JOINT SERVICES

RECOGNITION *Journal*

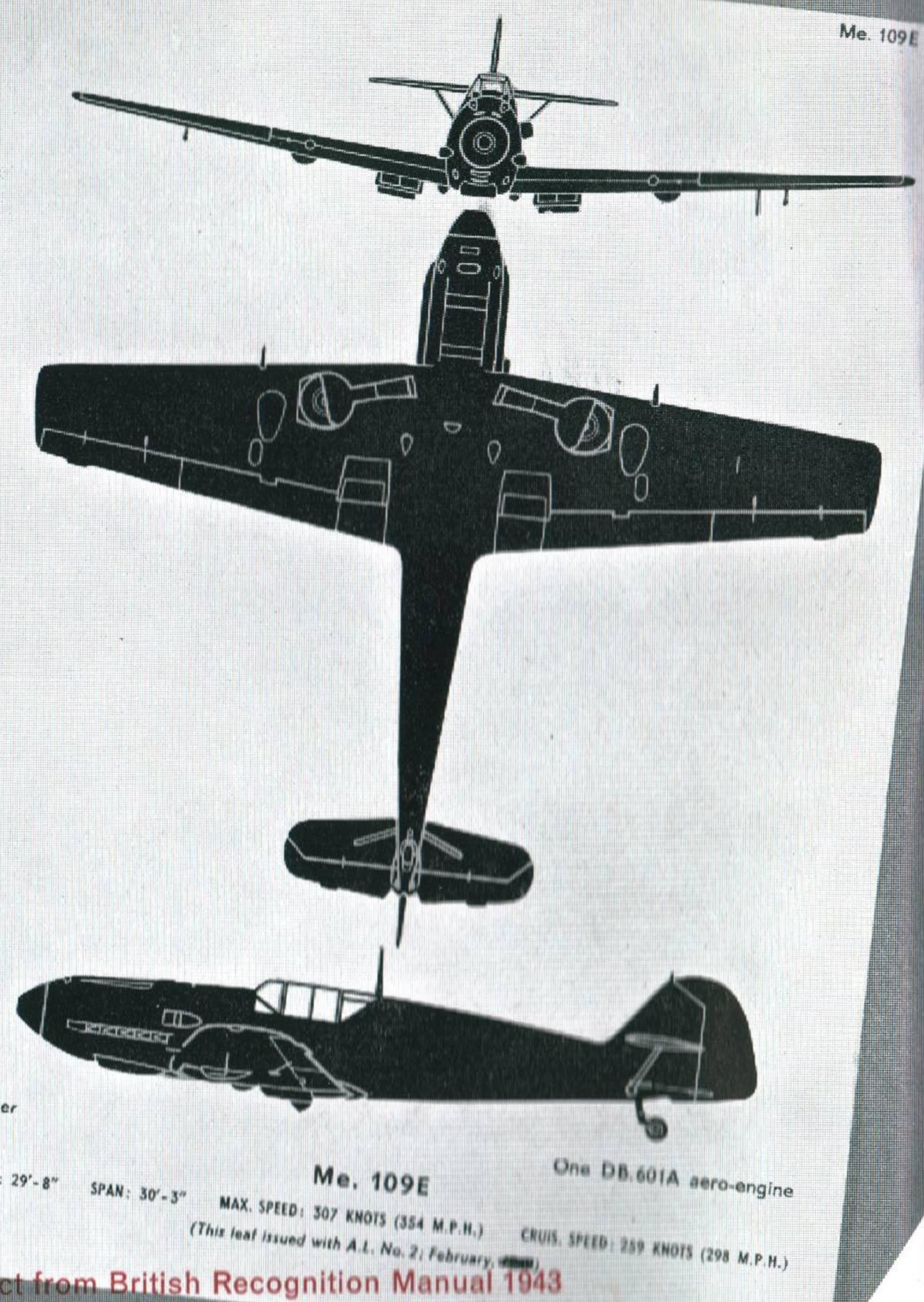


Vol. 19 NOVEMBER/DECEMBER 1964 No. 11



Extract from German Recognition Manual 1917

Me. 109E



Fighter

LENGTH: 29'-8" SPAN: 30'-3"

Me. 109E

One DB.601A aero-engine

MAX. SPEED: 307 KNOTS (354 M.P.H.) CRUIS. SPEED: 259 KNOTS (298 M.P.H.)

(This leaf issued with A.L. No. 2; February, [illegible])

Extract from British Recognition Manual 1943

Current lesson style



Bison

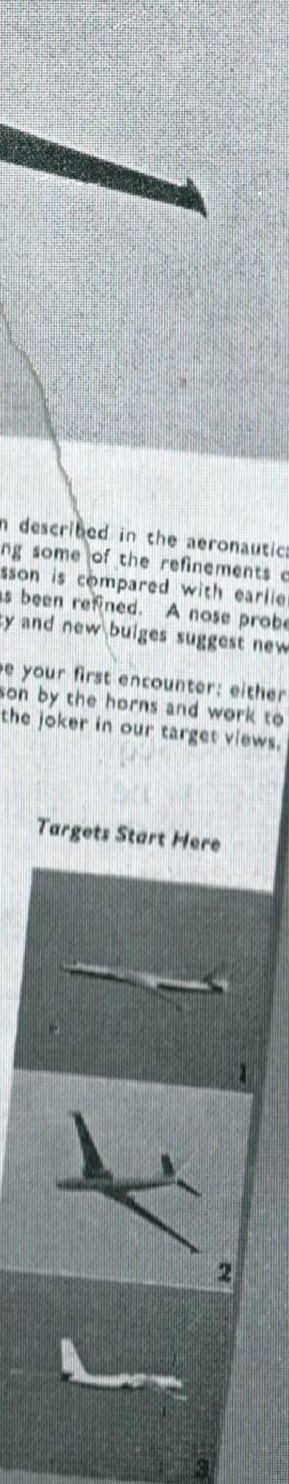
Russia's turbojet bomber Bison has been described in the aeronautical press as a clean modern design but lacking some of the refinements of Western bombers. However, if this lesson is compared with earlier lessons on the Bison, it will be evident that this bomber has been refined. A nose probe like our Valiant B(K) Mk. 1 suggests air-refuelling capability and new bulges suggest new radio aids and possibly a fire control system.

You may already be familiar with the Bison or this may be your first encounter: either way you will need identification experience—so take this Bison by the horns and work to the lesson instructions on page 207. Incidentally, beware of the joker in our target views.



SPAN: 170 feet

Targets Start Here





NOVEMBER/DECEMBER 1964 Vol. 19 No. 11

JOINT SERVICES

RECOGNITION JOURNAL

The *Joint Services Recognition Journal* is a monthly publication produced by the Directorate of Flying Training (R.A.F.), the Ministry of Defence, and prepared in collaboration with the Admiralty Board, the Army Department and the Ministry of Aviation (Air Technical Publications). Applications for copies can only be accepted from the Services or other official bodies, and must be submitted through the normal official publications supply channels—**not** to the Editorial Office or direct to the Ministry of Defence.

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* *Identification Lessons*

LET IT BE A LESSON

The lesson is the most practical and effective way of teaching and has been adopted generally over the past fifty years for military training—with the marked exception of identity training, at least until the present era.

A need for recognition training first became evident precisely fifty years ago when airmen were being fired at from the ground by friend and foe alike in France and Belgium during the opening months of the First World War. The official reaction by our Army was to give instructions for the Royal Flying Corps to display a Union Jack on their aircraft, which proved impractical, and to issue a pamphlet of drawings to the troops while the Admiralty, taking similar precautions with their aircraft, issued posters on German airships and aeroplanes.

As the war progressed and the variety of aircraft types increased, the belligerents each produced aircraft recognition booklets for field use. Little attempt was made to introduce identity training although in air-fighting, particularly on the interminable offensive patrols by British fighters on the Western Front, this was a dire necessity.

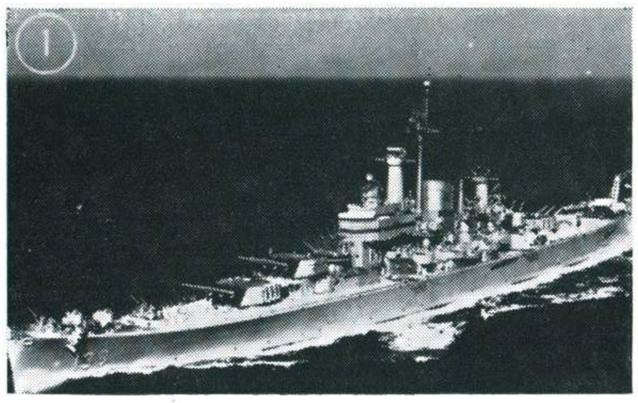
After the war little thought was given to this aspect of military training until the threat of the Second World War. This time recognition material was ready at the outset in book form—Air Publication 1480 Aircraft Recognition Handbook. But there is no time to refer to handbooks in action and the reference material they contain is only of use when it has been absorbed. Training is necessary and the distressing chapter of accidents through mis-identification, causing loss of life, missed opportunities of intercepting enemy aircraft and loss or damage to our own aircraft, stressed its need. This led to extensive and intensive training absorbing considerable man-power. Strangely, the mode of training was not based on sound principles. Lectures made exhausting work for many who could not be expected to be born lecturers and the assimilation of facts from publications and posters and note-taking followed by a series of tests gave mental indigestion to trainees for whom this subject was one of many. Modern visual aids were not lacking, indeed they were there in pro-fusion—epidiascope, wall-charts, cine and film-strip projectors, but the organised type-by-type lesson was not considered. Yet, in all other fields of military training active participation by the trainee is an accepted essential.

With the wisdom of hindsight we can see that the whole point was missed, that identity training was a *skill* and nothing more. Those being trained were told "what" they must do, whereas the real need was to be told "how". It is a cold, hard fact that this situation still largely exists today—alongside the confusion of Intelligence (collection of information) with skill.

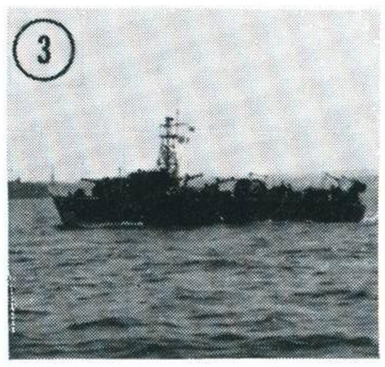
With weapon training no soldier would be deemed efficient unless he had handled his weapon and fired it on ranges. The inevitable and irritating facts of the opening lecture, including the muzzle velocity and weight of the barrel, would have little effect on ultimate marksmanship for which skill would not be acquired by lectures or reference books: if such information is needed, it is better and more easily acquired *after* acquiring the skill.

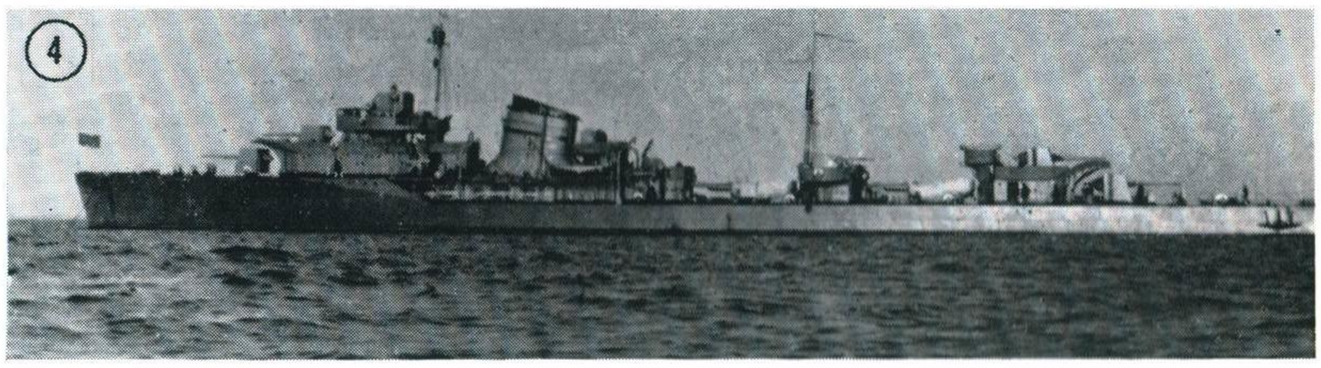
To-day, identification training, as recognition training is now known, should be based on the same sound principles applied to other fields of military training. This entails the bulk of a standard lesson being devoted to student participation with an introduction and background not exceeding 25% in time with at least 5% given to assessment. This is the technique adapted to *Journal* lessons with an introduction and background provided by text and lesson instructions, the learning being achieved by *working* on actual identification of target views from key information provided and self assessment from solutions given. Let it be a lesson. . . .

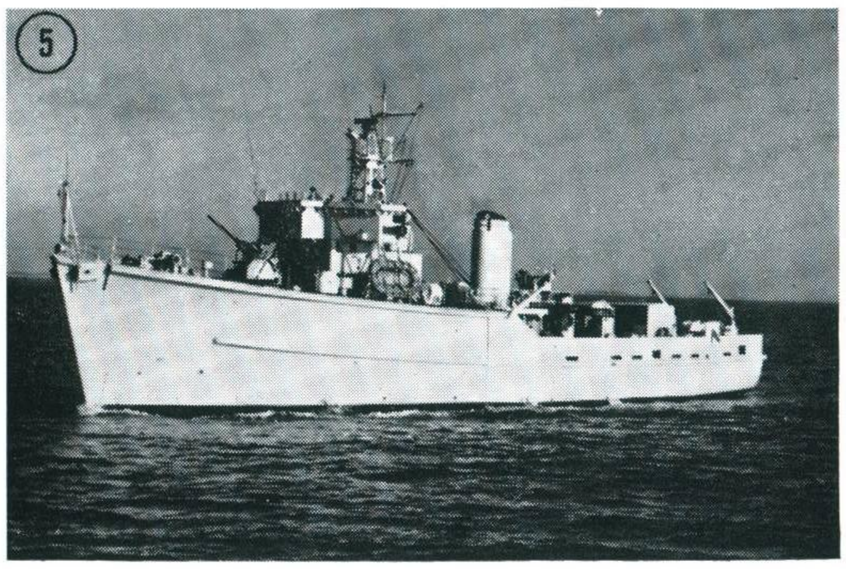
WARSHIP TYPE TEST No. 5

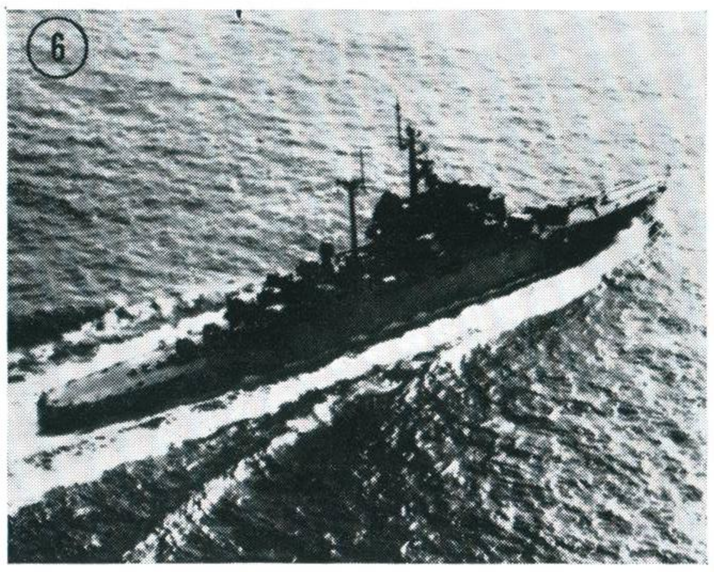

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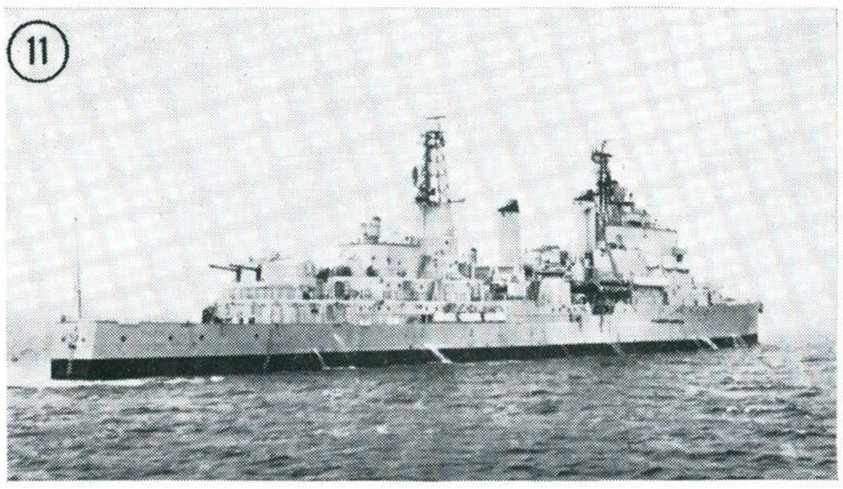

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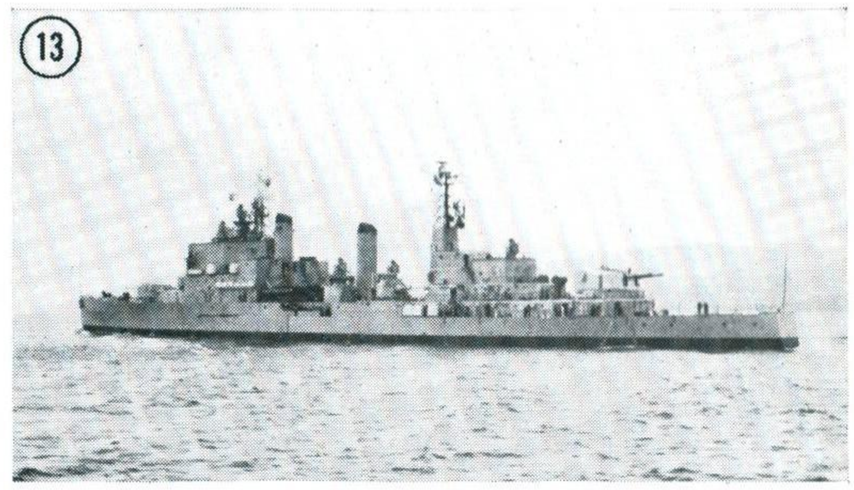

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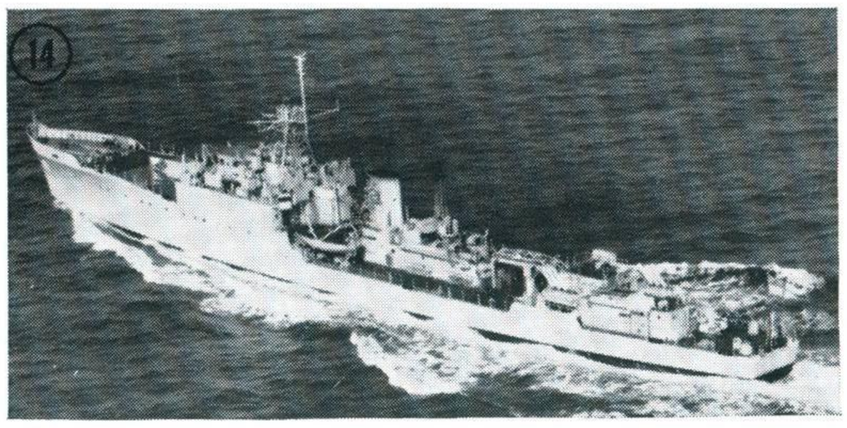

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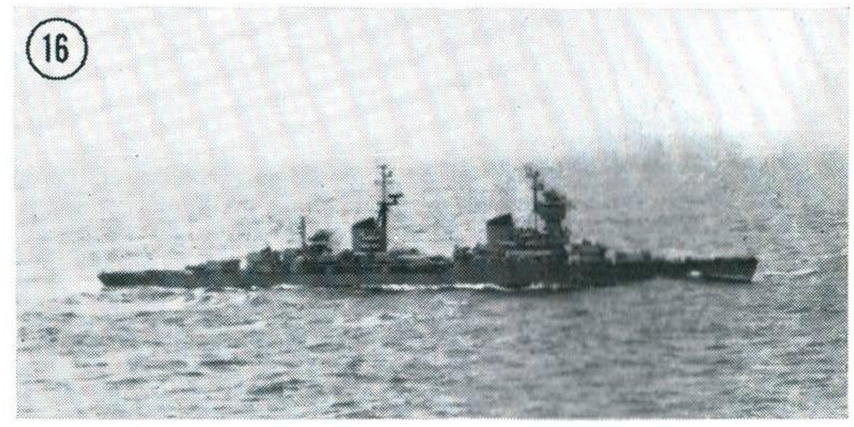

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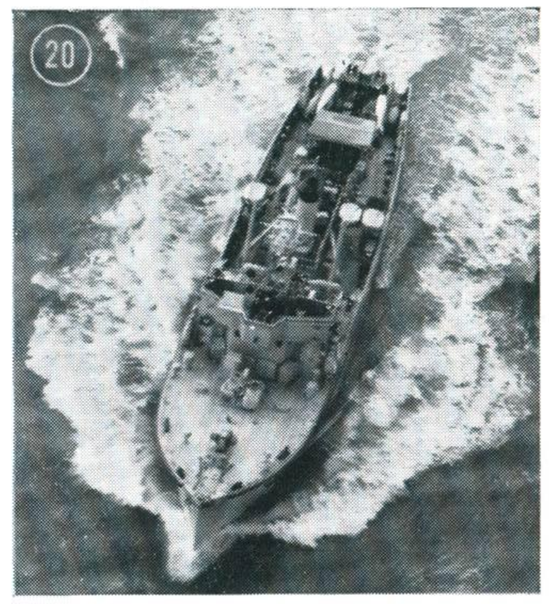

18

A spotting test involving warships of five nations. You are required to report each by class, type and nationality. The solutions on page 306 also give, where known, the names of the ships concerned.

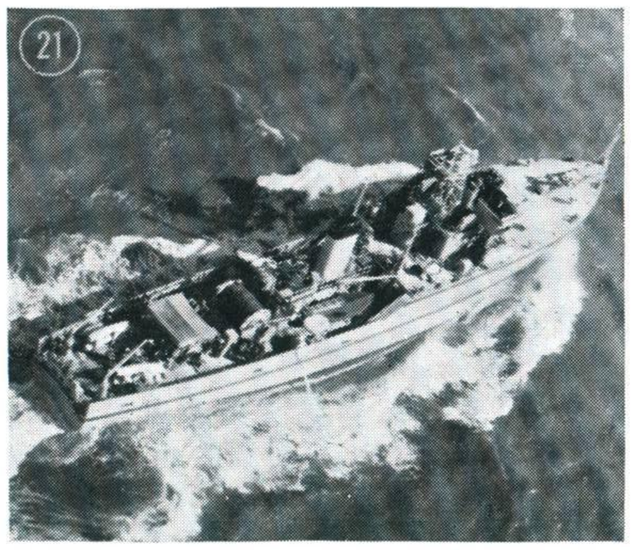
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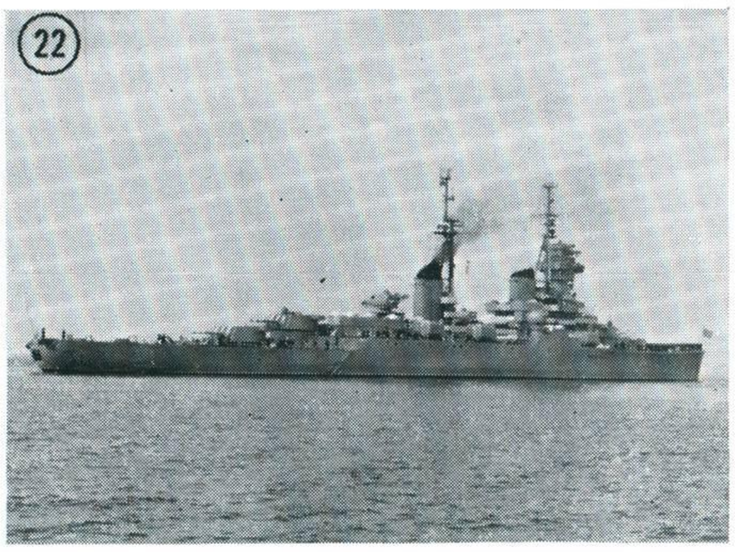
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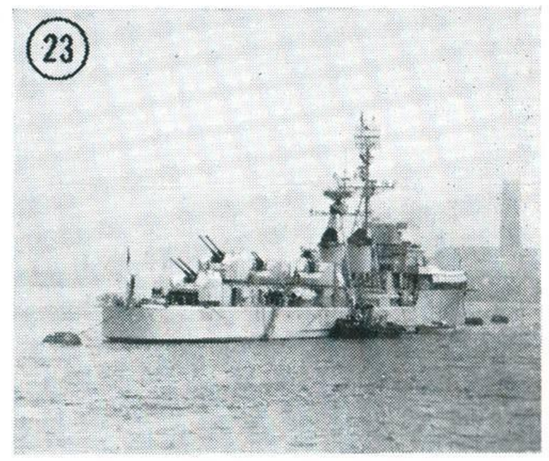
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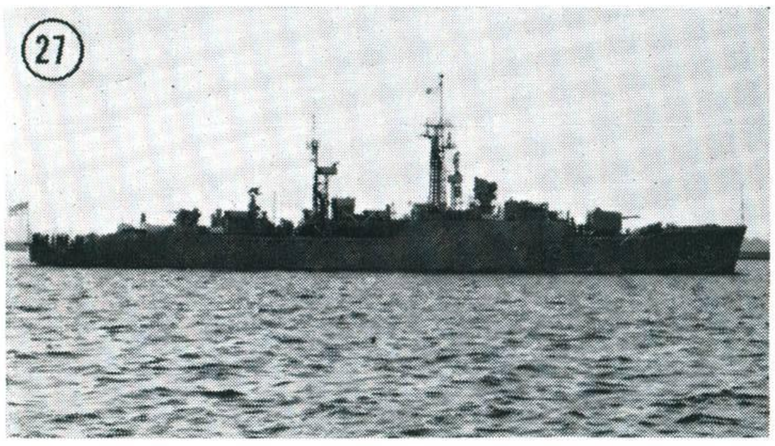
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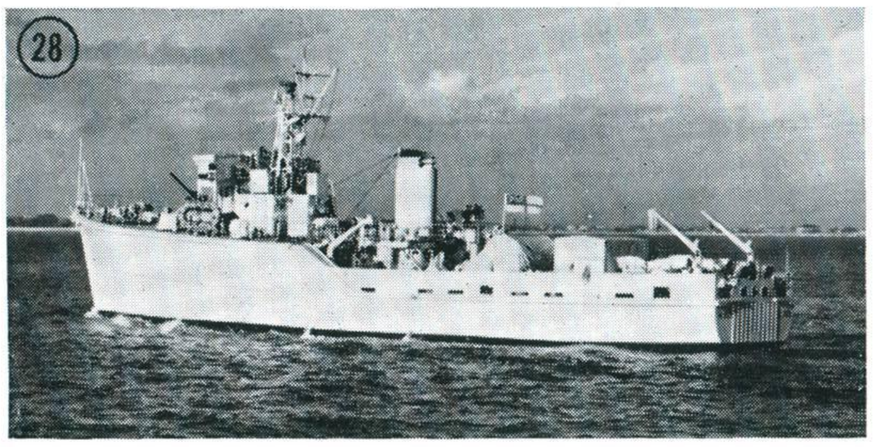
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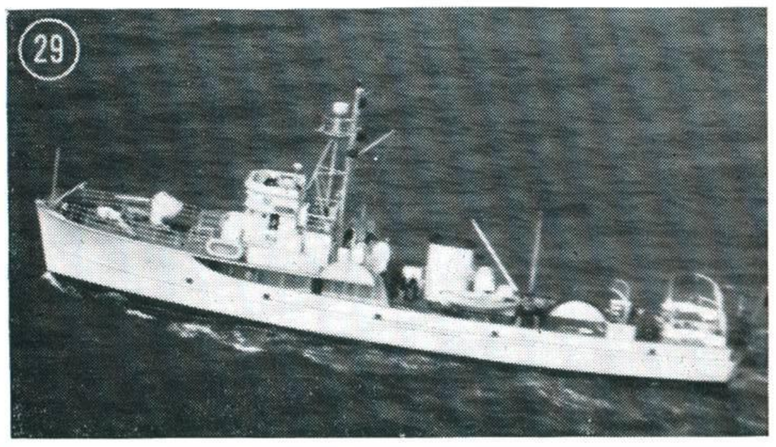
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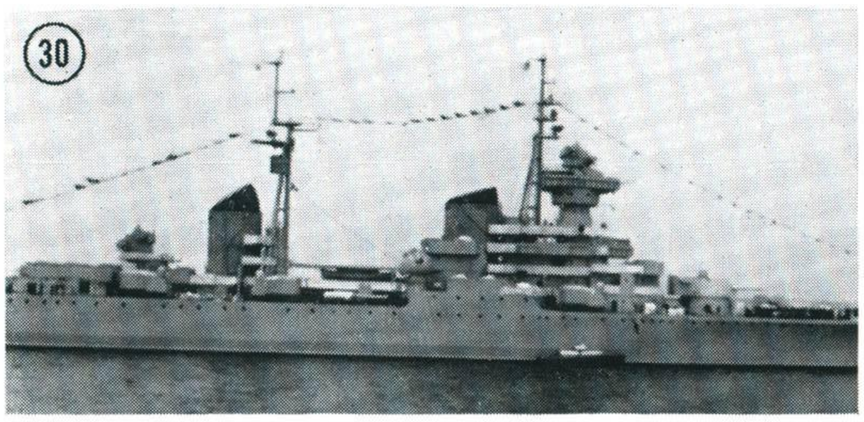
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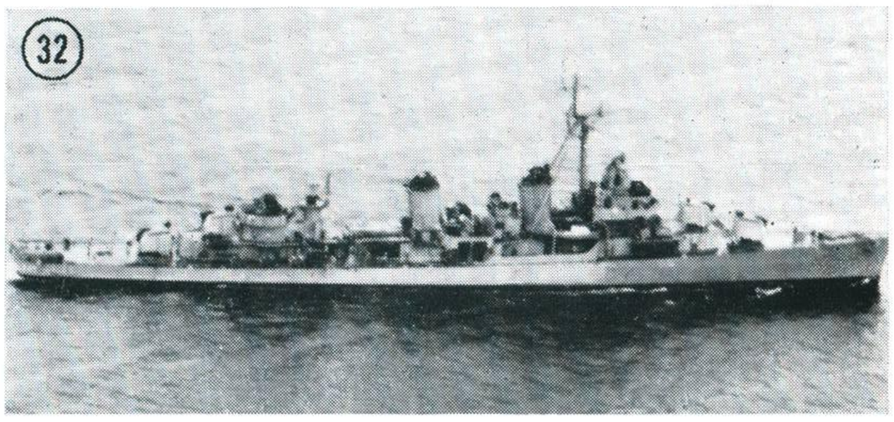
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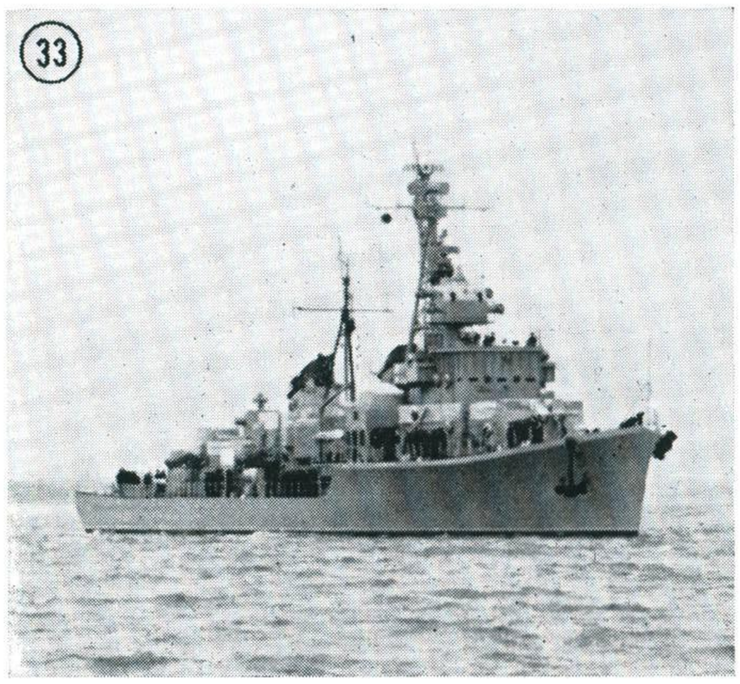
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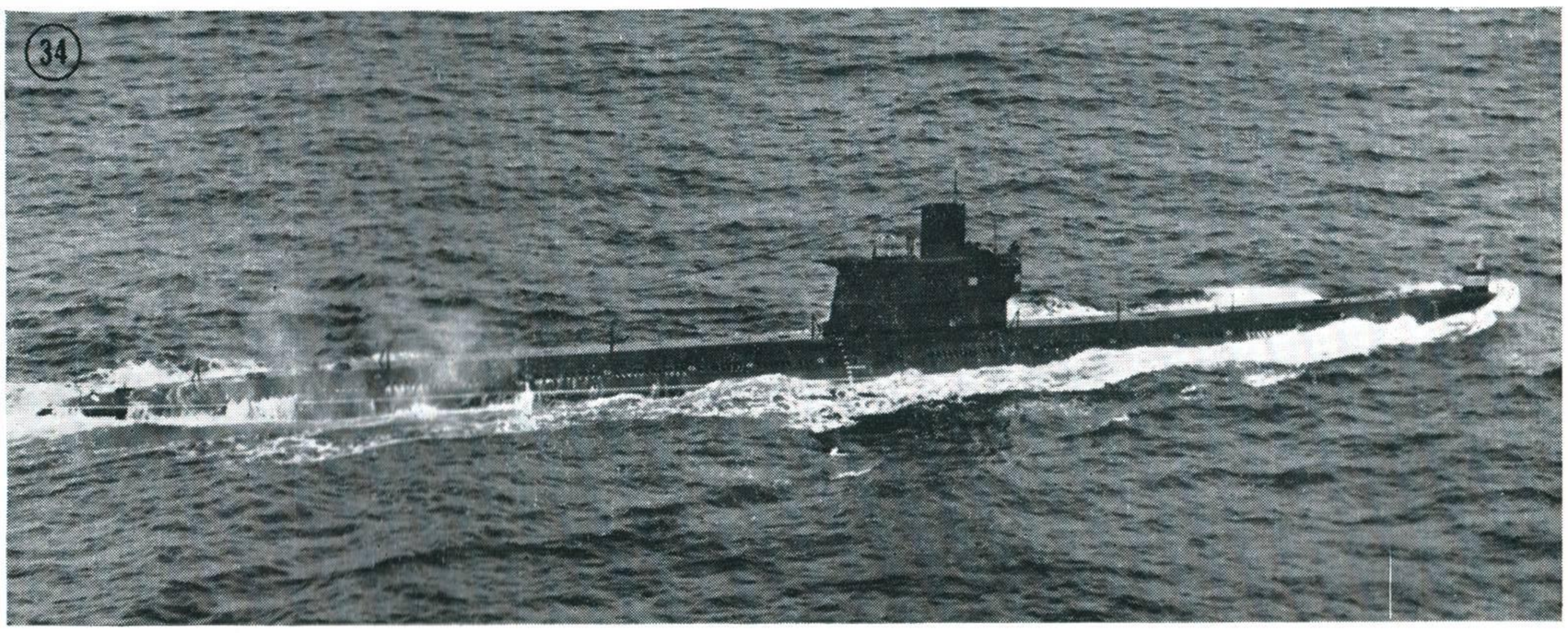
32



33



34



TRY THIS FOR SIZE!

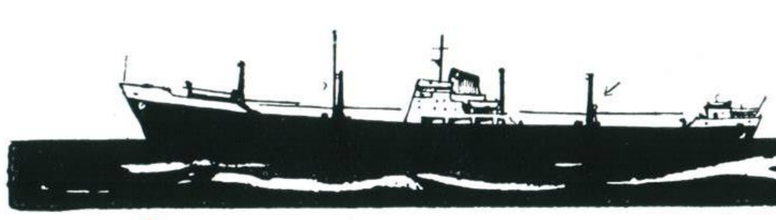
These vessels, all reproduced to a common measurement to emphasise their proportions, vary greatly in actual size. Using experience gained in earlier exercises and taking in account as a guide that No. 2 is 725 feet long and of 29,354 gross registered tons, estimate the length and tonnage in round figures of these ships and identify the type of vessel concerned.

Solutions on page 306 include the ship's name and date of building.

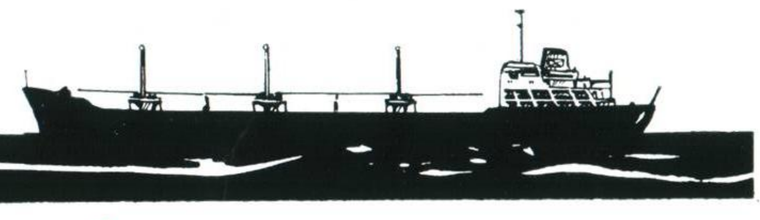


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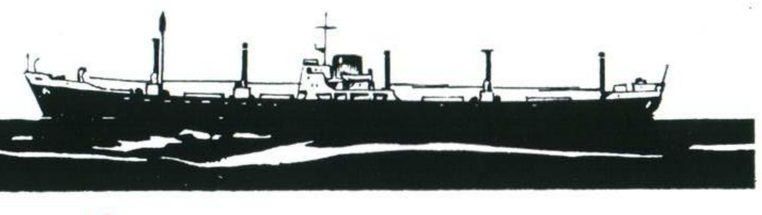
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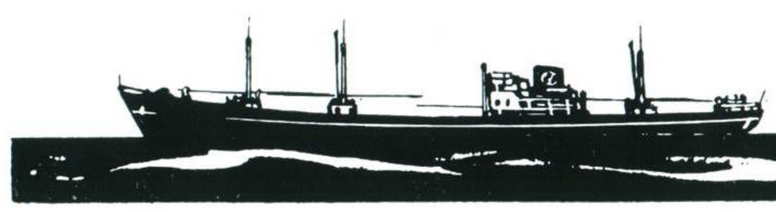
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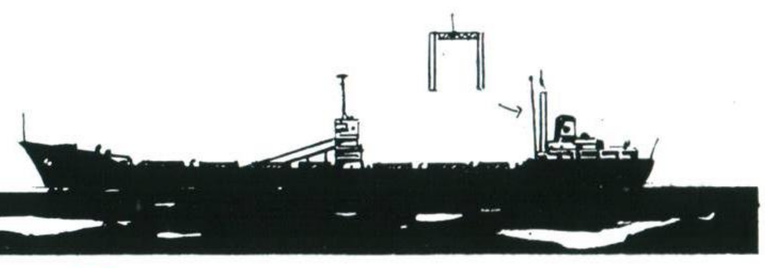
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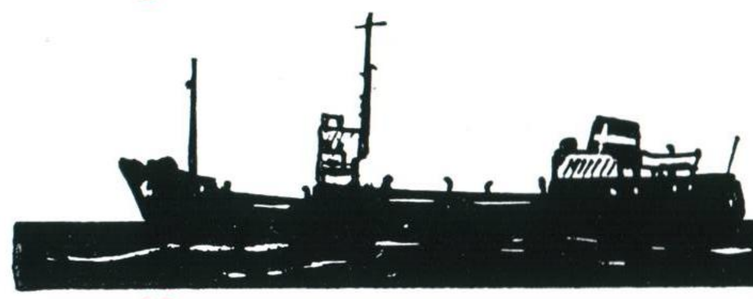
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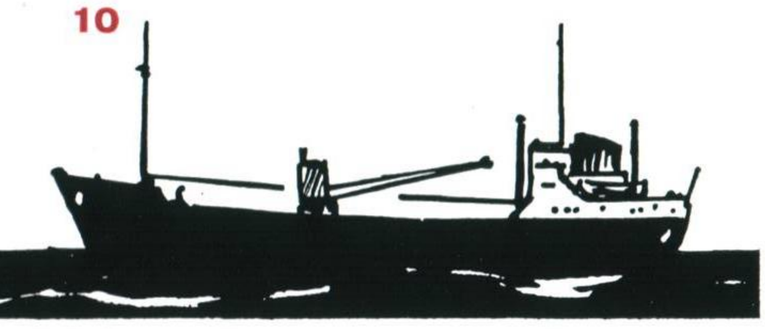
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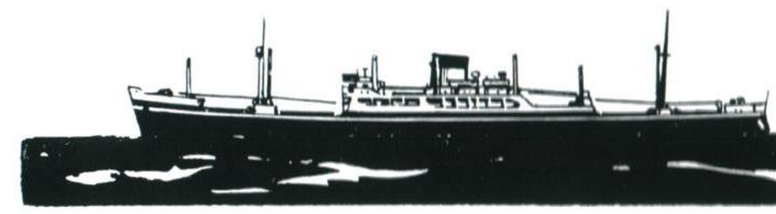
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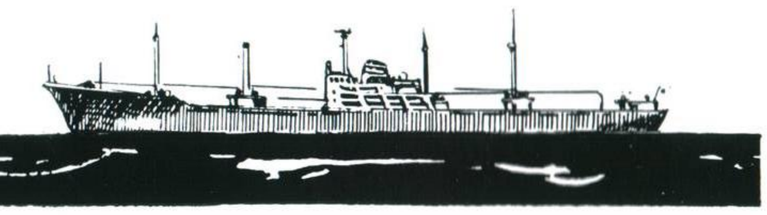
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16

DOUBLE UP !

A test with two or more aircraft in each target view. Use standard reporting names e.g. the pair below would be Wessex (top) and Bird Dog (bottom) although H-34 Seahorse and Cessna OE-1 is used by their own service, in this case the U.S. Marine Corps.

Solutions on page 306.

(Acknowledgment is made to Miss R. Rooke for the use of certain of her photographs).



1


2

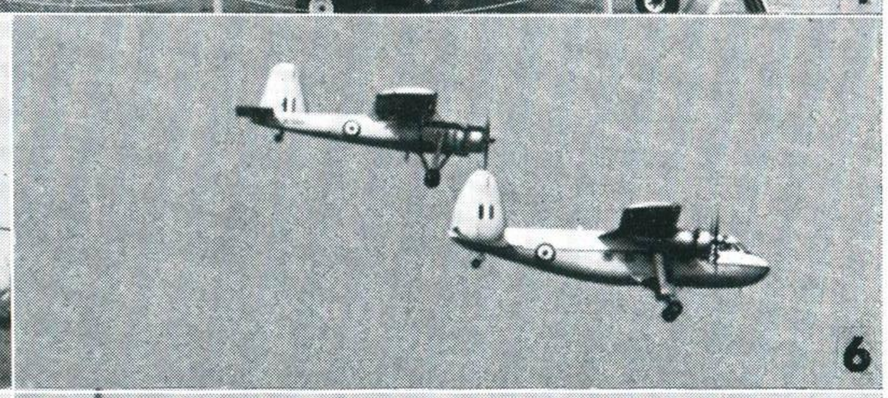

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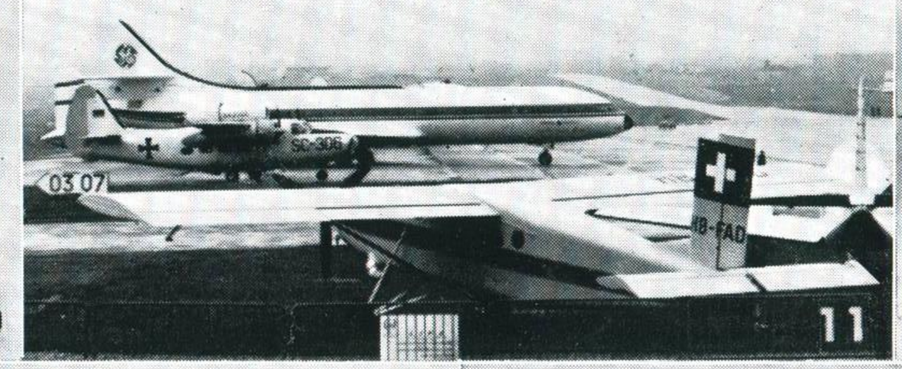
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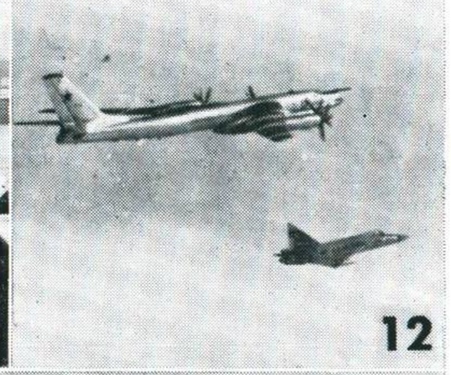
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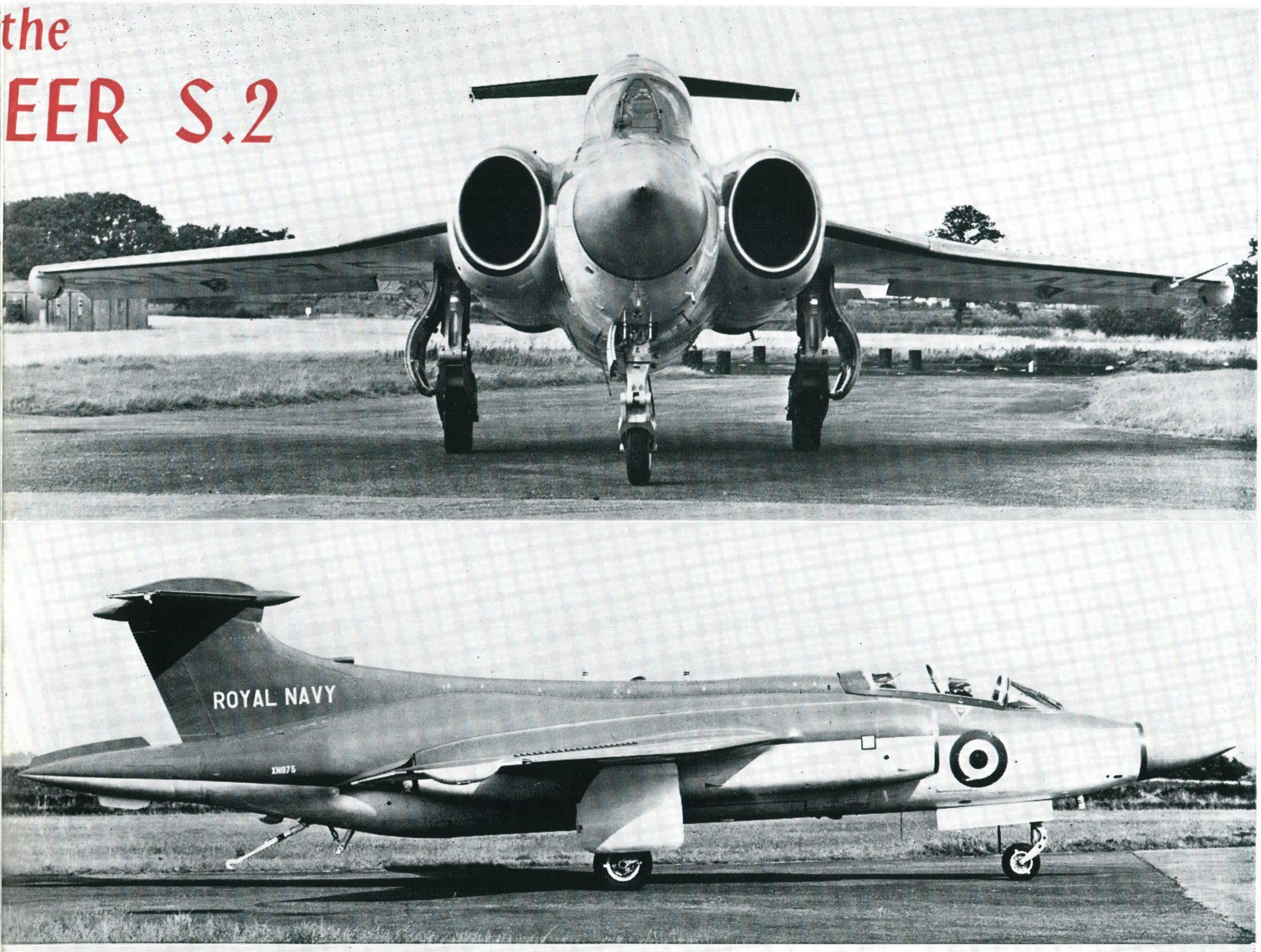


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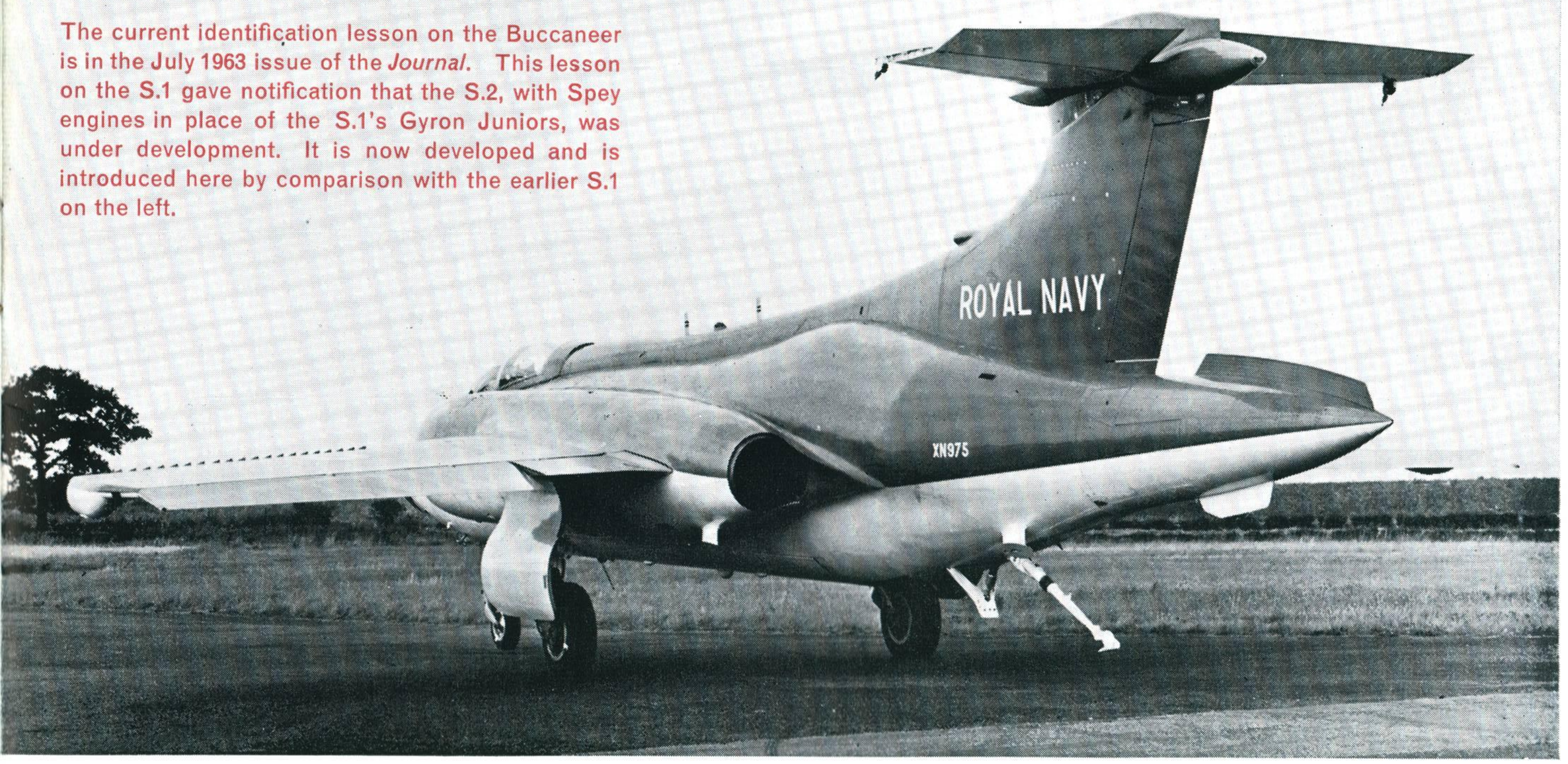
Introducing BUCCAN



the
EER S.2



The current identification lesson on the Buccaneer is in the July 1963 issue of the *Journal*. This lesson on the S.1 gave notification that the S.2, with Spey engines in place of the S.1's Gyron Juniors, was under development. It is now developed and is introduced here by comparison with the earlier S.1 on the left.



Wasp A.S.1.

This compact helicopter, seating up to six, is produced in two main versions; the Scout A.H.1 for the Army and its Royal Navy counterpart, the Wasp A.S.1. The naval version differs by a folding tail, deck-landing undercarriage and specialised equipment associated with its anti-submarine role.

It is not expected that you will be able to distinguish between Scout and Wasp in all cases, but it is essential that you know both types. Work to the instructions on page 305 and examine the key views on the following pages.

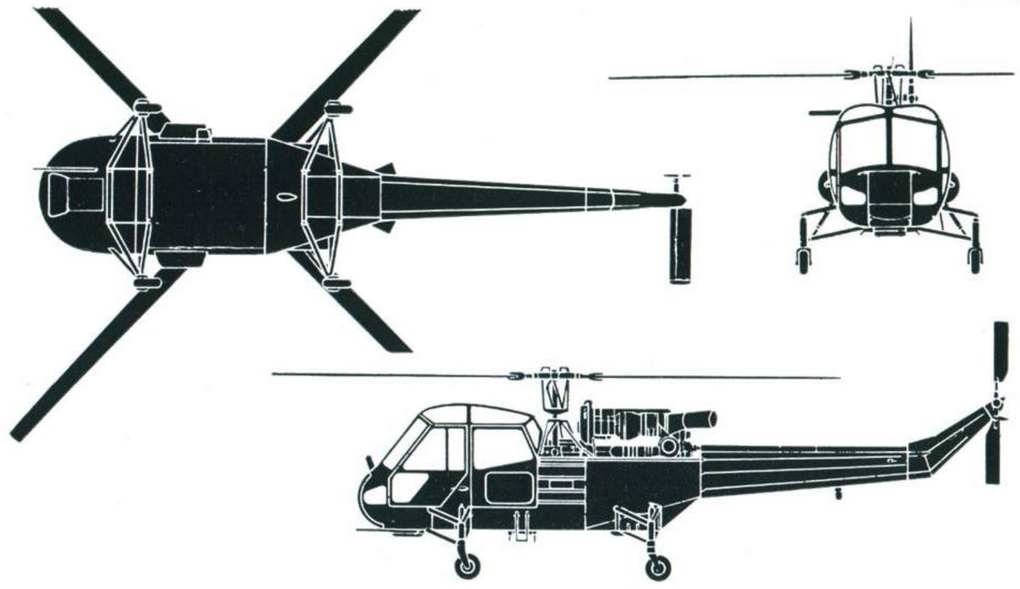
Scout A.H.1.





Continued overleaf

Continued from previous page





Length (overall) 40 feet

WASP A.S.I

Standard anti-submarine helicopter
of the Royal Navy

SCOUT A.H.I

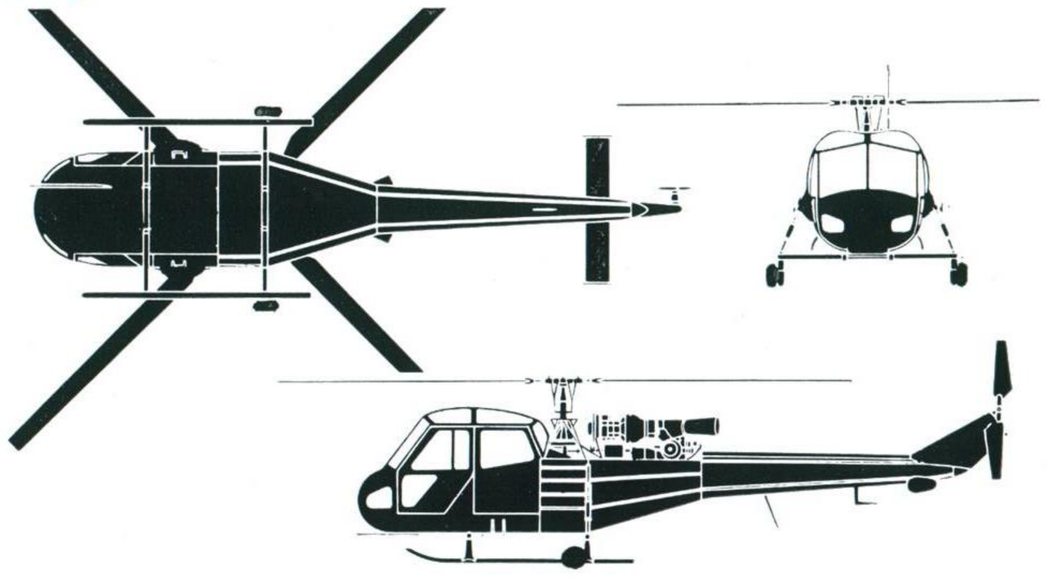
Standard general purpose helicopter
of the British Army

Solutions on page 306

WASP A.S.I



SCOUT A.H.I










15

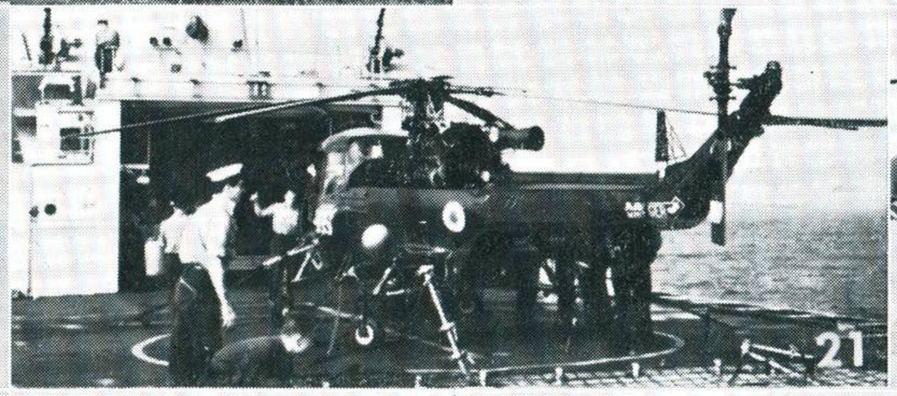

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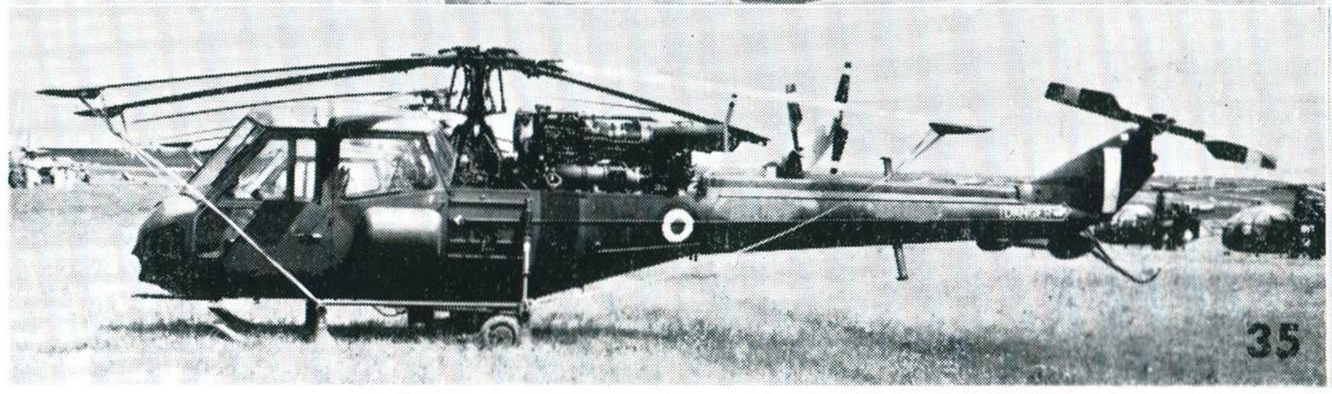

30


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36

Photo by courtesy of "Flight International"





Mirage IIIc with (right) Matra 511 missile and rails for Sidewinders and (top) with auxiliary fuel tanks

MIRAGE

MIRAGE III

The French Dassault Mirage III delta-wing supersonic fighter is capable of high-level interception as well as ground attack missions. It is produced in single-seat fighter (IIIC), reconnaissance (IIIR), long-range intruder (IIIE), two-seat trainer (IIIB) and various other versions to meet Australian, Swiss, South African and Israeli needs. There are also experimental versions under development and the IIIO, similar to the IIIE, is being built in Australia. The original IIIA version concerned only ten pre-production aircraft.

You will not be required to qualify the type in general reporting; it is sufficient that you identify a Mirage III for which the key views on this page show the range of variations.

Work to the instructions on page 305 and check with the solutions on page 306 which give, as far as can be ascertained, the full designation.

Span 27 feet



MIRAGE IIIC

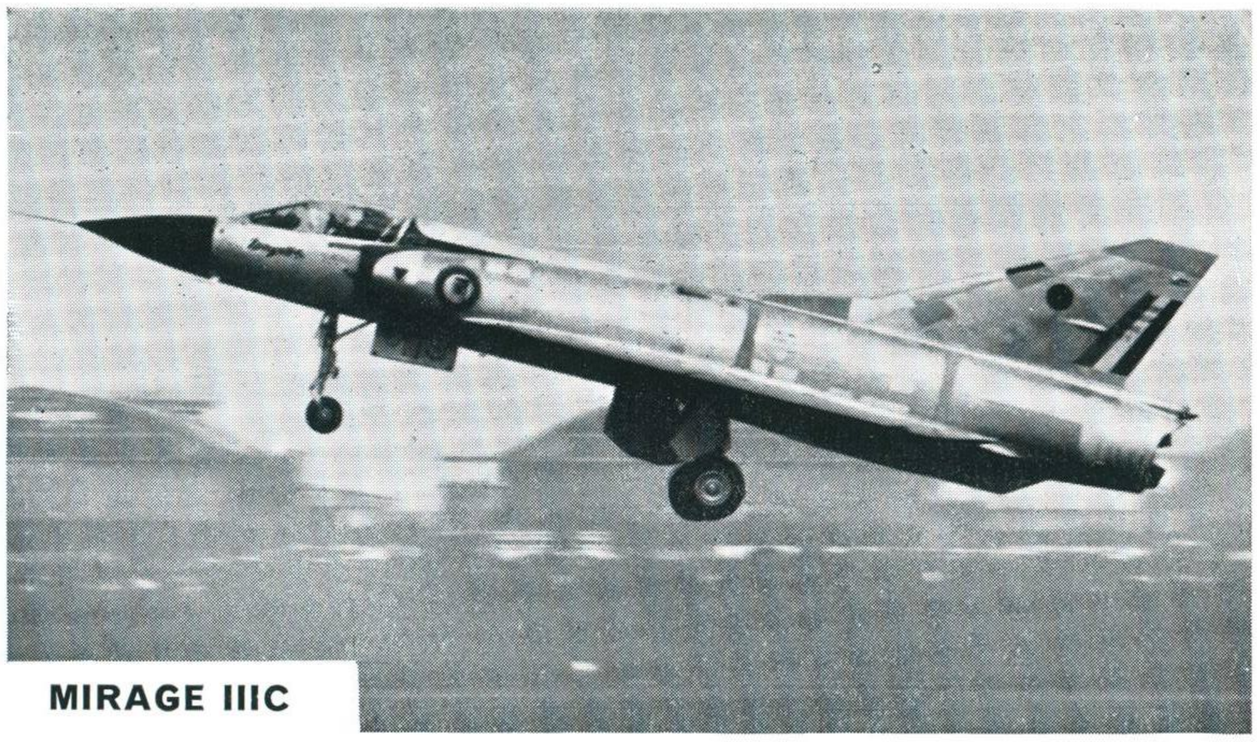


MIRAGE IIIR



MIRAGE IIIB

MIRAGE IIIE



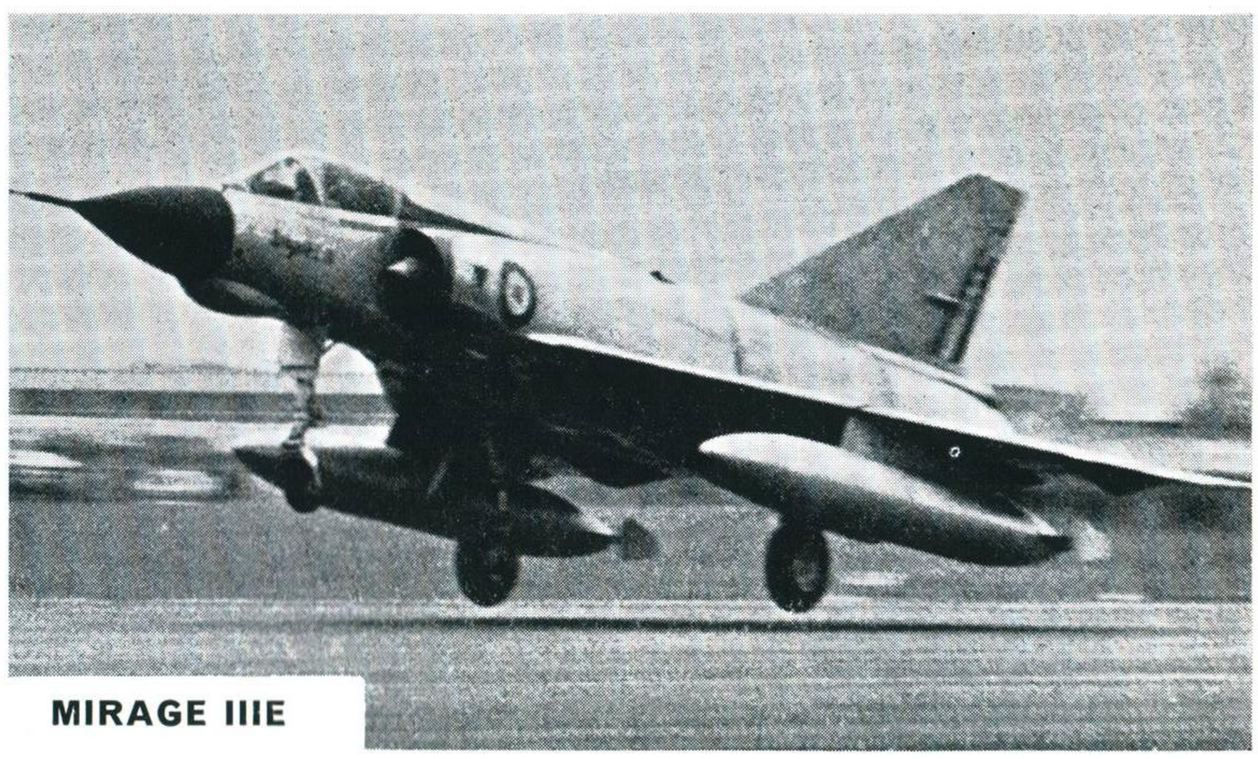
MIRAGE IIIC



MIRAGE IIIR



MIRAGE IIIB



MIRAGE IIIE

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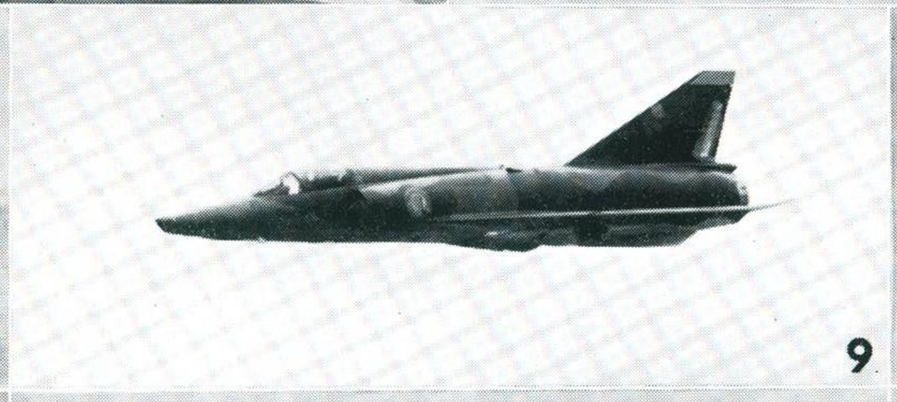

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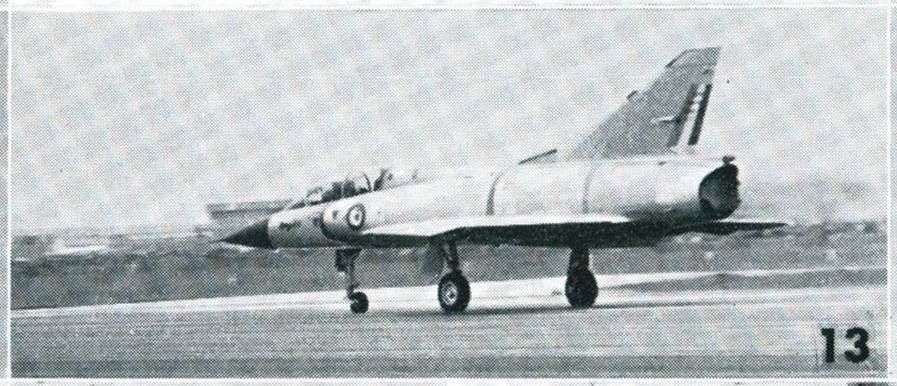

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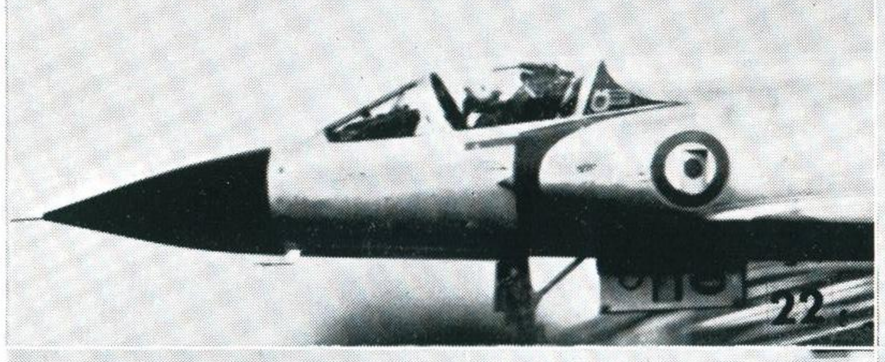

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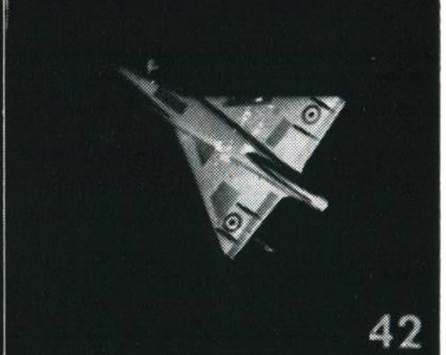

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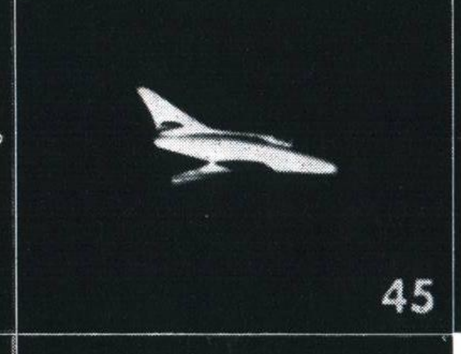

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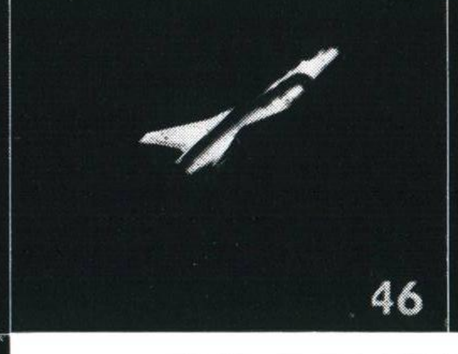

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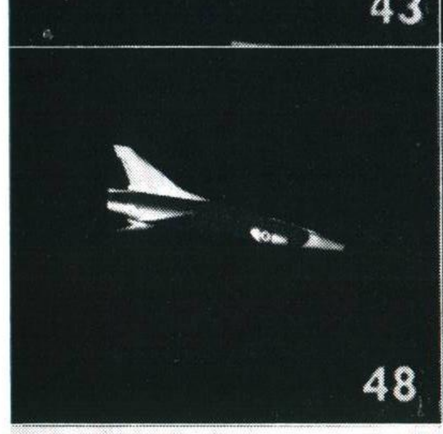

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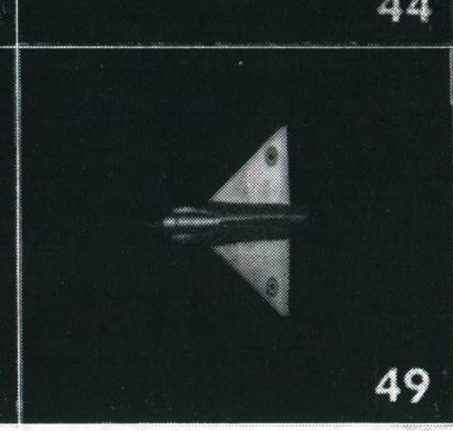

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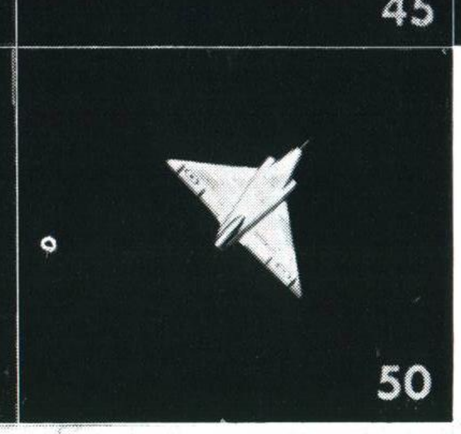

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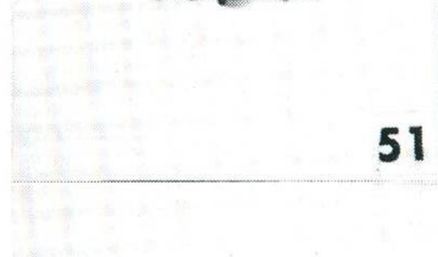

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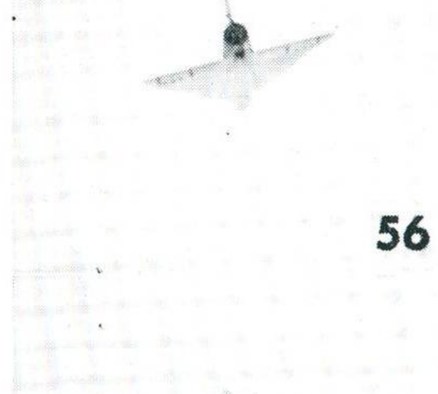

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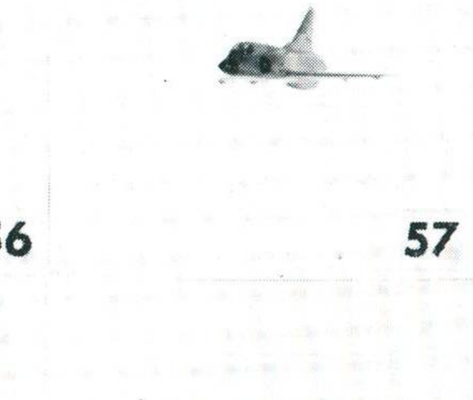

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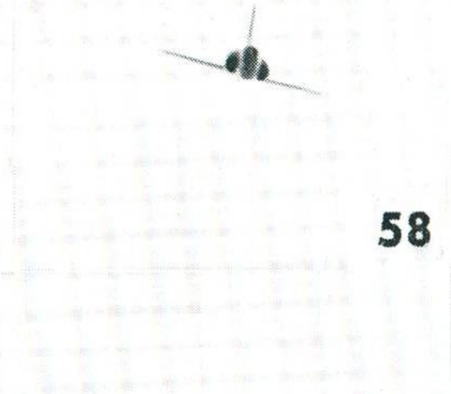

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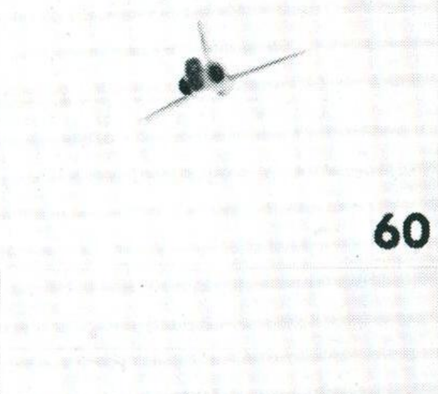

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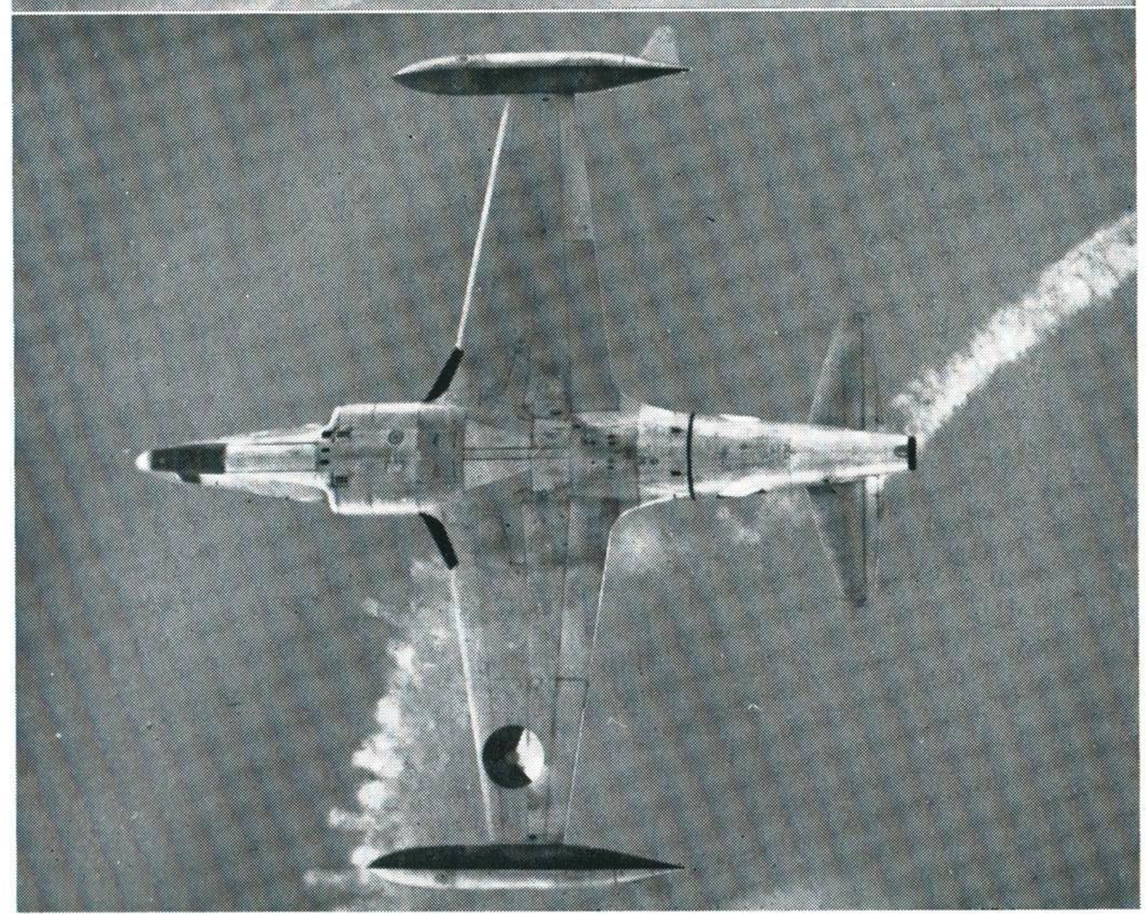

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BRIEFS

A KC-135 Stratotanker of the French Air Force refuels a Mirage IVA.



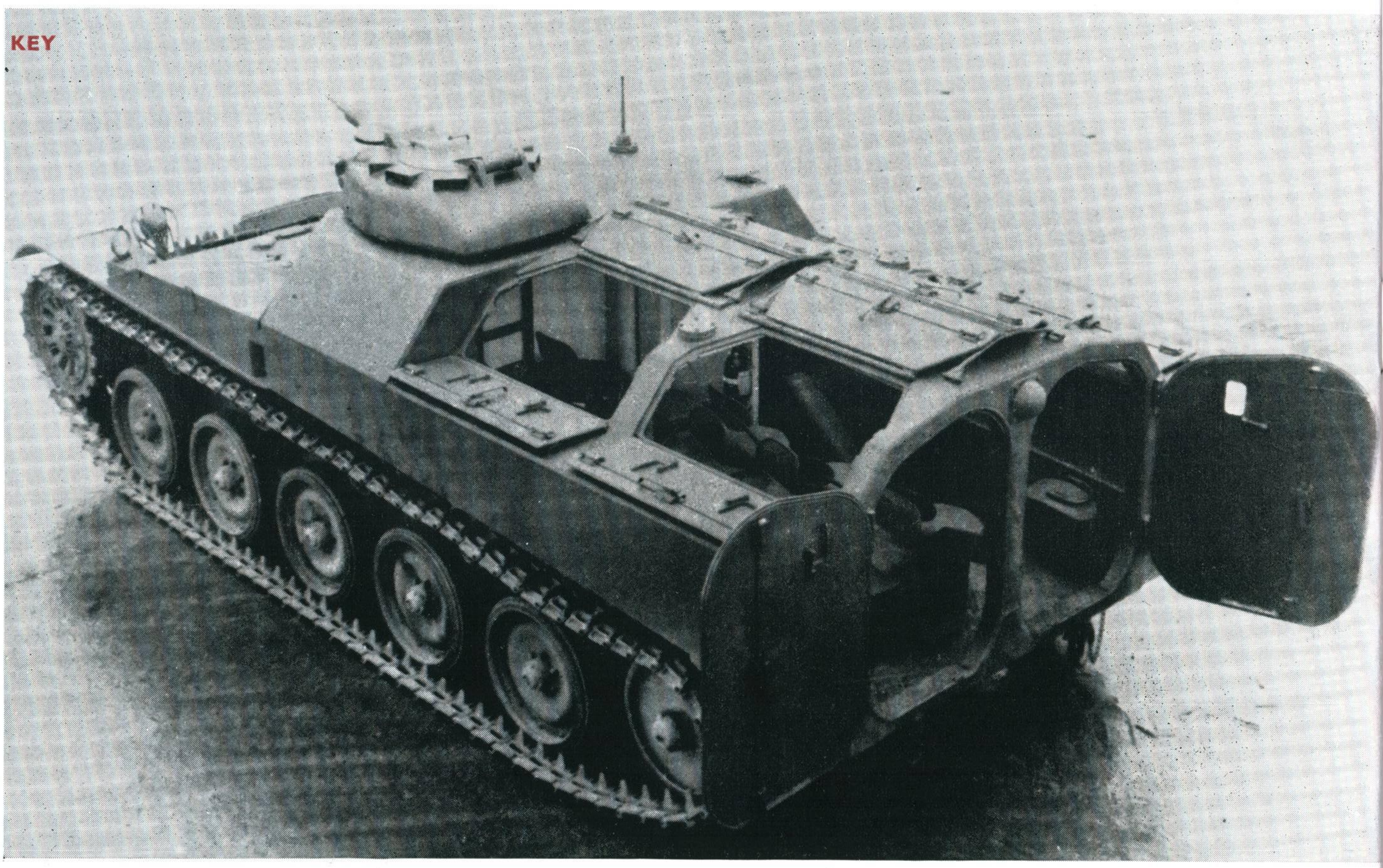


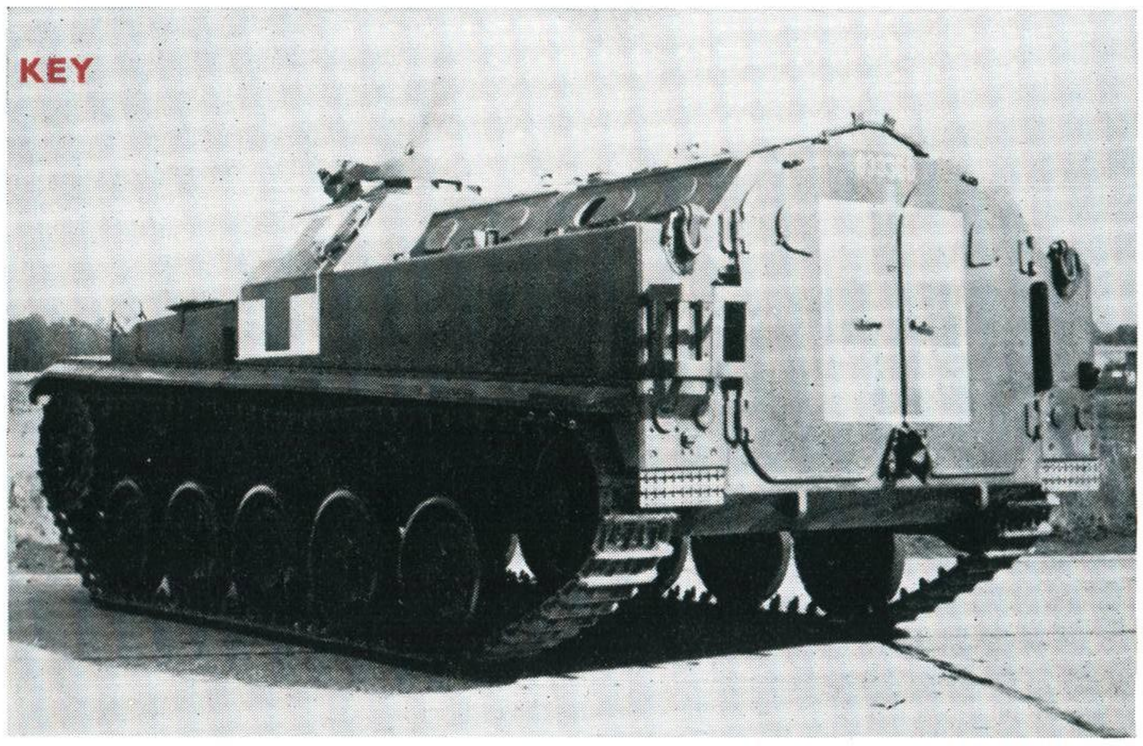
Our June 1962 editorial brought the Lockheed T-33 back to mind and the recent Battle of Britain anniversary ceremonies brought T-33 visitors from two N.A.T.O. nations, the Netherlands and Norway. The Dutch use two types, the T-33 (right) and RT-33 (right, above).

Two new models in the executive aircraft range, Cessna's turbocharged Skyknight (bottom, right) and Piper's new Comanche Model 260 (bottom, left).







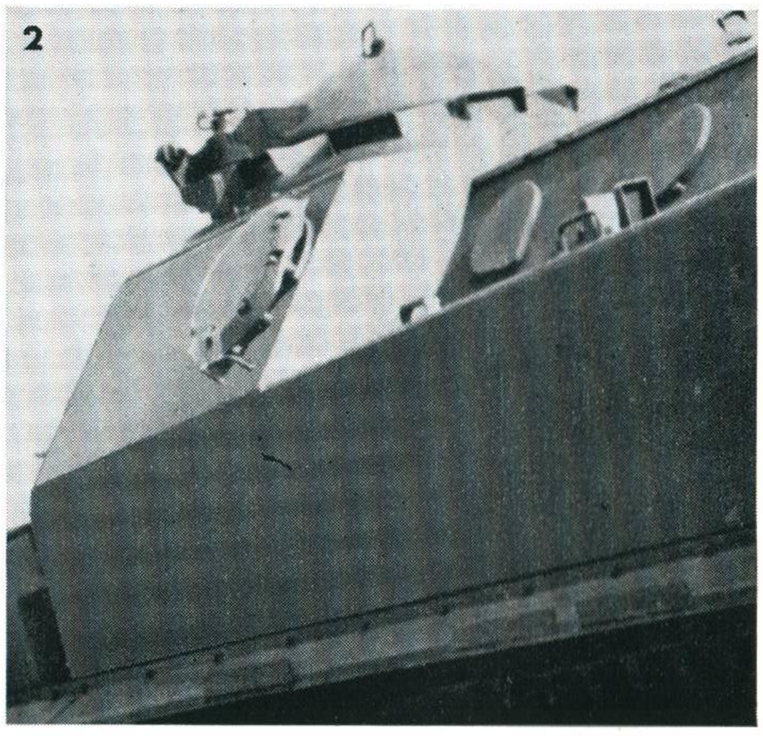


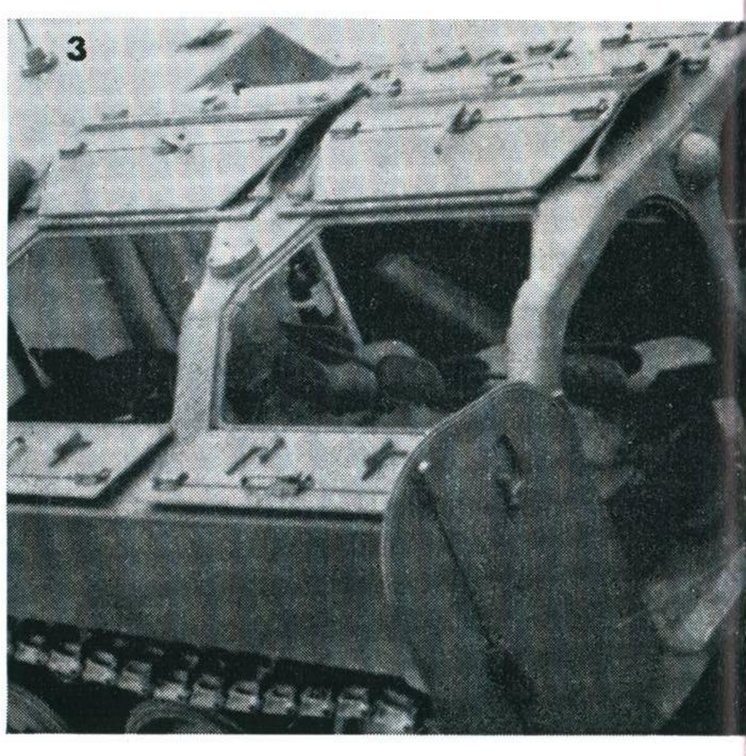
AMX-VCI

FRENCH ARMOURED PERSONNEL CARRIER

Vehicule de Combat d'Infanterie AMX, or AMX-VCI, is one of several derivatives of the AMX 13 tank which has been featured several times already in the *Journal*. As its name implies, it is an armoured infantry vehicle. It differs, however, from the U.S. M113 and the British F.V.432 armoured personnel carriers. Thus, it does not have a simple box-like superstructure but a more complicated one with folding side openings, which enable its occupants to observe and fire their weapons. In addition, it is commonly fitted with a small machine gun cupola.

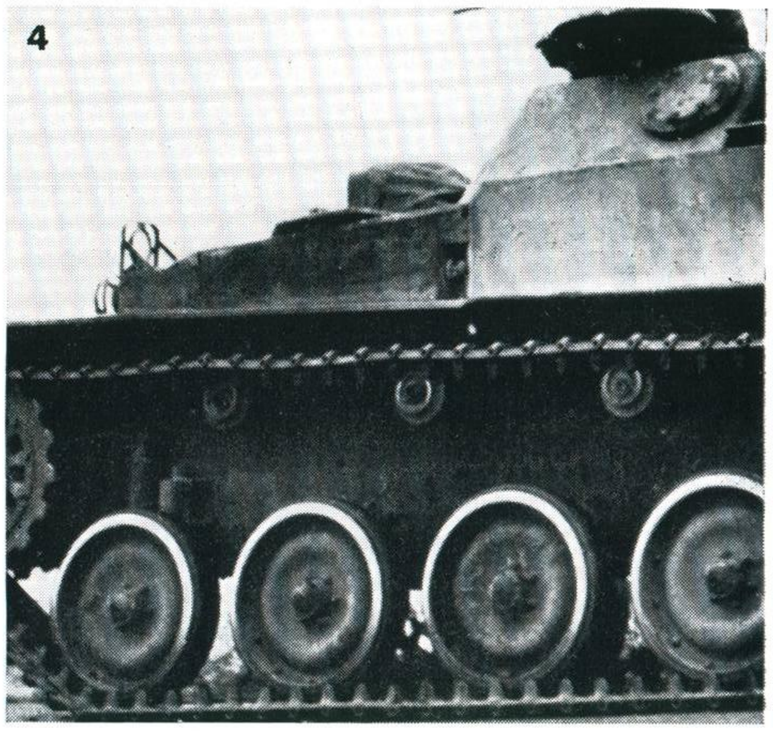






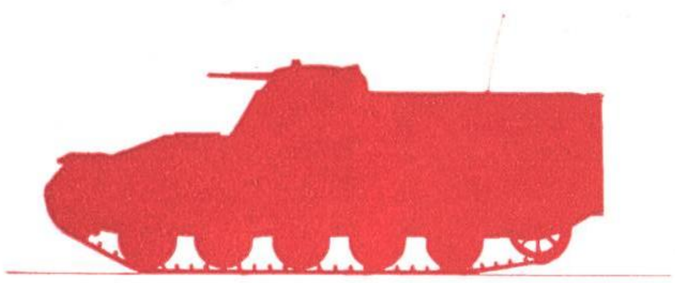
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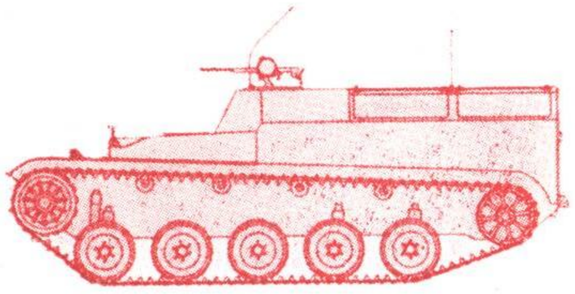


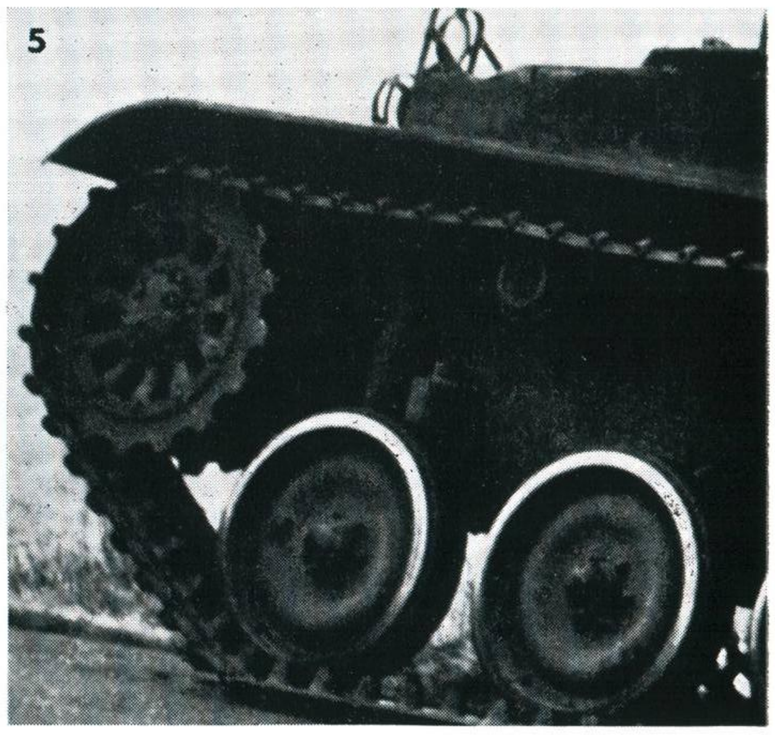


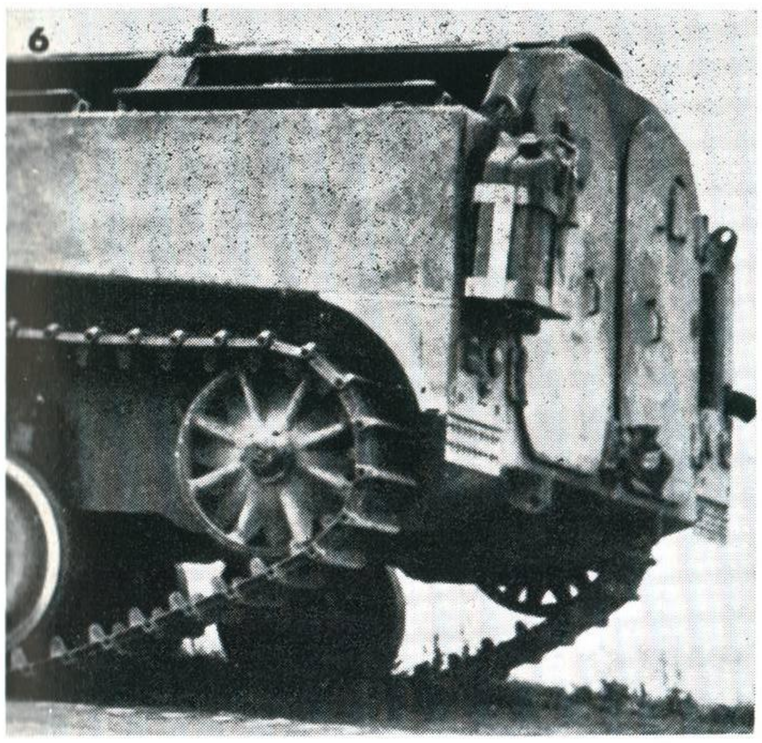
Unlike the United States carriers it is not amphibious but it enables the French infantrymen to fight on the move whereas the other carriers are merely armoured transport vehicles whose occupants must dismount to fight. AMX-VCI has also been referred to as the AMX-VTT, or *Vehicule Transport de Troupe*, and like other vehicles of this kind it is used for several other purposes. Thus, apart from its basic role of an armoured infantry carrier, it is also used as an armoured ambulance, a command vehicle and a cargo carrier.

Lesson instructions on page 305.

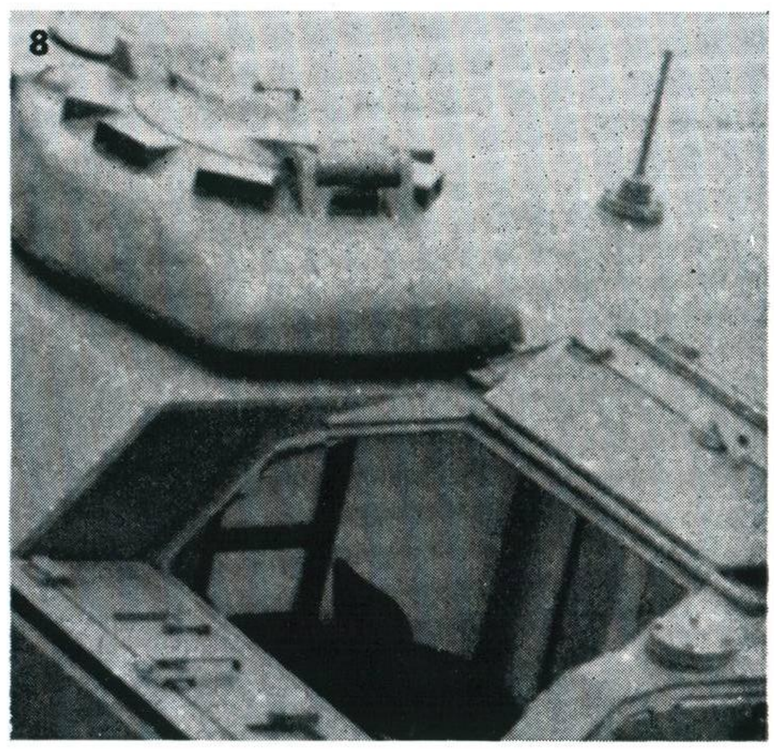


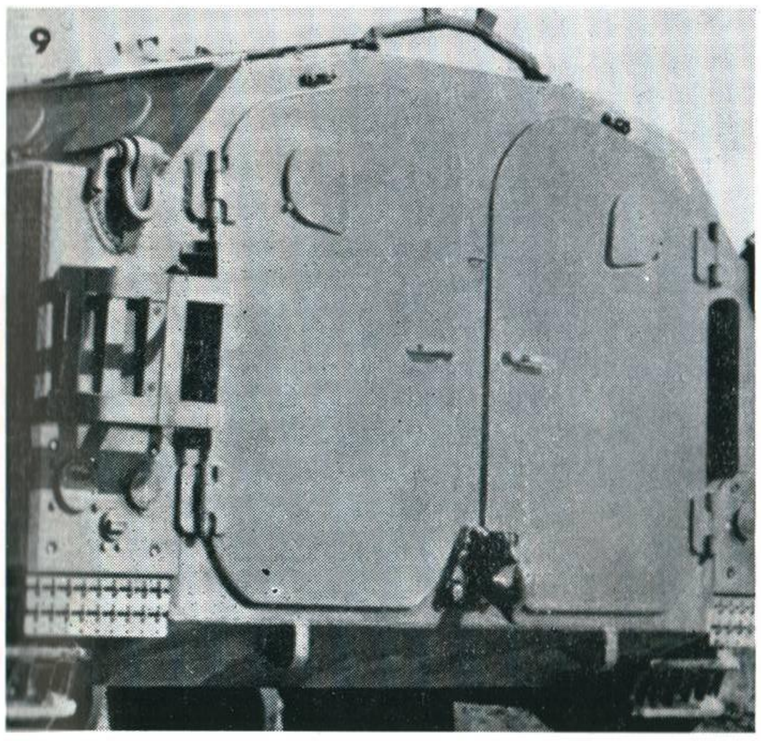


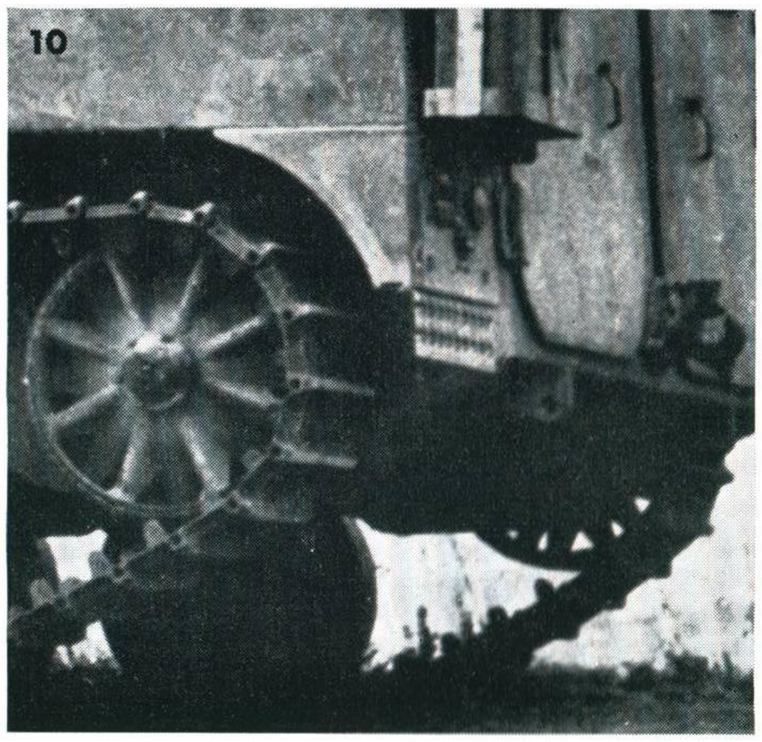


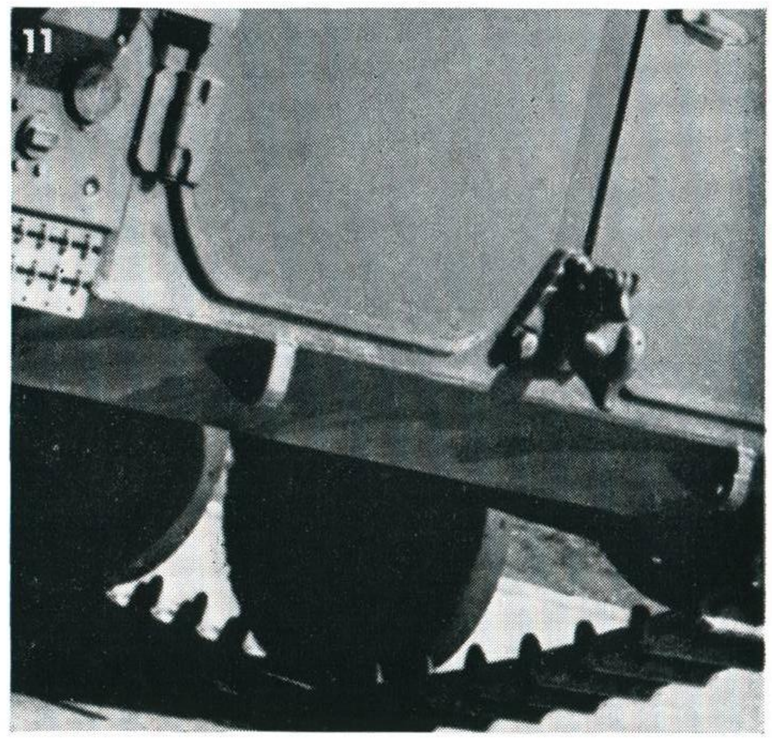






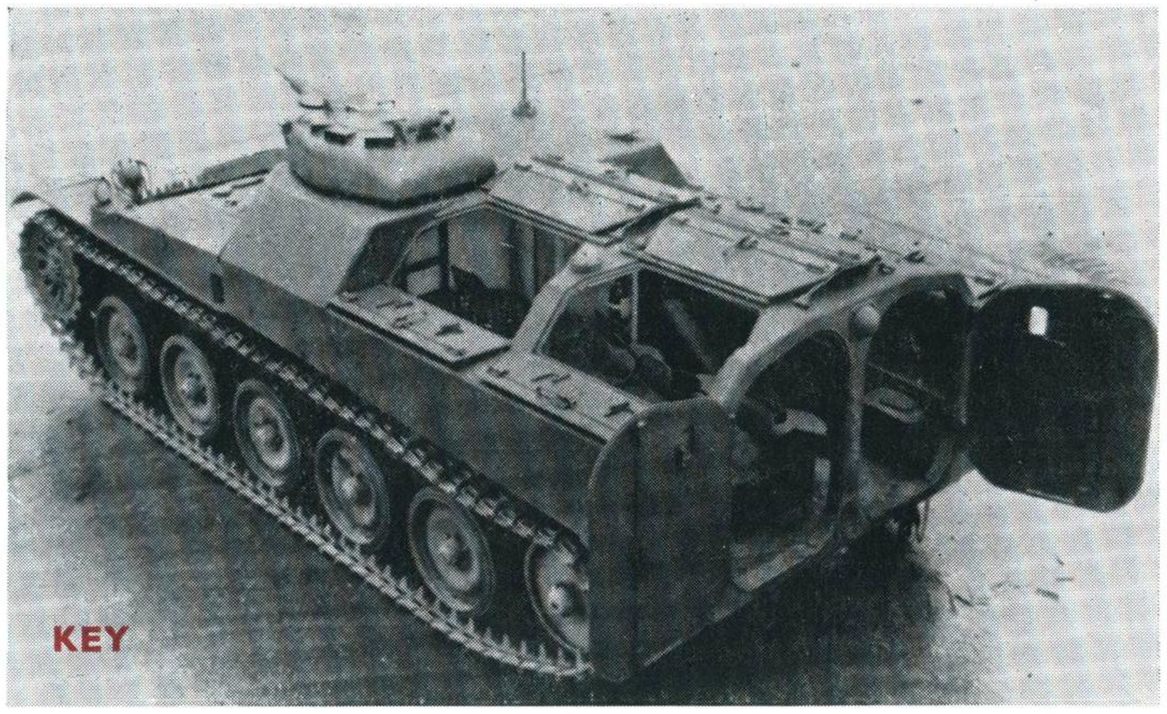






AMX-VCI — French Armoured Personnel Carrier

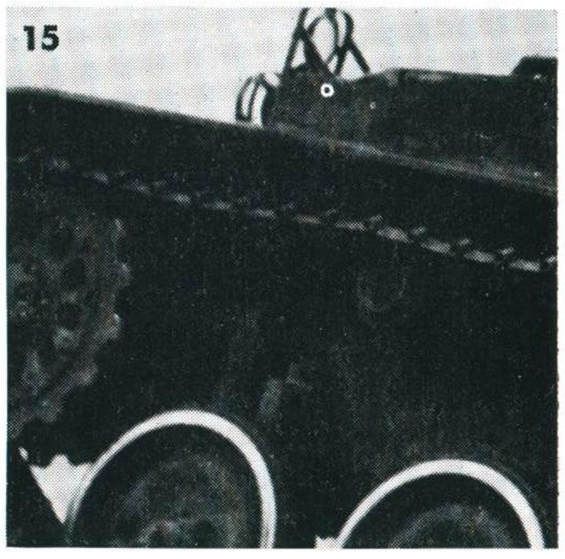


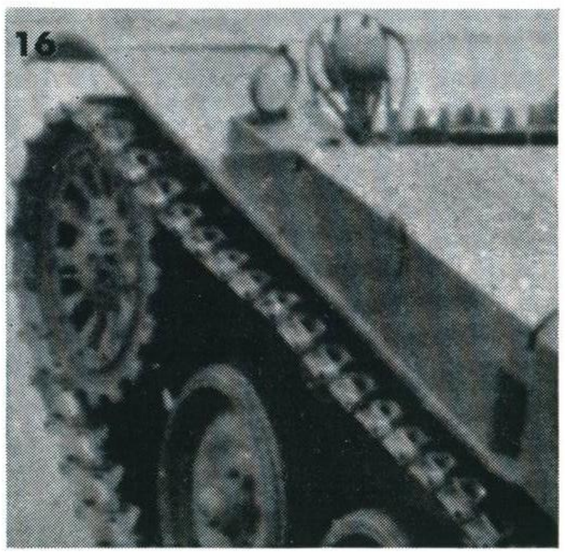


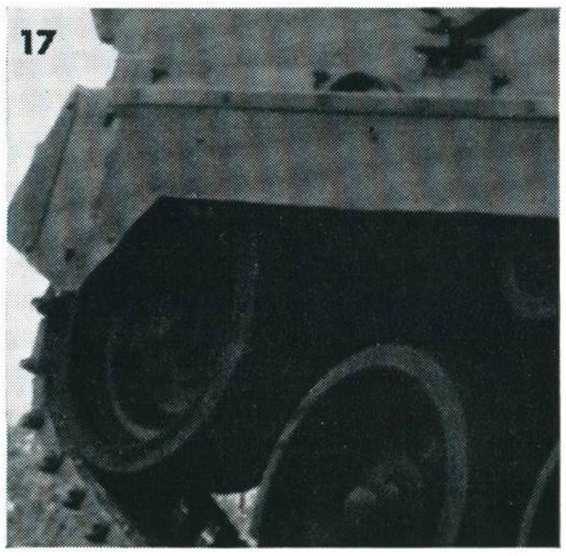


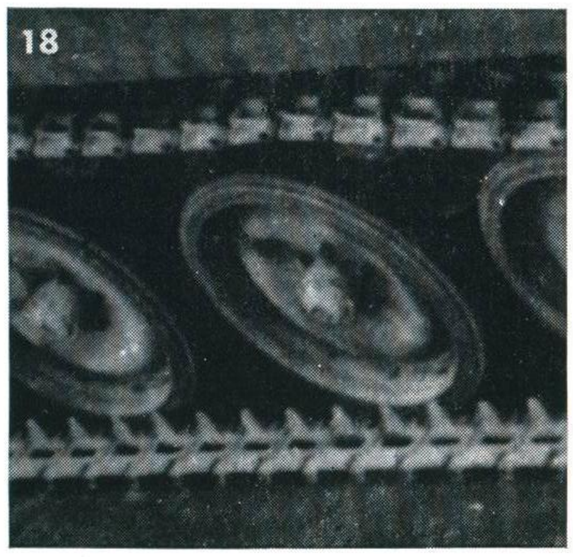


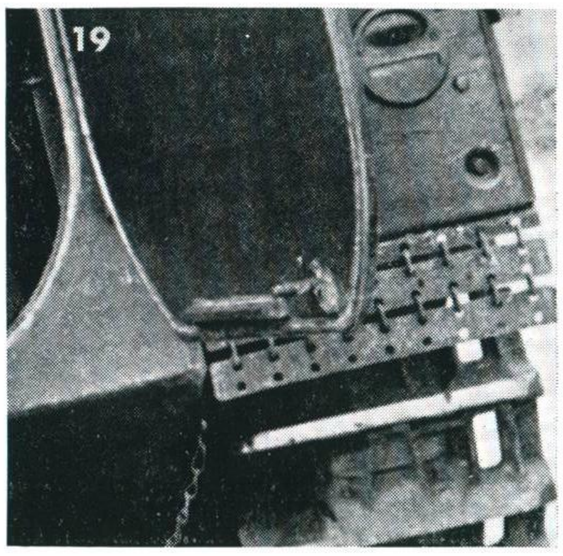


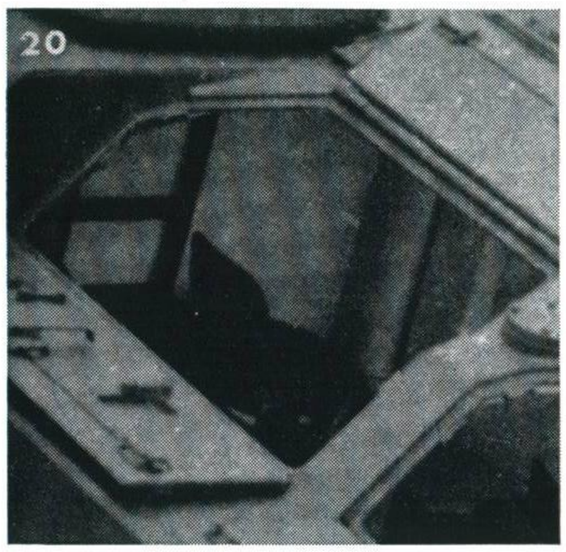


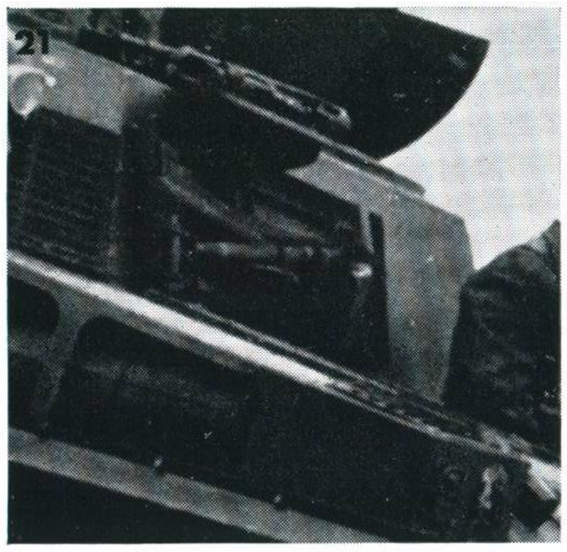


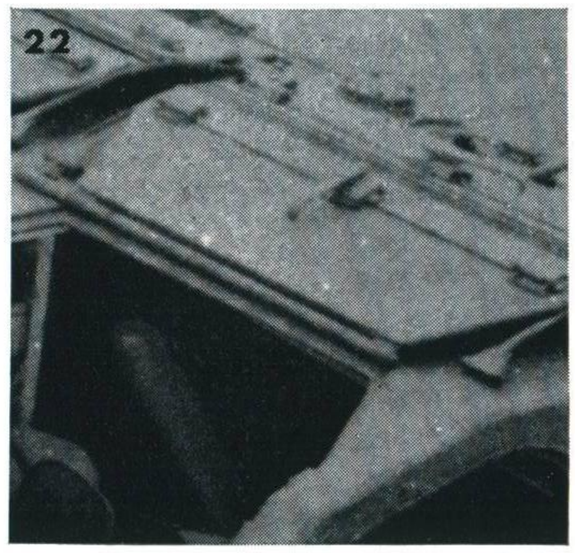


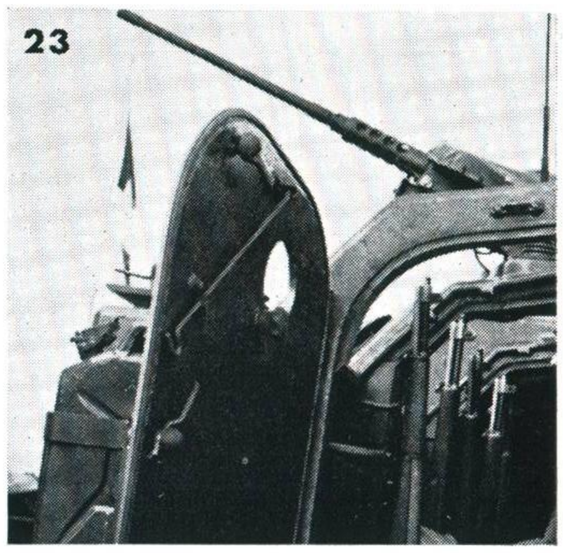


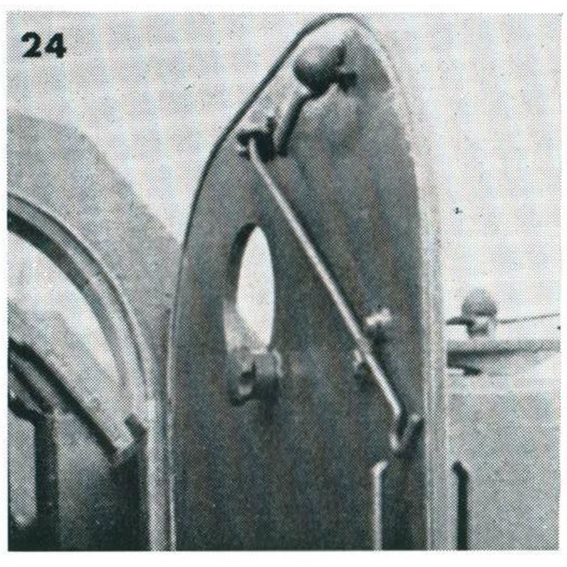






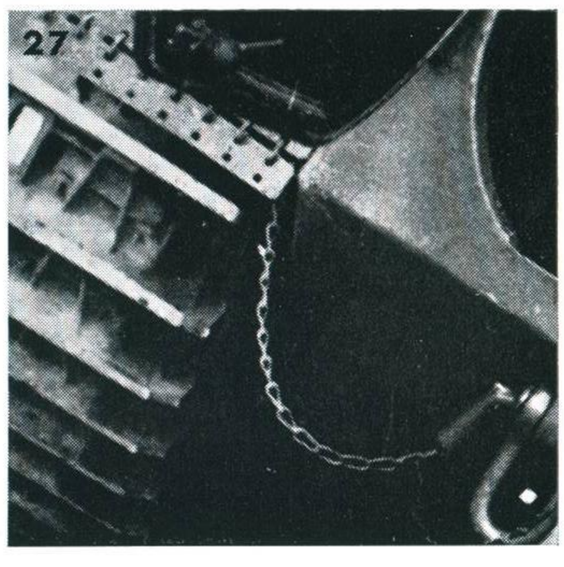




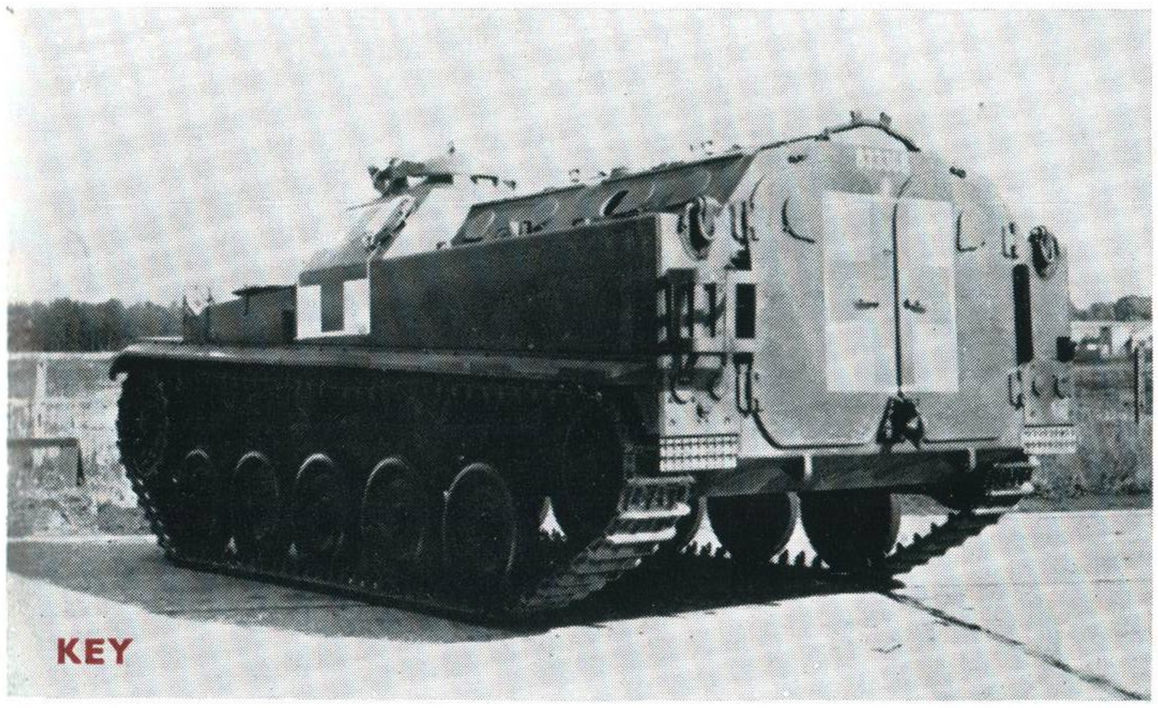


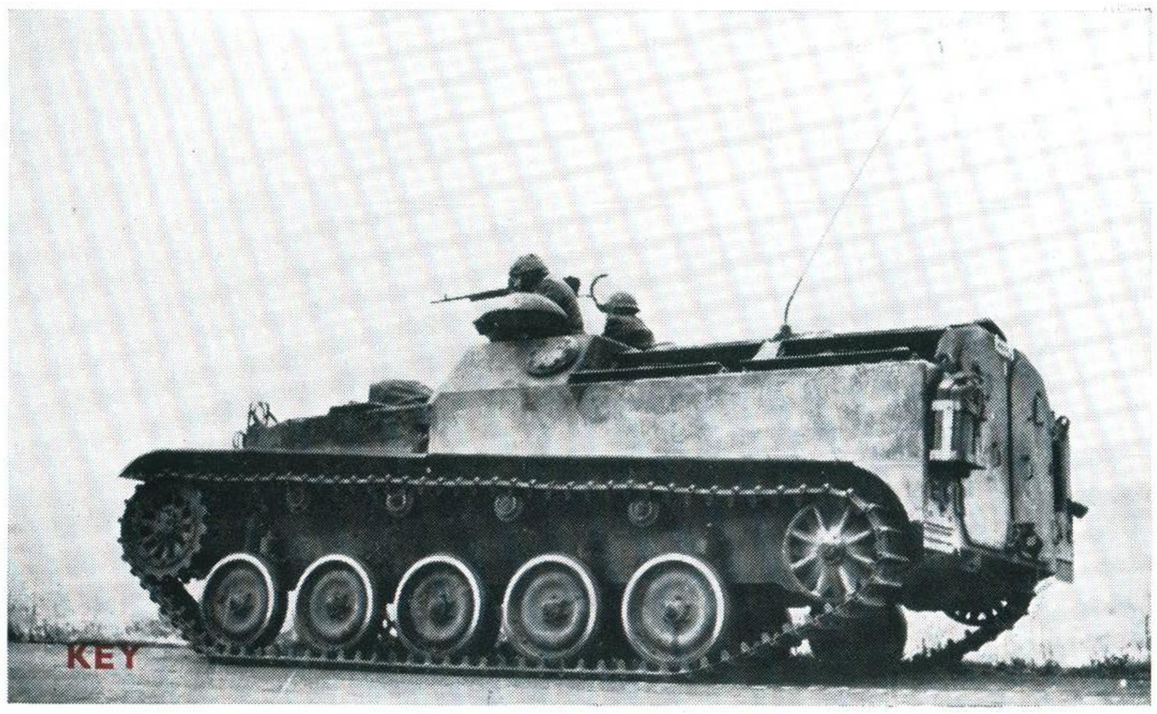


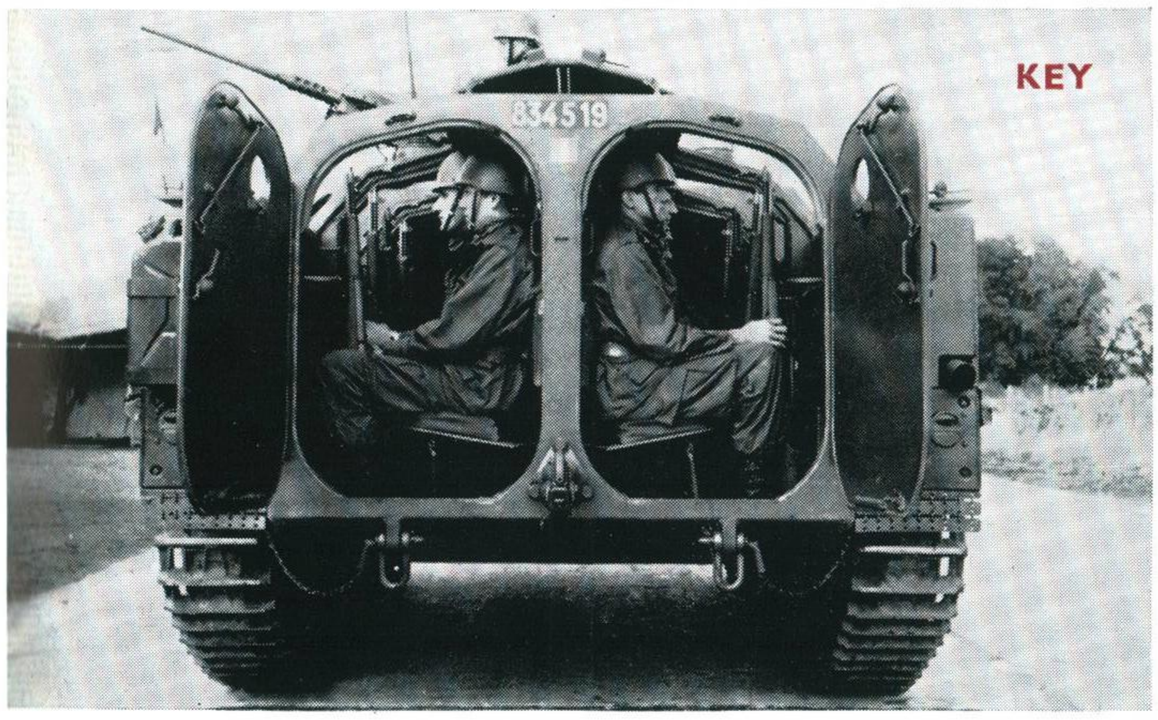




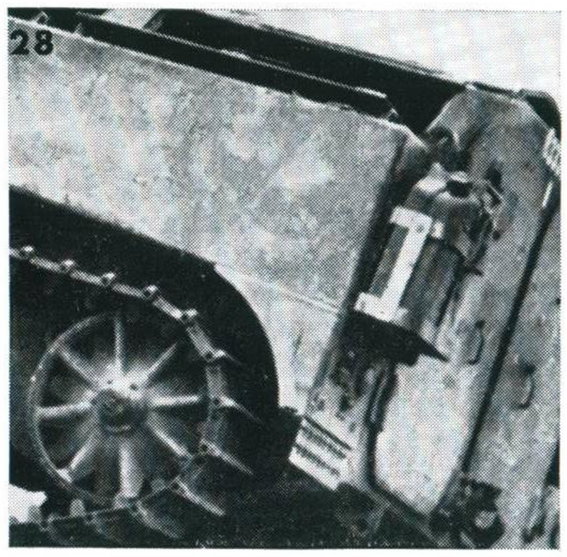
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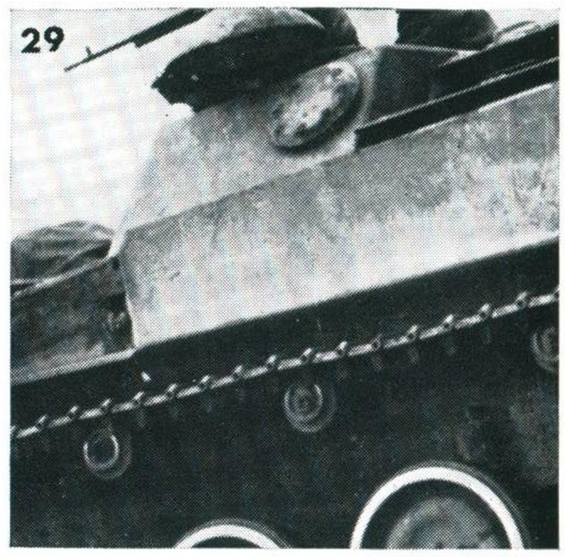


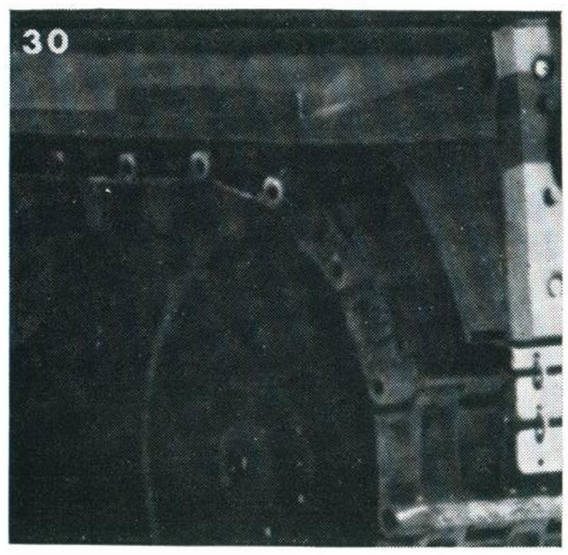


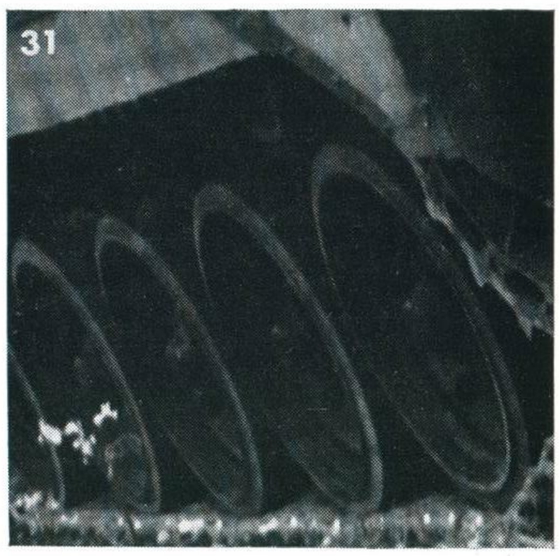


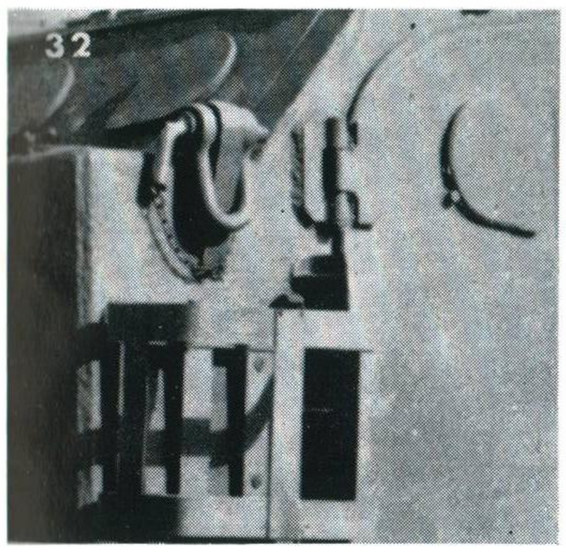
External differences between the different versions of this Carrier are small. The ambulance may be distinguishable by its prominent Red Cross Markings. It also lacks a machine gun cupola but this is also the case with several other versions of this vehicle, including some AMX-VCI. The AMX-VCI is already in service in numbers with the French Army and in addition it has been adopted by the Belgian and Dutch Armies.

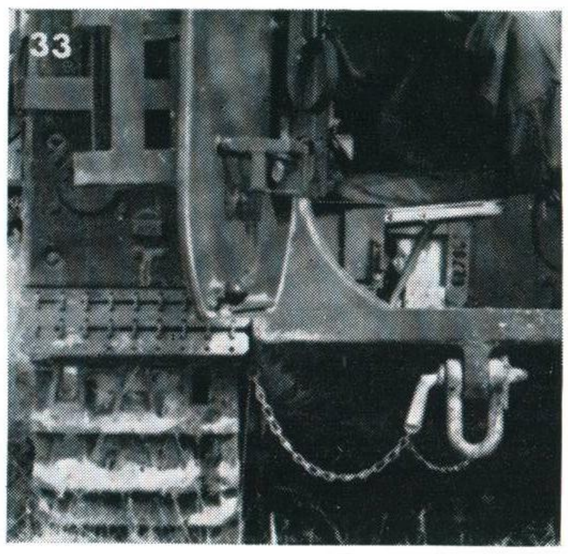


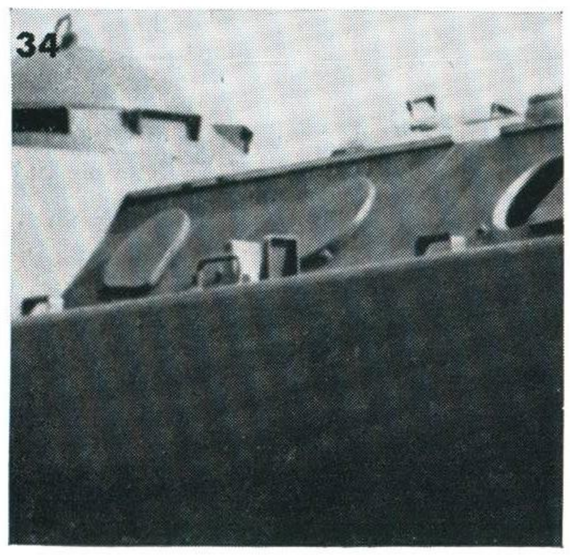




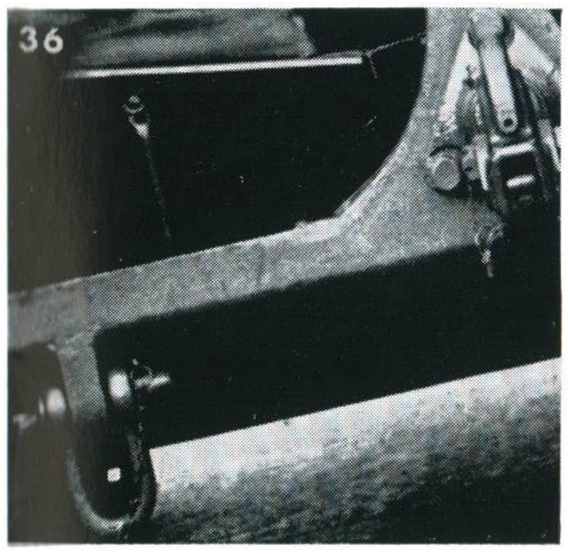


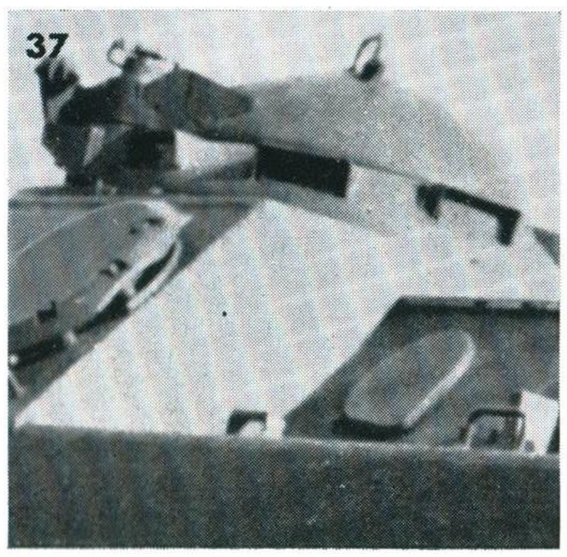


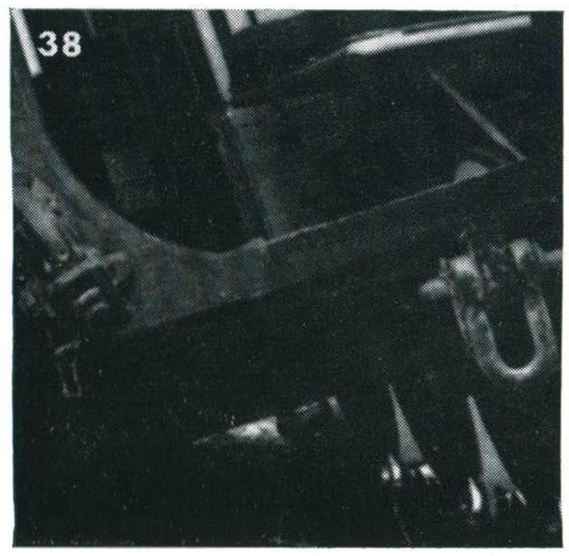


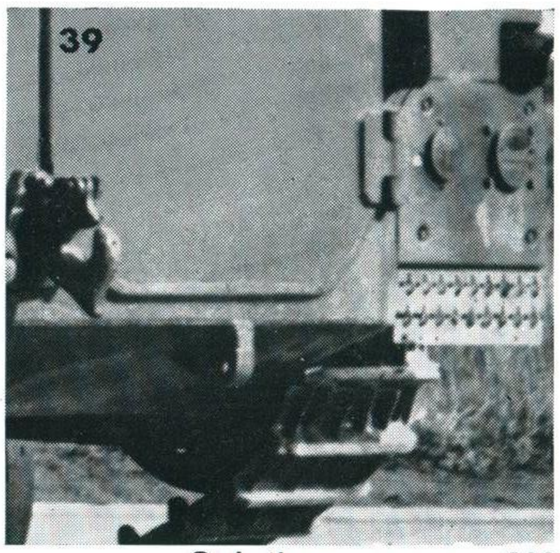






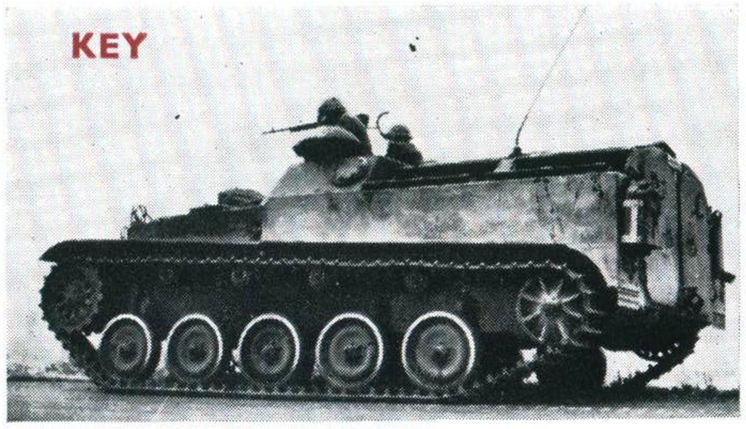






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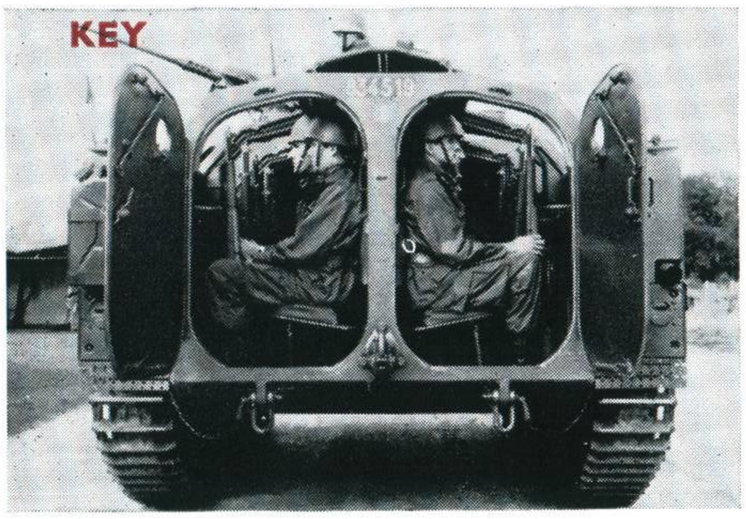
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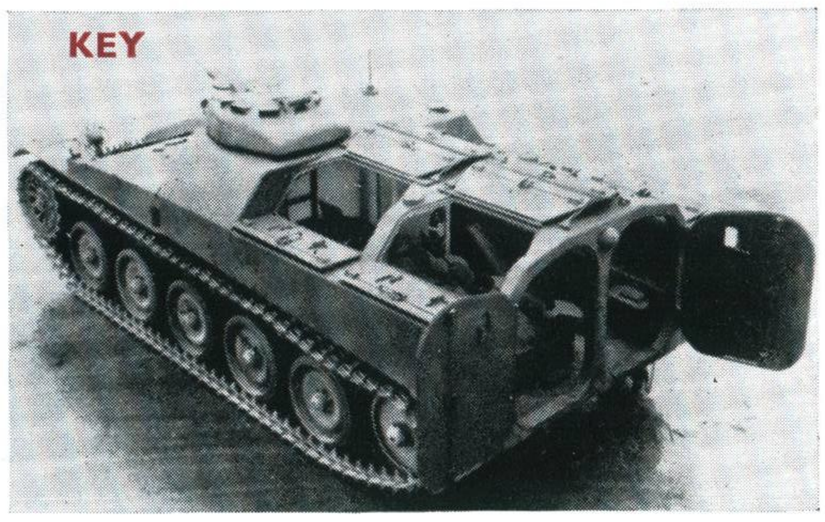
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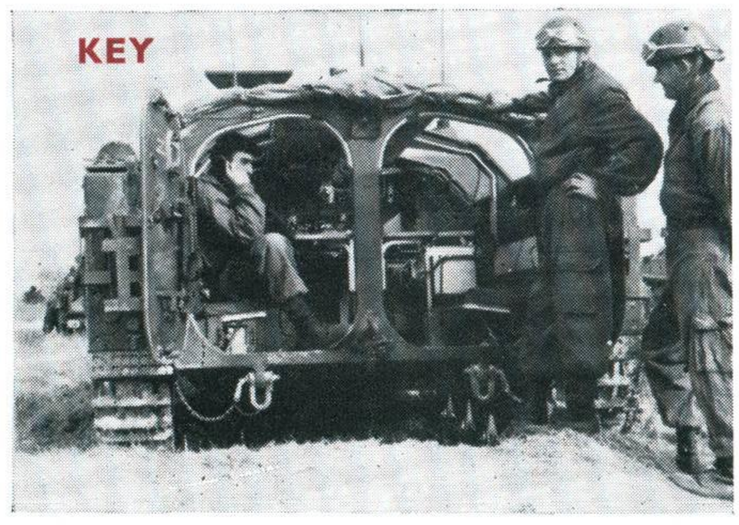
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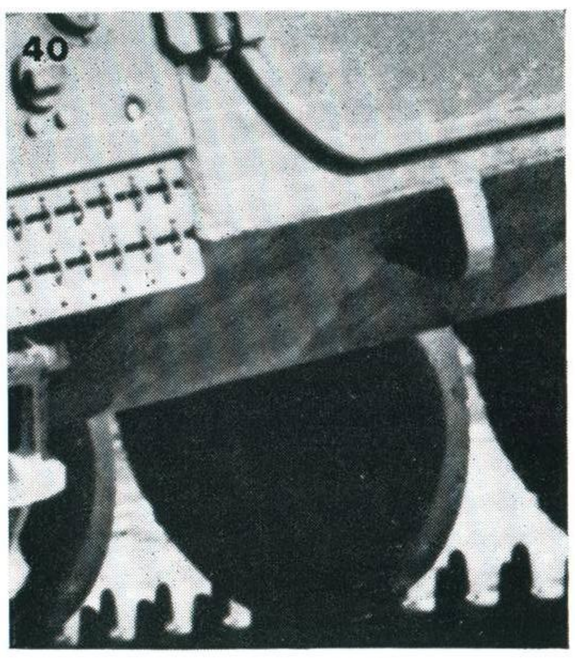
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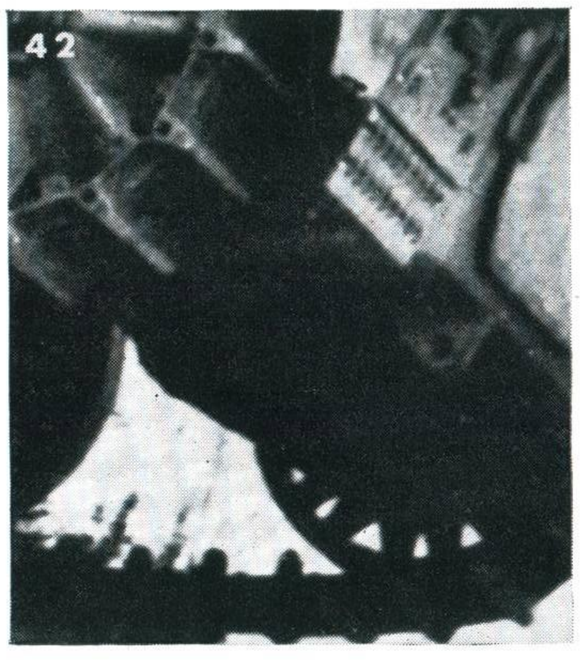
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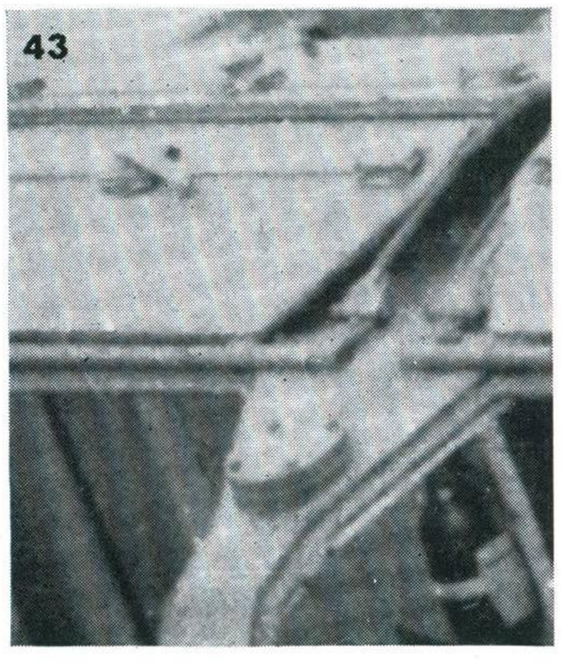
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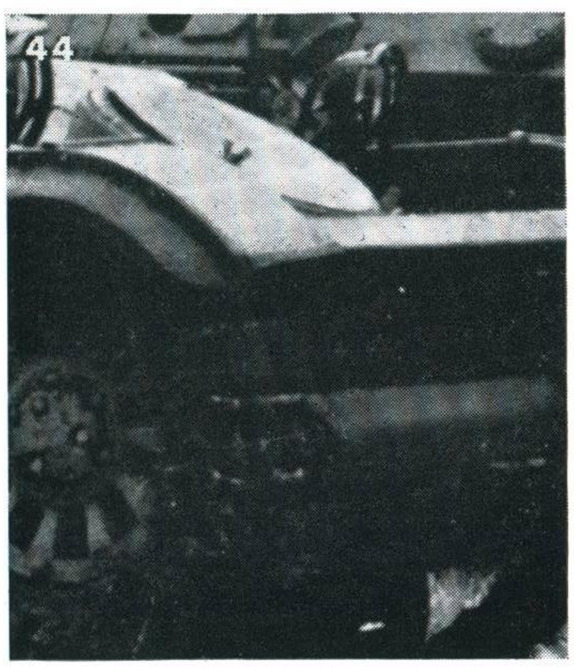
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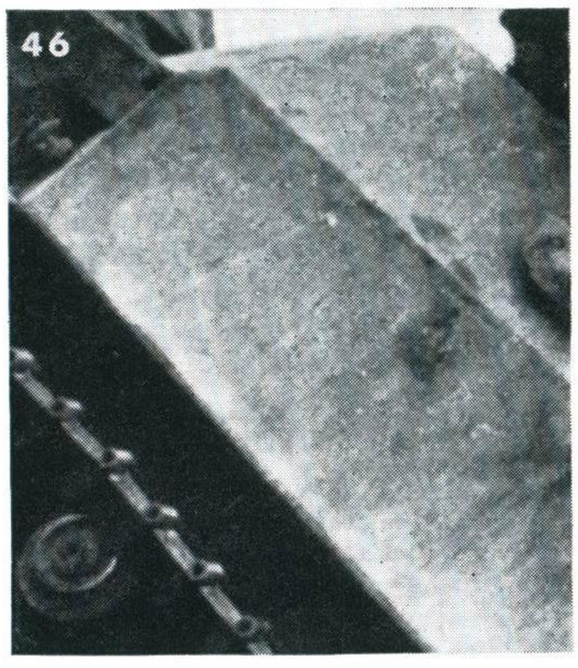
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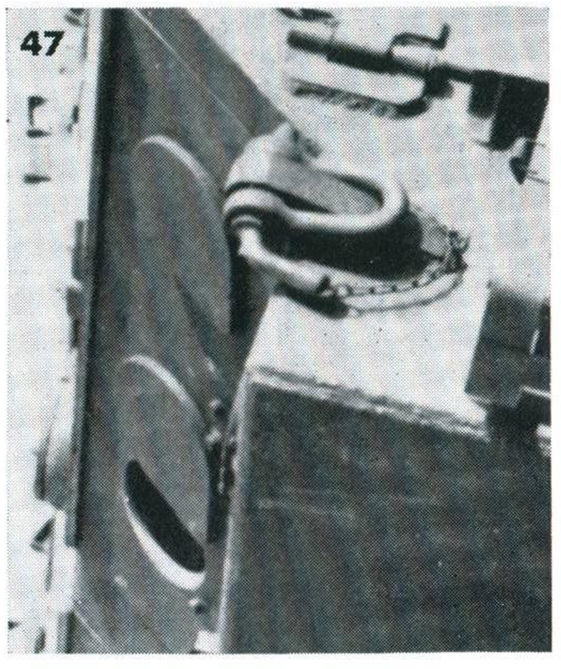
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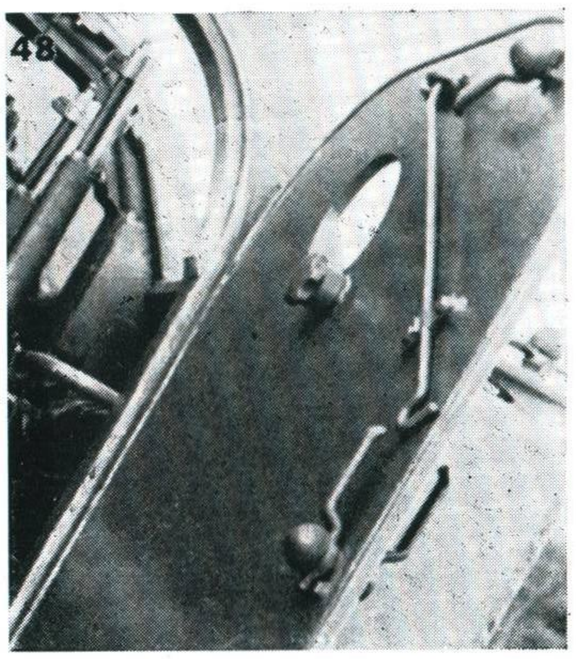
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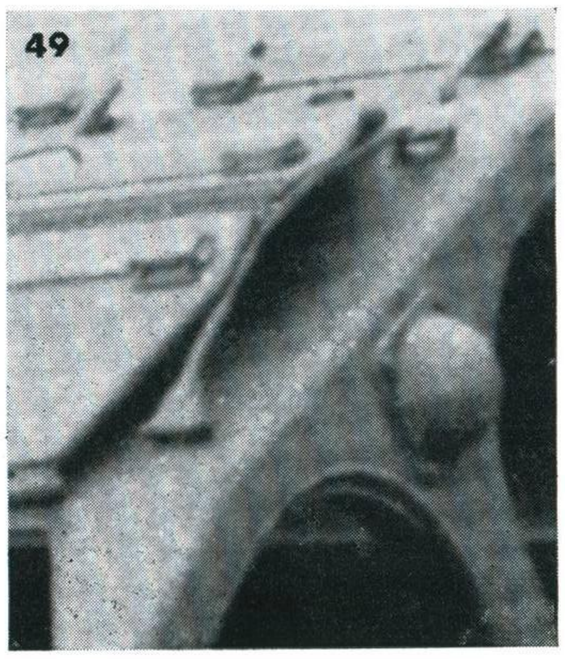
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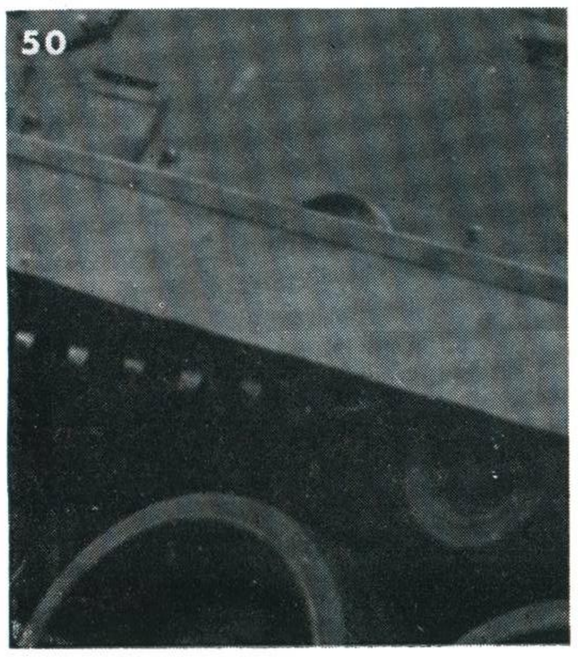
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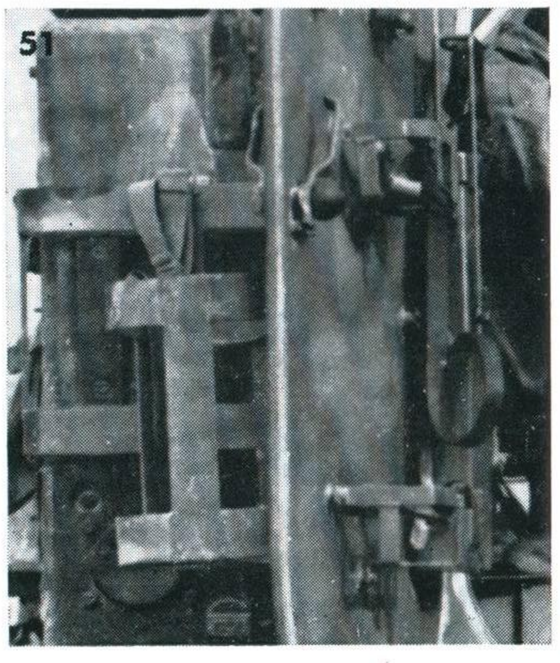
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50



51



In Passing . . .

Royal Navy helicopters. A Wessex H.A.S.1 and Hiller H.T.2 helicopter on H.M.S. Bulwark.



Lesson Instructions

To obtain the maximum benefit from the training devices published in this Journal, the following procedure should be adopted.

1. **Read the text associated with the lesson.**
2. **Prepare a list of target numbers so as to be able to tackle the targets in any order.**
3. **Identify the target pictures by comparing them with the key views: start with the easy ones so as to gain experience: also use targets already identified to solve the more difficult ones.**
4. **When certain of the identity of a target write down its name *IMMEDIATELY* against the appropriate number on your list. THIS IS IMPORTANT.**
5. **Lessons should not be hurried or given a time limit. So far as beginners are concerned, it is more important to identify accurately than quickly.**
6. **Do not attempt conscious memorising of details, shapes, or names.**

In our July 1964 edition lesson on the Alouette III, we said that so far there was only the one version, the SE3160. Here, now, is the SA3164 armed version with 20-mm. cannon as well as Nord SS-11 missiles.



BOOK REVIEWS

British Naval Aircraft Since 1912 by Owen Thetford. Published by Putnam. Price 63*s*.

In our June 1963 edition *Aircraft of the Royal Air Force Since 1918* was reviewed; this was the third and up-to-date edition of *Aircraft of the Royal Air Force 1918–1951*. The companion work *British Naval Aircraft 1912–1958* has similarly gone to a third edition with a modified title as *British Naval Aircraft Since 1912*.

This is the standard reference work on British Naval Aircraft, historical and current, and is thoroughly recommended for all Service libraries. It contains a review of each type that entered service with historical background, units to which it was allotted and brief technical data of a representative mark with, in each case, a three-view general arrangement drawing. An appendix illustrates the types in more limited use and other appendices list aircraft and seaplane carriers 1913–1961 and airships.

With the R.A.F. volumes it was recommended that the latest volume be regarded as a replacement for, not an alternative to, earlier editions. Unfortunately the changes in the naval volumes have not been so sweeping. The photographic reproduction in the latest volume is slightly inferior to the first and although a few changes have been made with illustrations and text brought up to date, only four more pages have been added (to cover the Buccaneer and Gannet A.E.W.3) for the price increase from 50*s*. to 63*s*.

B.R.

Aircraft Pocket Reference Library. Published by Macdonald. Price £1.

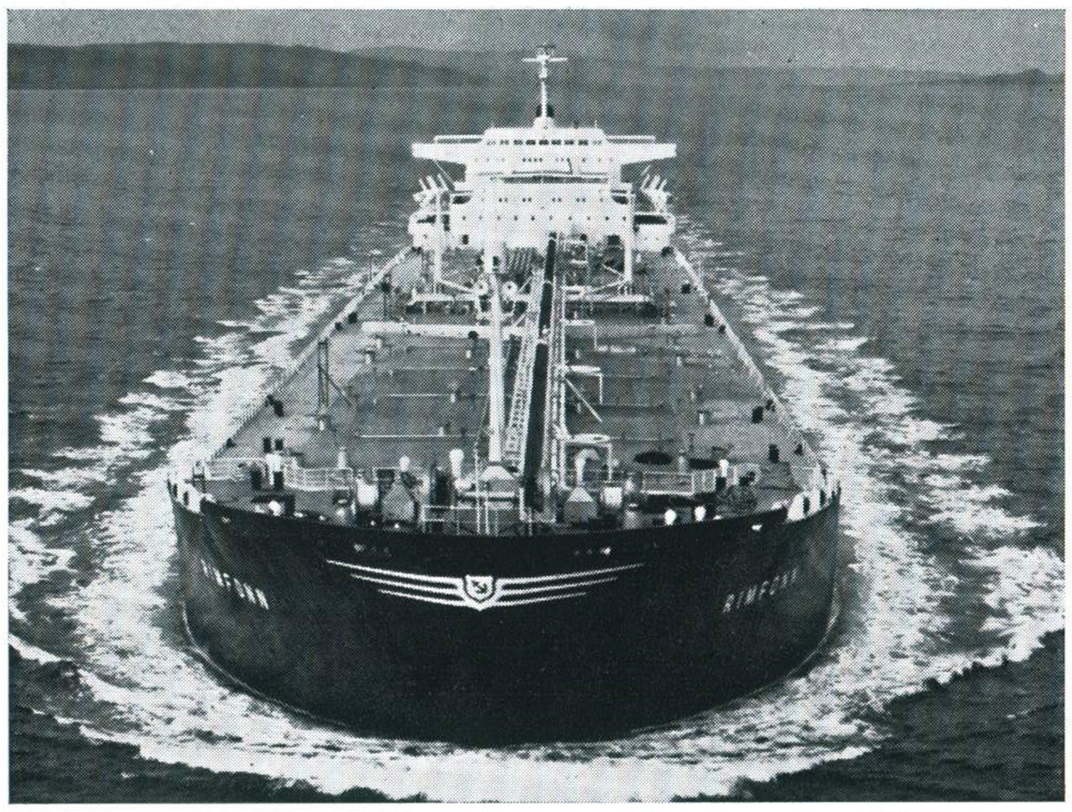
Within the confines of a sturdy case $5\frac{1}{2}'' \times 4\frac{1}{4}'' \times 2\frac{1}{8}''$ are eight 72-page pocket books of world aircraft currently flying with page-a-type coverage giving background history, data and silhouette-type three-view drawings. In this way 544 aircraft types are covered.

Each pocket-book deals with a different group of aircraft types as follows:

1 Fighters
2 Bombers
3 Trainers
4 Military Transports
5 Commercial Transports
6 Rotorcraft
7 Low Wing Light Aeroplanes
8 High Wing Light Aeroplanes

All-in-all, this is an excellent reference collection for a relatively modest sum and while identification training skill is not achieved by references, such books mean so much more to those proficient at this skill.

B.R.



(Photo by courtesy of Skyphotos Ltd.)

Cover Photo: This unique picture gives an admirable idea of the proportions of a large modern tanker. The deck railings will show the scale. Built in 1963 by Harland & Wolff, "RIMFONN" is a steam tanker of some 50,700 tons gross and 86,800 tons deadweight. Owned by Sigval Bergesen of Norway she has an overall length of 870 feet and has all bridge and accommodation aft.

SOLUTIONS TO TESTS AND EXERCISES IN THIS EDITION

Page 284 **WARSHIP TYPE TEST NO. 5**

No.	Class	Name (if known)	Type	Nationality
1	Salem	—	Heavy Cruiser	American
2	Chapayev	—	Light Cruiser	Russian
3	Ham	—	Inshore Minesweeper	British
4	Gromki	—	Destroyer	Russian
5	Ton	—	Coastal Minesweeper	British
6	De Grasse	De Grasse	Anti-aircraft Cruiser	French
7	Tribal	H.M.S. Tartar	General Purpose Frigate	British
8	Surcouf	—	Anti-aircraft Destroyer	French
9	Ton	—	Coastal Minesweeper	British
10	Blackwood	—	Anti-submarine Frigate	British
11	Tiger	H.M.S. Tiger	Cruiser	British
12	Kotlin	—	Destroyer	Russian
13	Tiger	H.M.S. Tiger	Cruiser	British
14	Blackwood	H.M.S. Keppel	Anti-submarine Frigate	British
15	Gromki	—	Destroyer	Russian
16	Chapayev	—	Light Cruiser	Russian
17	Gromki	—	Destroyer	Russian
18	Chapayev	—	Light Cruiser	Russian
19	Kotlin	—	Destroyer	Russian
20	Ton	—	Coastal Minesweeper	British
21	Ton	—	Coastal Minesweeper	British
22	Sverdlov	—	Light Cruiser	Russian
23	Surcouf	—	Anti-aircraft Destroyer	French
24	Kotlin	—	Destroyer	Russian
25	Y.M.S.	—	Coastal Minesweeper	French
26	Chapayev	—	Cruiser	Russian
27	Salisbury*	—	Aircraft Direction Frigate	British
28	Ton	—	Coastal Minesweeper	British
29	B.Y.M.S.	—	Coastal Minesweeper	Italian
30	Sverdlov	—	Light Cruiser	Russian
31	Sverdlov	—	Light Cruiser	Russian
32	Fletcher	—	Destroyer	American
33	Skory	—	Destroyer	Russian
34	"R"	—	Submarine	Russian

* All are probably having masts enclosed at some time or other.

Page 290 **WASP/SCOUT**

All targets are of **Wasps** or **Scouts** except No. 23 which is an **Alouette III.** Full identities are as follows:

1 Scout A.H.1	13 Wasp A.S.1	25 Wasp A.S.1
2 Wasp A.S.1	14 Wasp A.S.1	26 Scout A.H.1
3 Scout A.H.1	15 Wasp A.S.1	27 Wasp A.S.1
4 Scout A.H.1	16 Scout A.H.1	28 Scout A.H.1
5 Scout A.H.1	17 Wasp A.S.1	29 Scout A.H.1
6 Wasp A.S.1	18 Scout A.H.1	30 Scout A.H.1
7 Scout A.H.1	19 Wasp A.S.1	31 Wasp A.S.1
8 Scout A.H.1	20 Scout A.H.1	32 Wasp A.S.1
9 Wasp A.S.1	21 Wasp A.S.1	33 Wasp A.S.1
10 Scout A.H.1	22 Scout A.H.1	34 Scout A.H.1
11 Wasp A.S.1	23 Alouette III	35 Scout A.H.1
12 Scout A.H.1	24 Scout A.H.1	36 Wasp A.S.1

Page 294 **MIRAGE III**

All targets are of the **Mirage III** except for No. 23 which is a **Draken** and No. 45 which is a **Super Mystère.** Full designations, as far as can be ascertained from the views shown are:

1 IIIR	17 IIIR	33 III	50 III
2 IIIB	18 IIIB	34 III	51 III
3 IIIB	19 IIIC	35 III	52 III
4 IIIC	20 IIIB	36 III	53 III
5 IIIR	21 IIIE	37 III	54 III
6 IIIB	22 III	38 III	55 III
7 IIIE	23 Draken	39 III	56 III
8 IIIR	24 IIIB	40 III	57 IIIB
9 IIIR	25 III	41 III	58 III
10 IIIB	26 IIIBS (Swiss)	42 III	59 III
11 IIIB	27 IIIC	43 III	60 III
12 IIIC	28 IIIC	44 III	61 III
13 IIIC	29 IIIB	45 Super Mystère	62 III
14 III	30 III	46 III	63 III
15 IIIR	31 III	47 III	64 III
16 IIIB	32 III	48 III	65 III
		49 III	

Page 287 **DOUBLE UP**

1 (Left to right) Crate, Dakota, DC-6B
2 (Front and rear) Metropolitan (Convair 440) and Viscount
3 Sycamore (left), Whirlwind (right)
4 Mohawk (front), Albatross (rear)
5 Sikorsky S-62 (in air), Vertol 107 (on ground)
6 Pioneer (left), Twin Pioneer (right)
7 KC-135 Stratotanker refuelling a B-52 Stratofortress
8 Hawker P.1127 in front of a Vickers VC10
9 Electra (front), Caravelle (rear)
10 UH-2 Seasprite (foreground), Wasp (background)
11 (Front to rear) Porter, Pembroke, Caravelle
12 Bear B (top) and Delta Dagger (bottom)
13 Starfighter (top) and Delta Dagger (bottom)
14 Alouette II (on ground), Alouette III (in air)
15 Albatross (left) and F-4 Phantom (right)
16 A-5 Vigilante (left) and B-58 Hustler (right)
17 A-4 Skyhawks refuelling F-8 Crusaders

Page 286 **TRY THIS FOR SIZE**

No.	Name	Type	Gross Tonnage	Overall Length (feet)	Date of Building
1	Muchen	Freighter	12,500	545	1958
2	Yuho Maru	Ore Carrier	29,354	725	1962
3	Marabank	Freighter	8,854	486	1964
4	Ringwood	Freighter	10,860	536	1962
5	Mezada	Bulk Carrier	15,264	550	1960
6	Trentbank	Freighter	6,366	488	1962
7	Myken	Ore Carrier	9,821	524	1936
8	Ngakuta	Freighter	4,576	367	1962
9	Crowborough Beacon	Freighter	9,618	519	1954
10	Harry Lundeberg	Gypsum Carrier	10,200	525	1957
11	Ballylesson	Coaster	1,092	220	1959
12	Karmoy	Coaster	484	190	1957
13	Havjarl	Ore Carrier	13,612	545	1954
14	Elqui	Ore Carrier	11,106	534	1960
15	Cedric	Freighter	11,200	512	1952
16	Sadoharu Maru	Freighter	8,989	505	1962

Page 300 **AMX-VCI FRENCH ARMOURED PERSONNEL CARRIER**

All targets are of French **AMX-VCIs** except for Nos. 17, 31 and 50 which are British **F.V.432s.**

GREETINGS

The Editor and Staff send to all readers the Compliments of the Season and Best Wishes for 1965

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