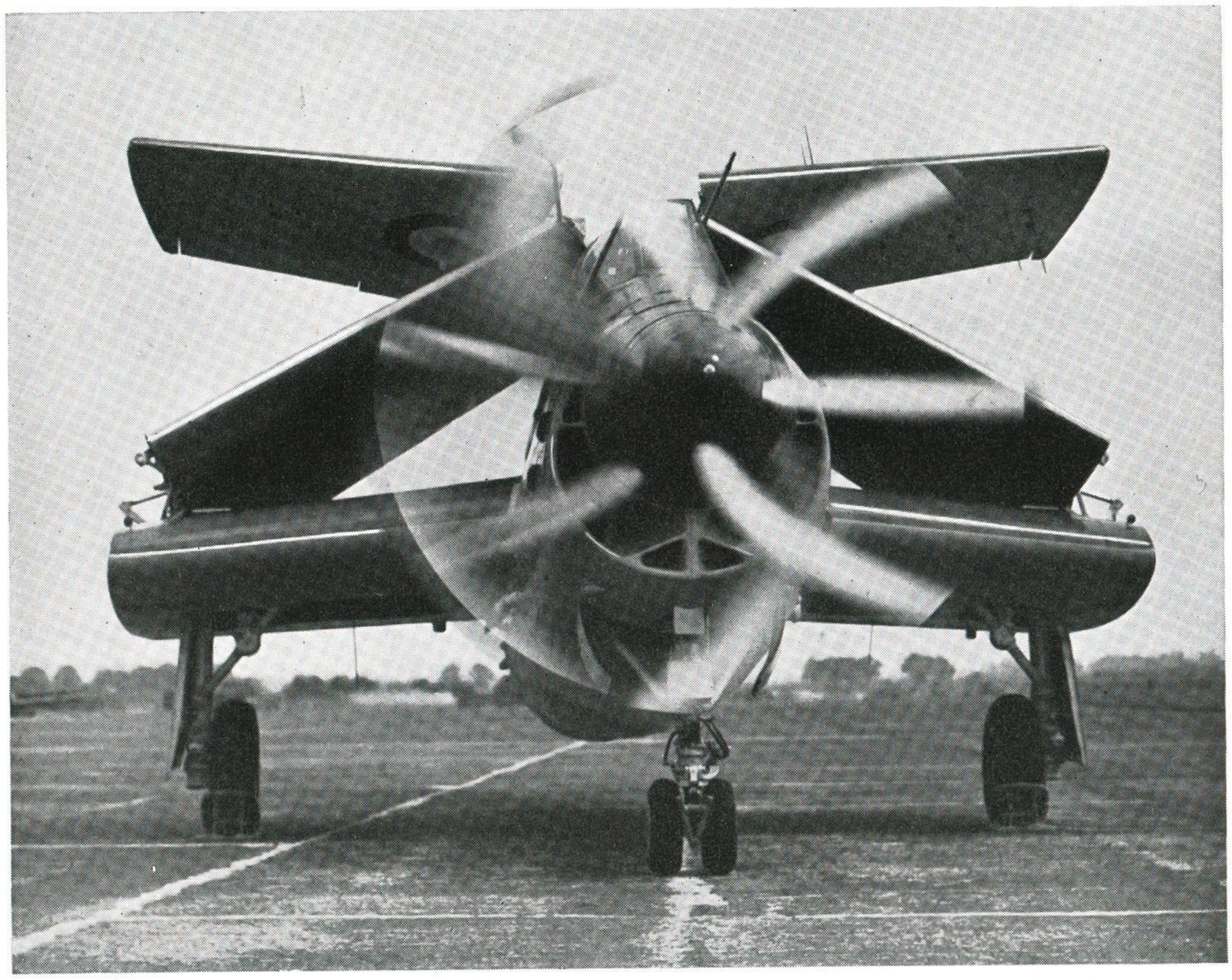
Fairey 17



by John W. R. TAYLOR

TAKE three men, a large radar scanner, fuel for long range, a Double Mamba power plant, an assortment of sono-buoys, bombs, rockets and other unpleasant devices ; pack them into the smallest possible aeroplane that will fly reasonably fast, operate from small carriers, fold to a neat size and handle so well that its pilot can look for submarines as well as fly it ; and what have you got ?—the Fairey " 17 ".

It was designed to a rigid Naval Specification, intended to combine in one comparatively small aircraft the anti-submarine search and strike rôles which have in the past required two small aeroplanes like the single and three-seat Skyraiders, or one big aeroplane like the Neptune. Such an ancestry has not always produced the most handsome aircraft, but few will criticise either the lines or the performance of the " 17 ".



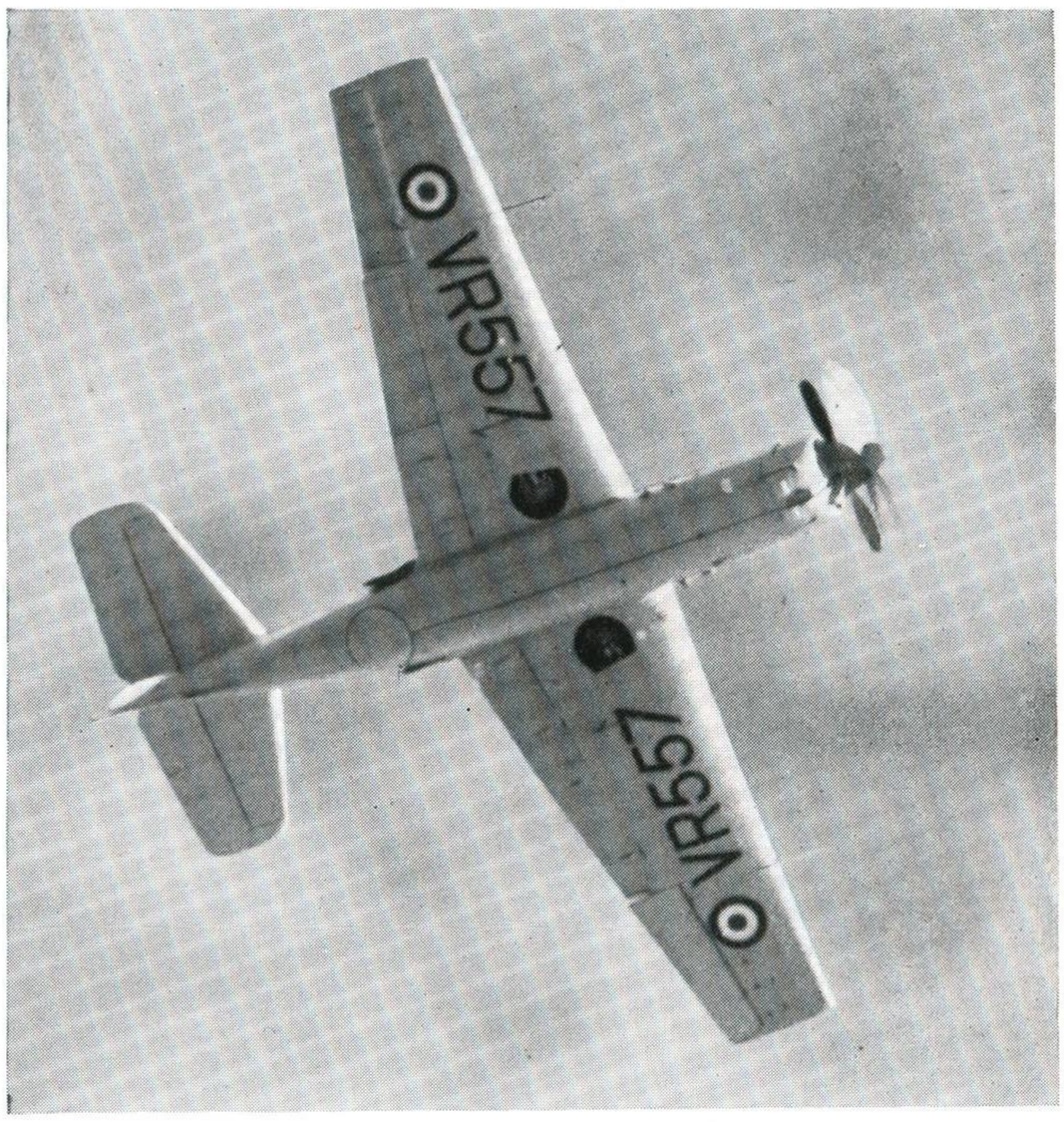
The credit for this is shared between Fairey's and Armstrong Siddeley, for much of the " 17's " versatility results from its Double Mamba power plant, which consists basically of two independently-operating Mamba engines, harnessed to work either as a team or separately. Each drives one unit of the Rotol eight-bladed contra-prop, so that in flight one of the side-by-side turbines can be stopped and the aircraft flown on the remaining unit, with the stationary propeller feathered to minimise drag. In this way, the " 17 " can use its full power for take-off or in combat, and cruise on one of its engines to conserve fuel and increase its endurance. It has the performance and safety characteristics of a " twin " and the

aerodynamic advantages of a single installation. [For recognition purposes aircraft with coupled power plants of this type are grouped as " single " (engine) types which they appear to be.—Ed.]

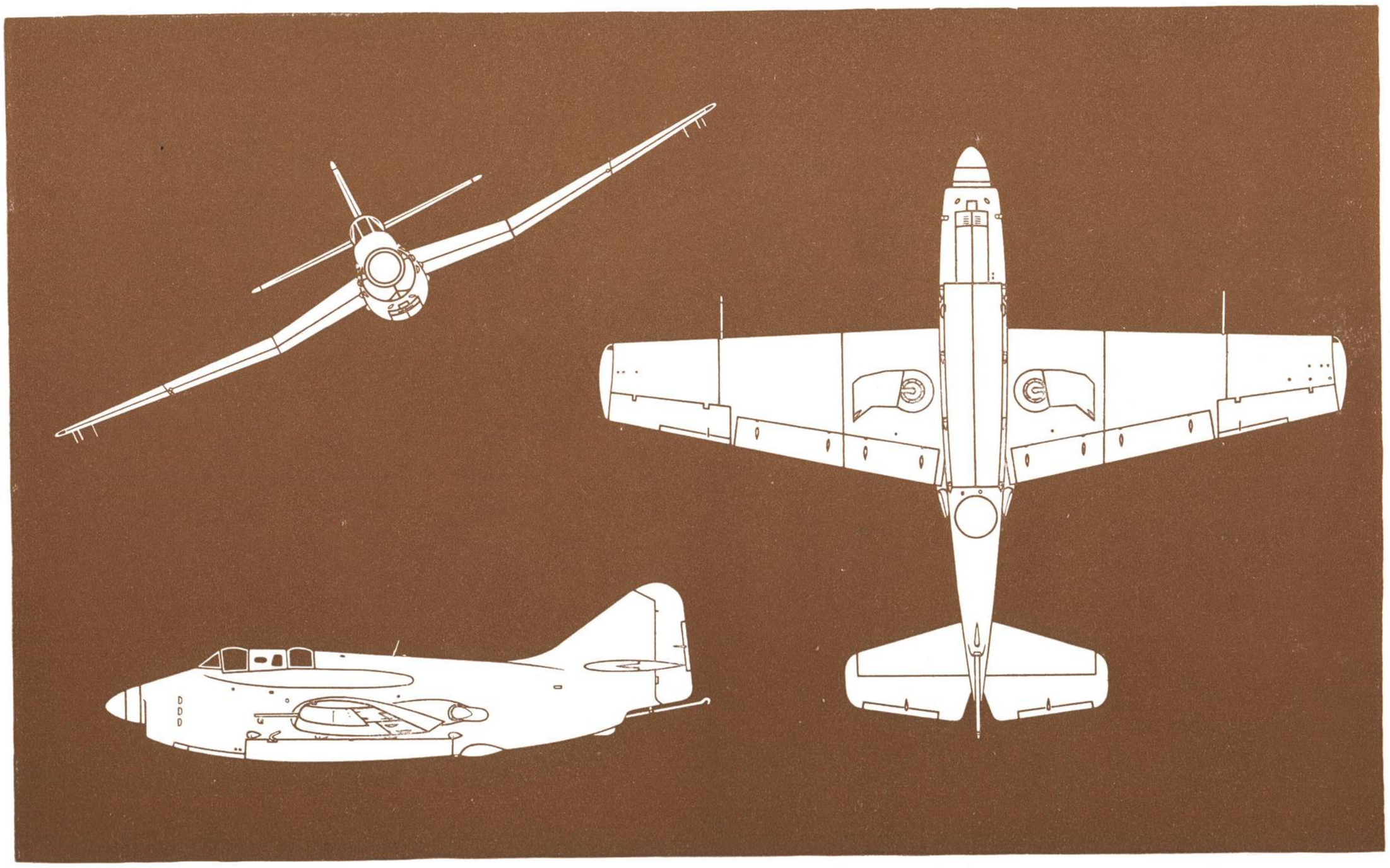
The chief recognition features are square-cut cranked wings, deep fuselage with a distinctive step under the tailplane, long sloping fin and the forward position of the pilot's cockpit. This last feature, together with a bubble canopy, results in excellent forward, sideways and downward view, an invaluable asset for deck-landing and for the last stages of anti-submarine search, after radar has indicated the submarine's approximate position. It has been made possible by the fact that the pilot sits above the power plant.

The qualities of the Fairey " 17 " were proved last year during extensive constructor's trials, followed by operational trials at Boscombe Down and aboard H.M.S. *Illustrious*. As a result, there is a substantial order for " 17s " to re-equip the Navy's carrier-based anti-submarine squadrons. Production will be speeded by use of the Fairey patented system of Envelope Jigging. This involves building the aircraft from the outside, instead of in the normal way, and guarantees completely accurate outside shape.

The Fairey " 17 " has made aeronautical history, long before it is in service. It was, for example, the first aircraft to fly powered by twin turbines with co-axial propellers ; date, place and pilot being 19th September, 1949, Aldermaston and Group Captain Slade, Fairey's Chief Test Pilot, respectively. Exactly nine months later, Lieut. Commander Callingham, R.N., landed the prototype on H.M.S. *Illustrious* at sea—the first time a propjet-powered aircraft had ever been landed on a carrier. Nor was that all, for the " 17 " went on to make a good number of landings and take-offs in that first day.



No more may be said about the Fairey " 17 " at present, except that it has double-folding wings, a nose-wheel undercarriage, and will, in its Service form, be a three-seater. Few who saw its impressive single and twin-engined performance at last year's S.B.A.C. Display will doubt that the Admiralty, Fairey's and Armstrong Siddeley have produced between them a formidable and very useful addition to the Royal Navy's strike power.




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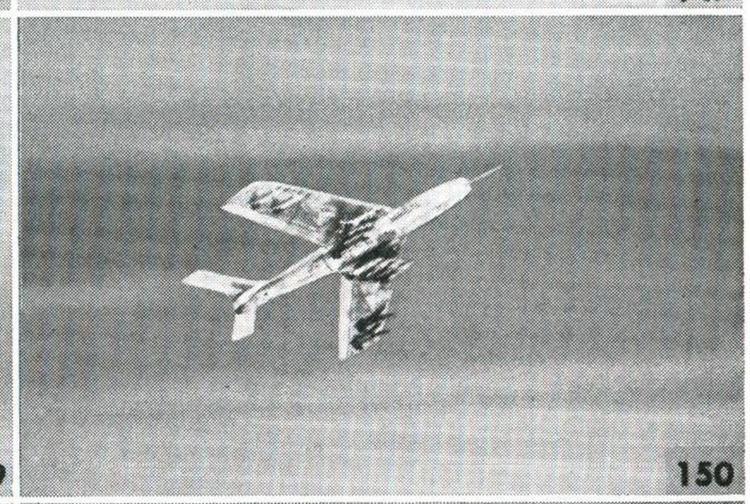

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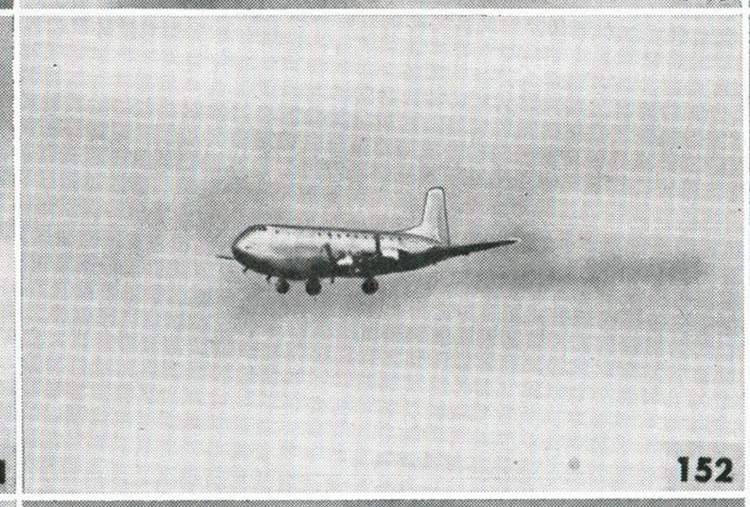

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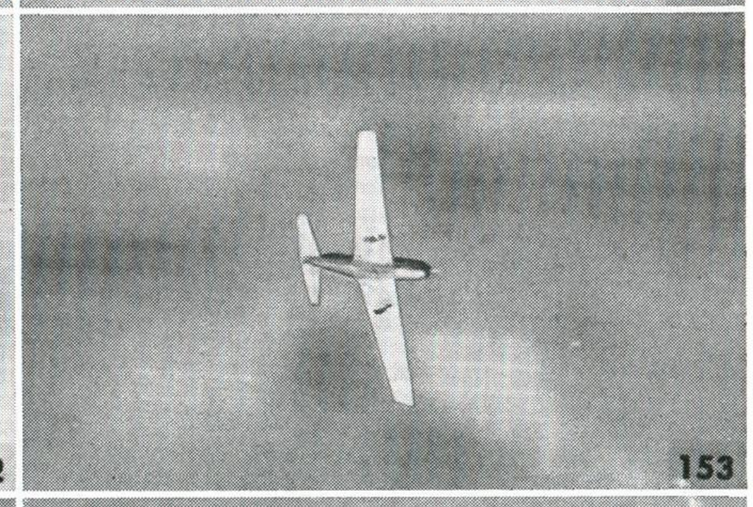

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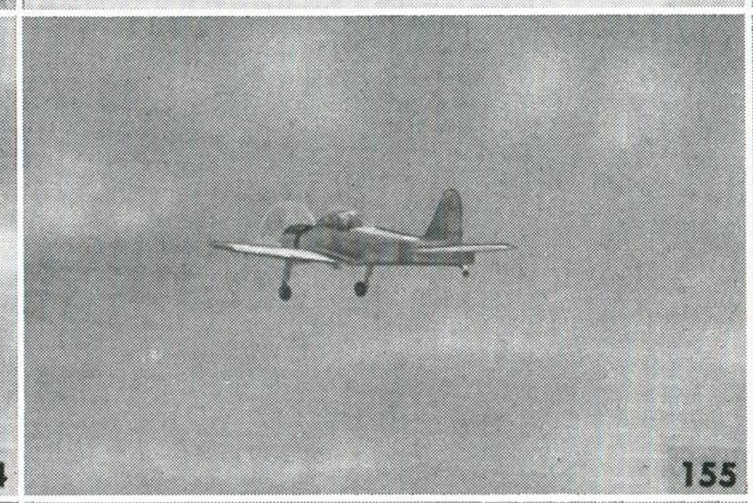

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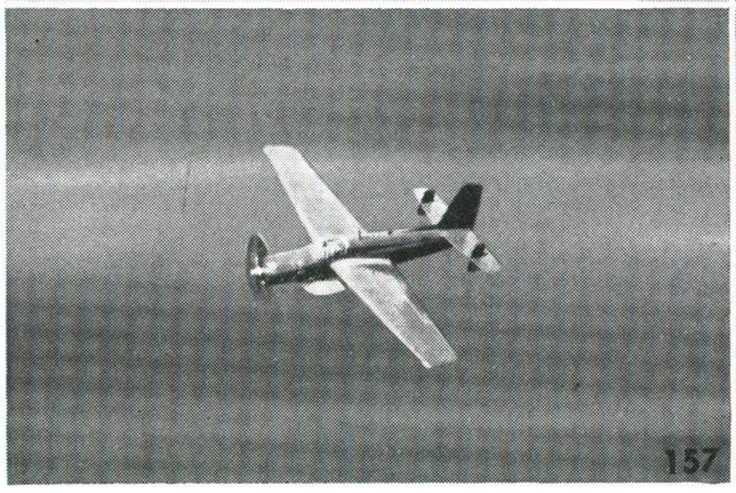

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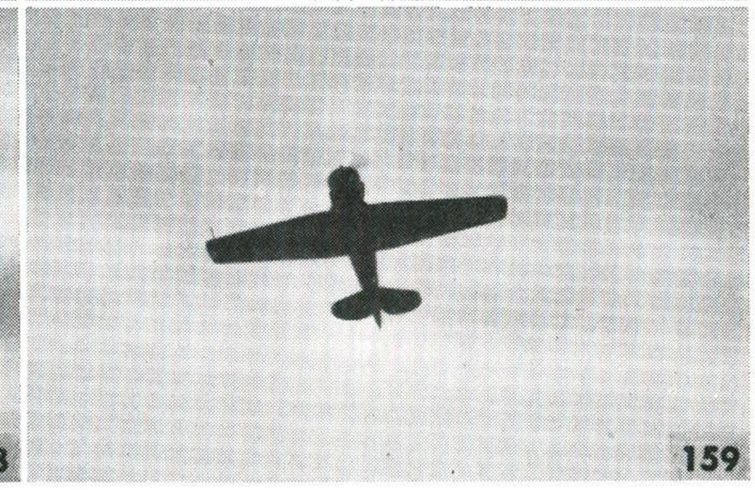

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T34-85





TANKS of the T34 design of one kind or another have been in continuous service with the Russian Army throughout the war with Germany, and since. There are a great number of them still in service today, the majority of which are T34-85s. This model (so designated because it has an 85 mm. gun) is now being used by the North Koreans against United Nations Forces.

One of its most tell-tale recognition features is the long slender unadorned barrel of its gun, which is given an exaggerated reach by the forward setting of the turret. This gun emerges, stilletto-like, from its " garden roller " type mantlet through a short " collar."



In this view the turret has been trained to the rear and shows its large overhang. The ball-type machine-gun mounting is on the right-hand side of the glacis plate whilst the driver's hatch is on the left. Below it is a spare section of track. Details of the suspension are clearly shown in this view.

Turret

The turret of the T34-85 is shaped like a long hexagon or a rather wide coffin. Its sides slope steeply ; it is flat topped and has a large cupola offset to the left and two smaller armoured ventilator covers which are usually at the rear. The mantlet rounds off the front face of the turret though the rear face is abruply chopped off. The turret has a large overhang, but when the gun is traversed to the front the overhang rides so close over the rear deck of the hull that it is not obvious.

Hull

The hull of the T34-85 is flat topped and has sloping sides, tail and glacis plates ; it partially overhangs the tracks. The nose of the hull formed by the glacis and lower nose plates is sharp. Mounted in the glacis plate is a " ball-type " machine-gun mounting and a driver's hatch. But the after deck of the hull is slightly raised and has grilles at the sides and on the top at the rear. Auxiliary fuel tanks are carried, usually in pairs, on the sides and sometimes on the tail plate of the hull at the rear, and two exhaust pipes emerge from and lie upon the tail plate. Both hull and turret are liberally supplied with hand grips for infantry. Track guards are narrow except at the front and rear where they are shaped over idlers and driving sprockets respectively. A small pannier bin is mounted on the forward end of the left-hand track-guard.

Suspension

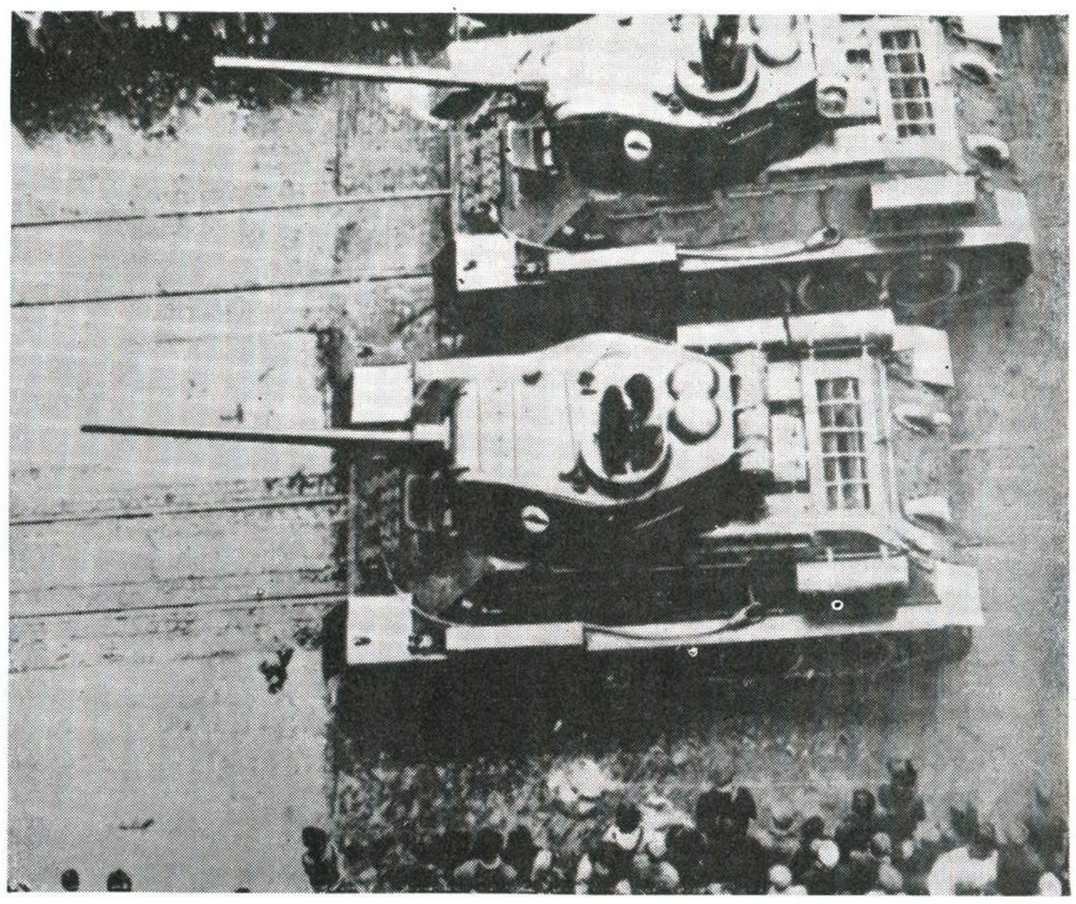
The suspension of this vehicle is remarkable for its absence of track-return rollers. It has five road-wheels which are unevenly spaced. The driving sprocket at the rear is not a sprocket in the normal sense as the driving and guiding horns are built into the track and are engaged by a system of rollers in the driving sprocket itself. The track rides back on the tops of the road wheels.

In general the T34-85 has a low, squat form with its long hexagonal turret placed well forward, from which the long stiletto-like gun barrel projects.

Overleaf are a number of illustrations of the T34-85 specially drawn by Mr. Frank Wootton, which capture completely the character of this much used Russian medium tank.

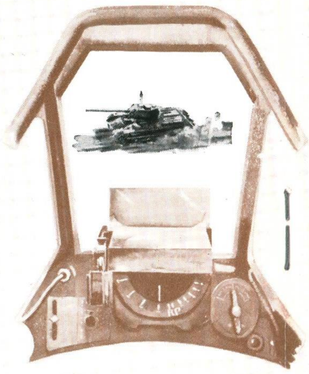
TECHNICAL DATA

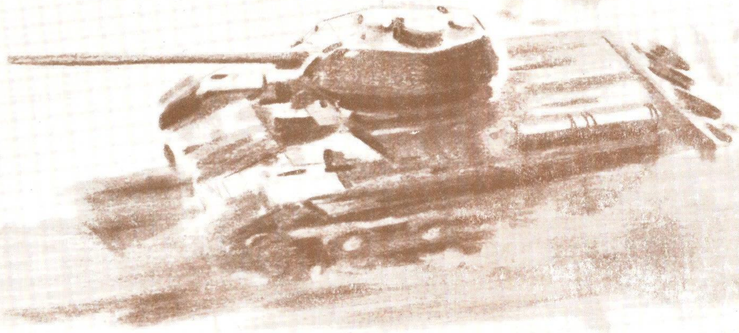
Length : (not including gun)	19 ft. $5\frac{1}{2}$ ins.
Width :	8 ft. $2\frac{1}{2}$ ins.
Height :	7 ft. 9 ins.
Width of Track :	19 ins.
Engine :	One 500 h.p. Diesel
Top Speed :	25 m.p.h.
Crew :	Five
Weight :	$29\frac{1}{2}$ tons



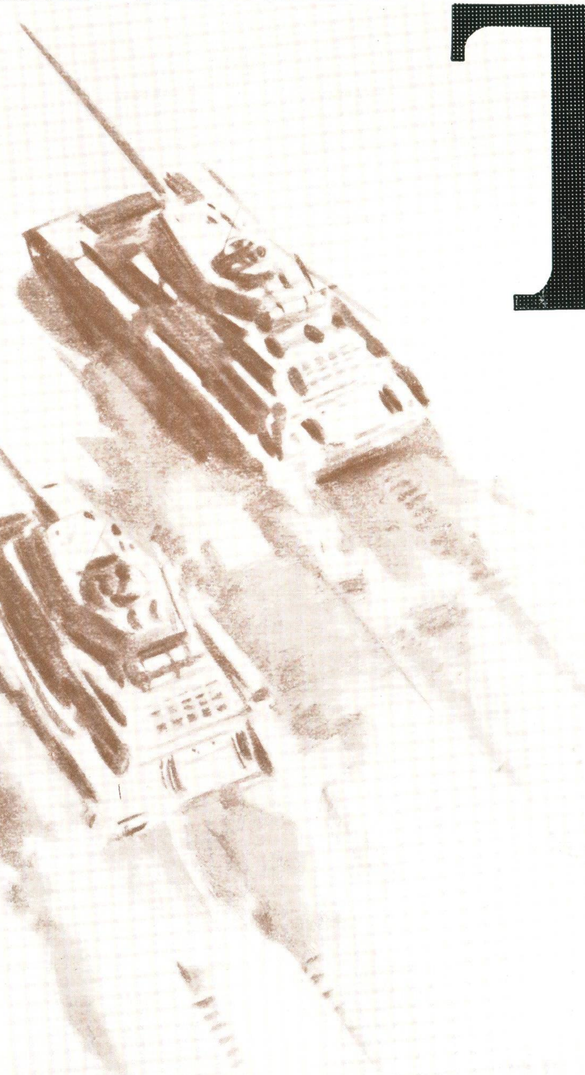
Note hexagonal turret shape and details of cupolas. Also grilles on rear deck and twin exhaust pipes on tail plate. More auxiliary fuel tanks may be carried than are shown in this view : Note that two are carried on the turret rear face. Observe the slender proportions and long reach of the gun barrel.

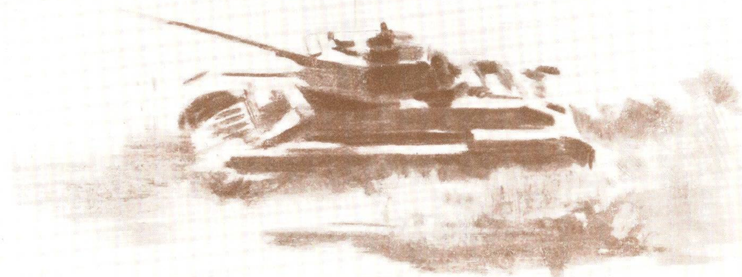


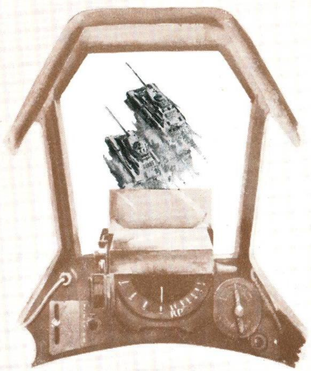


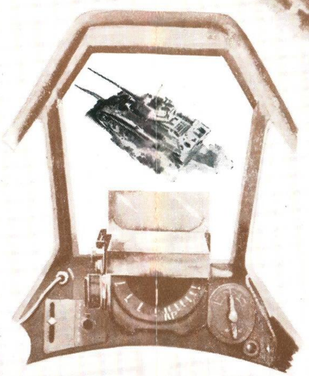


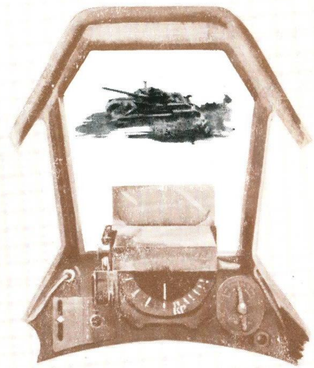
T34-85

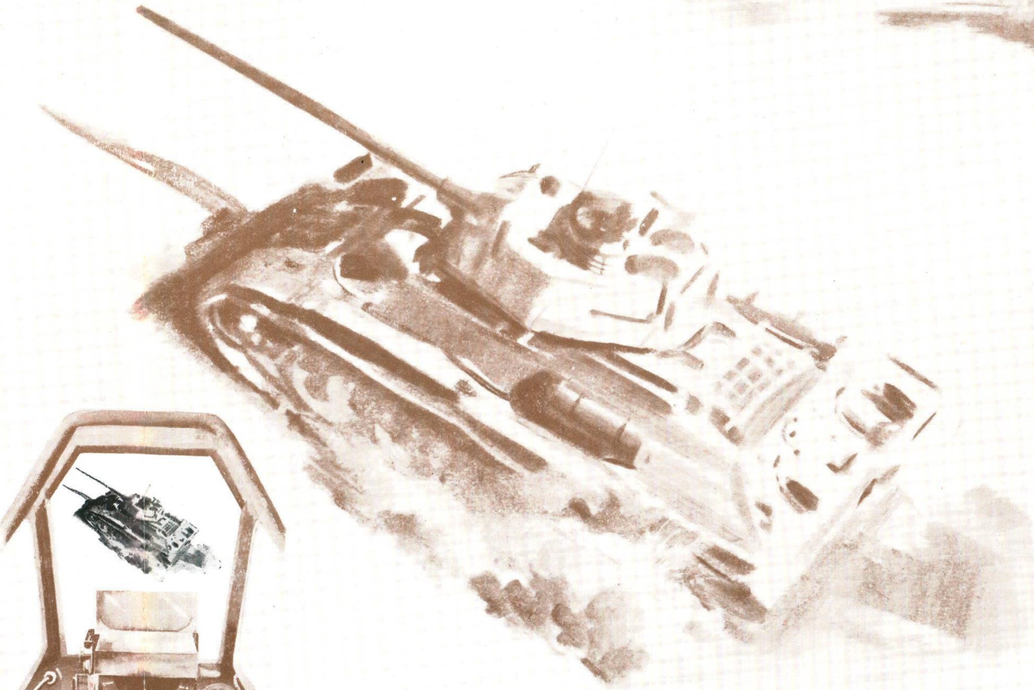






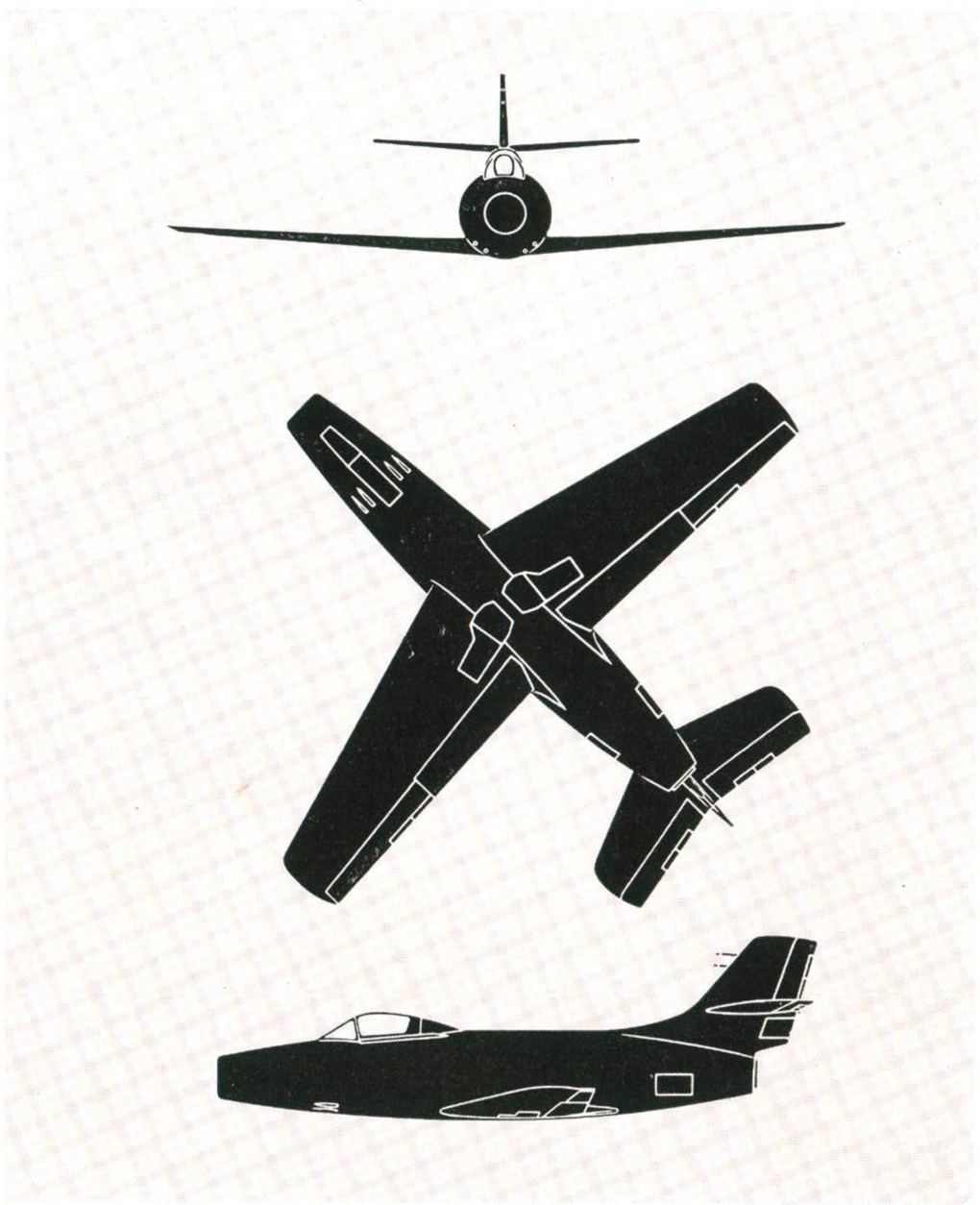


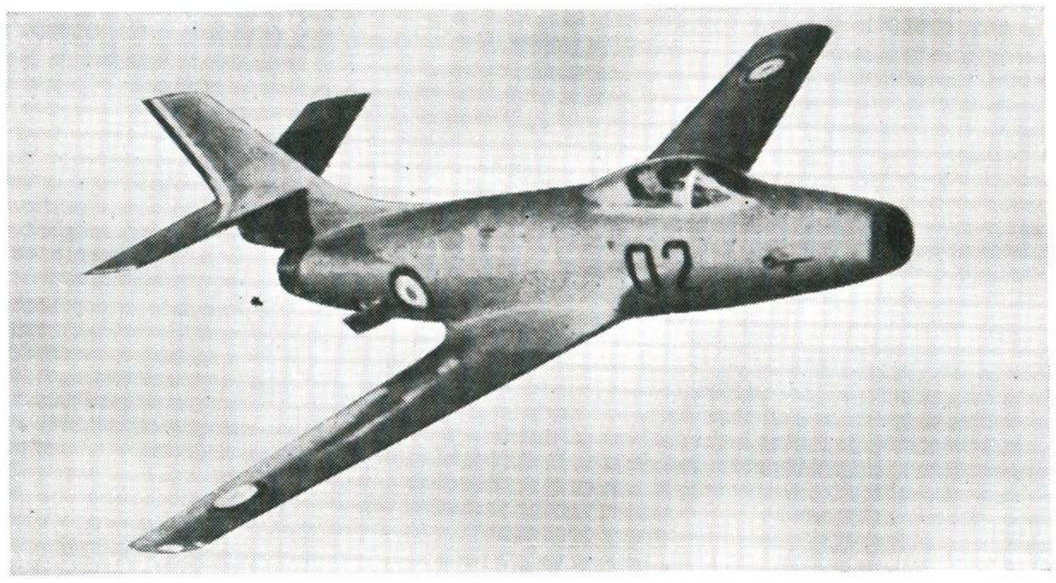




by FRANK WOOTTON

The 'OURAGAN' on Test for French Air Force

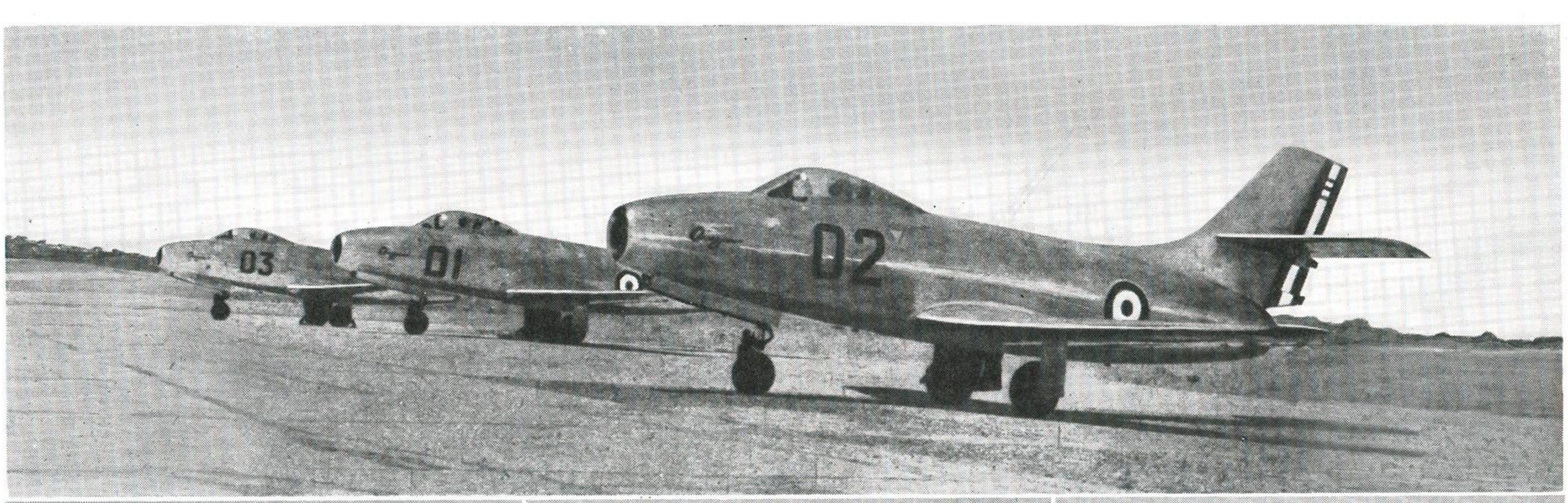


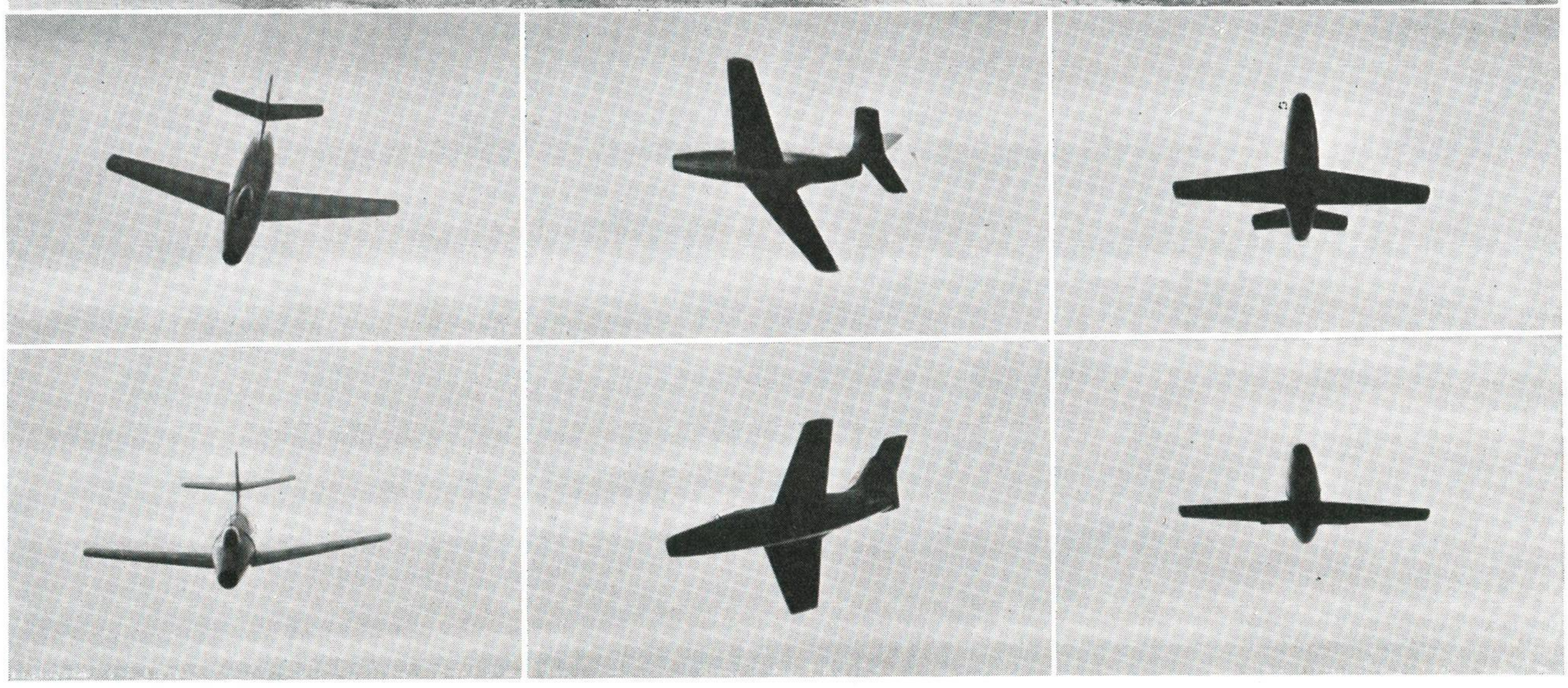


The Dassault MD.450 Ouragan is the first of France's post-war jet-fighters to reach production. It is built to the familiar formula of the jet "tube", midships wing and cruciform tail. The symmetrical fuselage has its greatest girth at about two-thirds its length. The large, slightly swept, tapered and blunted wing is over half-way back. The fin and rudder is back-swept and blunted at the top, and cutaway to clear the jet pipe. It is faired into the fuselage by its leading edge. The broad chord tailplane is swept, tapered and blunted.

TECHNICAL DATA

Span :	39 ft. 10 ins.
Length :	35 ft. 6 ins.
Engine :	Hispano Nene
Armament :	Four cannon firing forward under nose.
Remarks :	Air brakes are fitted low down on the rear of the fuselage. The rear section of the canopy is of metal.



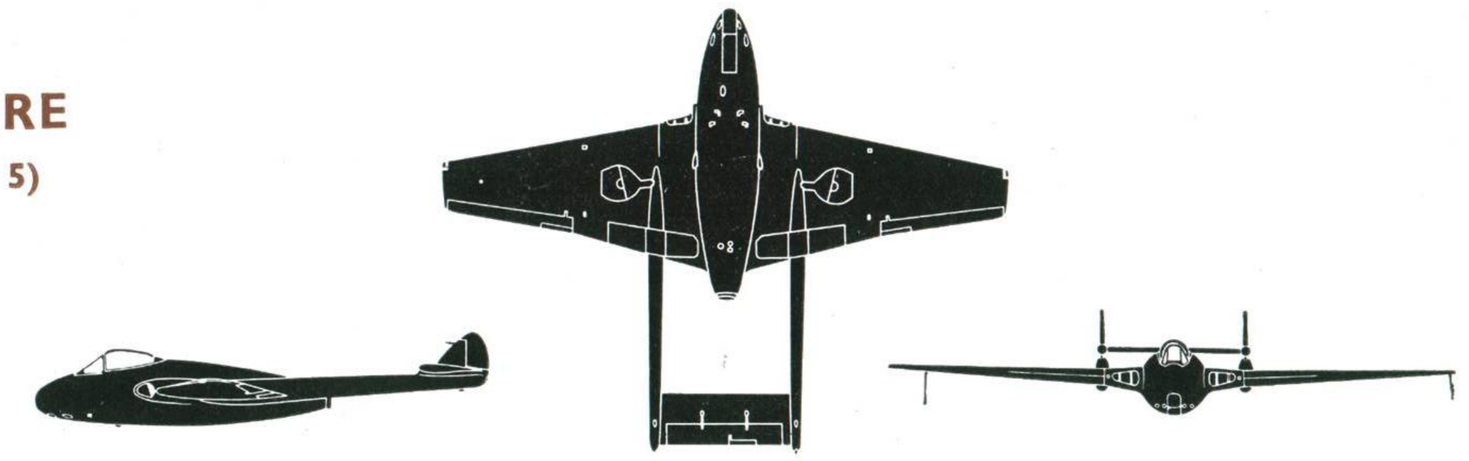


'BOOM-TYPE' TUTOR

With the aid of the 3-view silhouette key, deduce the identity of each of the aircraft in the photographs and sillographs on the following two pages, and list your results. Ensure correct identity by as many points as possible before checking your list with the results on the rear cover. Instructors can improve the scope of this tutor by preparing additional sheets for deduction by students.

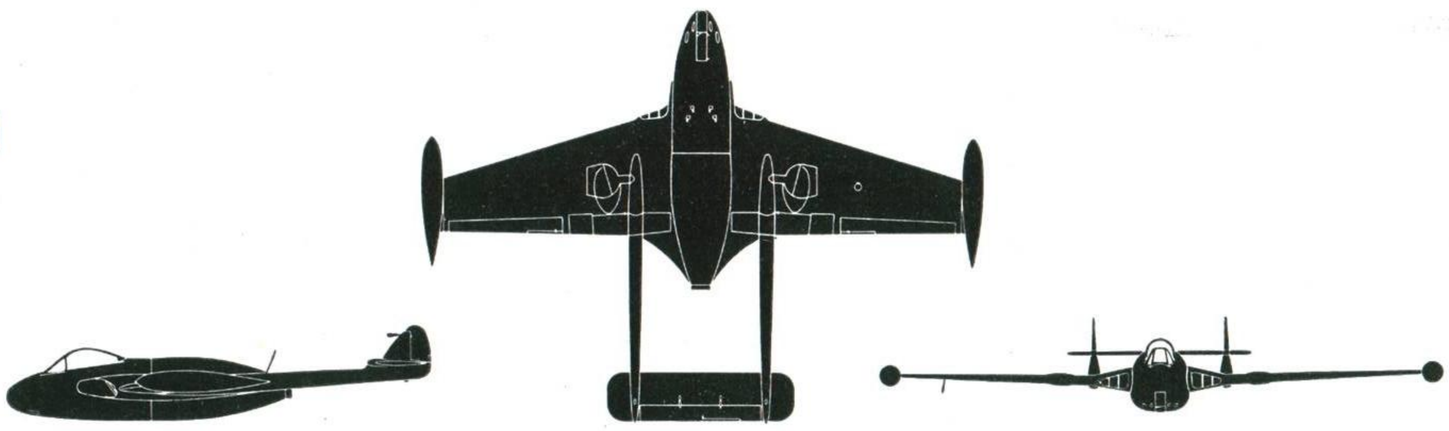


VAMPIRE
(FB Mk. 5)



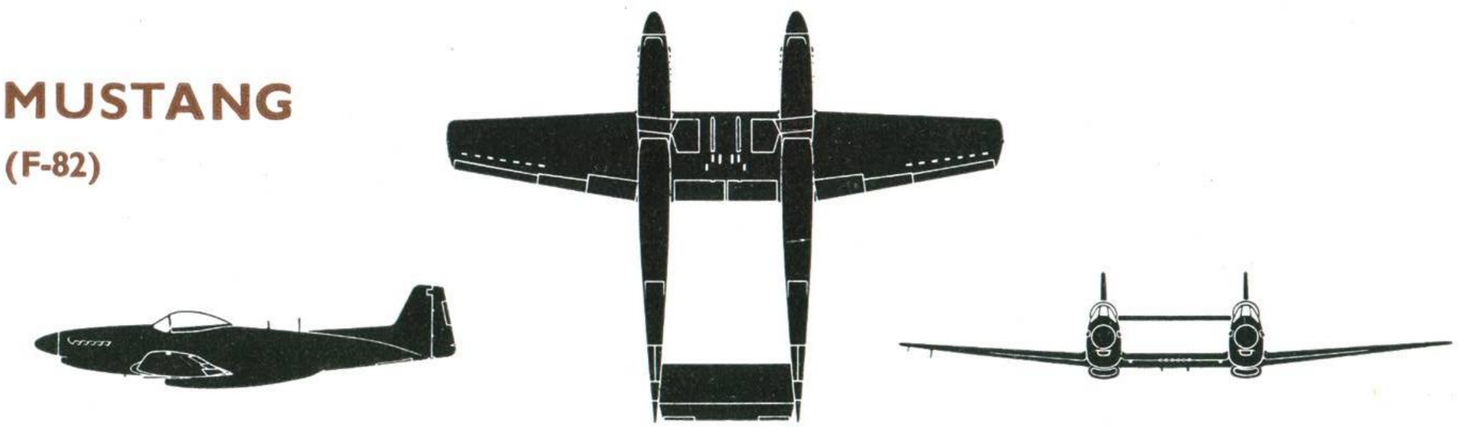


VENOM
(FB Mk. 1)



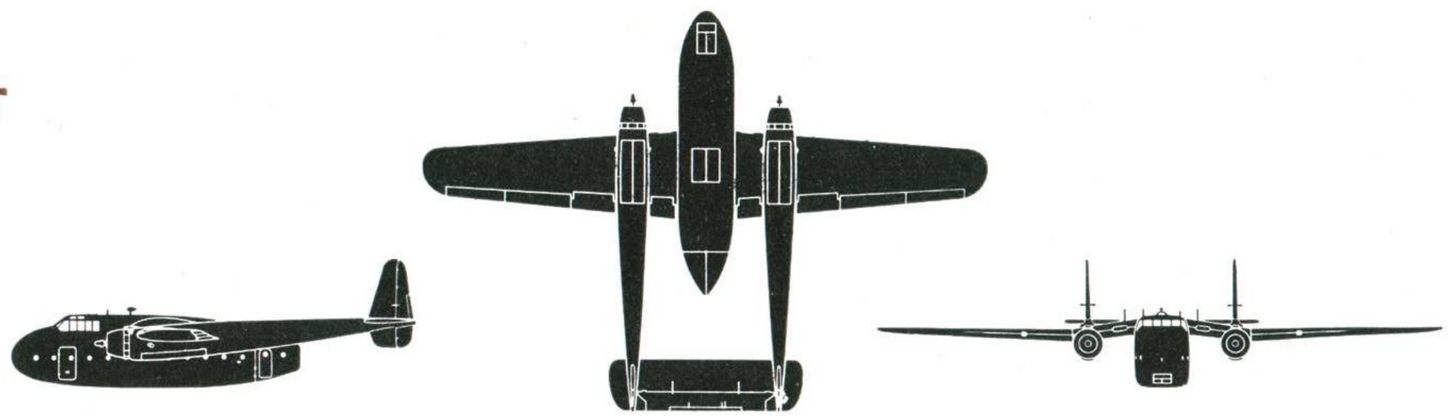


TWIN MUSTANG
(F-82)



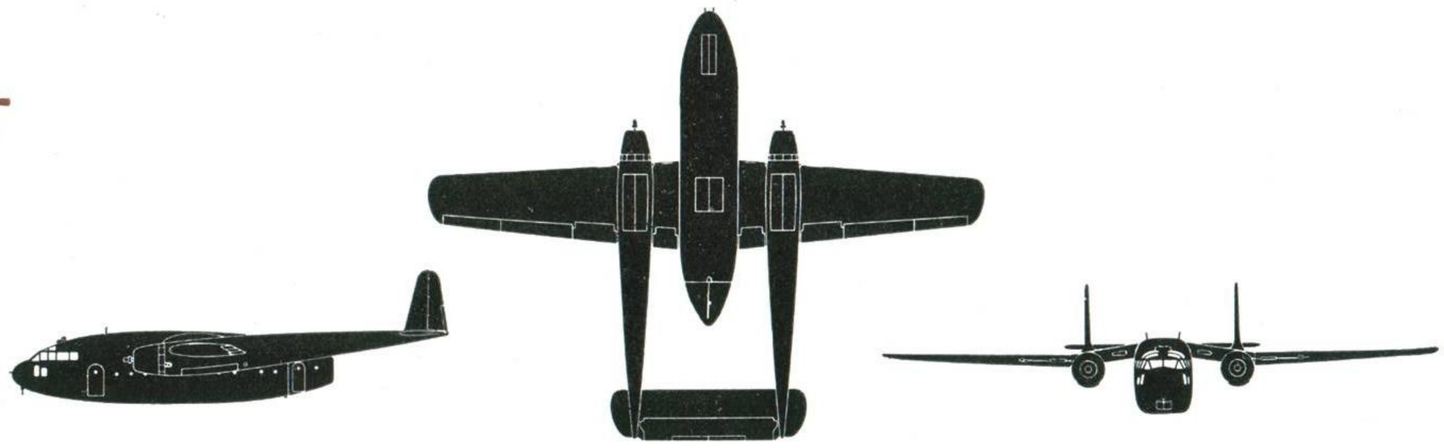


PACKET
(C-82)



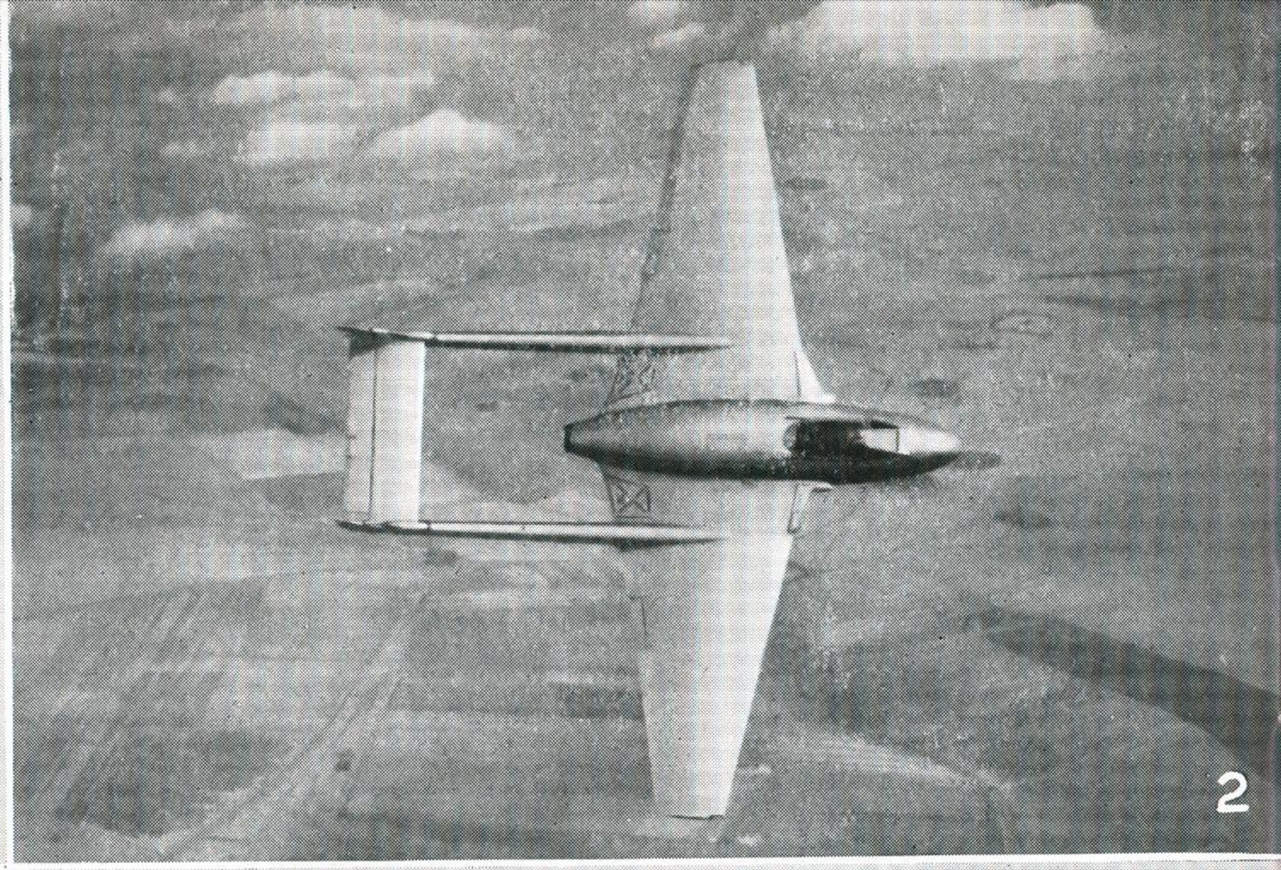


PACKET
(C-119)

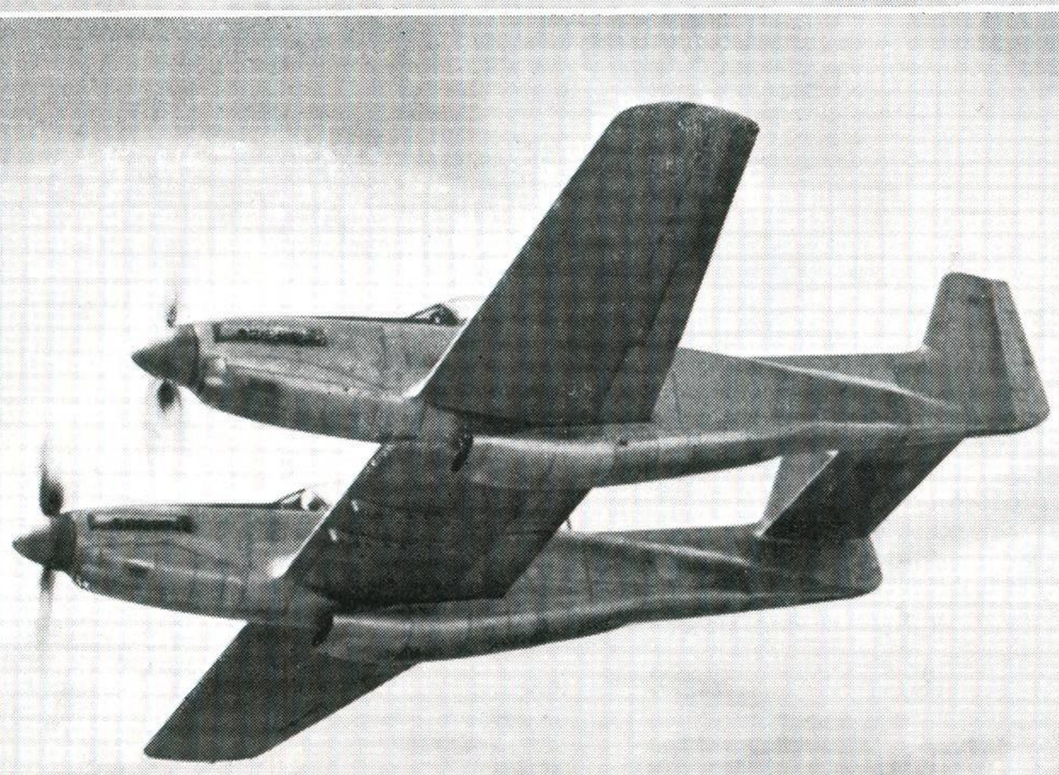




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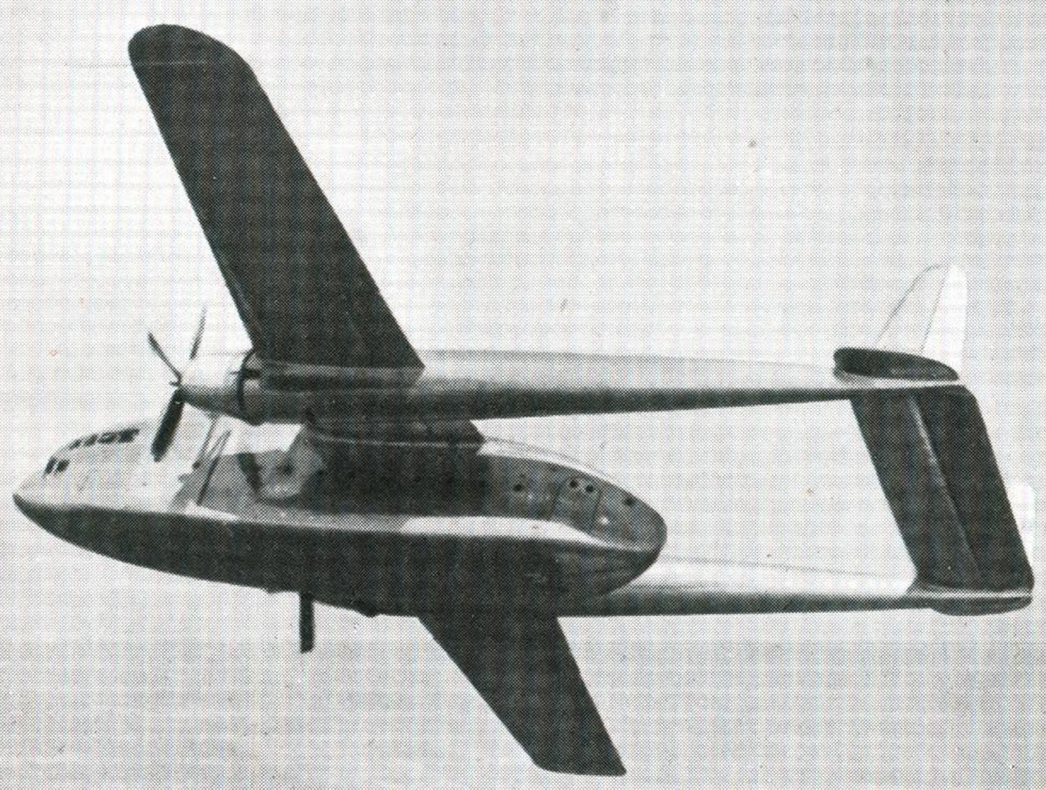
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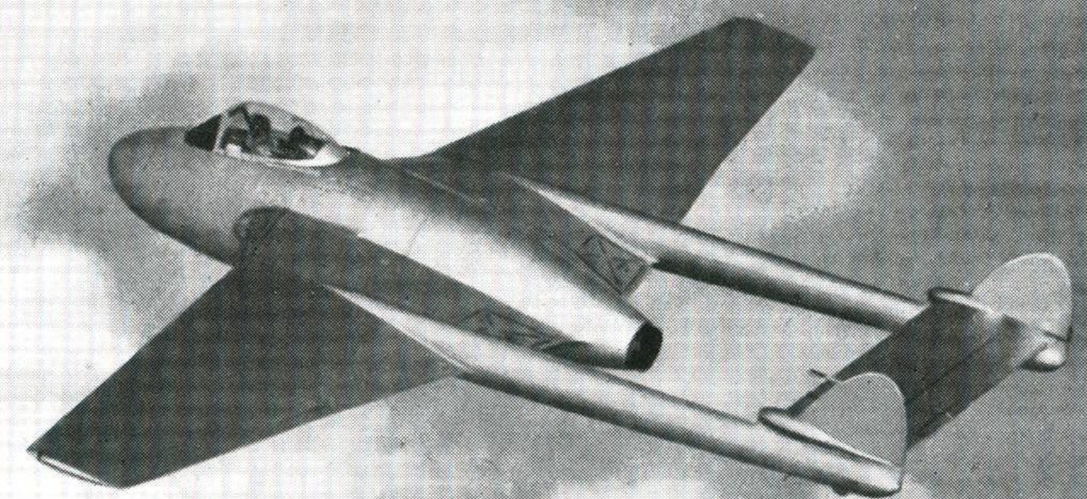
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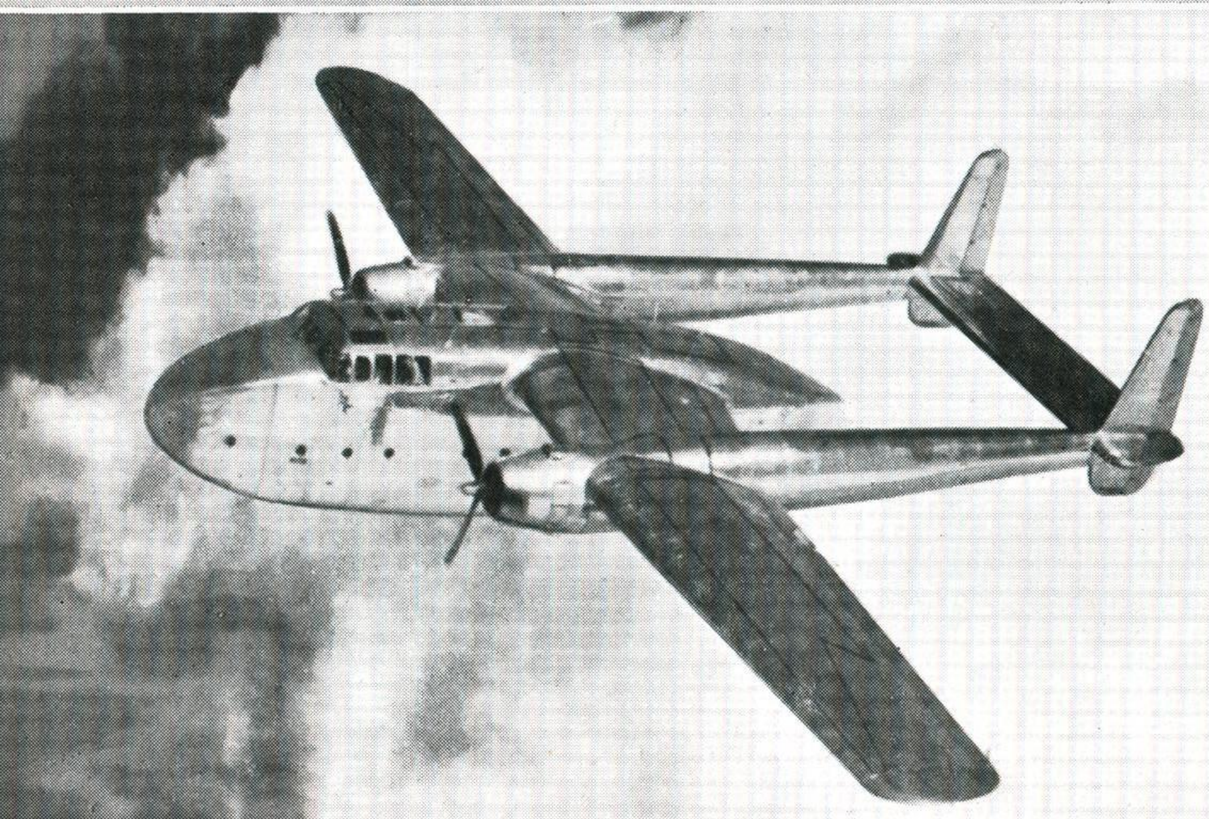
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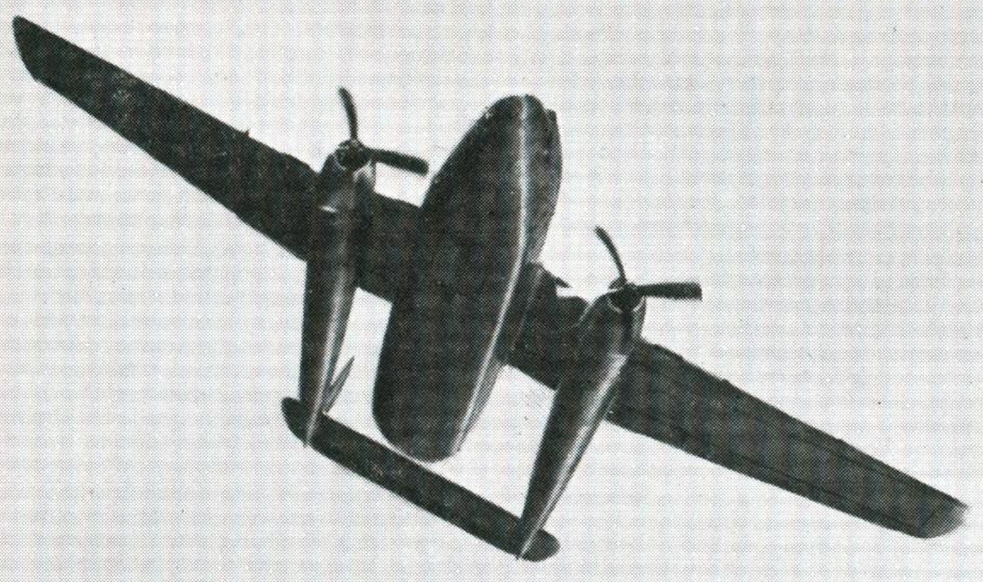
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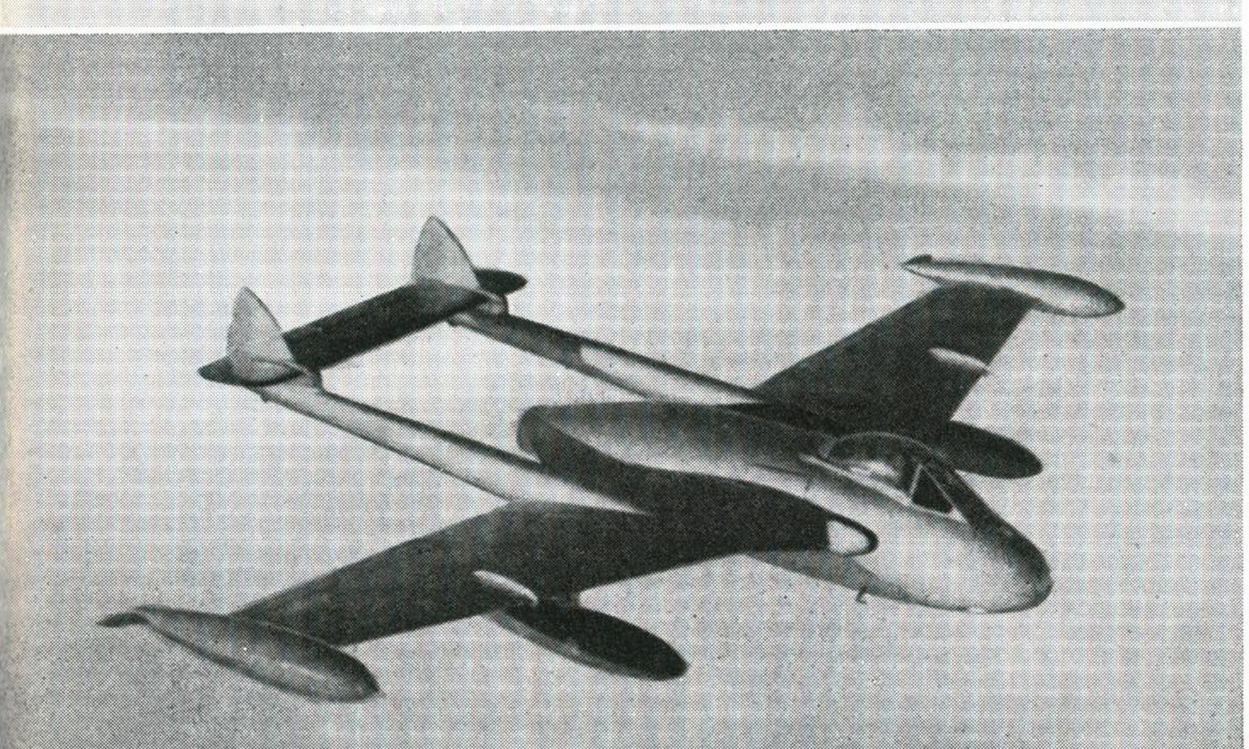


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11











1



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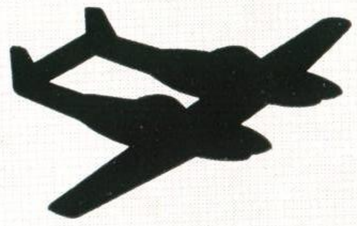
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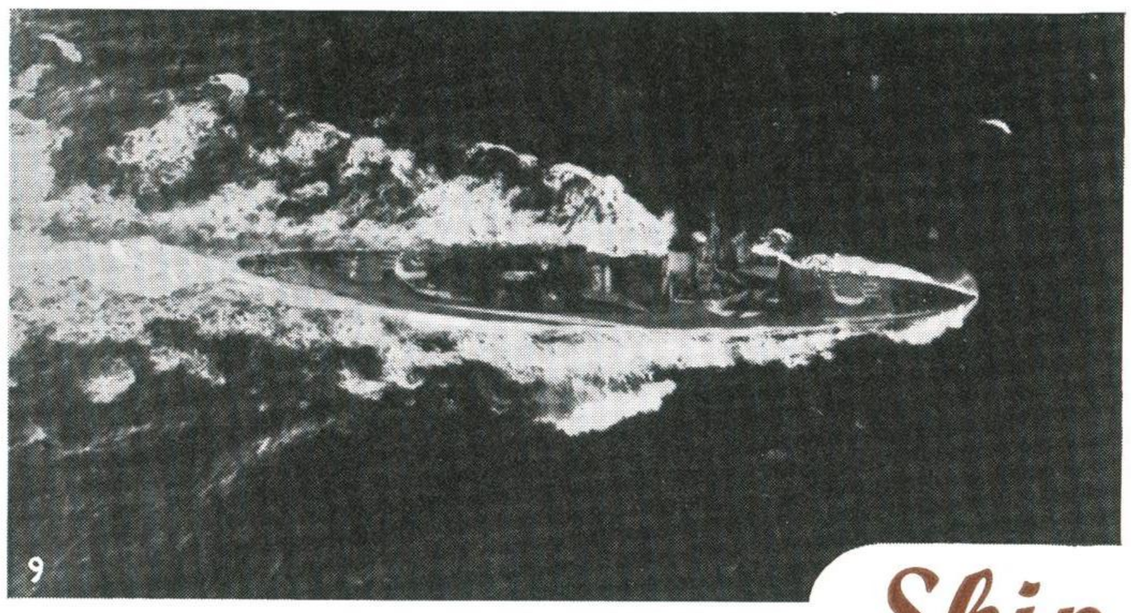


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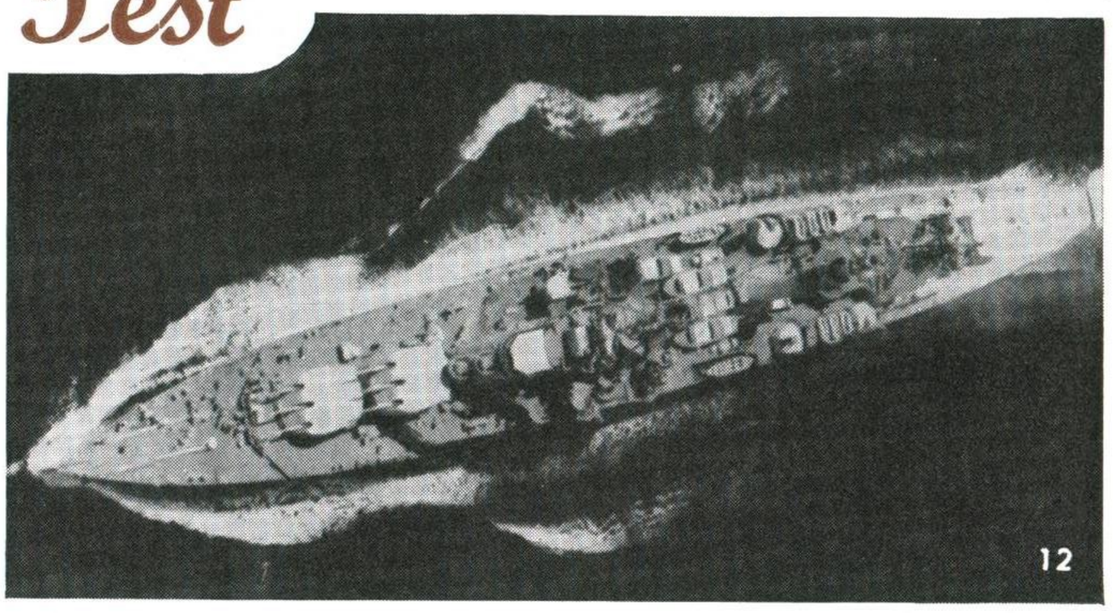
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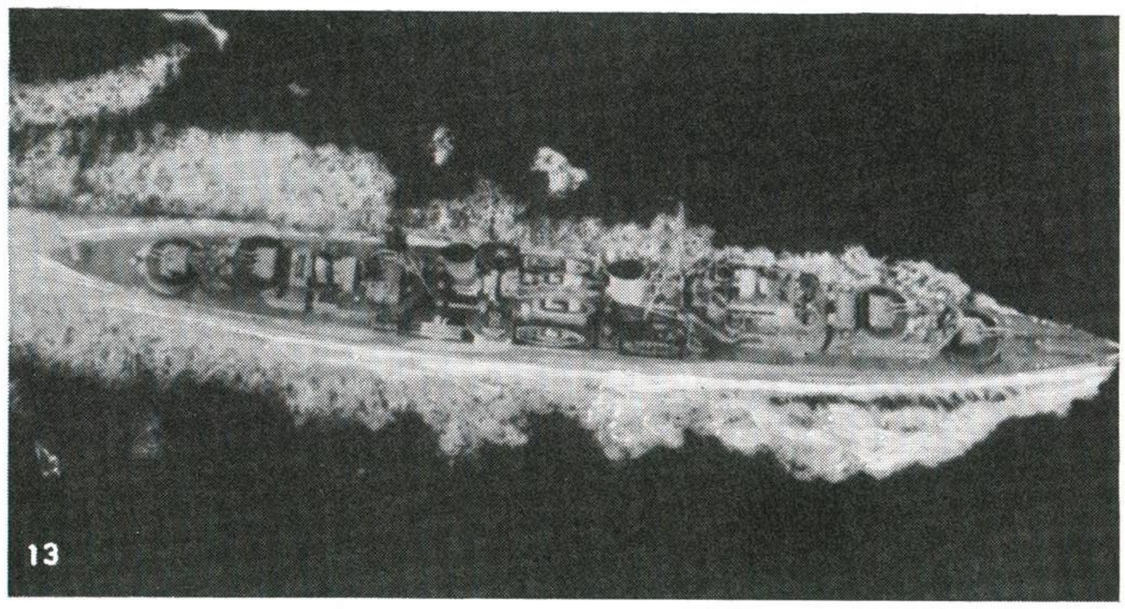
Ship Test

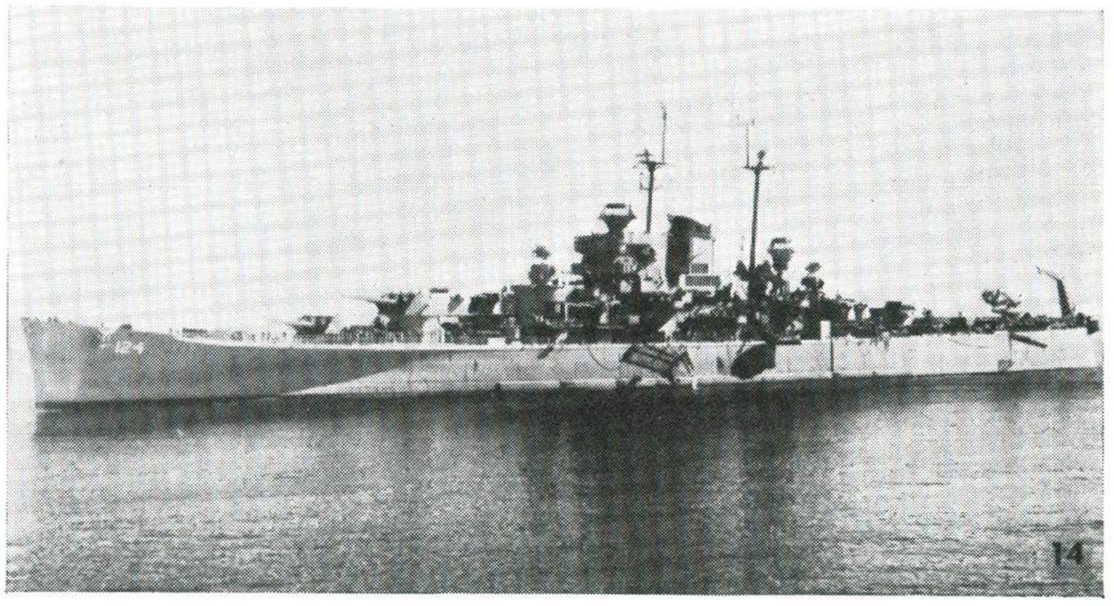

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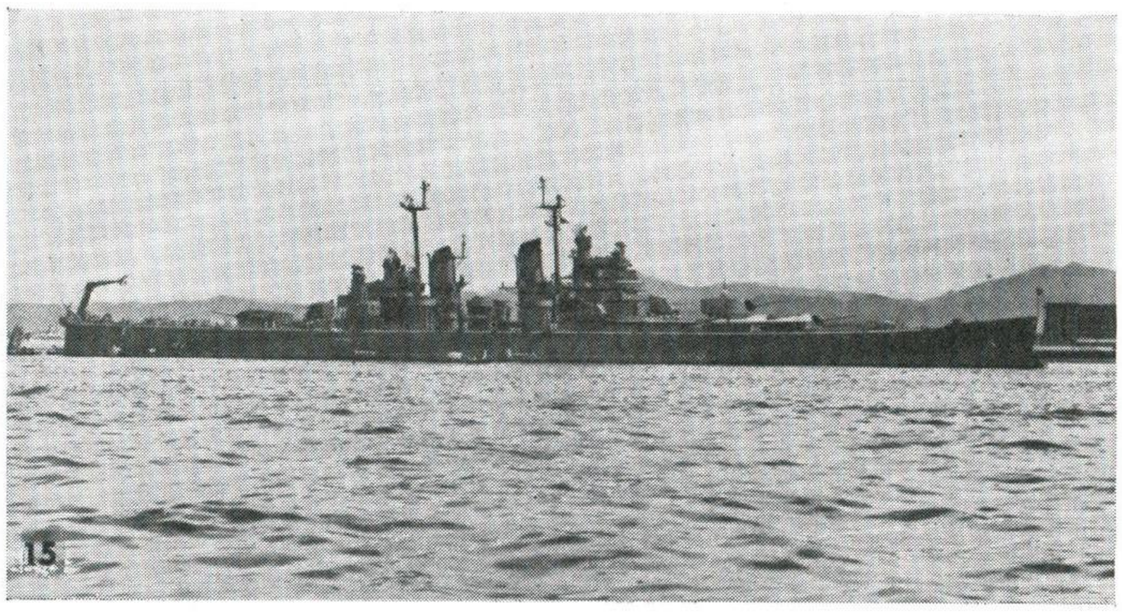

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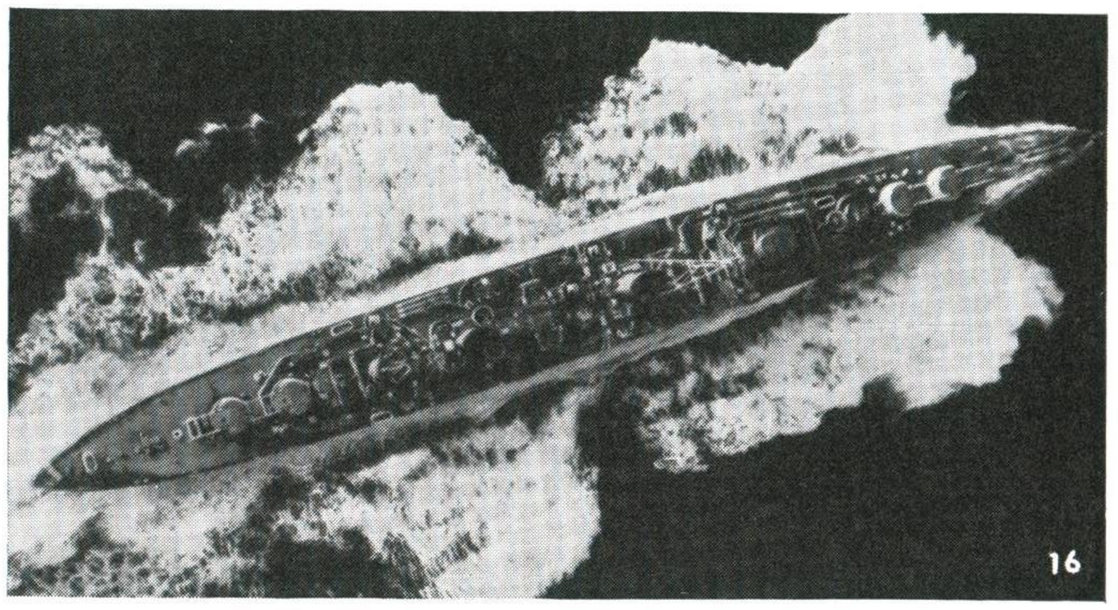

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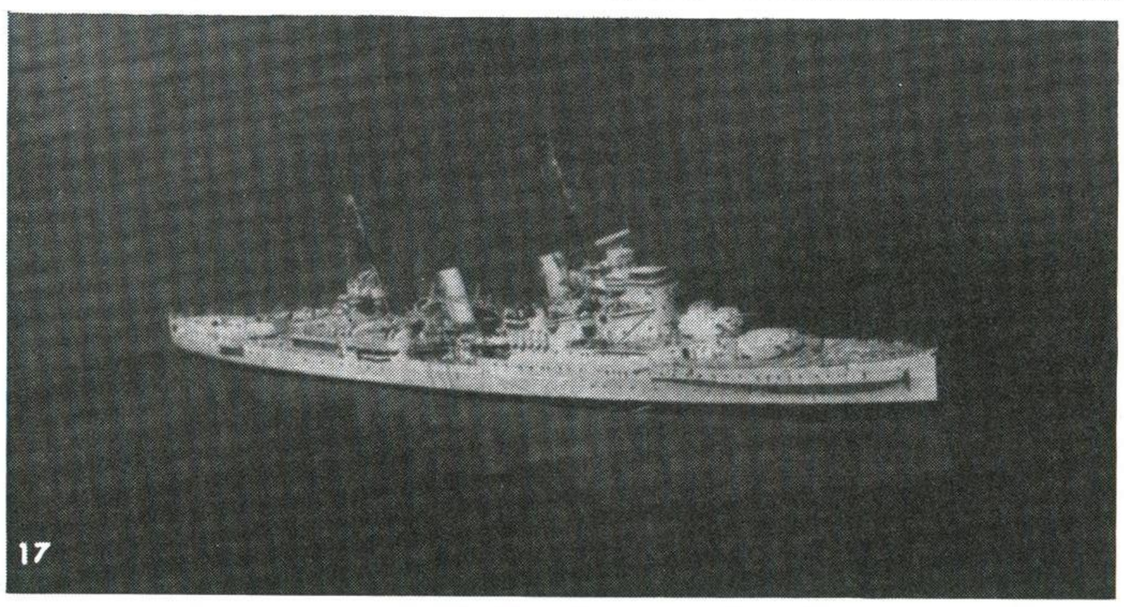

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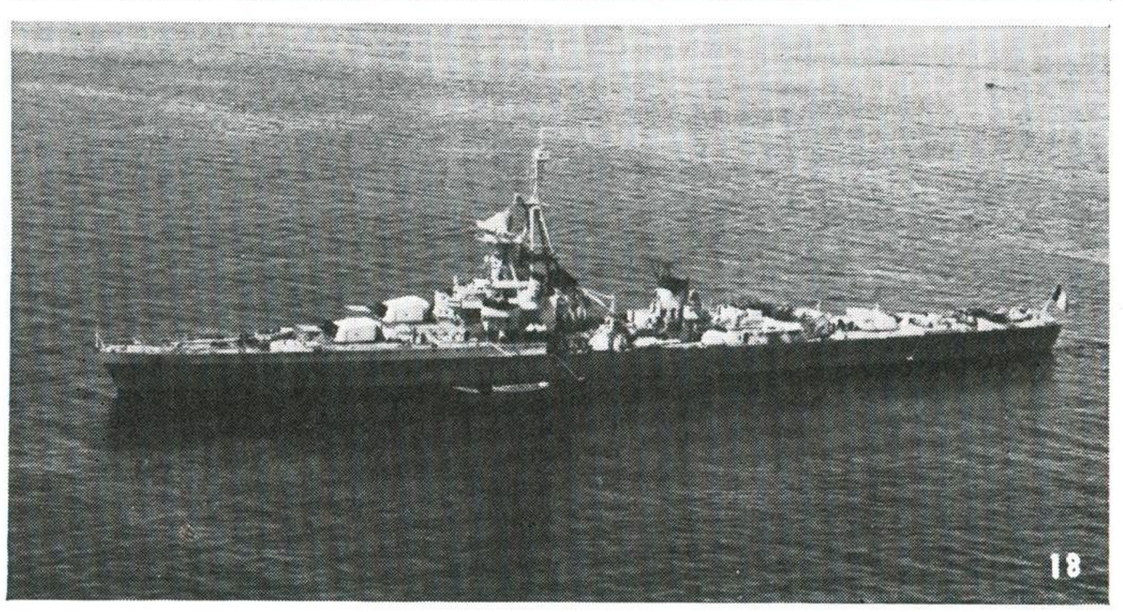

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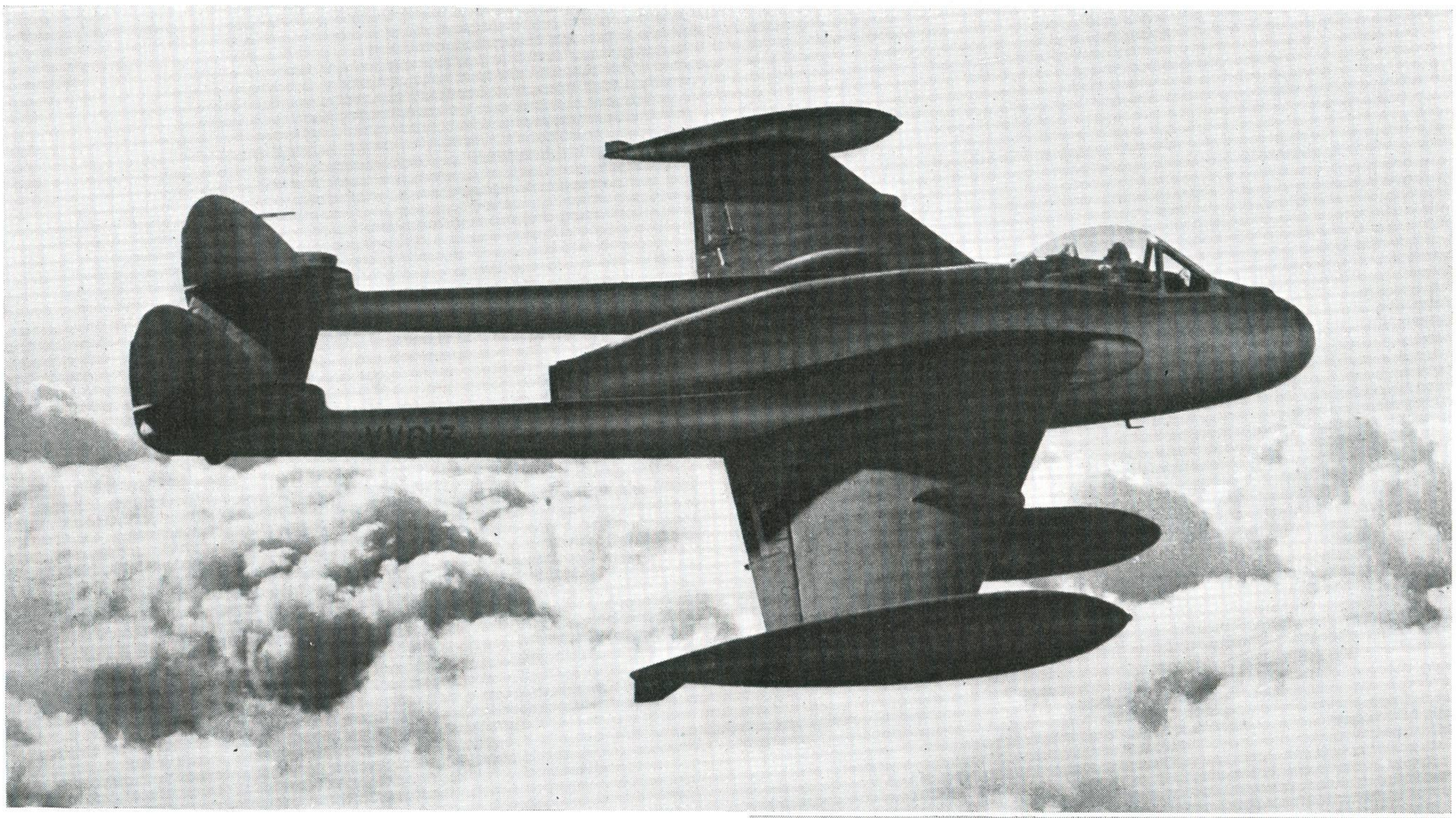

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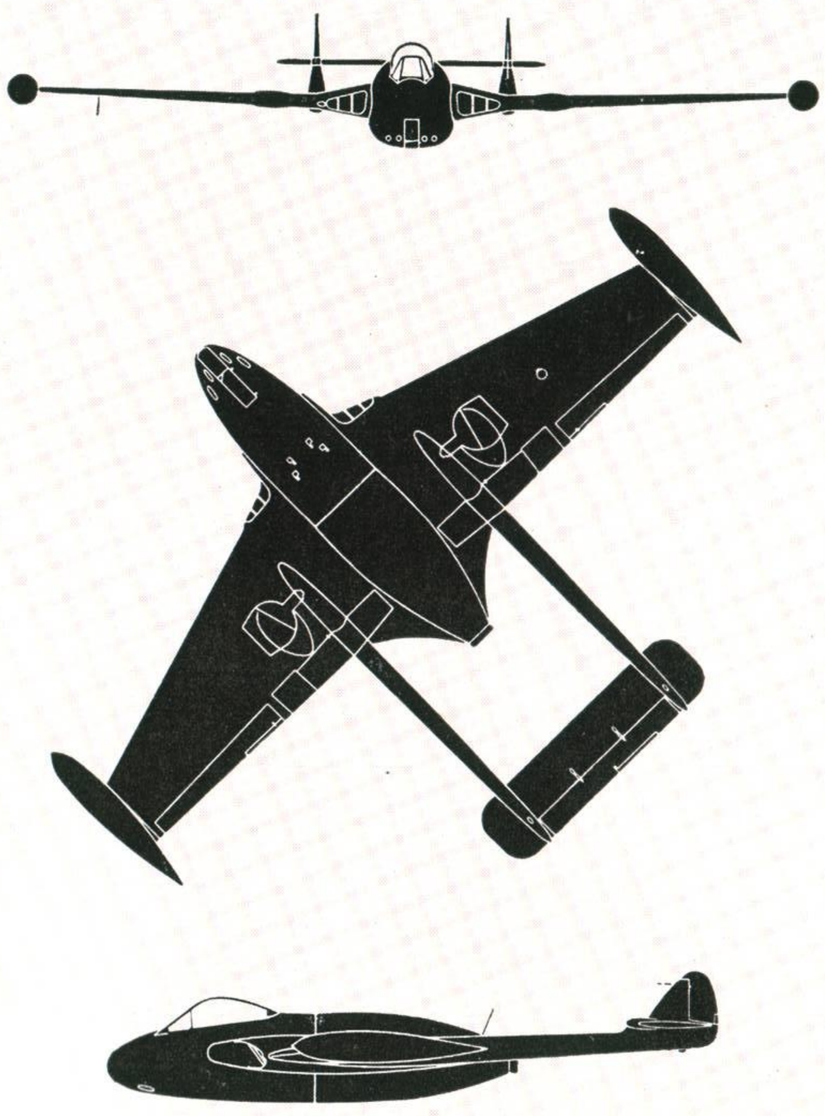
VENOM on Test for R.A.F.

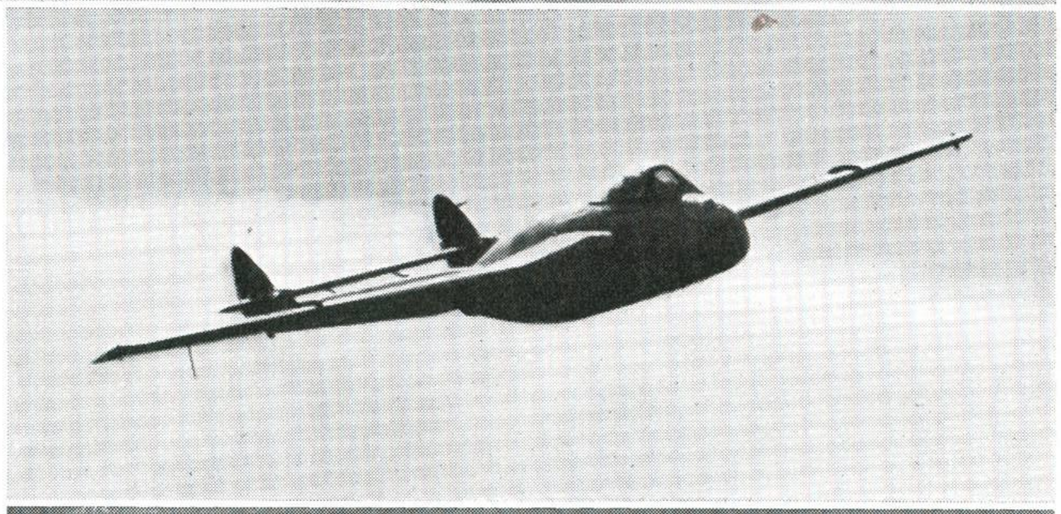


We show two possible alternative appearances for the De Havilland Venom which is now in large scale production for the Royal Air Force. This " most aggressive looking insect " looks even more so with two underwing tanks, but loses much of its venomous aspect without them. It is expected that it will generally wear only its tip tanks.

TECHNICAL DATA

Wing Span :	41 ft. 9 ins.
Length :	31 ft. 5 ins.
Engine :	One Ghost 2 turbojet
Armament :	Four cannon in nose of nacelle.

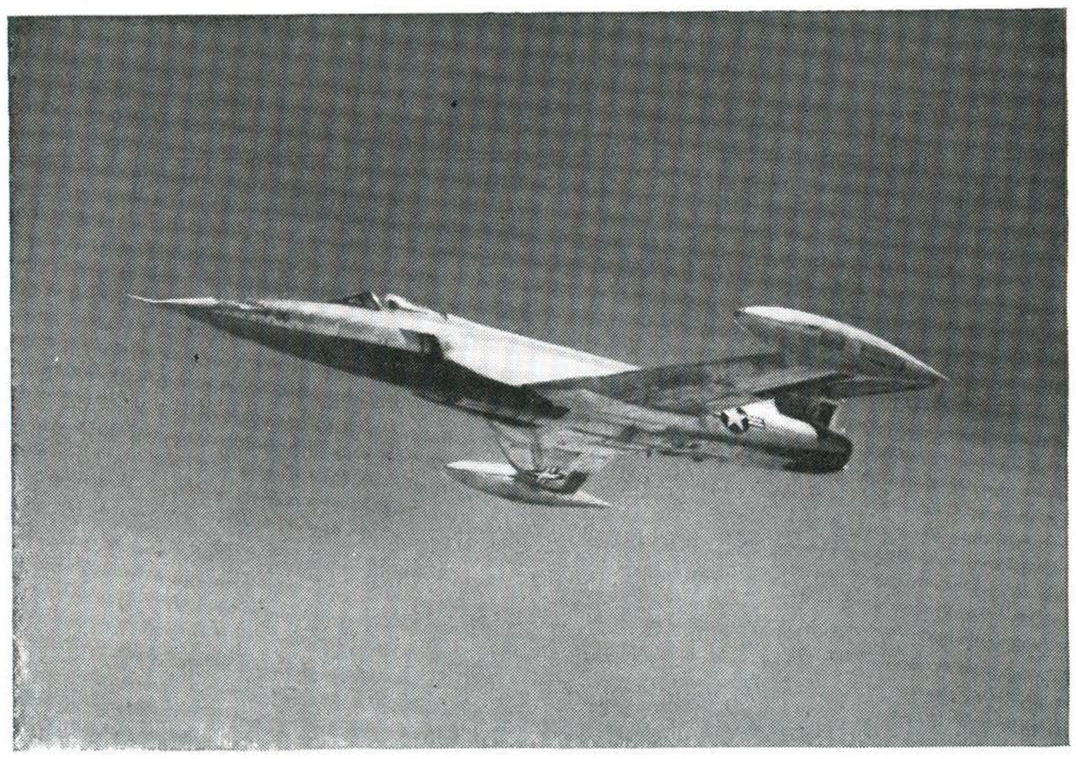




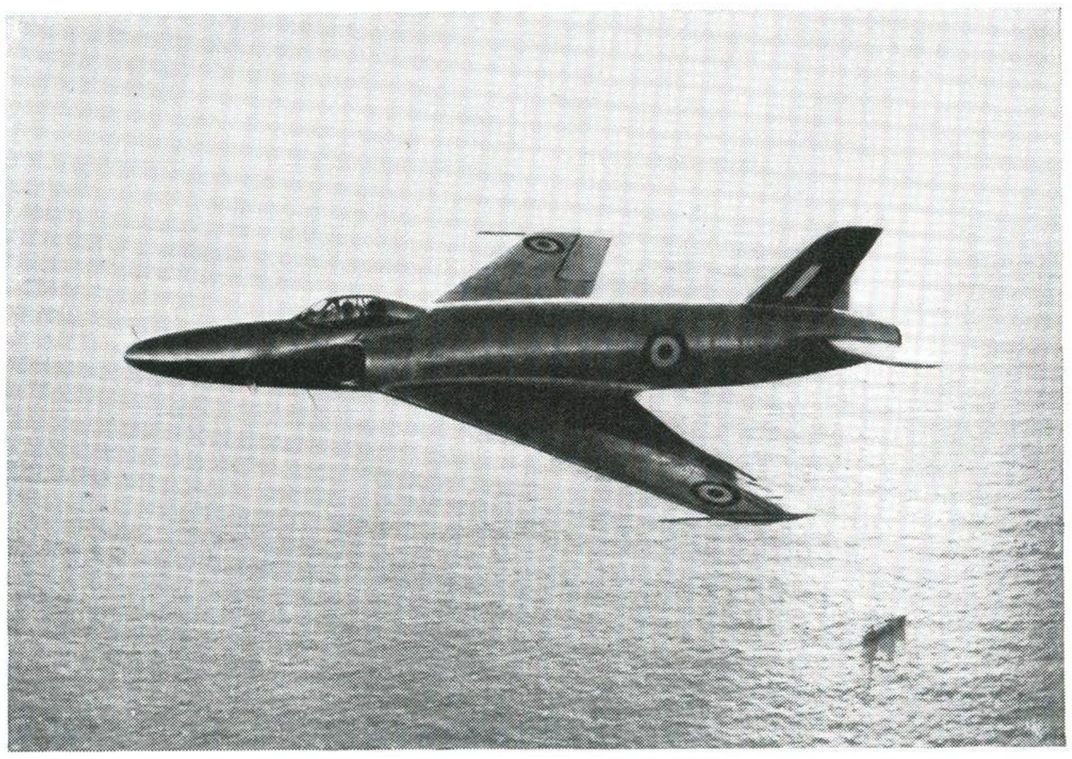


EARLY WARNING!

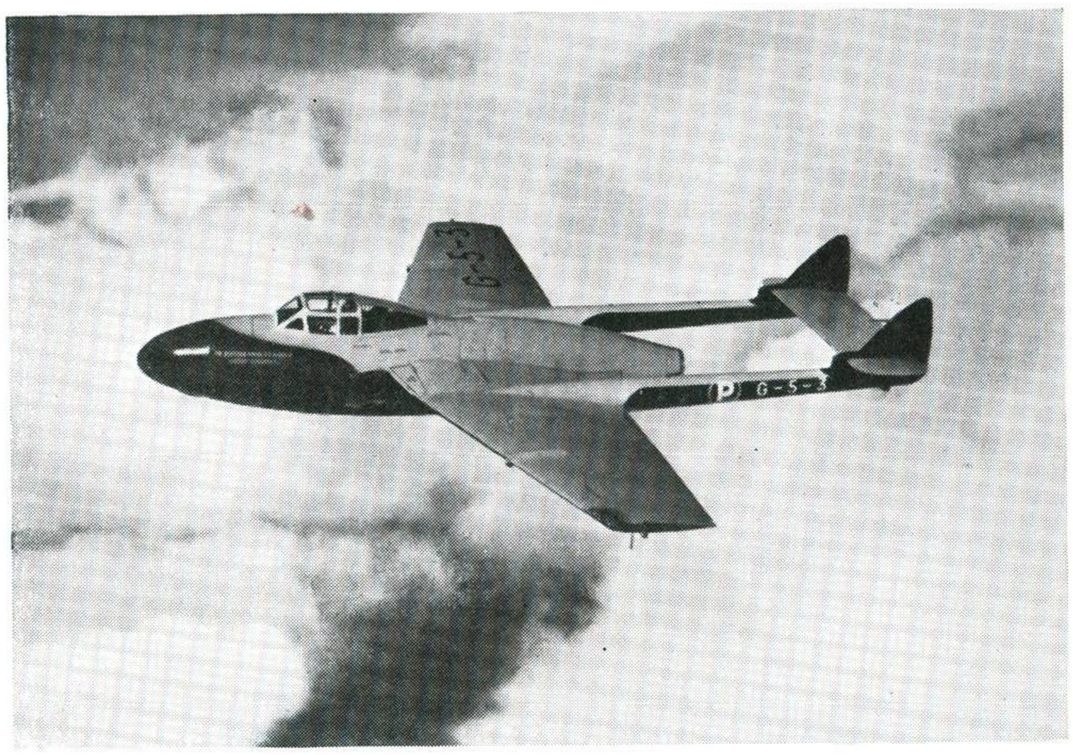
A glimpse of new types of aircraft which show promise of coming into Service, and of older and familiar types in new guises



Nifty Ninety or Lockheed XF-90 experimental twin-jet fighter (though " single " in appearance) now undergoing evaluation trials for U.S.A.F. It features a very short spread of swept-wing ; a cruciform tail unit (also swept) and twin tail pipes. Span : 40 ft. 0 ins.



Swift as an Arrow. The family resemblance of the Supermarine 535 to the Vickers Attacker is not disguised by " sweep ". As we go to press, a production order has been announced for the Swift, which is a development of the 535 shown here. Span : 31 ft. 8 ins.



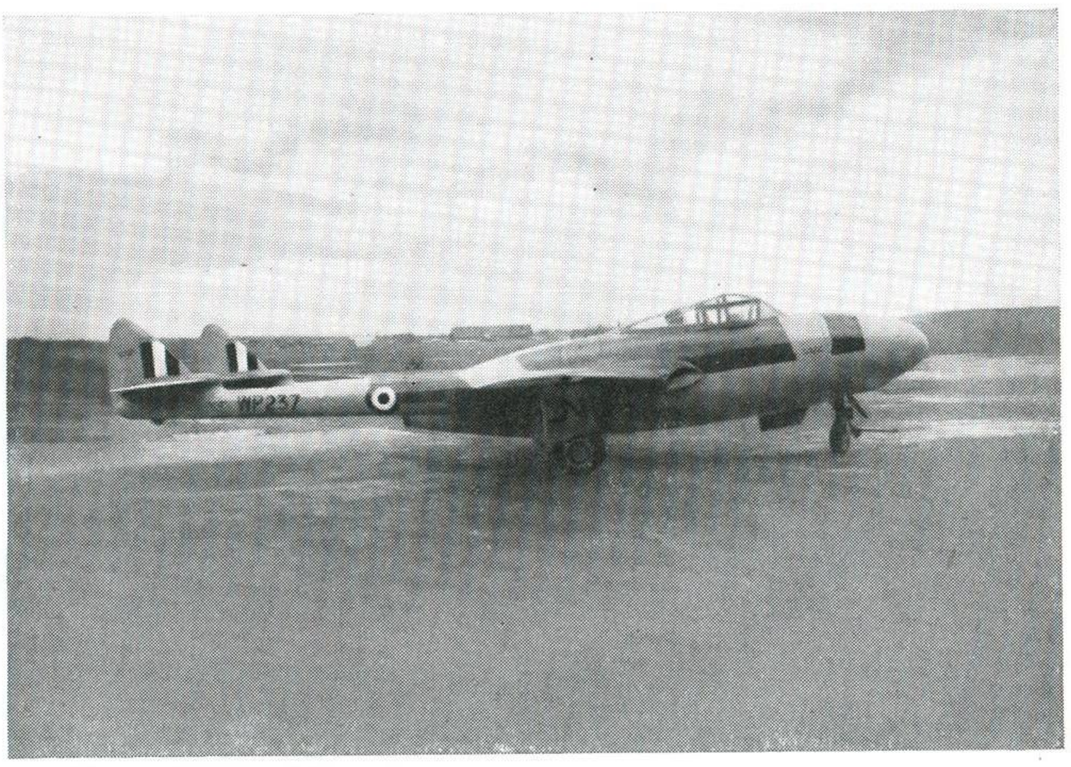
Venom Venture. A two-seat night-fighter development of the De Havilland Venom. The lengthened nacelle and the return to the characteristic " moth wing " fin and rudder are noteworthy. It is called the Venom NF Mk. 2. Span : 41 ft. 9 ins.



Martin Magnification. The Martin 404 is a longer and pressurized version of the 202. The fin and rudder shape has been modified slightly. The two radial engines are Pratt and Whitney Double Wasps. Span : 93 ft. 3 ins.



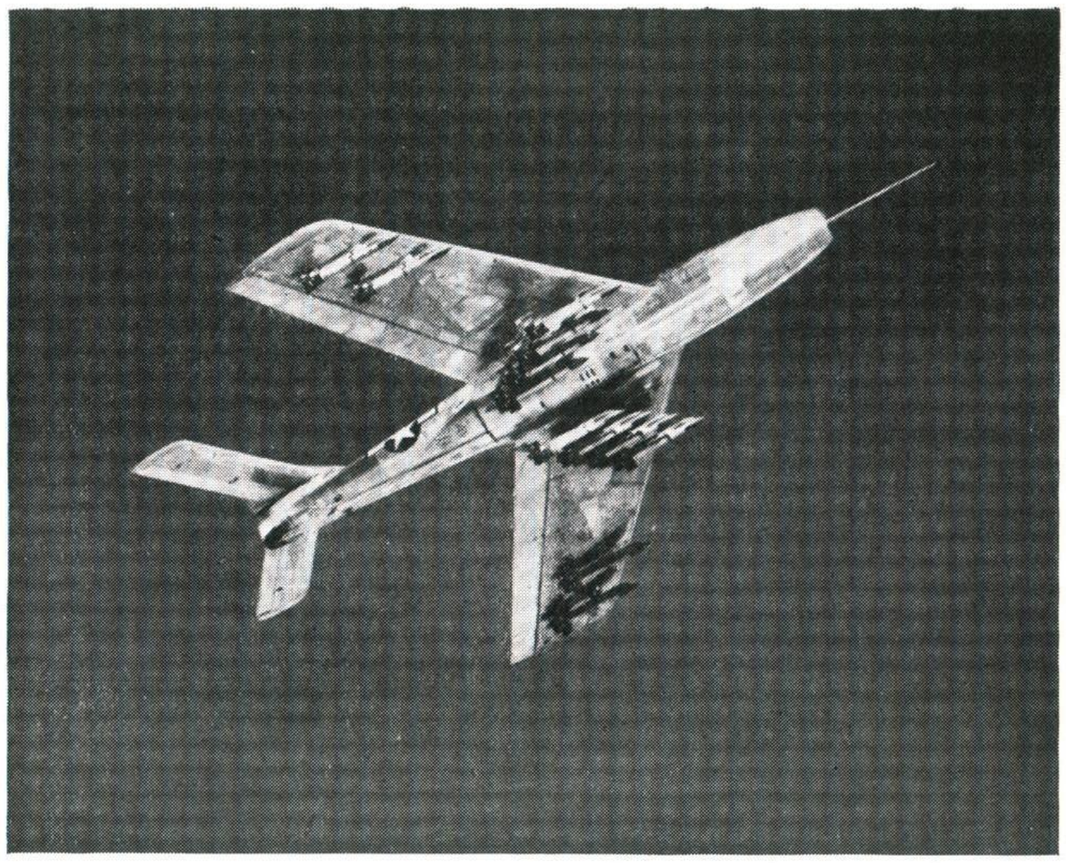
Fin Folder or, North American AJ-1 Savage. A three-engined bomber in the " twin " group. Two Double Wasp radials are visible but a turbojet in the fuselage for combat spurts is not. The elaborate folding is for carrier operating. Span : 71 ft. 0 ins.



Dark Vampirism. This is the two-seat night fighter production version of the D.H. 113. Known as the Vampire NF Mk. 10, it features a longer nacelle, a larger cockpit canopy and refinement of fin-shape. Span : 38 ft.



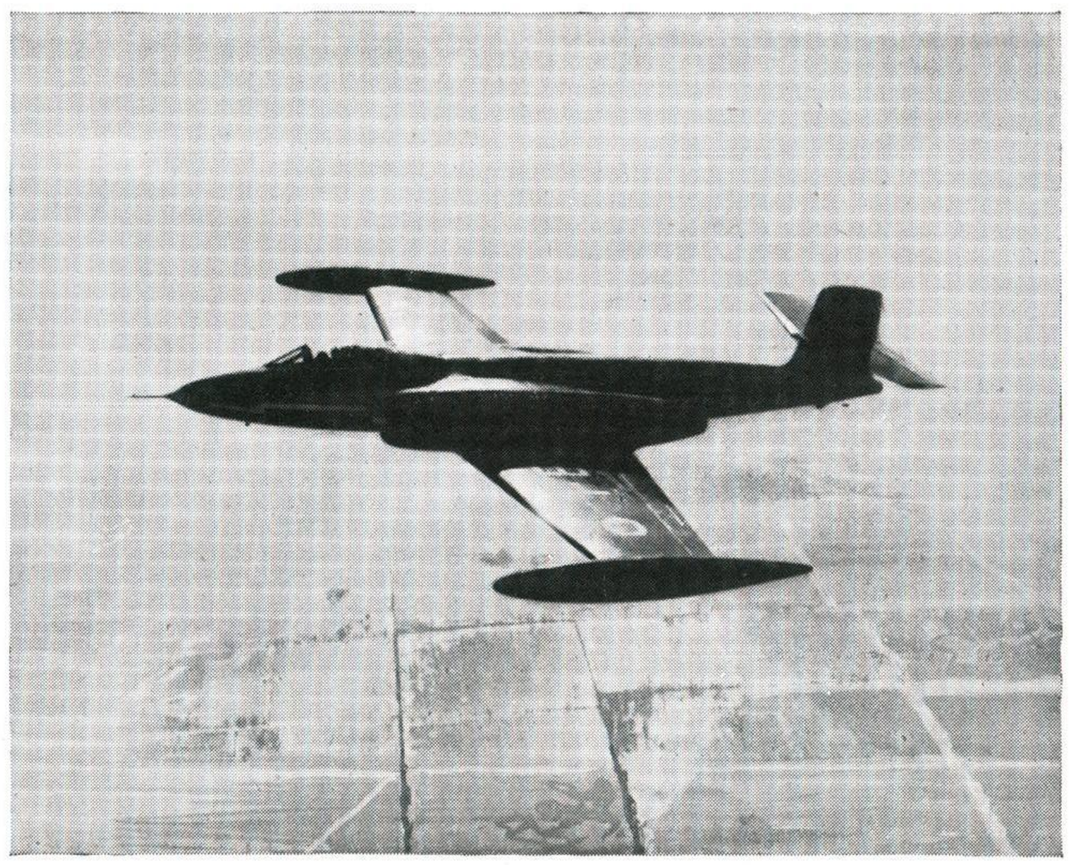
Pointed Panther. This is the fifth of the Grumman Panther series. It has modified intake openings, a more pointed fin and rudder shape and a slightly longer fuselage and is known as the F9F-5 Panther. Span : 38 ft. 0 ins.



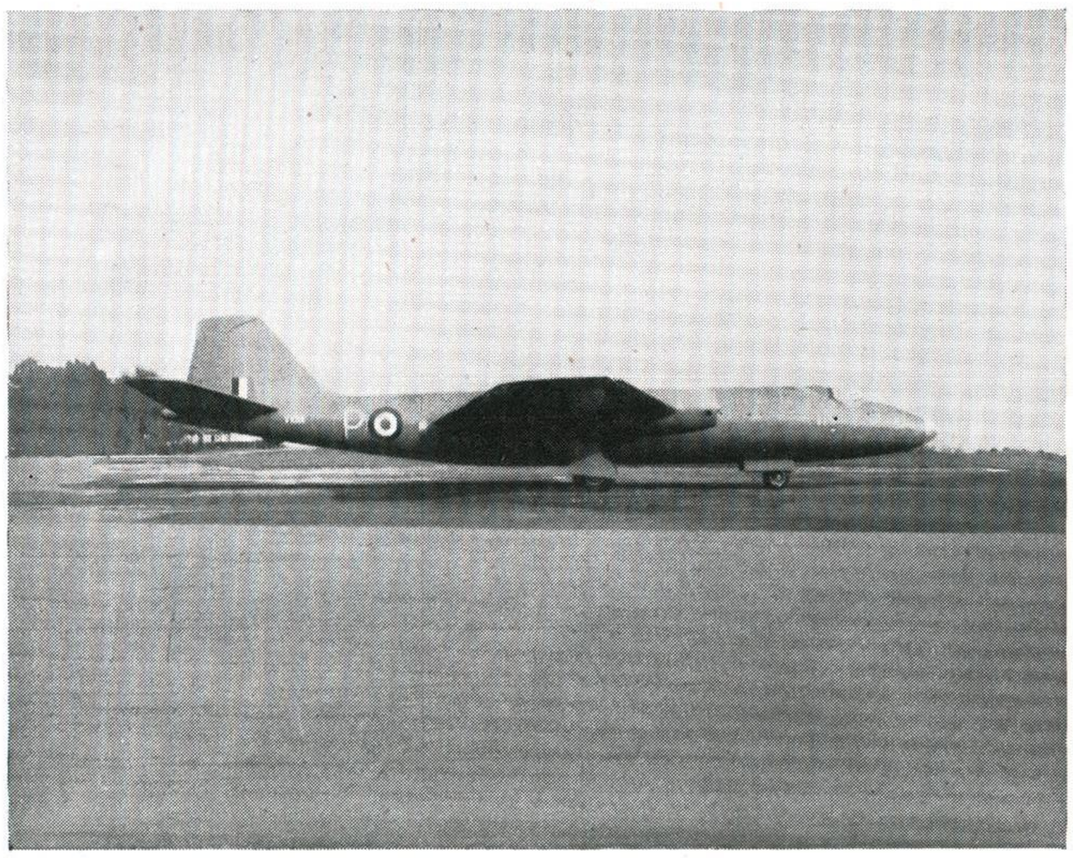
Thunderjet Development or Republic F-84F, a swept-wing version of the Thunderjet. Apart from changes in the shape of flying surfaces, the familiar bottle-neck in the fuselage seems, in this view, to have been " ironed-out ". Span : 34 ft. 0 ins.



Boeing " Bowser " or KC-97A, sometimes unofficially called the strato-tanker, is the latest version of a familiar and easily remembered form. The external differences are the simple addition of a ventral nodule from which depends the refuelling boom and the " butterfly " for controlling it. Span : 110 ft. 4 ins.



Canned Canuck. The Avro CF-100 twin-jet all-weather fighter (which incidentally may be both a " single " and a " twin-type ", depending on the angle of view) can be fitted with a pair of outsize, outrigger tip-tanks, enhancing the " speed " impression of an already " fast " fighter form. Span : 52 ft. 0 ins.



Camera Canberra. A reconnaissance version of the English Electric Canberra called the PR Mk. 3. The only exterior difference between it and the B.2 is that its perspex nose cone has no flat (optical) panel Span : 63 ft. 11 ins.



Percival's Pedagogue. The Provost prototype two-seat basic trainer to be produced for the R.A.F. The aircraft illustrated is the production version with a Leonides engine. The P.56 features an advanced fin and rudder, a large bulging cockpit canopy and a fixed undercarriage. Span : 35 ft. 2 ins.



New Aircraft Recognition Material

PICTORIAL CHARTS

A.D. 4676 P2V Neptune and PBM Mariner
4677 AD-1 Skyraider and AM-1 Mauler.
4651 Hornet F Mk. 3.
4670 C-47 Dakota
4671 Venom FB Mk. 1
4672 Viking 1B
4678 C-82 and C-119 Packet
5128 Martin 202
5132 F8F Bearcat

LARGE SILHOUETTE

A.D. 4696 XA2D-1 Skyshark

FLASH TRAINER TRANSPARENCIES

Stores Ref. 14D/1129 A.L. No. 12.

If no local arrangements are already in force, applications for supplies should be made through the usual official channels quoting reference numbers as above.

Errata

Vol. 6, p. 48, Sillographs No. 913 read Sea Vampire F Mk. 20 ; p. 57 Douglas XF-4D read Douglas XF4D throughout ; p. 72, Semi-Sillographs No. 2, read Seafury F Mk. 10, No. 11 read Proctor T Mk. 4, No. 13, read F-82 Twin Mustang, Elementary No. 959 read HRP-1 Rescuer.

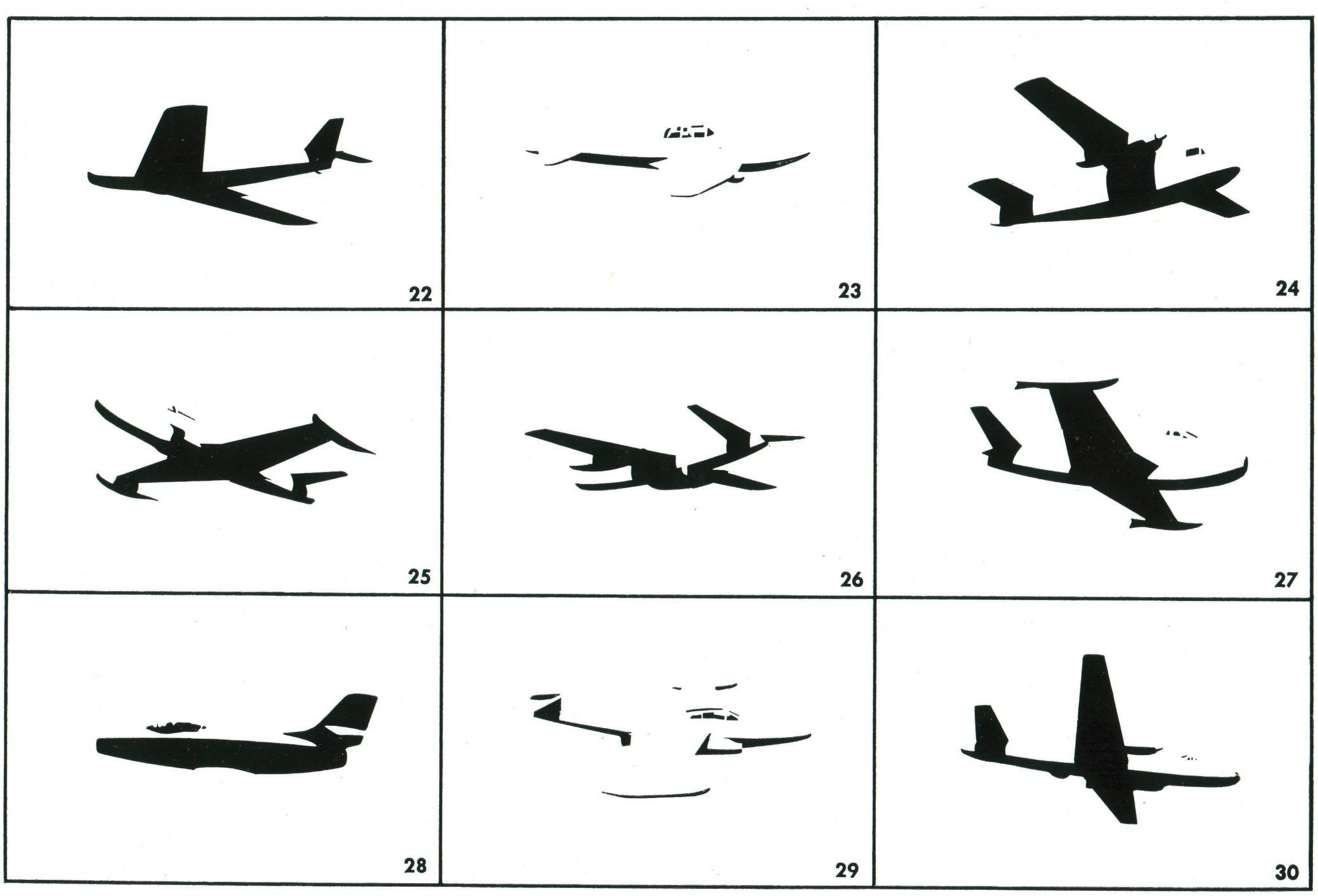
Tank Detection

EXAMINE this picture in conjunction with the additional clues below it. You should then have ample information to identify the tank. If you have to resort to solving the anagram contained in the initial letters of the clues, you need to re-study pages 112 and 113 of the May *Journal*.



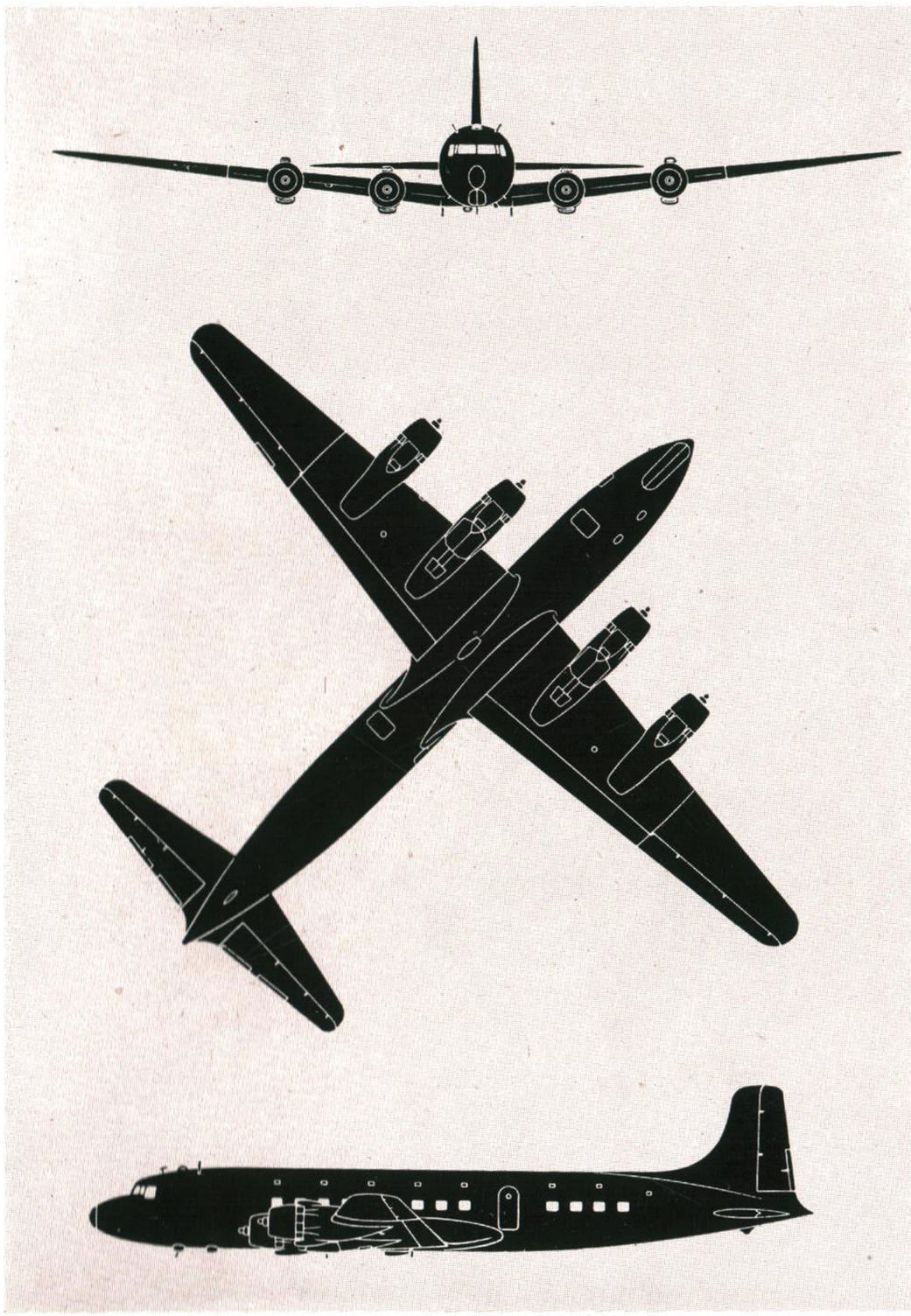
C for cut away skirting plate
O for overhang of turret
U for under cover mantlet
R for ribbed rear deck
T for tapered turret

N for nose-sharp
I for inlets, air, gridded, set of
N for number of road wheels (check picture)
E for elongated low-slung hull.

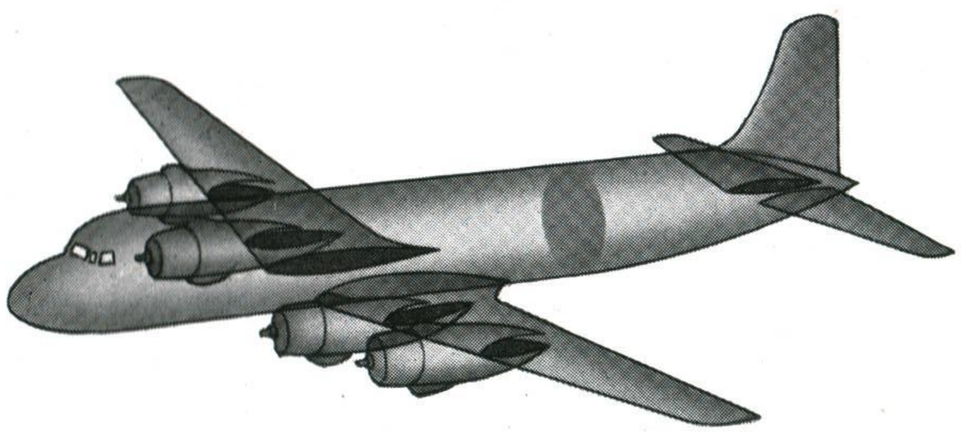


SEMI-SILLOGRAPHS

SILHOUETTES—A PAIR TO COMPARE



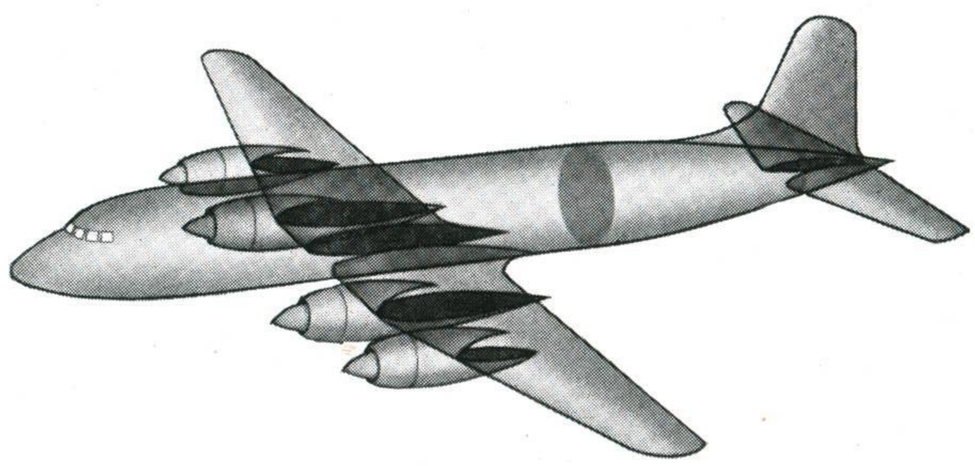
DOUGLAS DC-4



Span : 117 ft. 6 in. Length : 100 ft. 7 in.

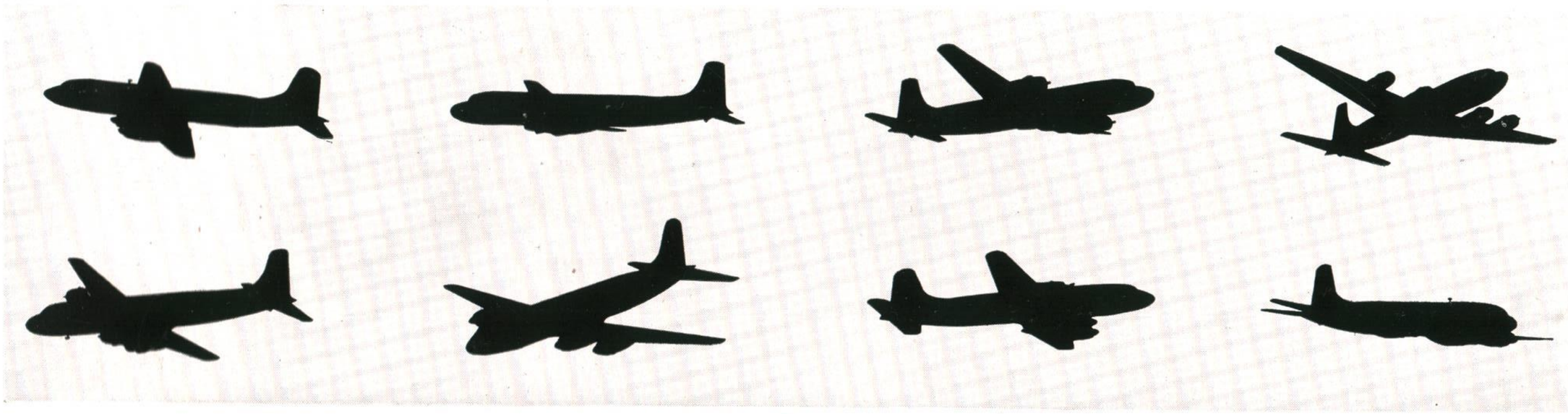


HANDLEY PAGE HERMES 4



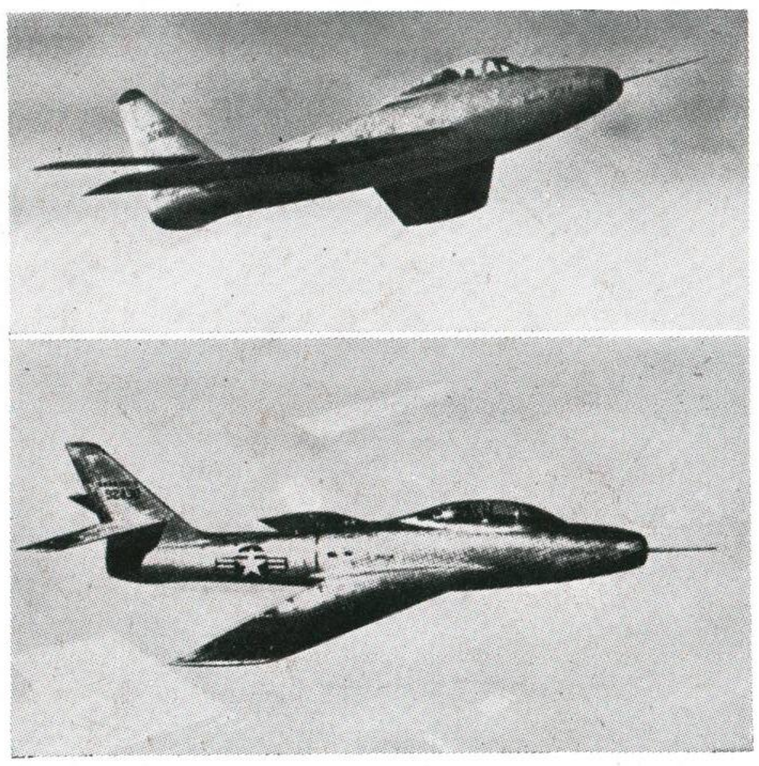
Span : 113 ft. Length : 96 ft. 10 in.

Solve these SILLOGRAPHS (Answers on rear cover)





Cover Photo. : " Home on the Range "—a rear-view of a rocket releasing XF-84F. Below are other views of this swept wing version of the Thunderjet. This prototype is now undergoing U.S.A.F. evaluation trials, others are in production.



TRICKY TRIO

This way up! Left to right : AM-1 Mauler, IL-10, AD-2 Skyraider.

"BOOM" TYPES

PHOTOGRAPHS		SILLOGRAPHS	
1	Venom FB Mk. 1	1	C-82 Packet
2	Vampire FB Mk. 5	2	Vampire FB Mk. 5
3	C-119 Packet	3	C-119 Packet
4	F-82 Twin Mustang	4	Vampire FB Mk. 5
5	C-82 Packet	5	Venom FB Mk. 1
6	Venom FB Mk. 1	6	F-82 Twin Mustang
7	C-119 Packet	7	Vampire FB Mk. 5
8	Vampire FB Mk. 5	8	C-82 Packet
9	F-82 Twin Mustang	9	F-82 Twin Mustang
10	C-82 Packet	10	Venom FB Mk. 1
11	C-119 Packet		
12	Vampire FB Mk. 5		

SOLUTIONS TO RECOGNITION TESTS IN THIS EDITION:

ELEMENTARY

19 Hermes 4
20 Halifax A Mk. 9
21 PE-8
22 F9F-5 Panther
23 Meteor F Mk. 8
24 Saab J.21A
25 Attacker F Mk. 1
26 Meteor F Mk. 4
27 Saab B.18B
28 AF-2W Guardian
29 Meteor F Mk. 3
30 Cessna L-19
31 Lancaster B Mk. 7
32 Lincoln B Mk. 2
33 Convair-Liner
34 C-122 Avitruc
35 Hastings
36 North American AJ-1 Savage

SEMI-SILLOGRAPHS

22 F-86 Sabre
23 IL-10
24 Prince
25 F-80 Shooting Star
26 B-45 Tornado
27 FJ-1 Fury
28 MD 450 Ouragan
29 F-89 Scorpion
30 P4M Mercator

ADVANCED

142 Venom FB Mk. 1
143 Canberra B Mk. 1
144 North American AJ-1 Savage
145 F9F Panther
146 B-36D
147 Saab J.29
148 CF-100 Canuck
149 Consul
150 F-84F
151 A2D-1 Skyshark
152 C-124 Globemaster 2
153 Chipmunk
154 Wyvern TF Mk. 2
155 Percival P.56
156 AD-3W Skyraider
157 AF-2W Guardian
158 Comet
159 Harvard 2

SHIP TEST (CRUISERS)

9 *Southampton Class*
10 *Southampton Class*
11 U.S.S. *Wichita*
12 *Fiji Class*
13 *Dido Class* (H.M.S. *Scylla*)
14 *Oregon City Class*
15 *Baltimore Class*
16 Modified *Dido Class* (H.M.S. *Diadem*)
17 *Southampton Class*
18 *Gloire Class* (French)



" You go your way . . ."

HERMES and DC-6 SILLOGRAPHS

Top : Hermes, DC-6, DC-6, DC-6.
Bottom : DC-6, Hermes, Hermes, Hermes.

READERS' REMINDER ?

You are reminded that the *Joint Services Recognition Journal* is an official publication for the use of the Armed Forces, and, as such, is not for sale. Application for copies may only be made through appropriate official channels and not to the Editorial Office.

TRICKY TRIO



DO NOT invert the page to identify these shapes ! The unfamiliar aspect of the inverted image demands greater concentration. Greater concentration means that the shape will be impressed more thoroughly. All who claim proficiency in spotting should know their aircraft shapes " standing on their heads."

47,145 6/51 38-241

Printed under the Authority of H.M. Stationery Office by Fosh & Cross Ltd., London