

D1

JOINT



SERVICES

RECOGNITION

Journal



Vol. 23 JANUARY 1968 No. 1



LEOPARD?



Lesson Instructions Identity Training is a matter of "doing", rather than of gathering information. Submit to the instructions given below in every lesson and the ability to identify will become automatic.

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. The procedure will take care of that. Do not attempt to do it without the key too soon, wait until it is self-evident.

Conduite des leçons

1. Lire le texte correspondant à la leçon.
2. Préparer une liste de numéros de cible, de façon à pouvoir prendre les cibles dans n'importe quel ordre.
3. Identifier les photos de la cible en les comparant avec les vues-clé: commencer par les plus faciles de manière à gagner de l'expérience: se servir aussi de cibles déjà identifiées pour trouver les plus difficiles.
4. Quand vous serez certain de l'identité d'une cible, notez son nom immédiatement en face du numéro correspondant sur votre liste. **CECI EST IMPORTANT.**
5. Les leçons ne devront pas être précipitées ou d'une durée limitée à l'avance. En ce qui concerne les débutants, il est plus important d'identifier avec précision que rapidement.
6. Ne pas s'efforcer d'apprendre par cœur les détails, les formes ou les noms.



JOINT SERVICES

RECOGNITION JOURNAL

The *Joint Services Recognition Journal* is a monthly publication produced by the Directorate of Flying Training (R.A.F.), Ministry of Defence, and prepared in collaboration with the Admiralty Board, the Army Department and the Ministry of Technology. 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.

The **Journal is produced solely for official use and must not be sold to members of the public.** Contributions and correspondence should be addressed to the Editor, *Joint Services Recognition Journal*, Ministry of Defence, Room 409, Old War Office Building, Whitehall, London, S.W.1.

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* *Identification Lessons*

" FOR OFFICIAL USE ONLY "

When readers complain to the Editor about the *Journal* it is unpleasant but not news. When the Editor complains about the readers that is not only unpleasant news but is also serious, for it is about a serious subject—Security.

Security is a function of Intelligence: its object is to keep information out of the hands of our friends the potential enemy. It is a thankless job and is often criticised for being too water-tight and at the same time as being full of leaks—depending upon how those who criticise stand to suffer. However, our grouse is not with the Security people but with our readers.

The job of weighing up the value of information in order to decide whether the balance of advantage lies in "releasing it" or in "keeping it back" is not an easy one and, fortunately, is not for the Editor alone to decide. But we can say for certain that nothing appearing in the *Recognition Journal* has a security grade, that is to say it is information which is knowable by—though not necessarily known to—all and sundry.

This does not mean—and we must emphasise the point—that the *Recognition Journal* is of no value to potential enemies of this country. It is, very much so. It collects, collates and presents in convenient form information which can aid an enemy not only by the fact of its being in summarised form

but upon recognition training matters also. It is obvious that it would be a great convenience to him if our ways of thinking and our ideas on the subject could be used for the benefit of his own forces, which is what some readers may be allowing him to do—albeit in all innocence.

Apart from careless people who have left the odd *Recognition Journal* in trains and buses it seems that attempts have been made to buy or sell it, and even to advertise that it is available for sale, or that someone would like to buy a copy. To say that it is wrong to do so is to underrate the seriousness of the matter.

The Security folk say, quite rightly and very firmly, that this sort of thing must cease. The first step, they suggest, is to remind all readers that the *Journal* is "FOR OFFICIAL USE ONLY". These words are imprinted in bold type at the head of the page and if you have not already seen them—read them now. They mean exactly what they say. Everyone who has copies of the *Journal* is therefore responsible for seeing that whilst they should have the widest possible distribution among those officially entitled to see them, they must not be shown to anyone else. Worse could follow. The Security people say that unless these words have the desired effect they will cause other words to be put upon the cover which can only mean that far fewer people will have a chance to see the *Journal* at all. So, in our personal as well as our official interests, we must keep our *Journals* under our official hats.

DC-8 SERIES 50

Span 142 feet 5 inches

Length 150 feet 6 inches

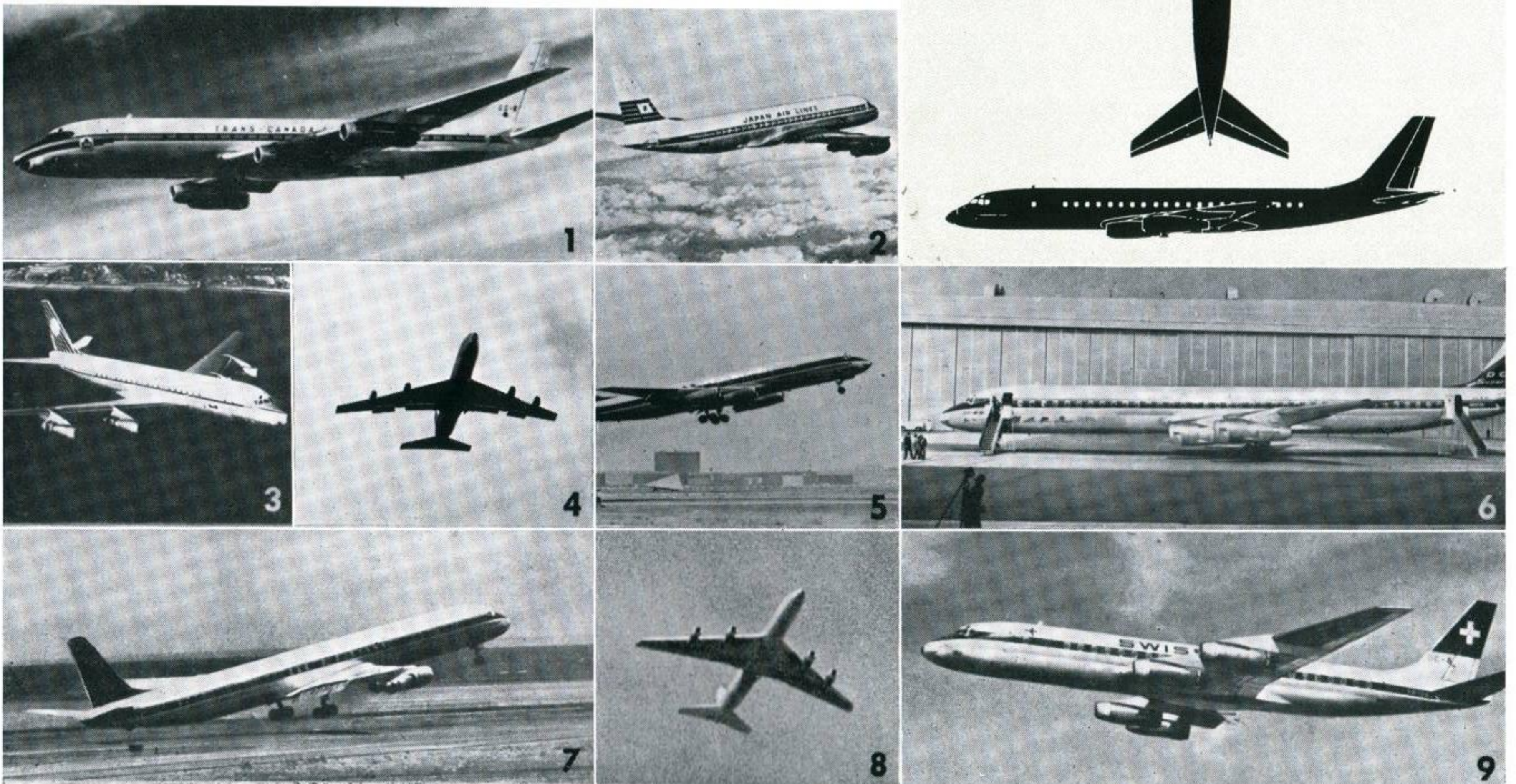
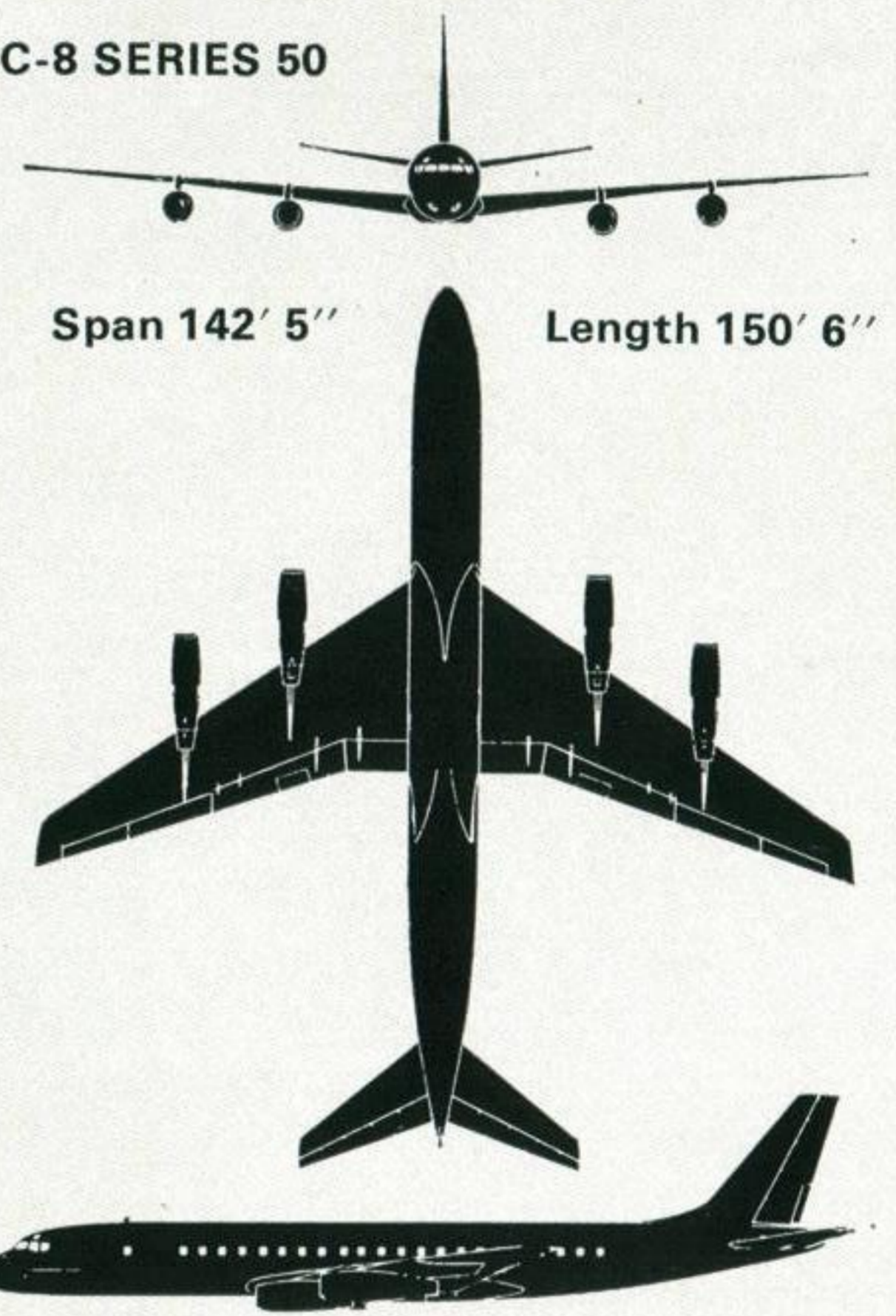


DC-8 SERIES 10 TO 50

First model of the Douglas DC-8 long-haul jet airliner was the Series 10 which entered service in August 1959. This was followed, successively, by the Series 20, 30, 40 and 50, all very similar in outline but having different power plants and operating weights and, in the case of the Series 50, an aerodynamically-improved wing. These original versions are all in service but only the Series 50 remains in production, including the DC-8F Jet Trader variant with a large cargo loading door in the fuselage side.

Work to instructions on page 2, and report targets as DC-8— or otherwise if jokers. Solutions on back cover.

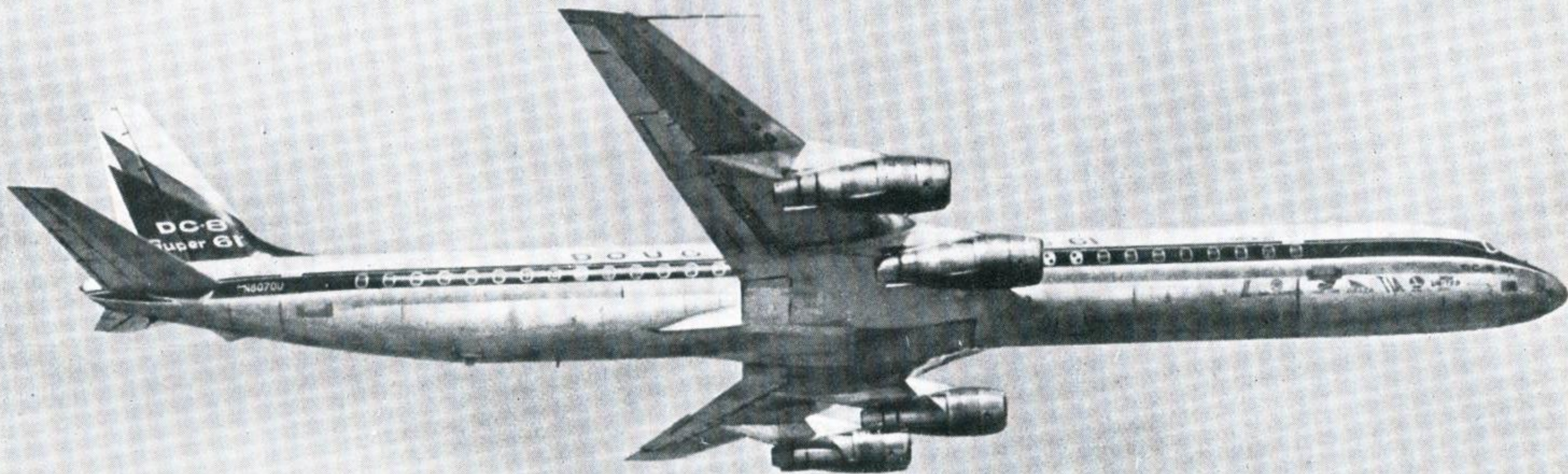
DC-8 SERIES 50



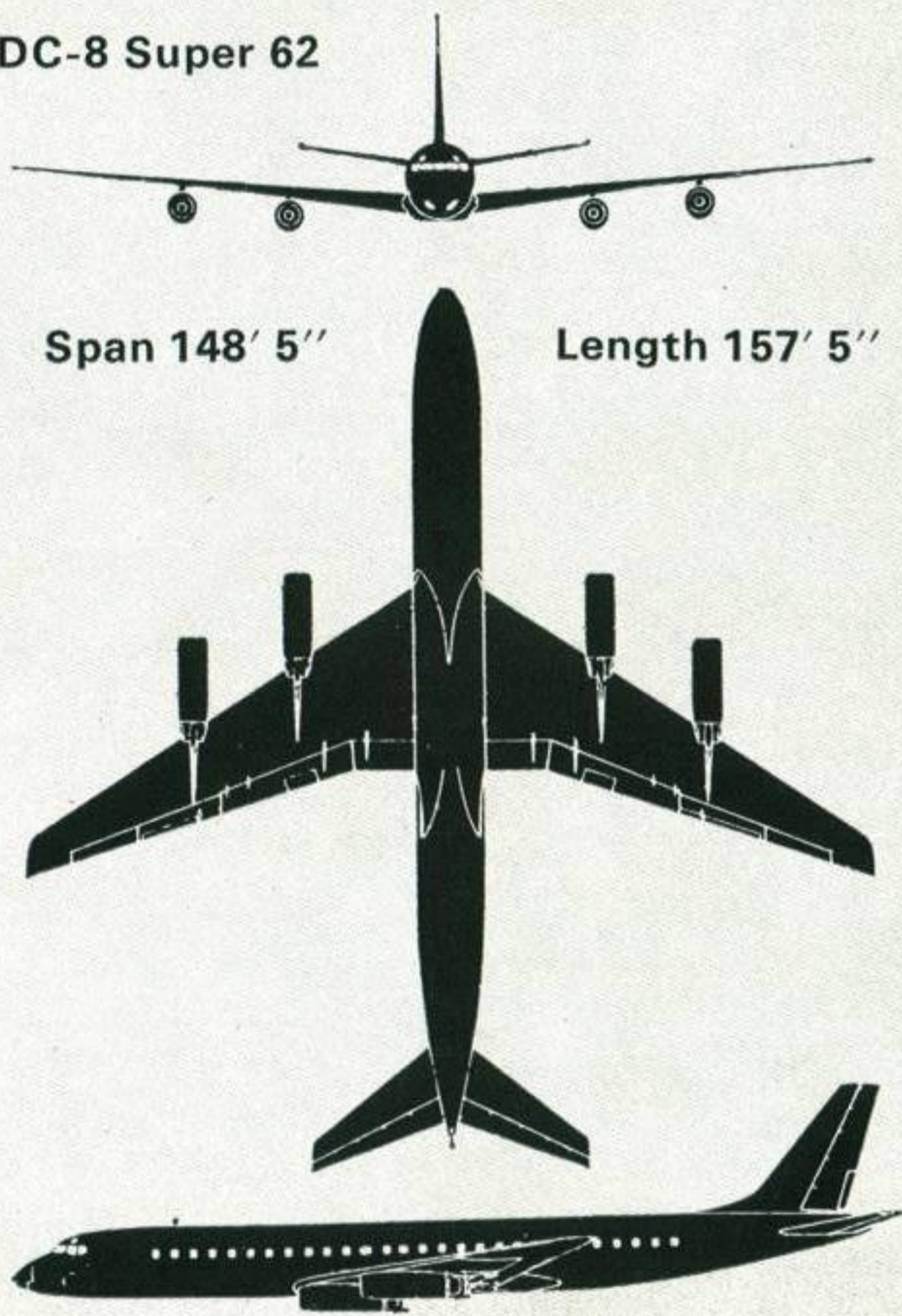
DC-8 SUPER 61

Span 142 feet 5 inches

Length 187 feet 5 inches

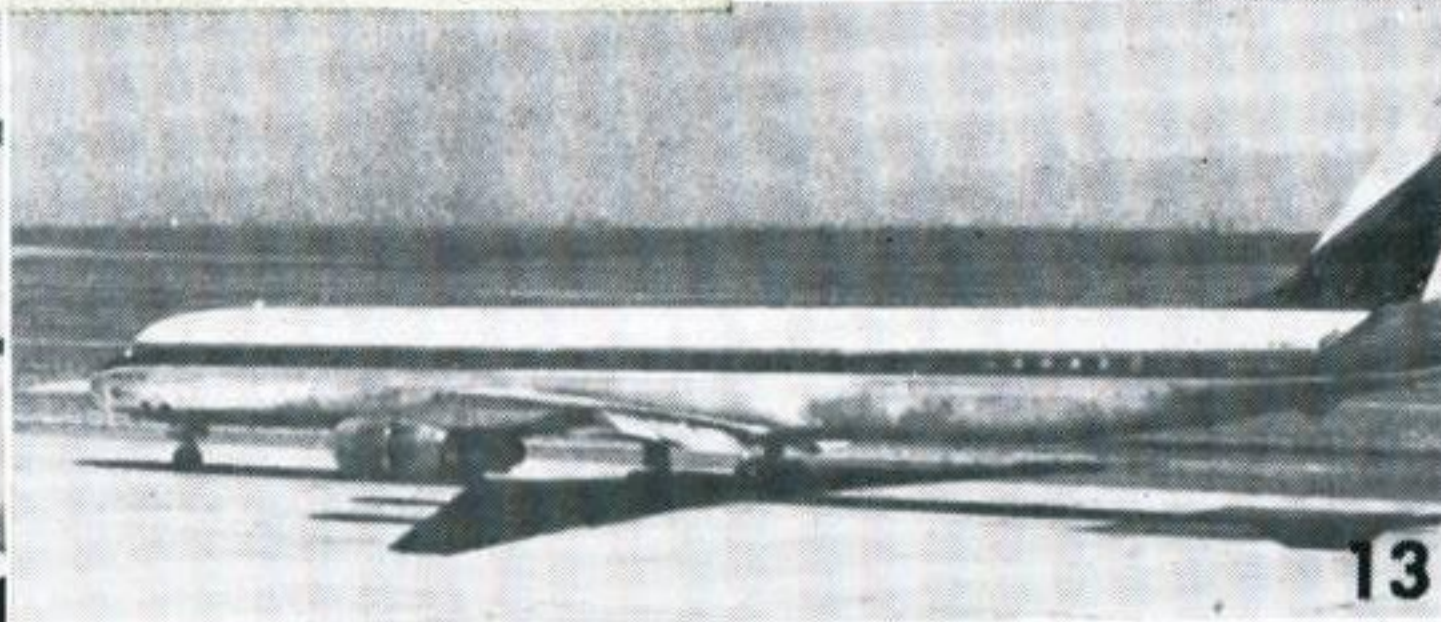


DC-8 Super 62



DC-8 SUPER SIXTY SERIES

Three "stretched" versions of the DC-8 were introduced in 1965, offering two alternative fuselage lengths and other changes to meet specific airline requirements. Known collectively as the Super Sixty Series these new models comprise the Super 61, similar to the Series 50 with fuselage lengthened by 36' 11"; the Super 62 with fuselage lengthened only by 6' 11" but with other changes for maximum range including 3-foot wing-tip extensions and low-drag nacelles and pylons; and the Super 63 combining the long fuselage of the Super 61 with the aerodynamic refinements of the Super 62. All models are in service and are available in all-passenger or Jet Trader configuration.



continued overleaf



DC-8 SERIES 50
 Span 142 feet 5 inches
 Length 150 feet 6 inches

DC-8 *continued*

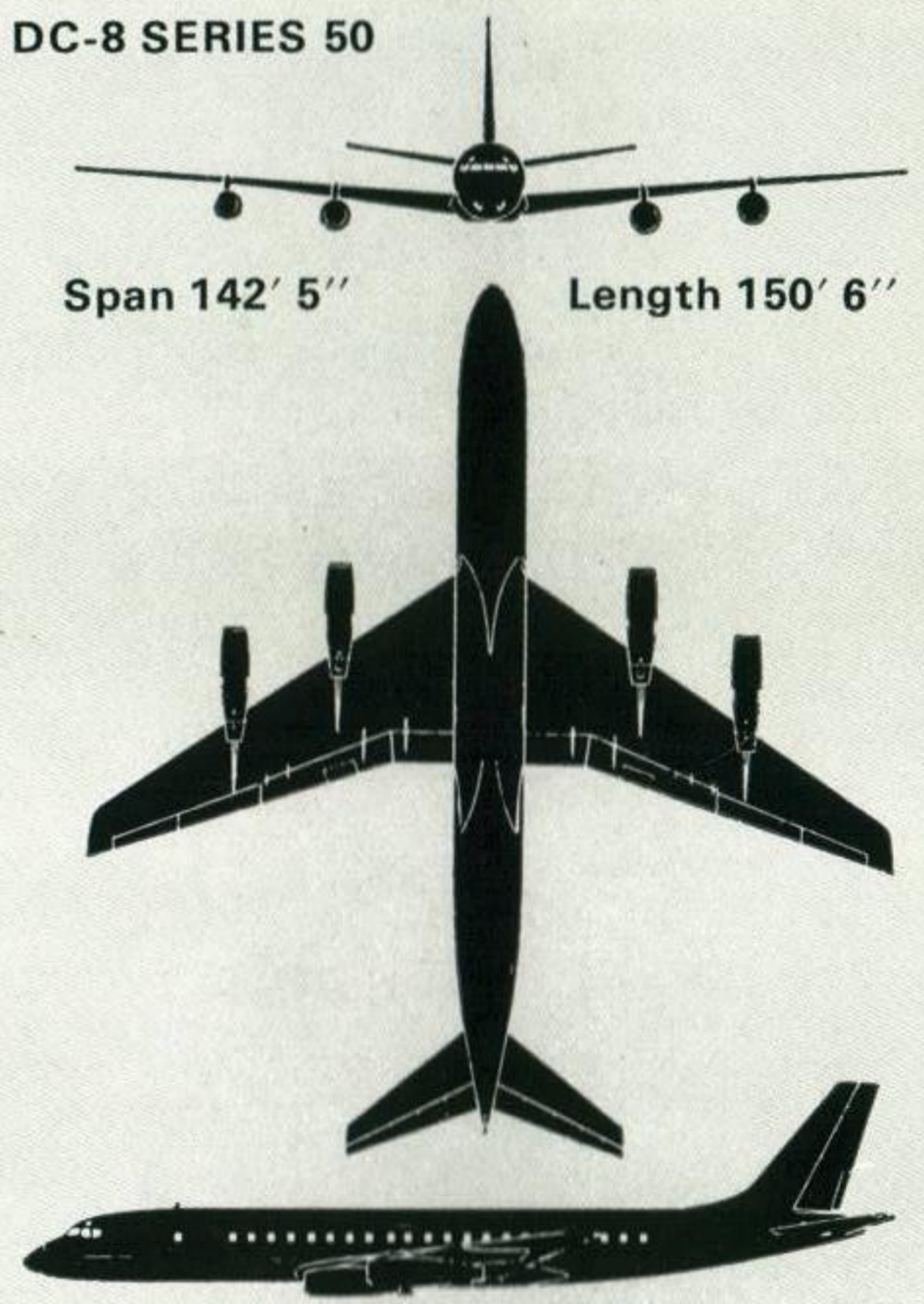
Lesson instructions are on page 2



DC-8 SERIES 50

Span 142' 5''

Length 150' 6''

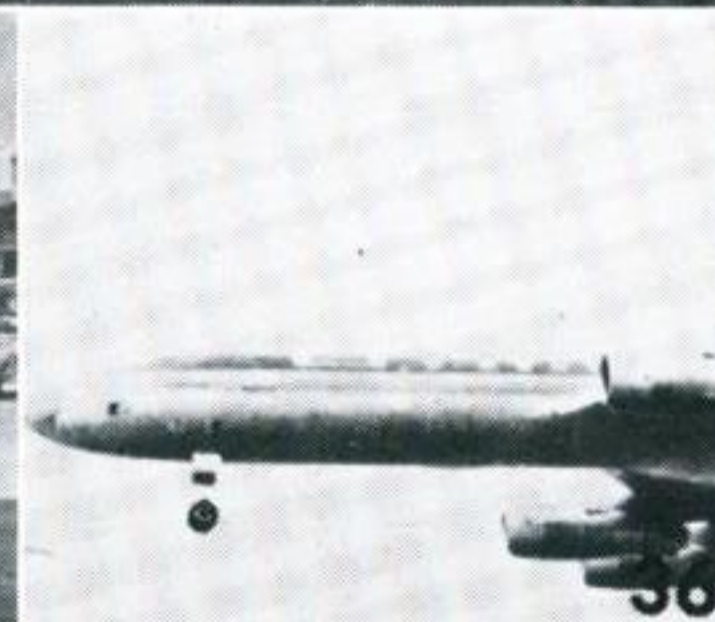
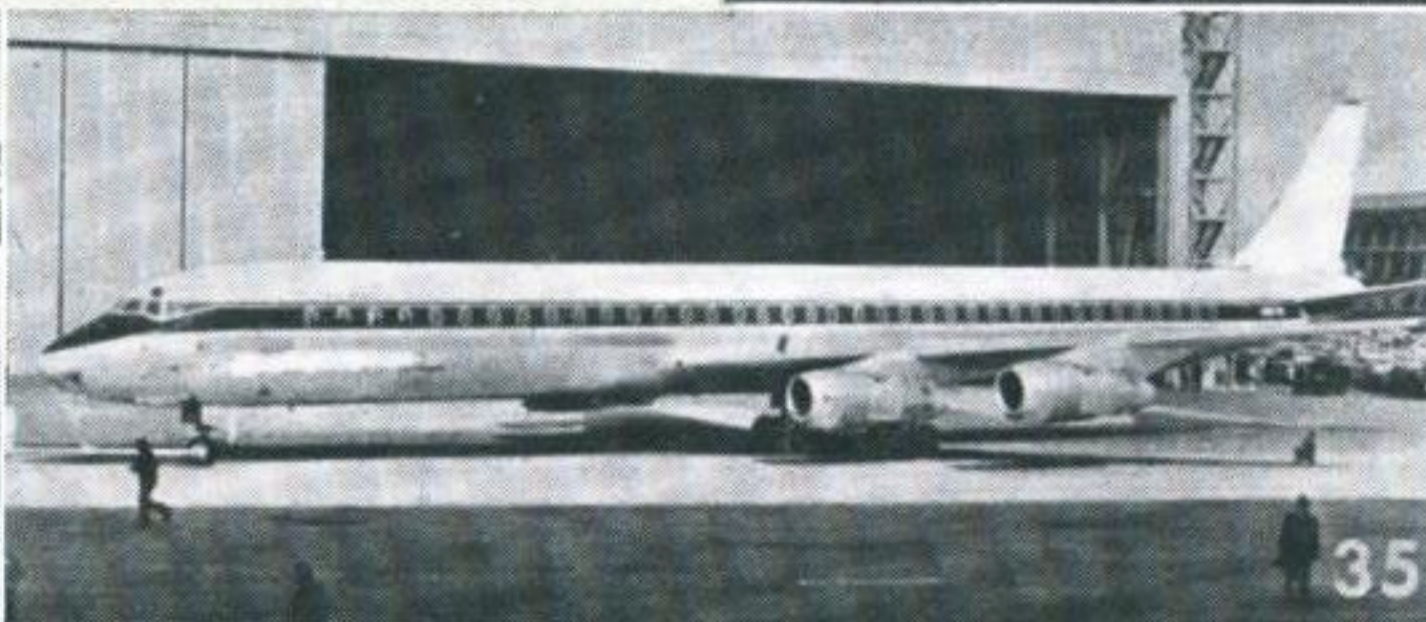
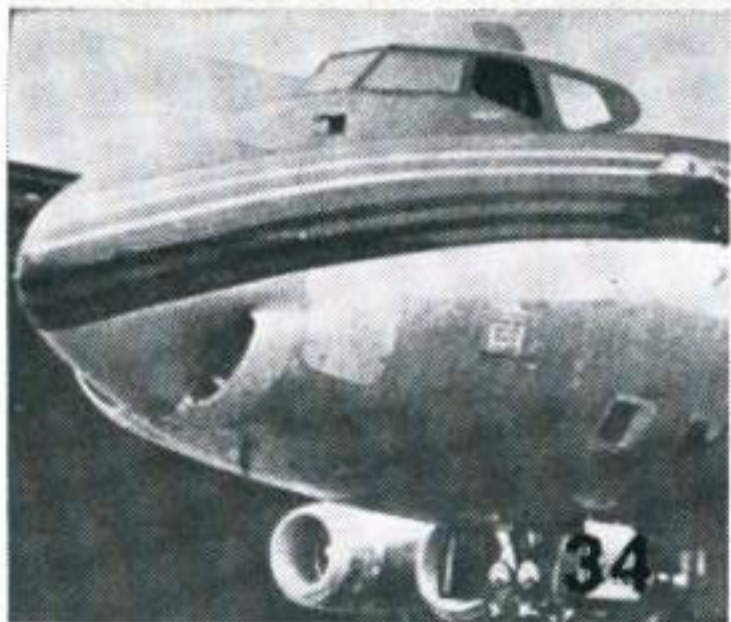
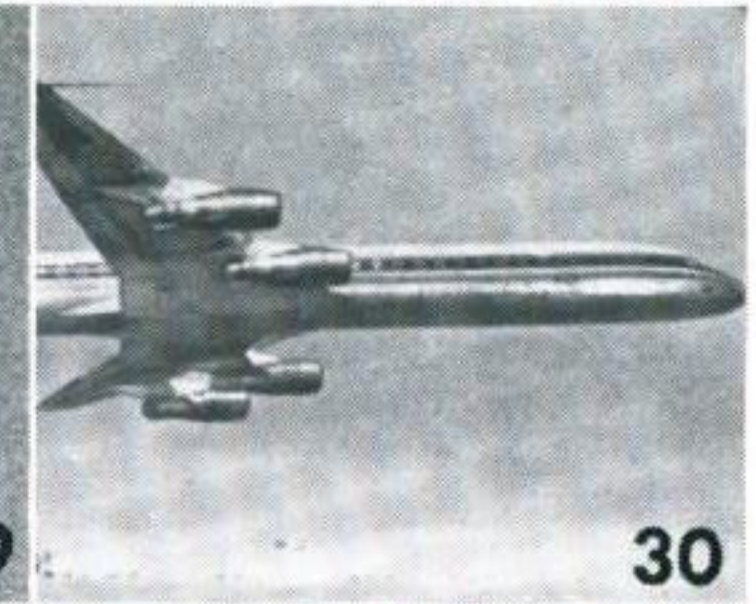
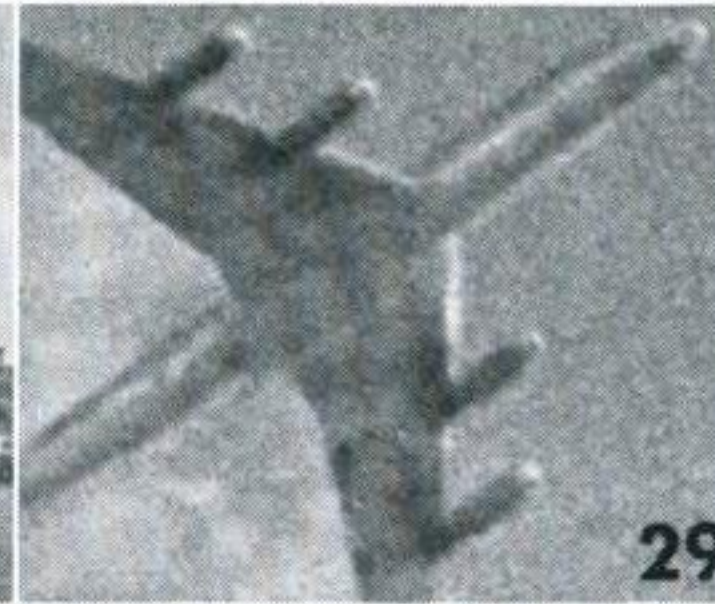
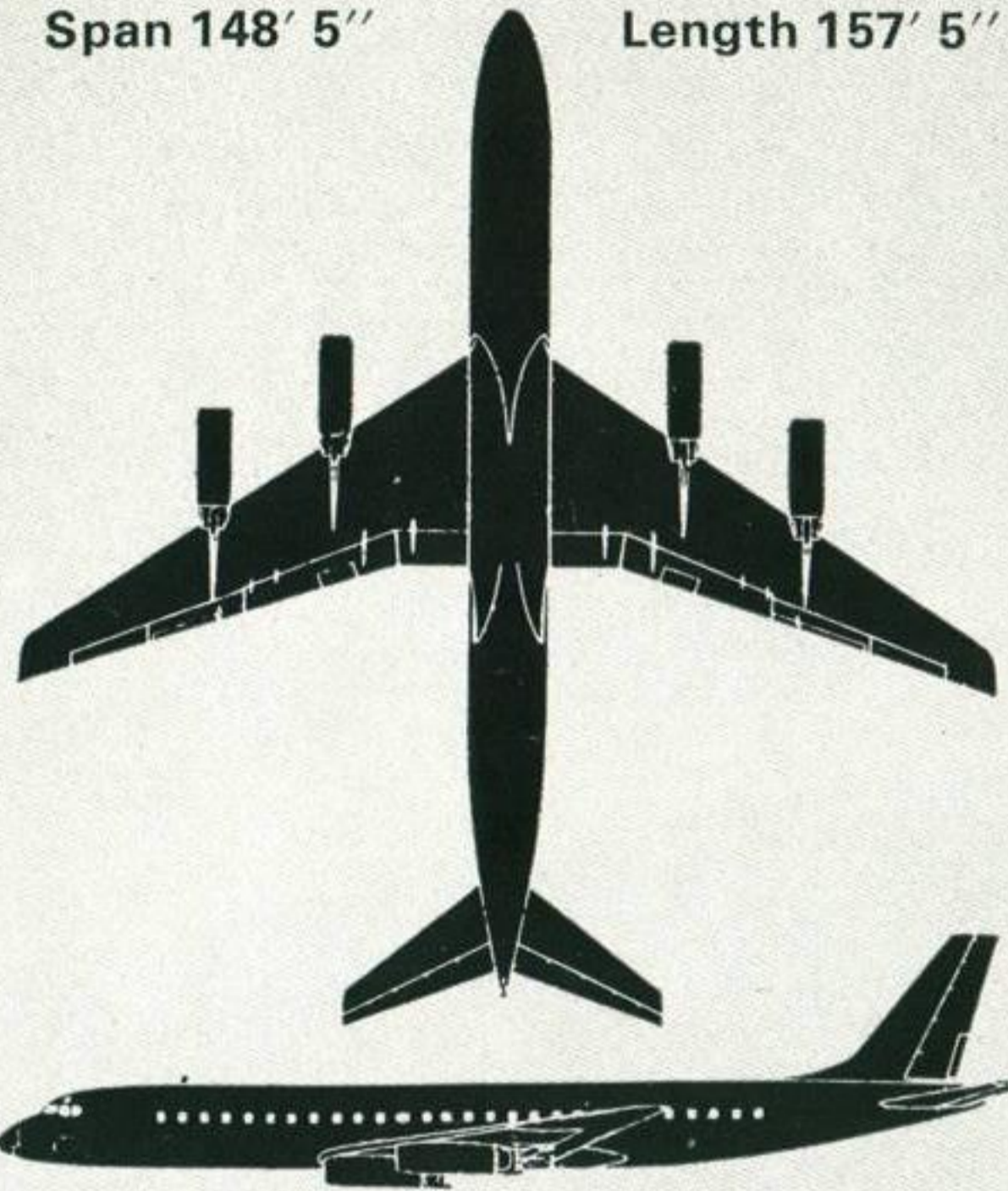


DC-8 SUPER 62



Span 148' 5"

Length 157' 5"



Solutions are on the cover

DC-8 SUPER 62



Span 148 feet 5 inches
Length 157 feet 5 inches



LEAR JET

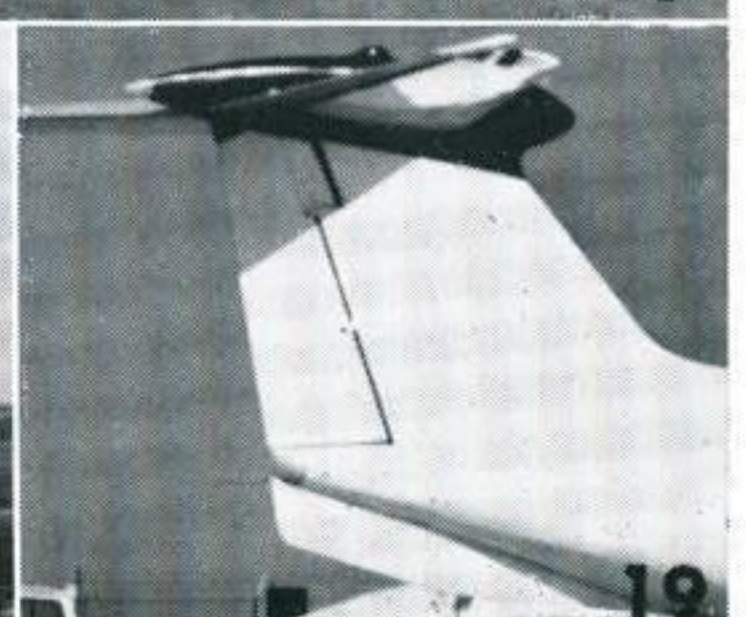
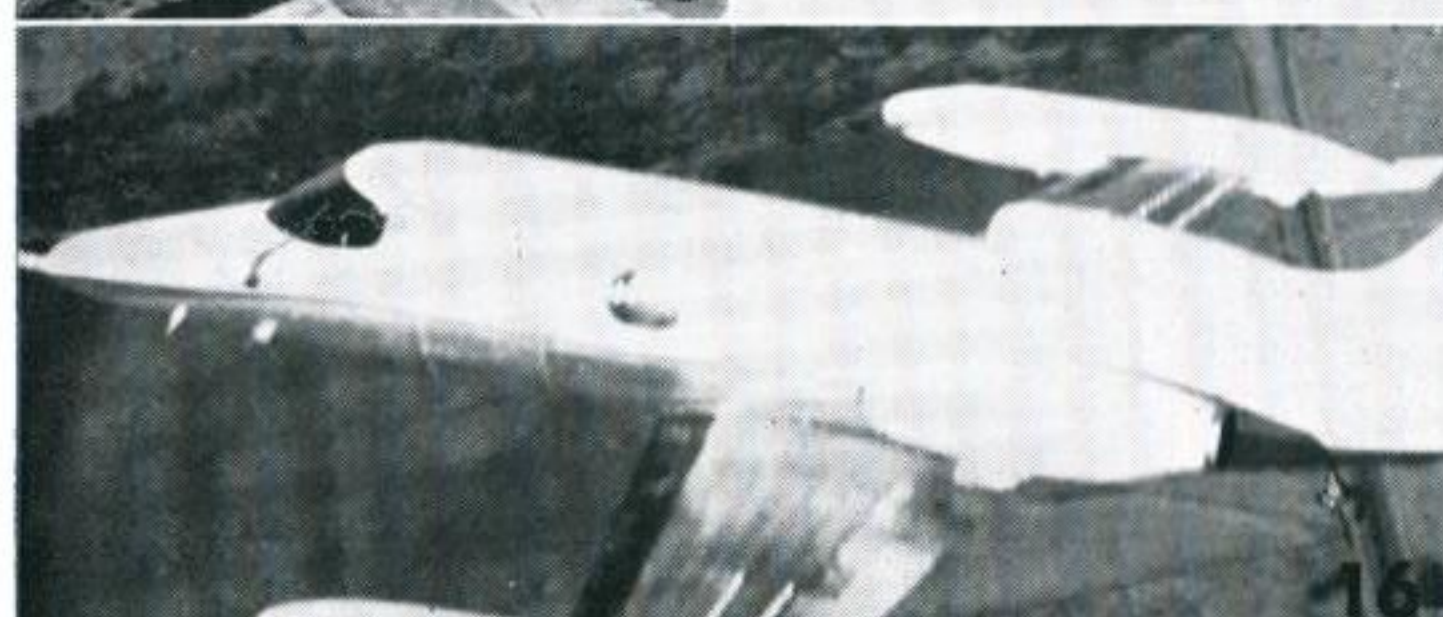
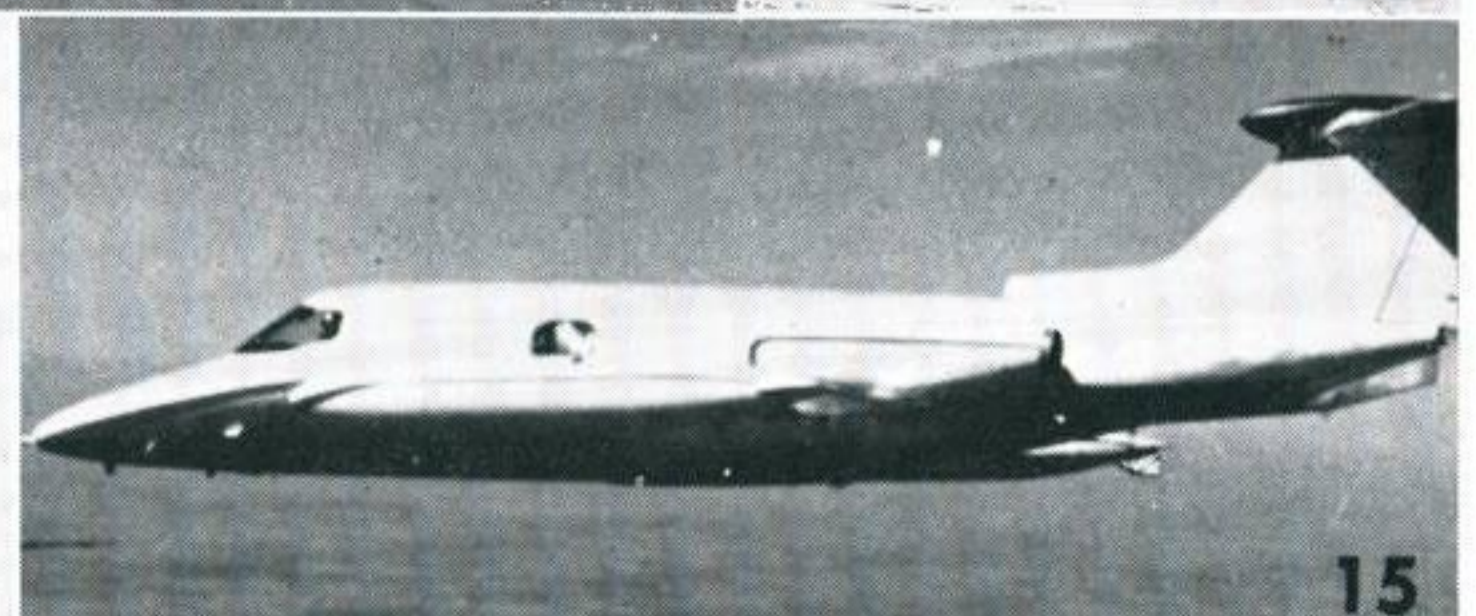
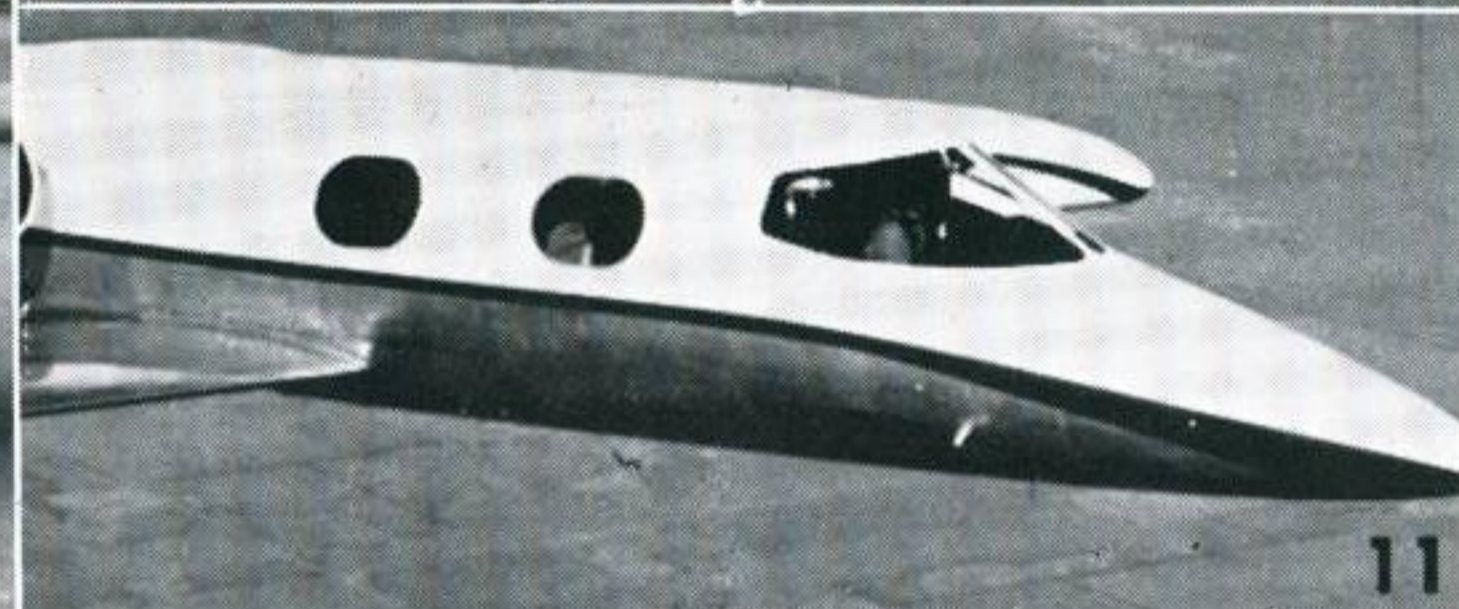
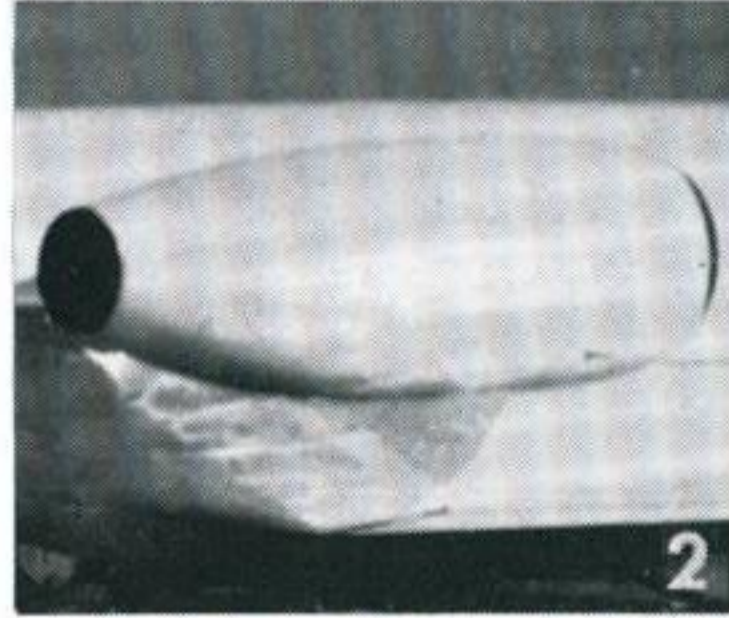
One of the world's fastest executive jets, the Lear Jet had its origin in the SAAC-23, a design of William P. Lear's Swiss-American Corporation using largely Swiss design know-how and in particular the wing design of the abortive P.16 strike fighter. The project was later transferred to the U.S. where the prototype Lear Jet flew in October 1963. First production model was the Model 23, an 8-seater (including pilot or pilots) of which about 100 were sold. The present range com-

prises the Model 24, similar to the original model but having a higher gross weight and minor structural improvements including a modified windscreen; and the Model 25 transporter—a 10-seat version with a lengthened nose (nearly $4\frac{1}{2}$ feet longer) and smaller but more numerous passenger-cabin windows. A development of the Model 24, the Model 24A, has enlarged wing-tip tanks. The Lear Jet Corporation was taken over last year by the Gates Rubber Company, but the name "Lear Jet" remains in use. The Lear Jet 24 is powered by two 2,850 lb s.t. General Electric CJ610-4 turbojets and cruises at 508 m.p.h.

Lesson instructions are on page 2 Solutions on the cover



Span 35' 8"



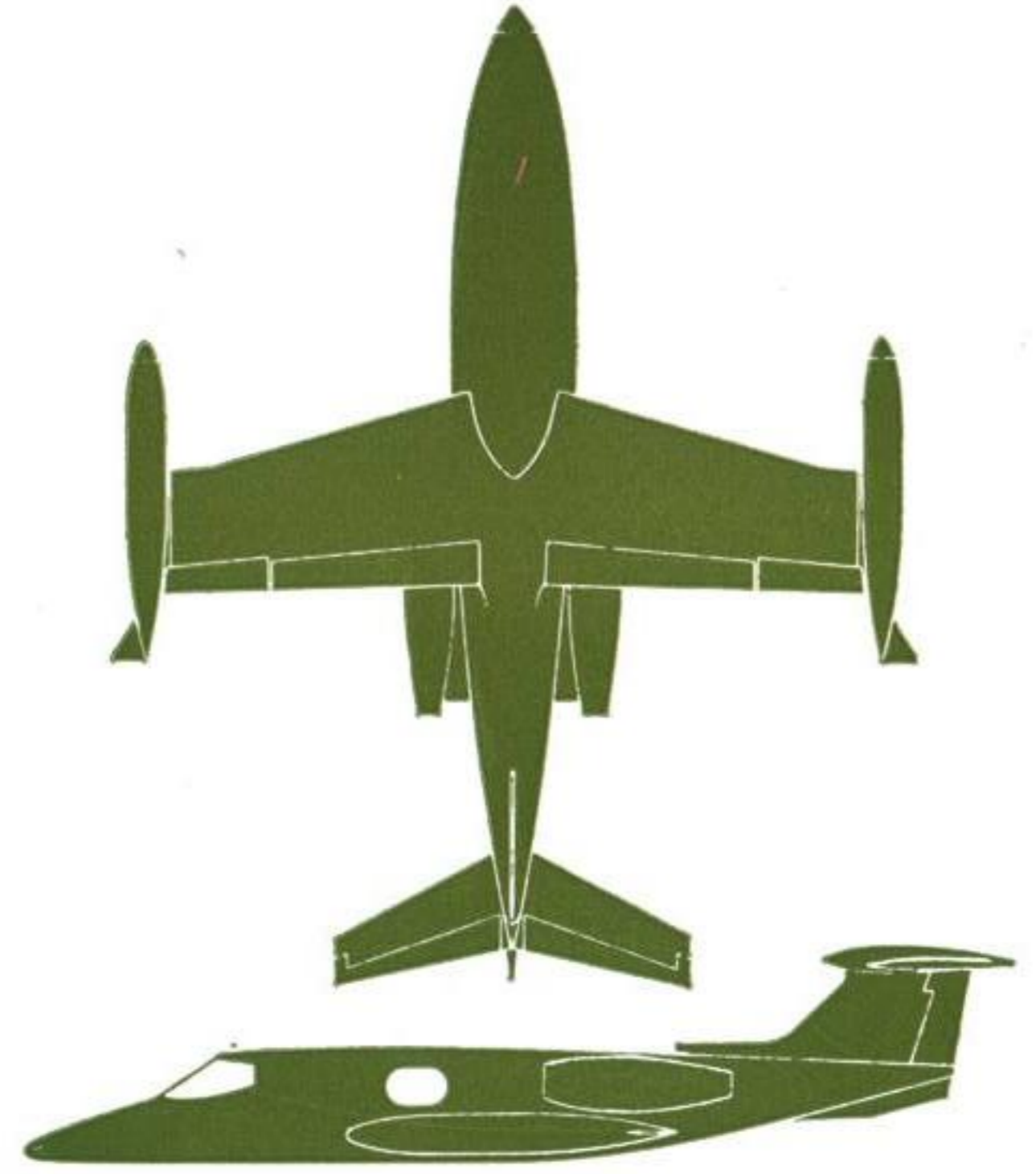
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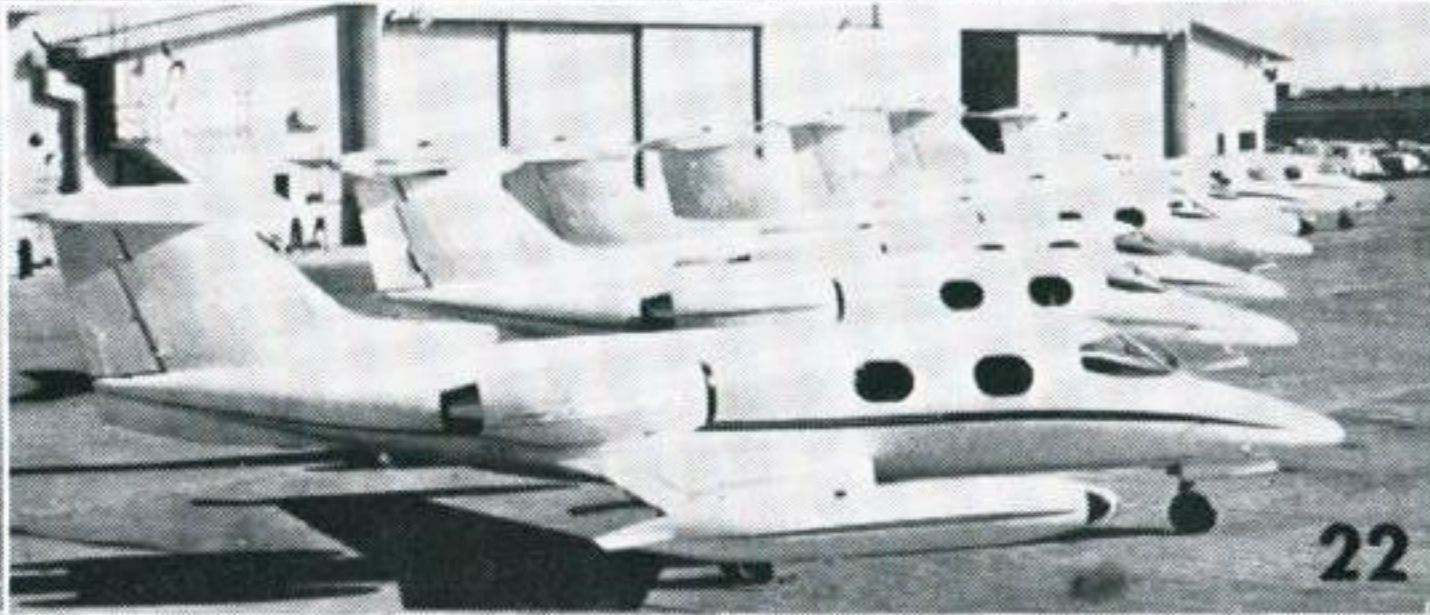
20



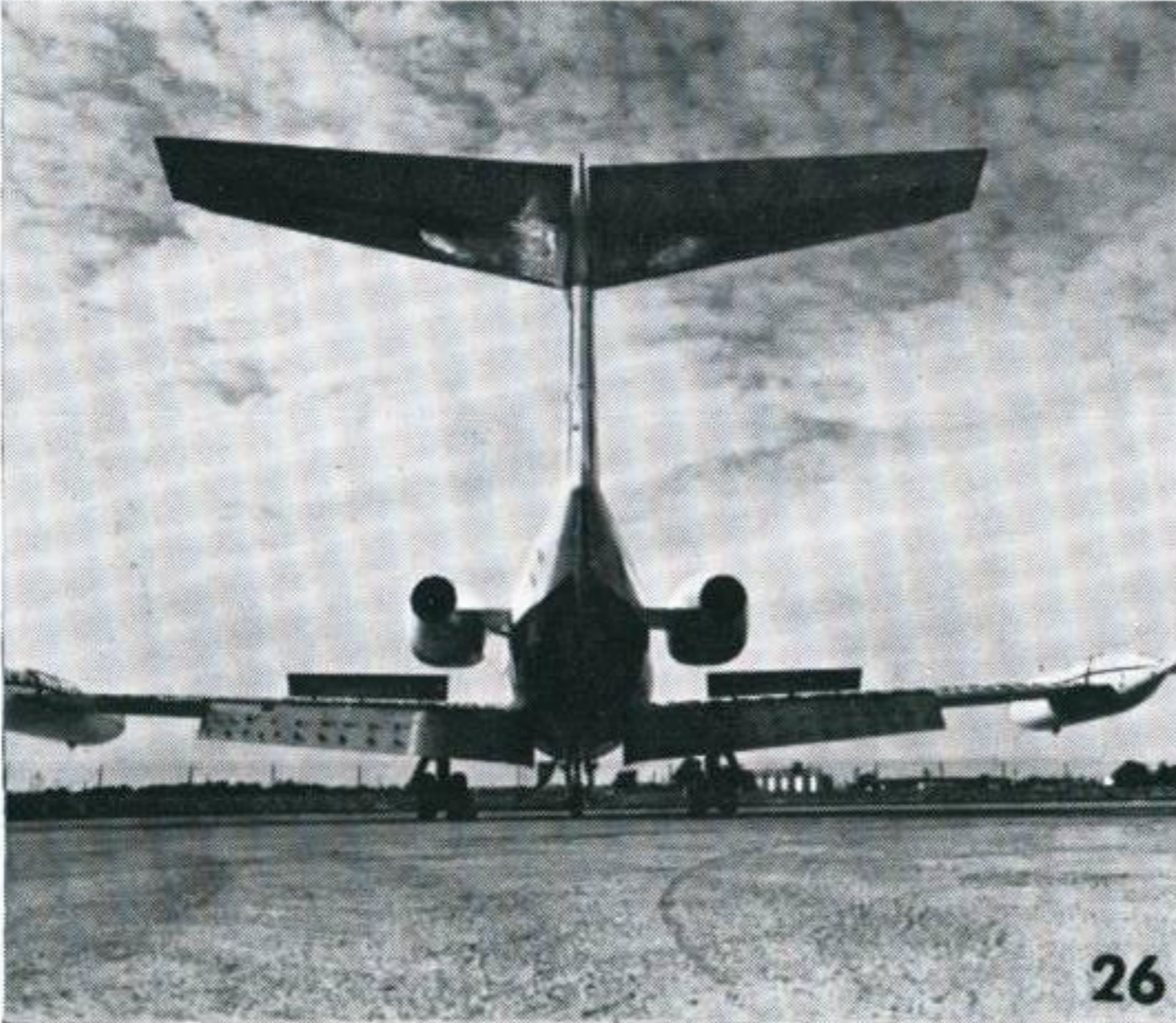
Span 35' 8"



21



22



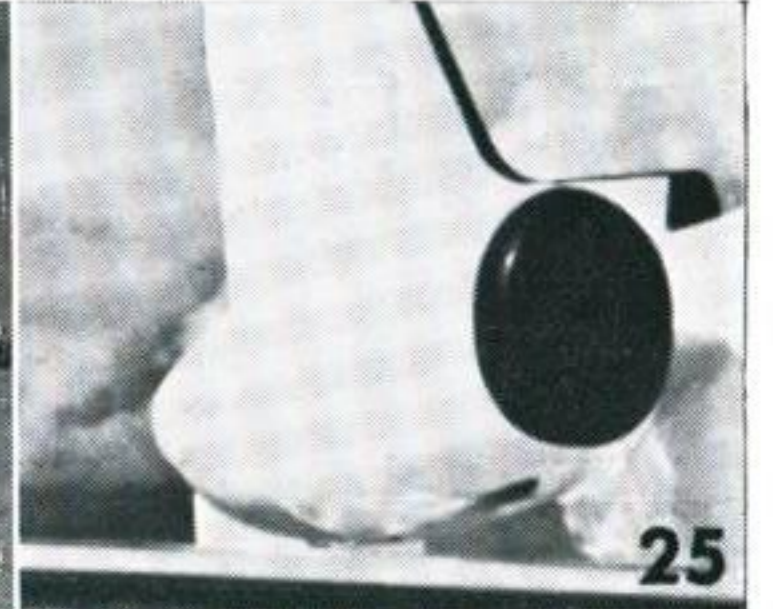
26



23



24



25



27

LEAR JET *continued*



KEY



KEY

As the Lear Jet is similar in layout to many other twin-jet executive aircraft—the HS125, Rinaldo-Piaggio PD808, Fan Jet Falcon, Sabreliner, for example—it needs to be learned properly. So read the instructions on page 2 carefully and report these targets as Lear Jets or otherwise if jokers. Solutions on the back cover.



28



31



29



30



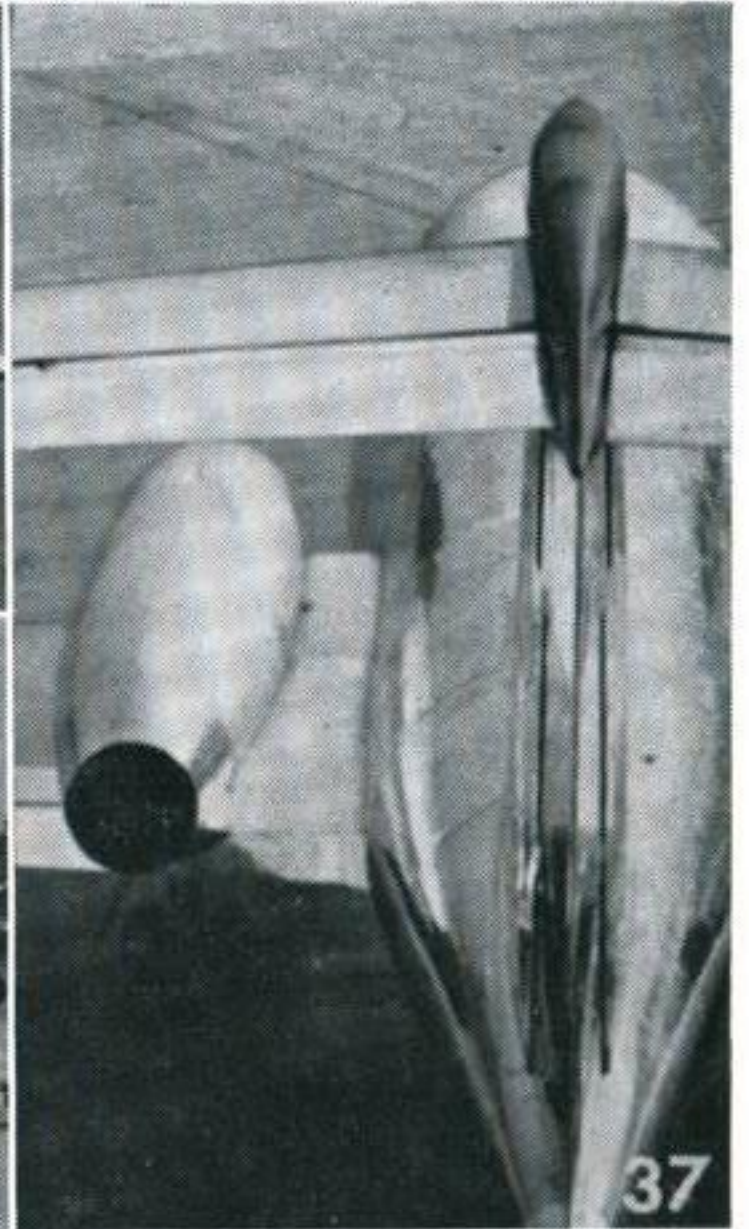
32



35



33



37



34



36



40



38



39



41

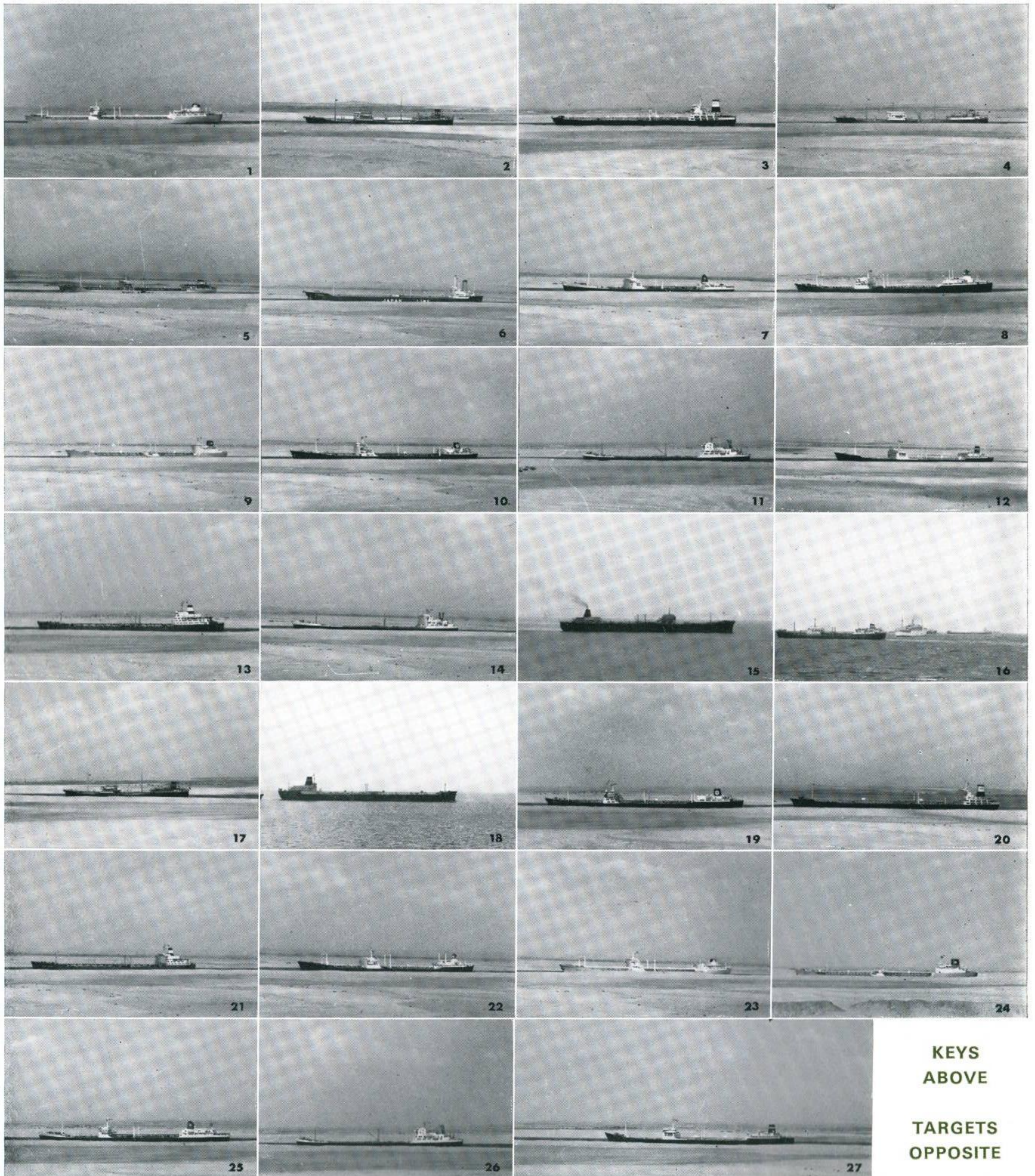


42

TANKERS — SHIPS OF THE DESERT

Shown below are 27 key photographs of tankers. On the opposite page there are 30 targets. Also, at the top of the opposite page are the names of the tankers which appear in the key views, together with their nationalities, tonnages and reporting codes. Carefully

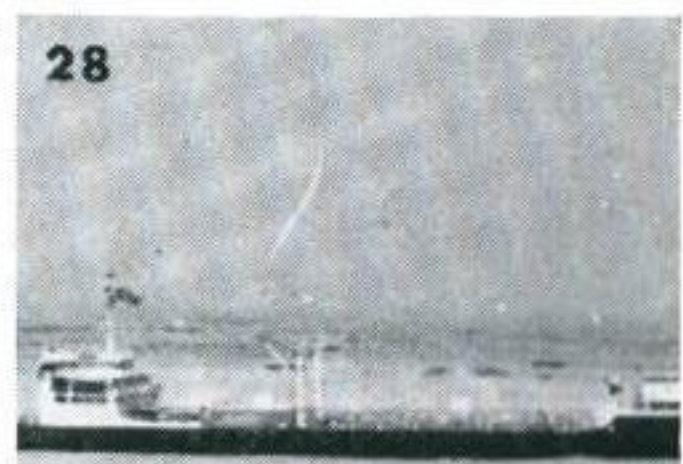
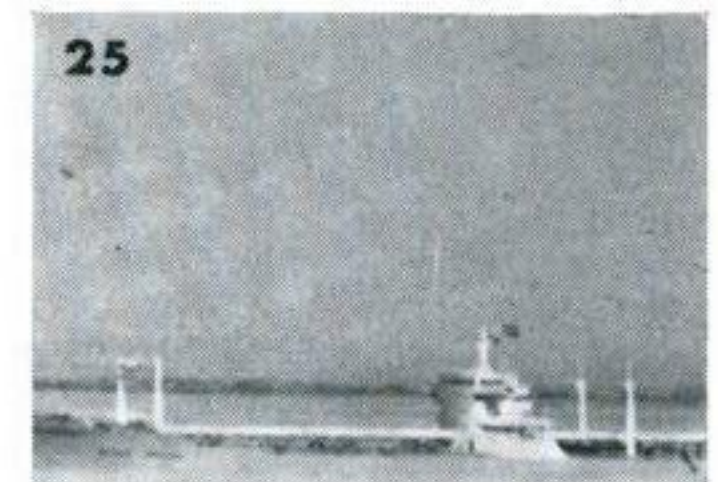
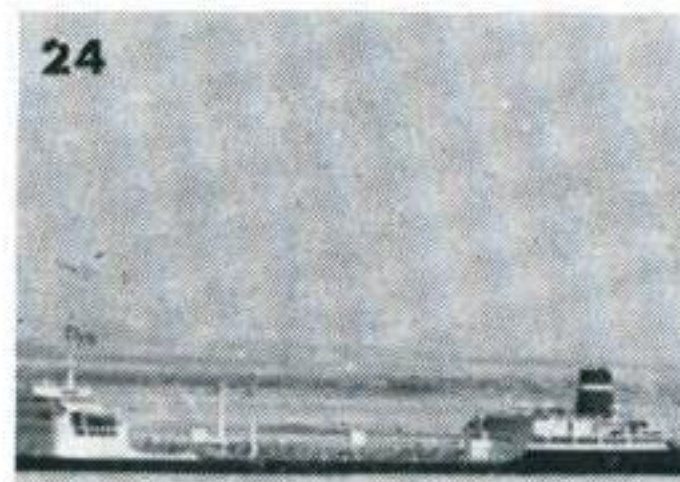
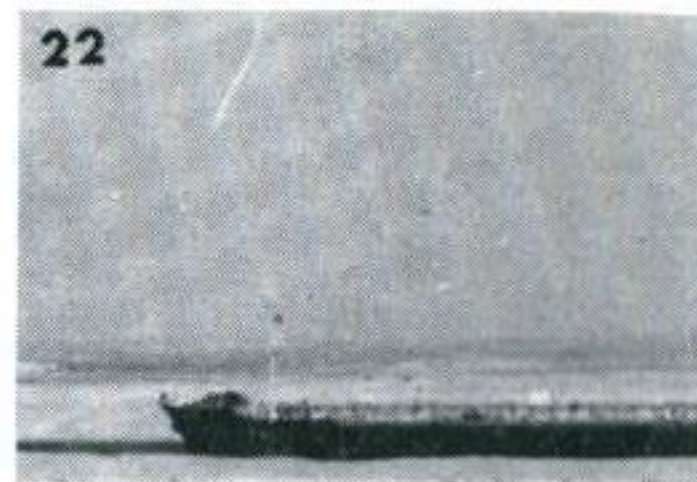
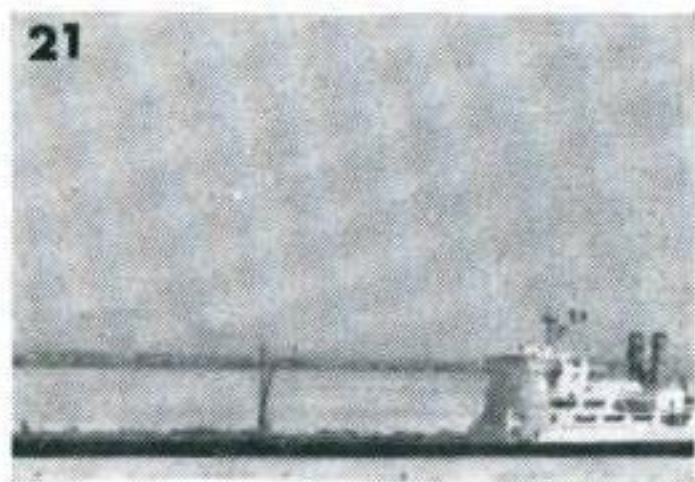
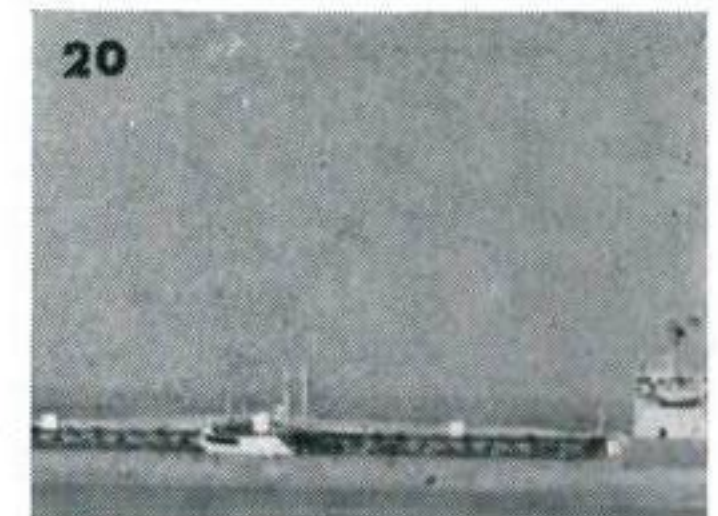
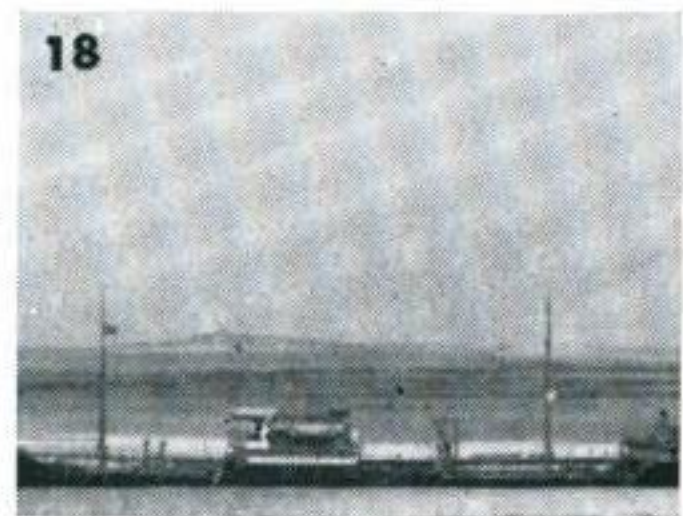
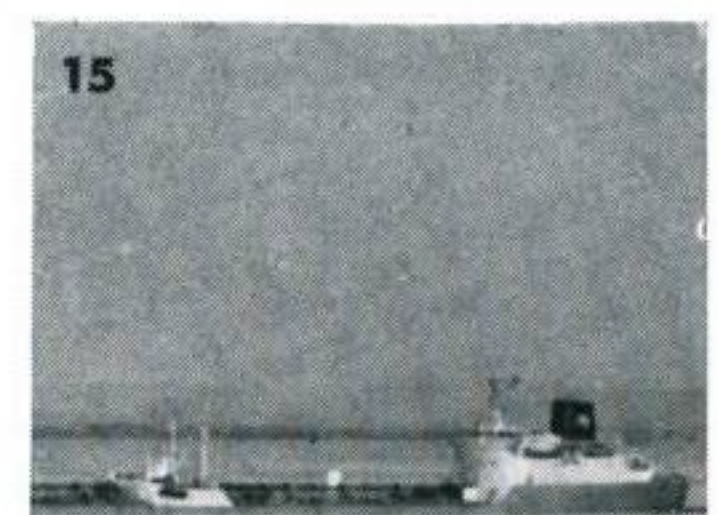
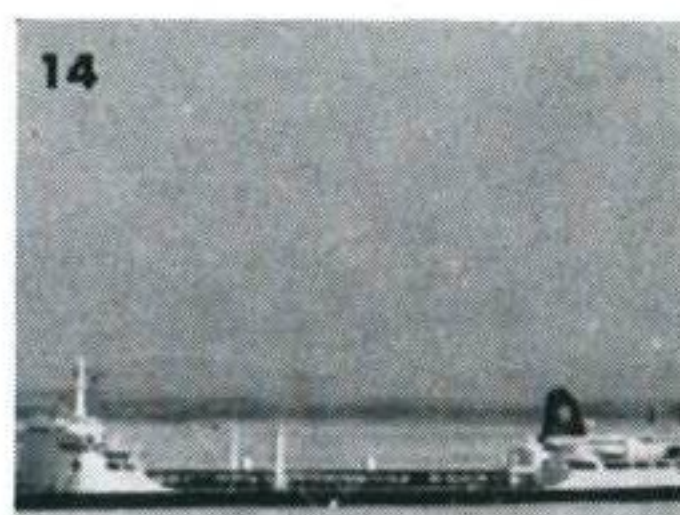
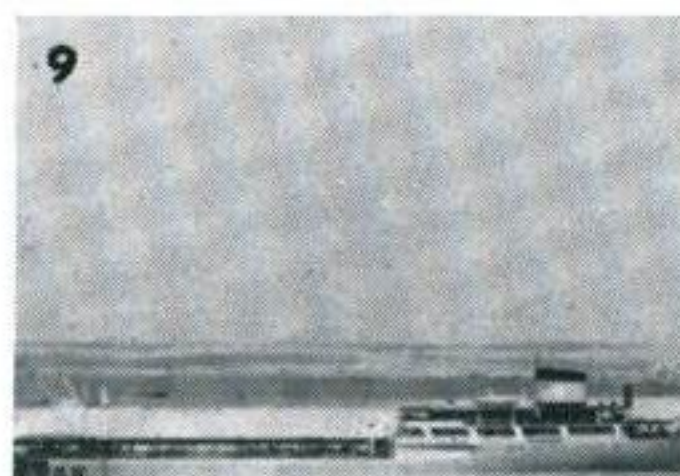
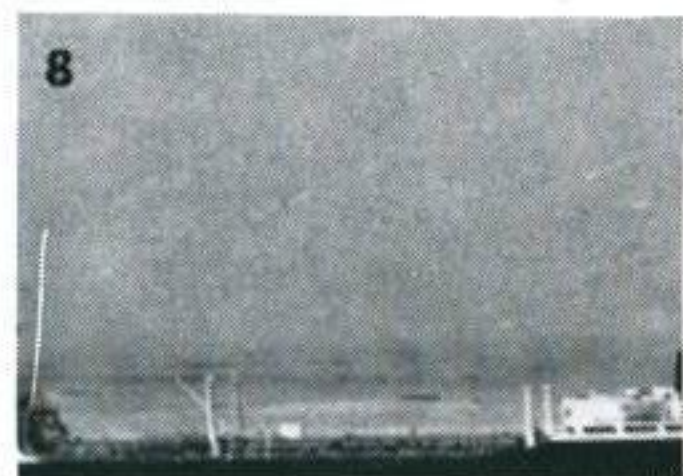
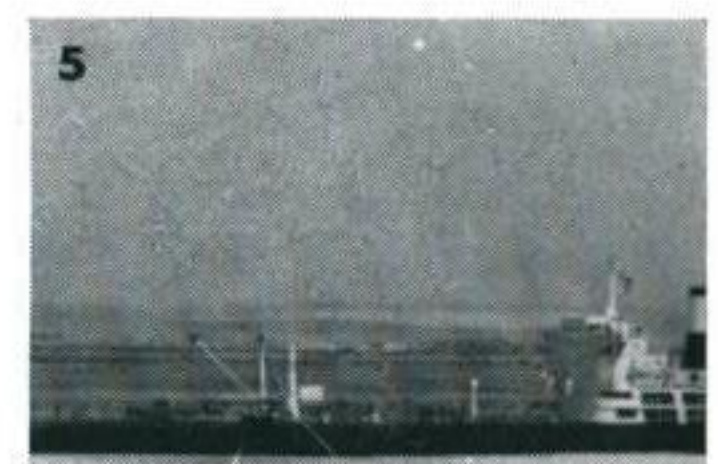
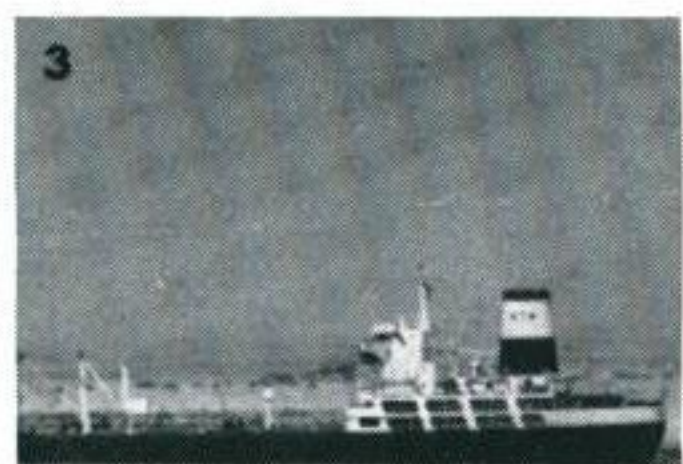
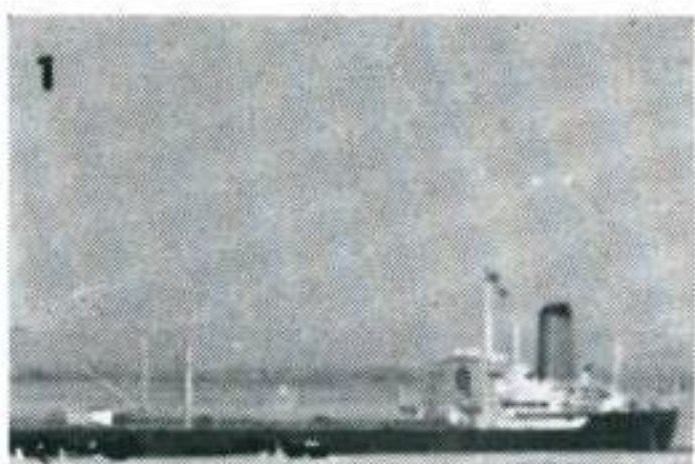
work through the targets comparing them with the key views. List the target numbers and when a target is recognised, write down the name and number of the corresponding key view. Finally, turn to page 28 to check your results.



KEYS
ABOVE

TARGETS
OPPOSITE

No.	Name	Nationality	Tons	Length in feet	Sequence	Hull	No.	Name	Nationality	Tons	Length in feet	Sequence	Hull
1	Berge Racine	Norwegian	37,705	796	KMKKFK	H123	13	Esso Lincoln	British	31,720	743	KKMF	H13
2	British Hero	British	11,358	547	M(KK)MF	H123	14	Rigel	See Number 11				
3	Mermaid	Panama	36,685	800	MKMF	H1(3)	15	Manhattan	American	65,746	940	MMKF	H1
4	British Vigilance	British	11,349	547	MKMKF	H123	16	British Kestrel	British	11,171	523	MMKKF	H123
5	Marie Maersk	Danish	21,627	686	KMKFK	H13	17	British Hero	British	See Number 2			
6	Asia Maru No. 2	Japan	43,410	729	KKMF	H13	18	Tuareg	Norwegian	43,572		KKMFK	H13
7	Patro	Liberian	28,410	736	MMKFK	H123	19	Texapo Greenwich		See Number 10			
8	Afta	Turkish	39,406	755	KMKKF(K)	H123	20	Mermaid		See Number 3			
9	Hemland	Swedish	22,671	682	MKMF	H123	21	Esso Lincoln		See Number 13			
10	Texapo Greenwich	British	35,720	761	MMKKF	H13	22	Afta		See Number 8			
11	Rigel	French	31,182	737	KKMFK	H13	23	Berge Racine		See Number 1			
12	Inago Portu- guese	Portu- guese	24,995	710	MMKF	H123	24	Hemland		See Number 9			
							25	Patro		See Number 7			
							26	Rigel		See Number 11			
							27	Inago		See Number 12			



BTR-50P



Soviet Amphibious Armoured Personnel Carrier

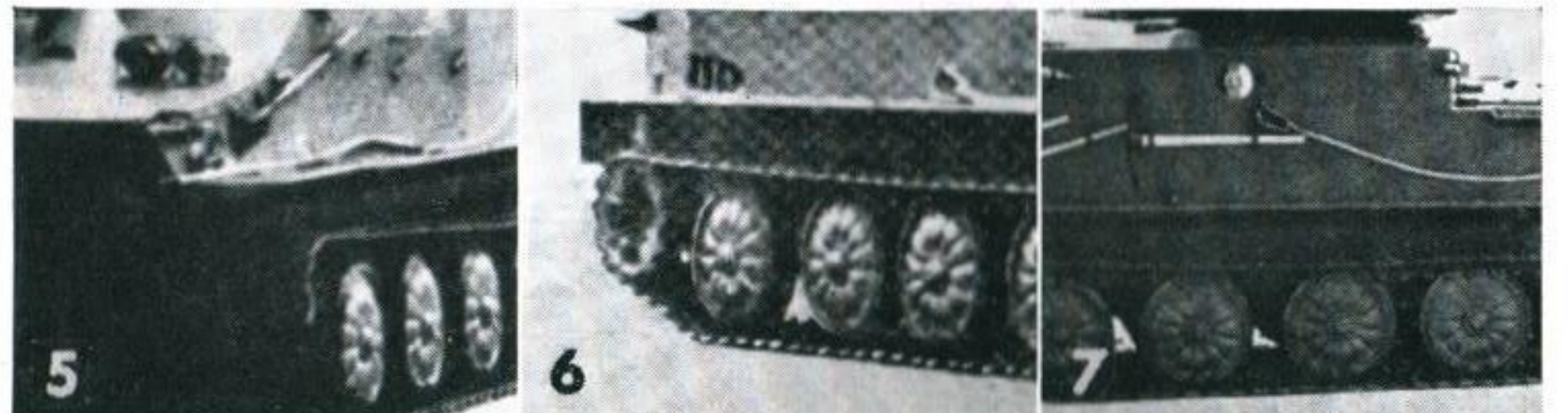
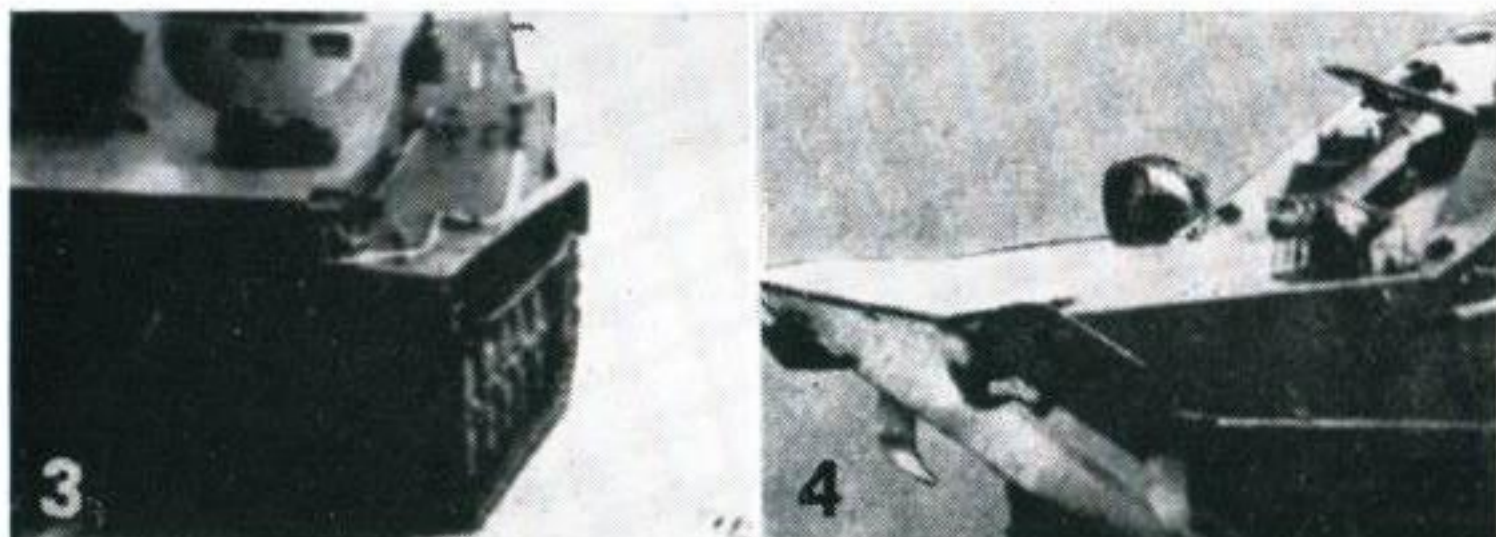
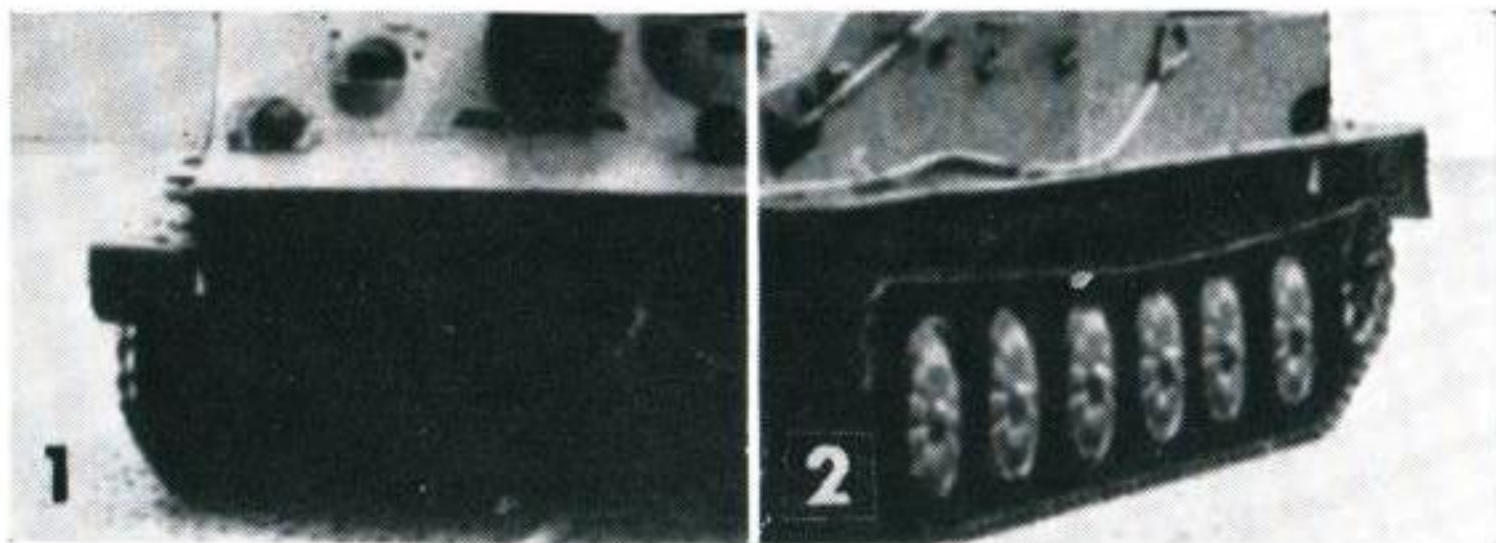
BTR-50P

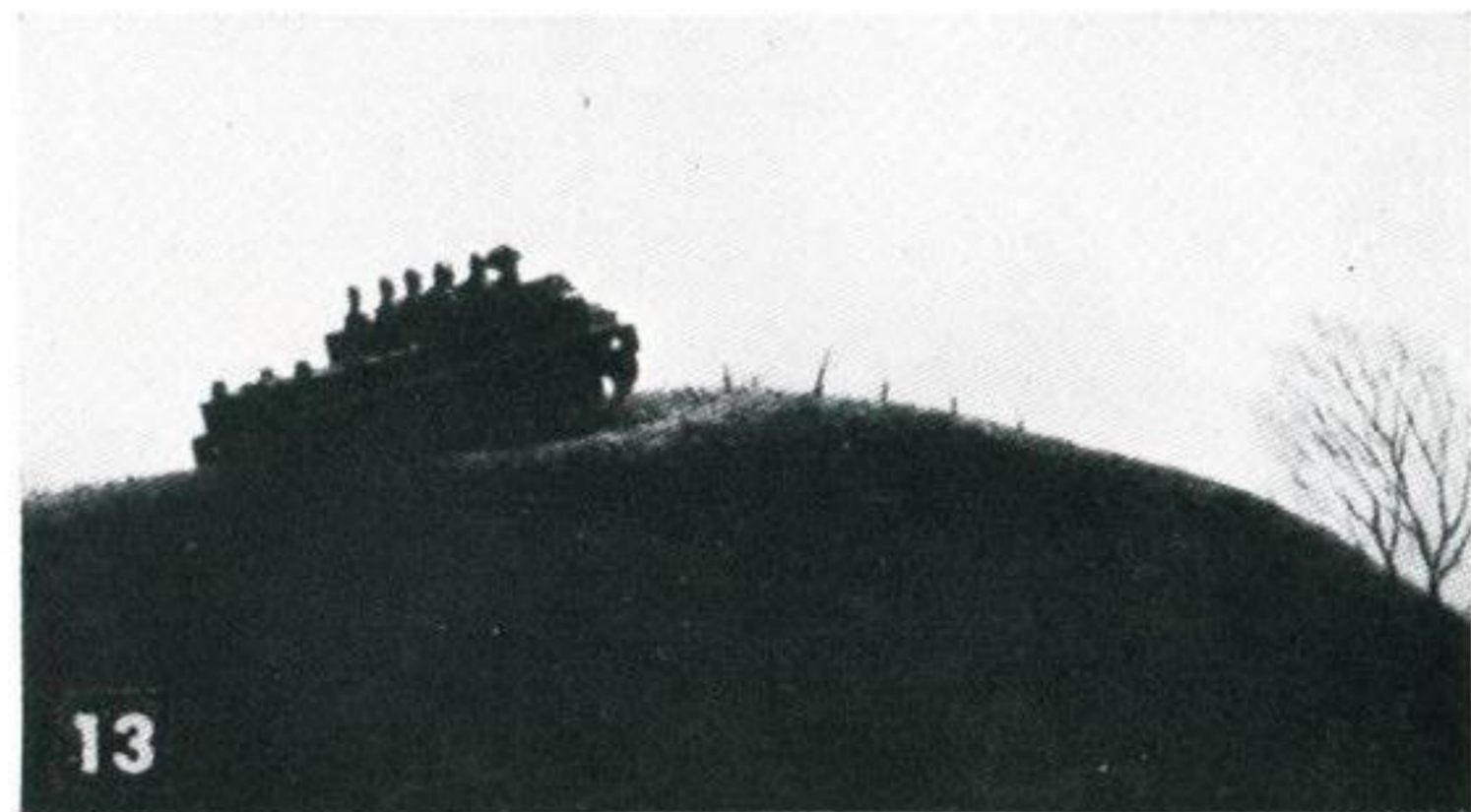
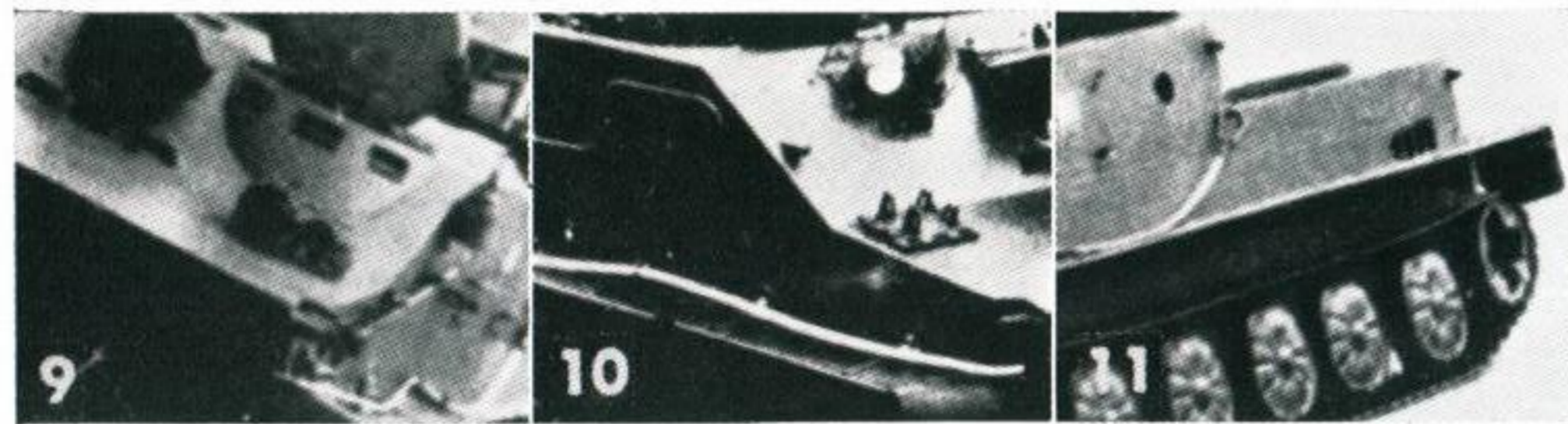
BTR-50 P is the first tracked armoured personnel carrier ever to be used by the Soviet Army. It entered service eleven years ago and since has been used extensively not only by the Soviet forces but also by other Communist armies, including those of Czechoslovakia, Poland and East Germany.



Lesson instructions are on page 2 Solutions are on the cover

In many ways the BTR-50 P resembles the PT-76 amphibious reconnaissance tank of which it is, in fact, a modification. It has, of course, no 76-mm. gun turret but its track assembly, with six medium size road wheels per side and no return rollers, is the same. It also has the same water jet propulsion unit



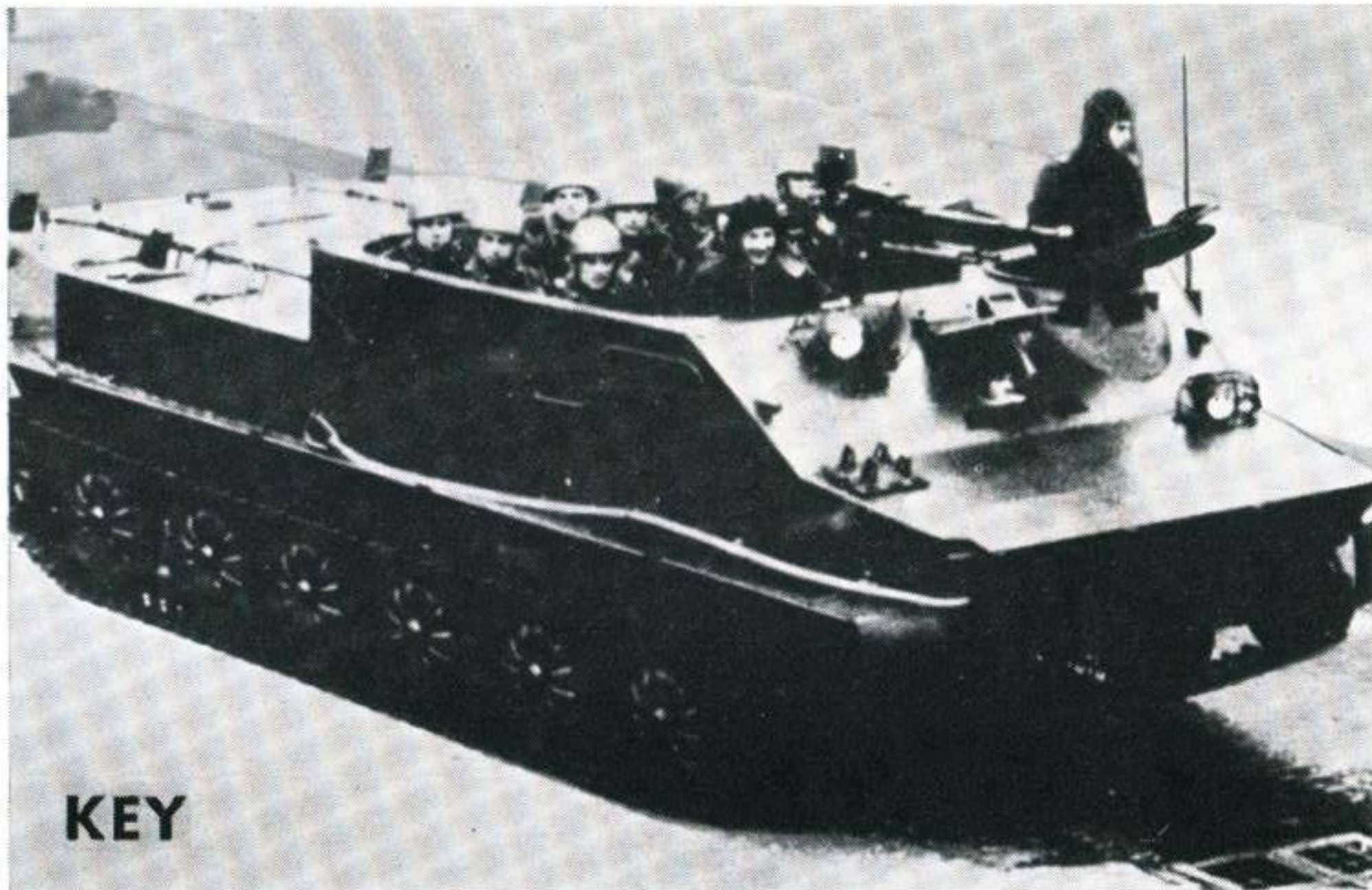


whose inlets may be seen towards the rear of the hull, above the track guards, and whose two outlets are located in the rear hull plate. The water jet propulsion unit enables the BTR-50 P to move faster in water than other, track-propelled amphibious armoured vehicles and like the PT-76 it can, therefore, swim even across relatively fast-flowing rivers.



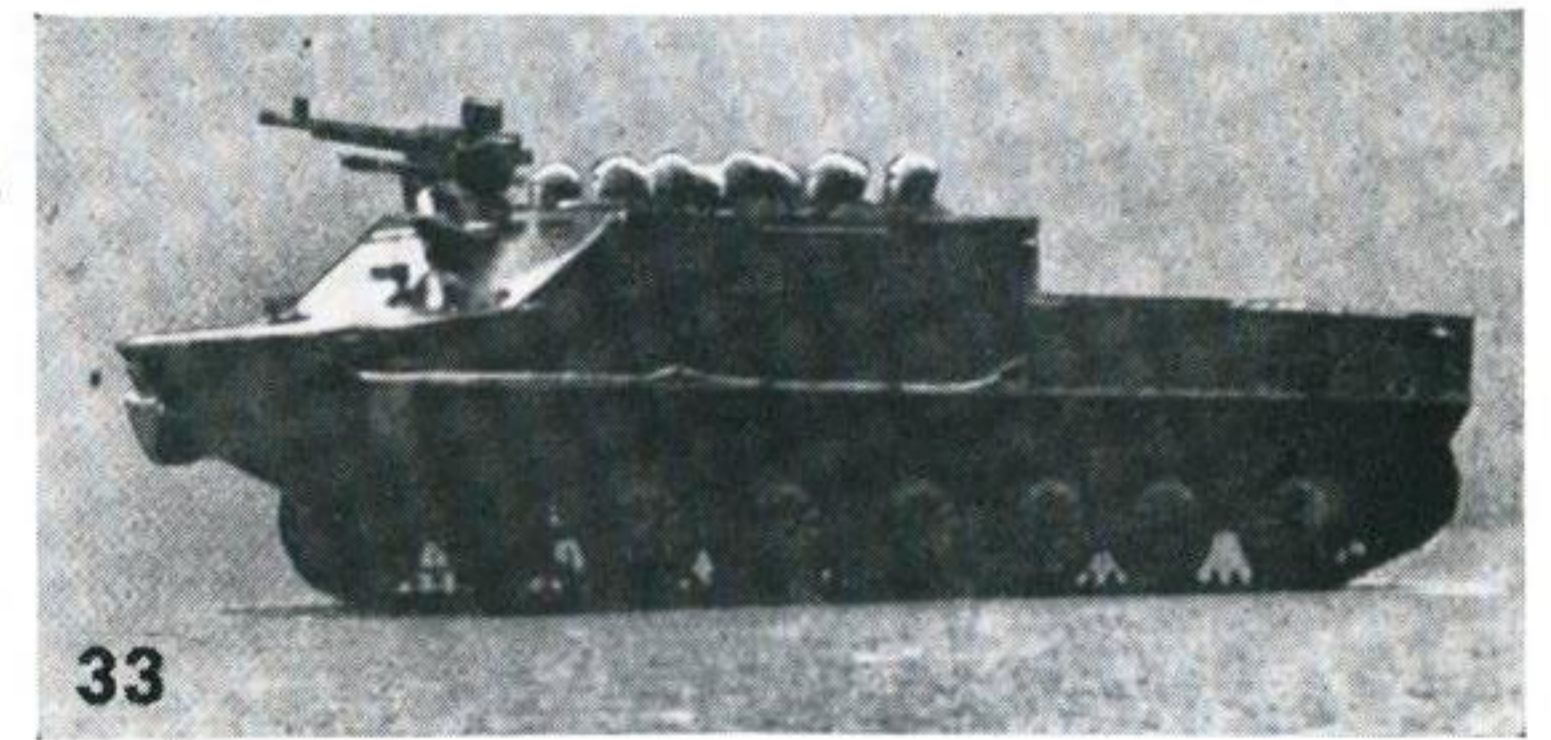
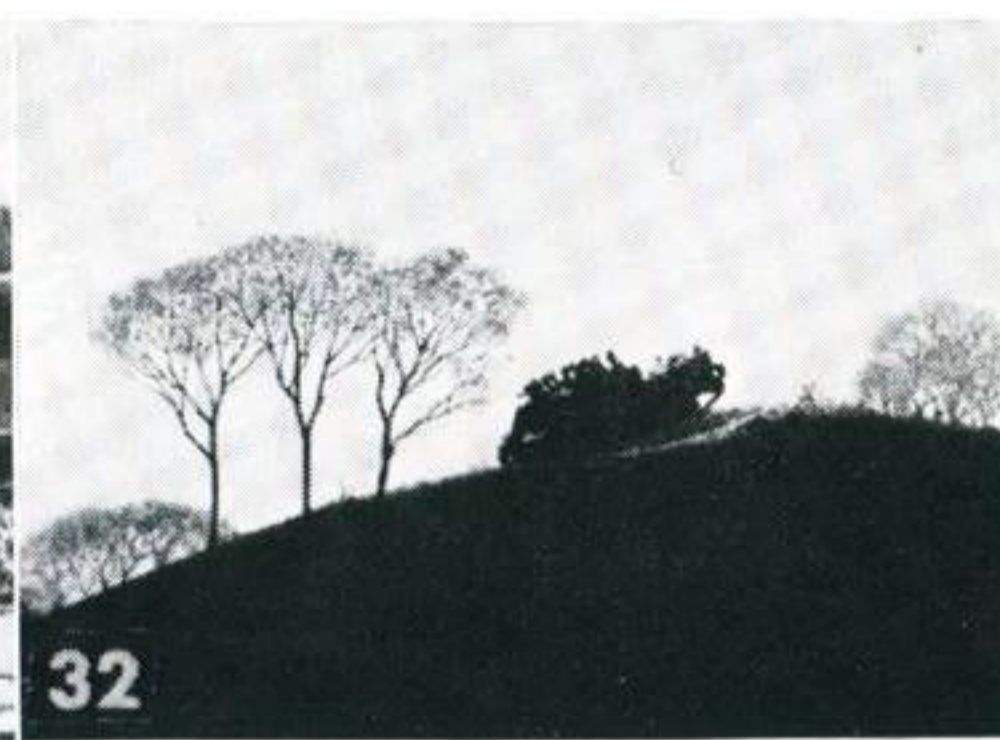
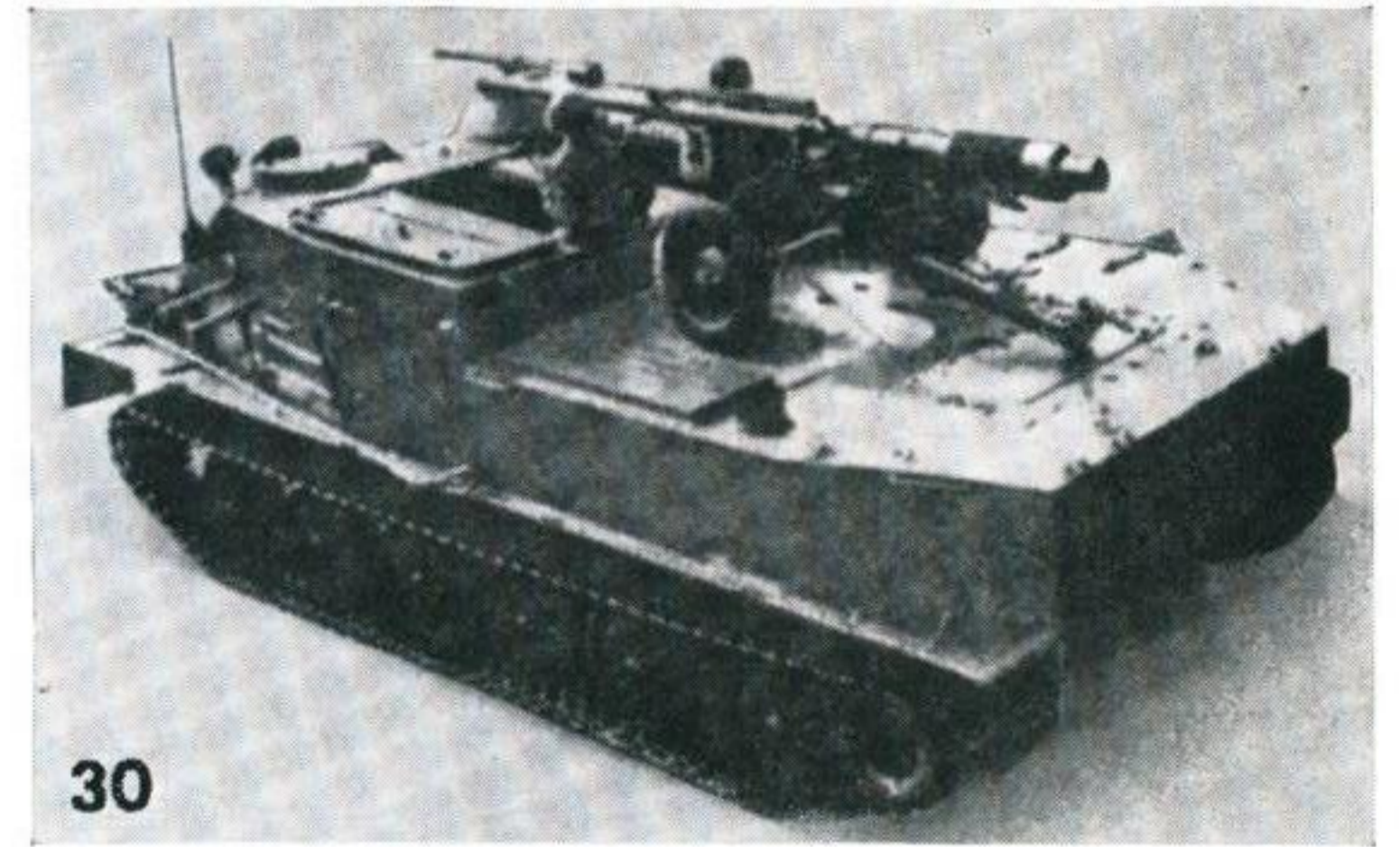
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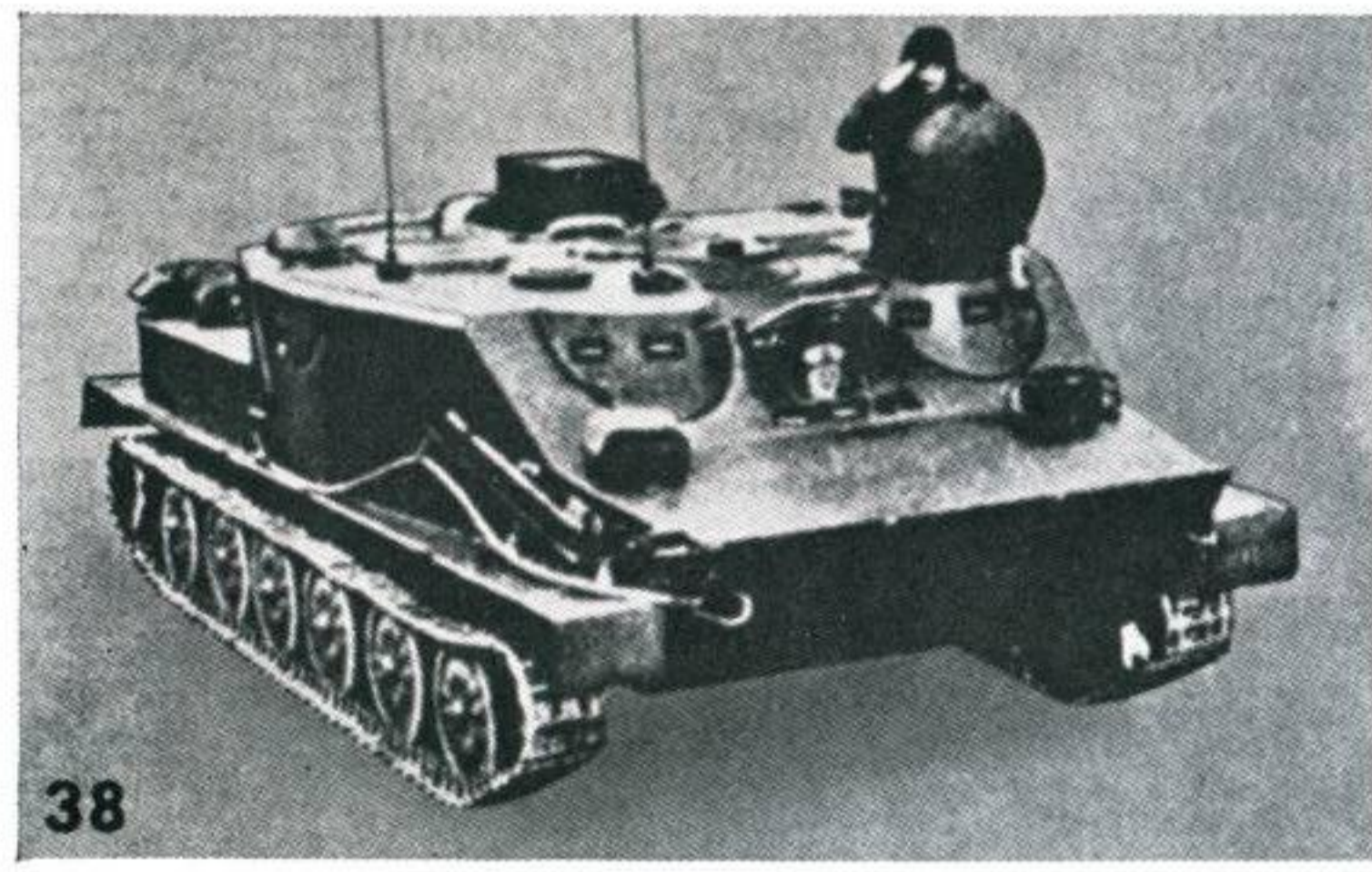
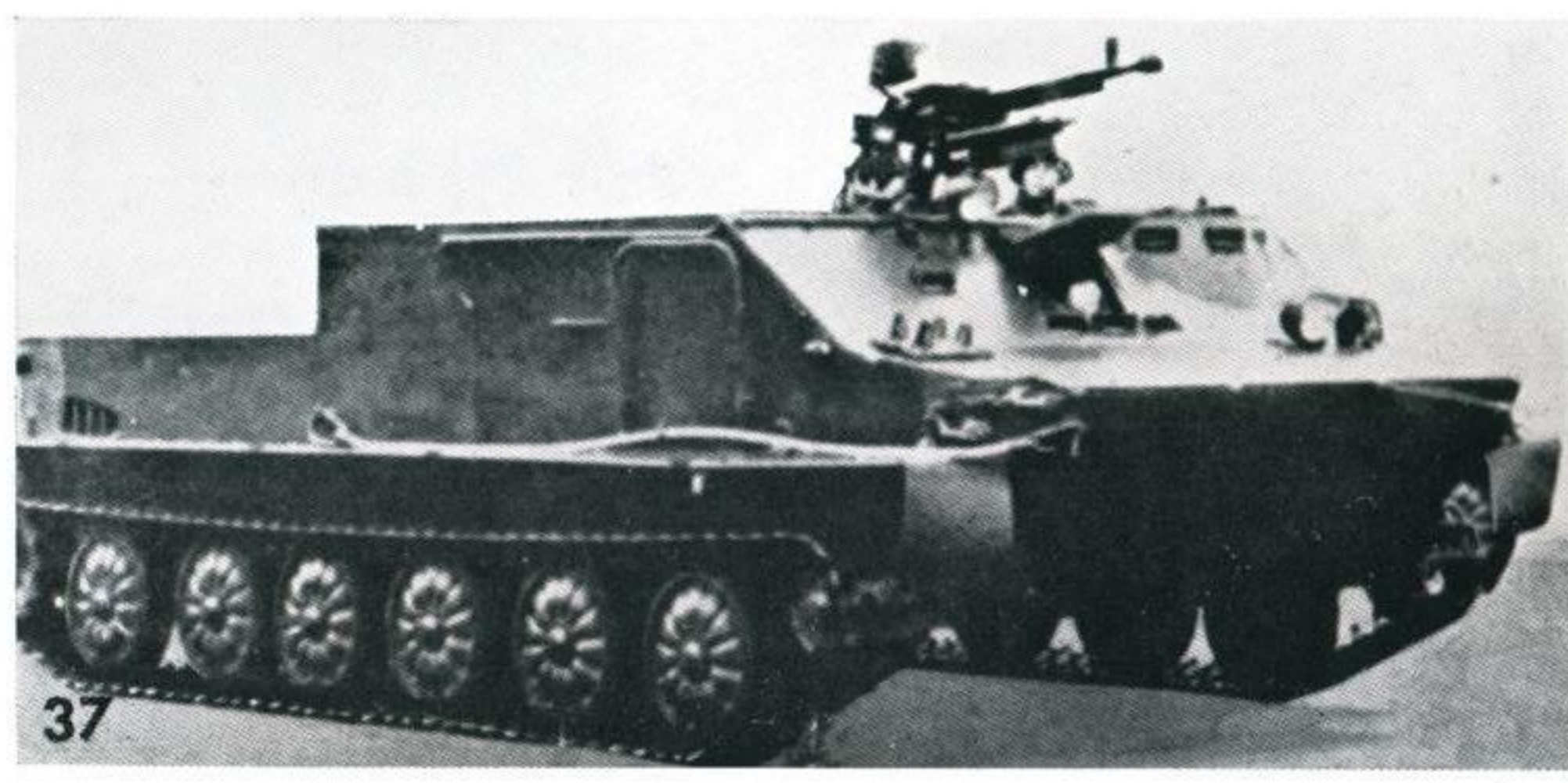
Lesson instructions are on page 2

Solutions on the cover



BTR-50P

During the eleven years of its use the BTR-50 P has undergone several changes. In its original form it had an open-top superstructure but from 1960 onwards its crew compartment has been provided with several different forms of overhead protection. Moreover, its latest version, known in Czechoslovakia as the OT-62, has a machine gun turret instead of the machine gun ball-mounted alongside the driver in the front superstructure plate. However, for all its improvements, the BTR-50 P now has a successor in a new Soviet tracked armoured personnel carrier with a gun turret and a low silhouette which is altogether superior to it.





H.M.S. ABDIEL

Built by John I. Thornycroft at Woolston H.M.S. ABDIEL was put into commission in 1967. She is designated an "exercise minelayer" and as such is the first of the type in the Royal Navy. Her function is to lay exercise mines and to maintain mine counter-measure forces when these have to operate at distance from their bases.

She measures 1,200 tons displacement (standard), is 265 feet long overall and is powered by two Paxman engines which give a speed of 15 knots. Her complement is 14 Officers and 109 ratings.

Pendant number is N.21 but you should never rely on seeing it.

In appearance she is distinctive with a rather high freeboard and flush deck. The lengthy bridge and super-

structure extends to about midships, topped at the forward end by a light tripod mast. The conical funnel is abaft amidships with a large crane abaft that.

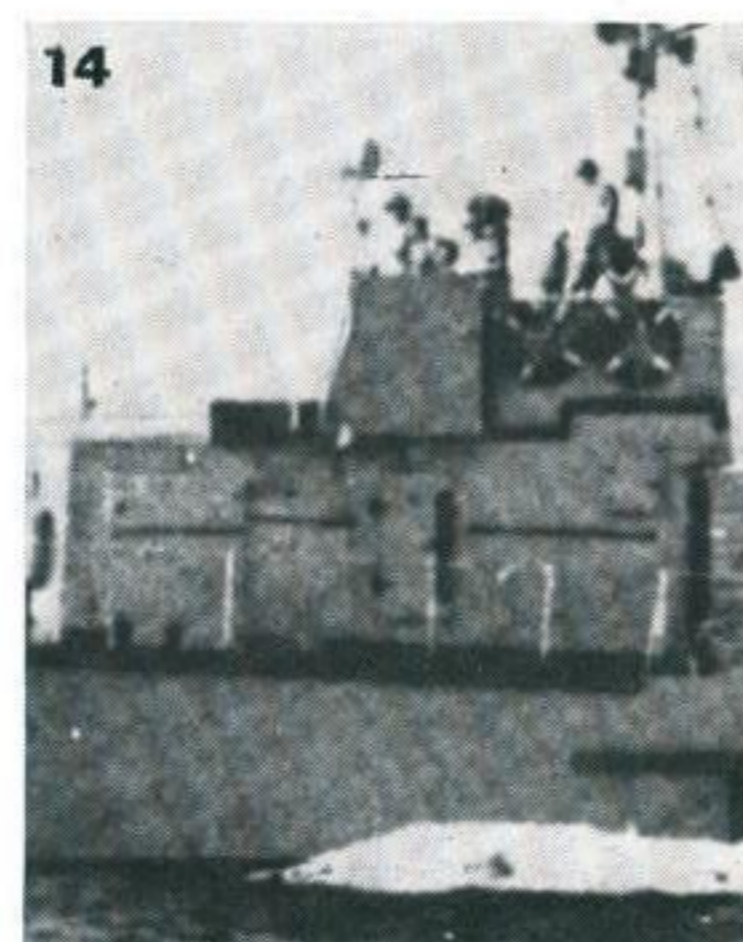
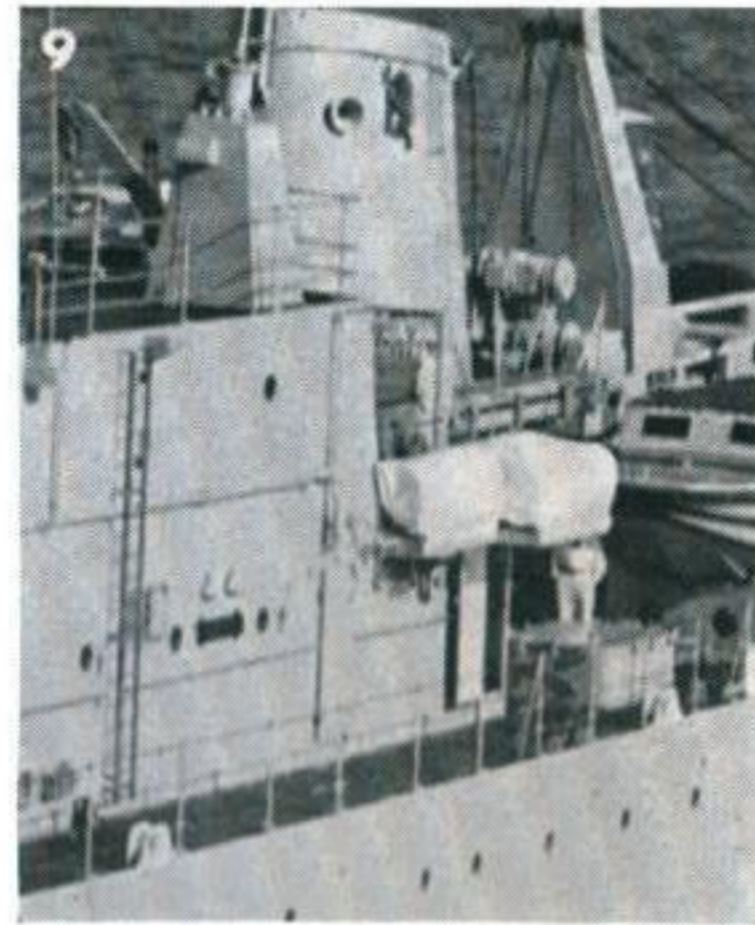
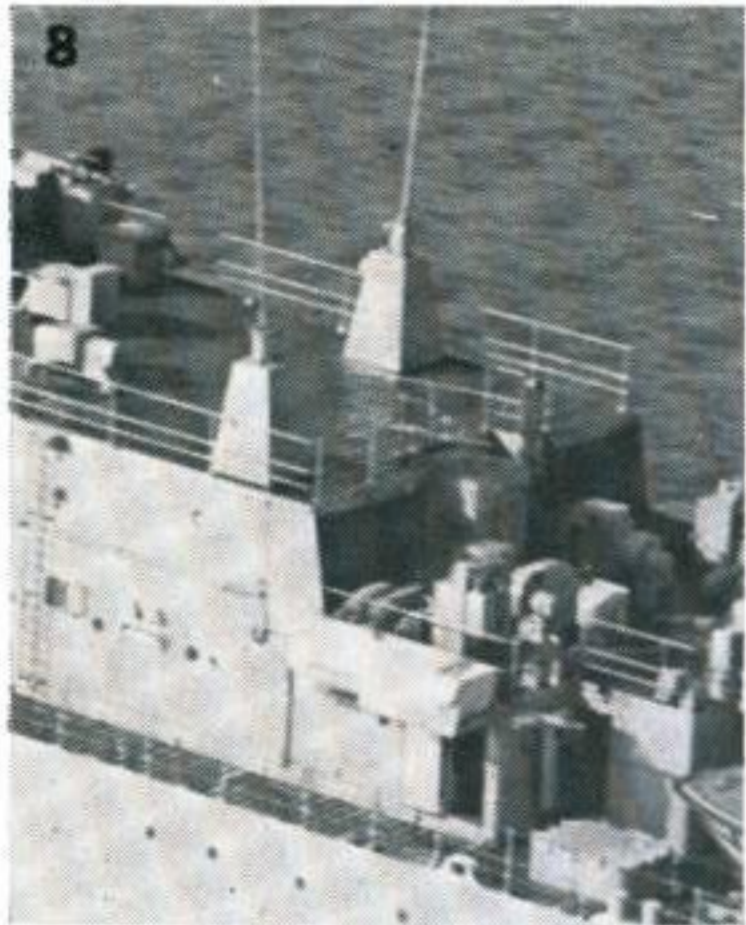
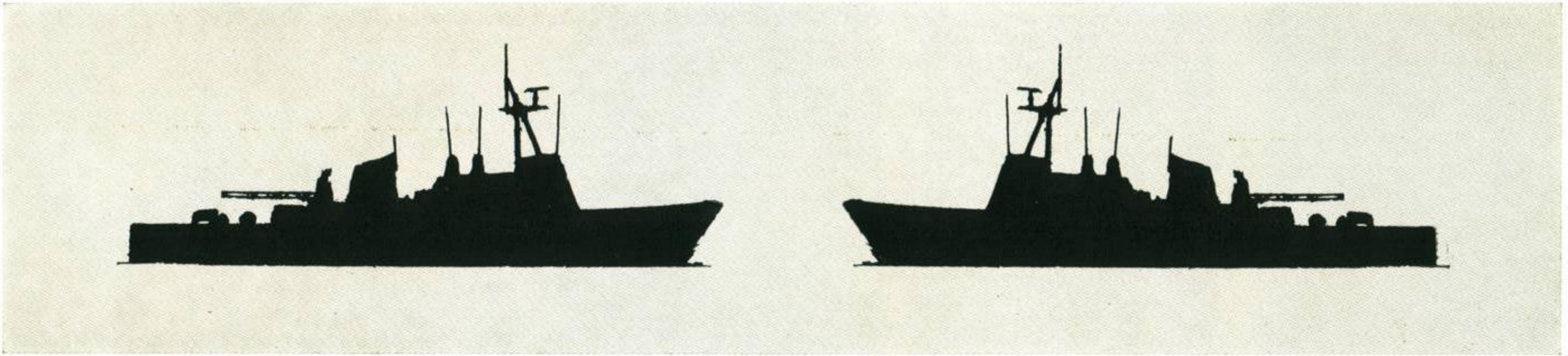
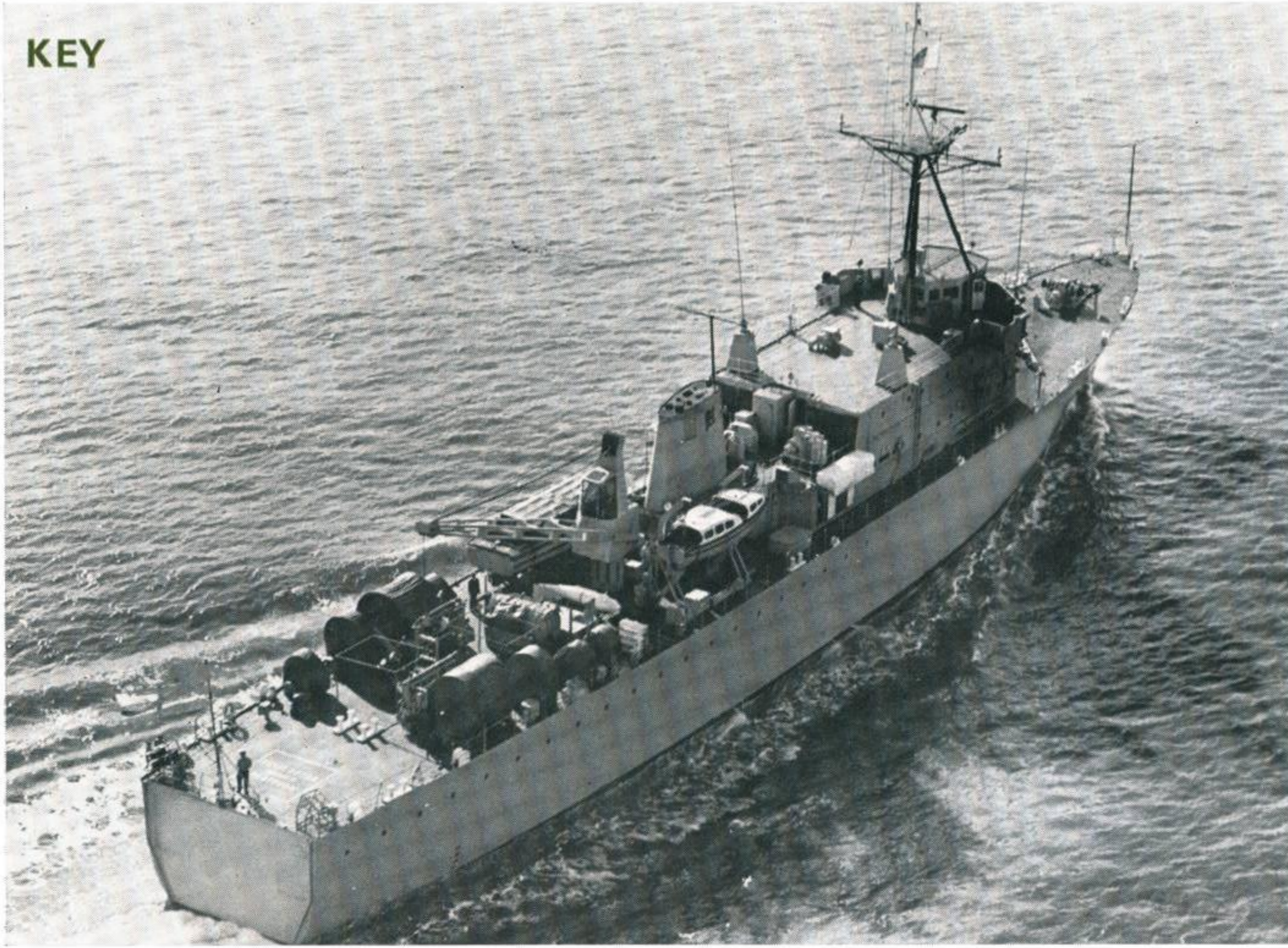
When silhouetted she bears some resemblance to the HECLA class survey ships but these have a tall, light mainmast and the crane is *forward* of the super-structure.

She might also be confused with the Indian survey ship DARSHAK (crane *between* funnel and bridge) and, oddly enough with the Russian nuclear support ships of the UGRA class although these are much larger vessels and in their turn, are not unlike the DON class escort ships. Work to instructions on page 2 and report targets as H.M.S. *Abdiel*—or otherwise if jokers. Solutions on back cover.

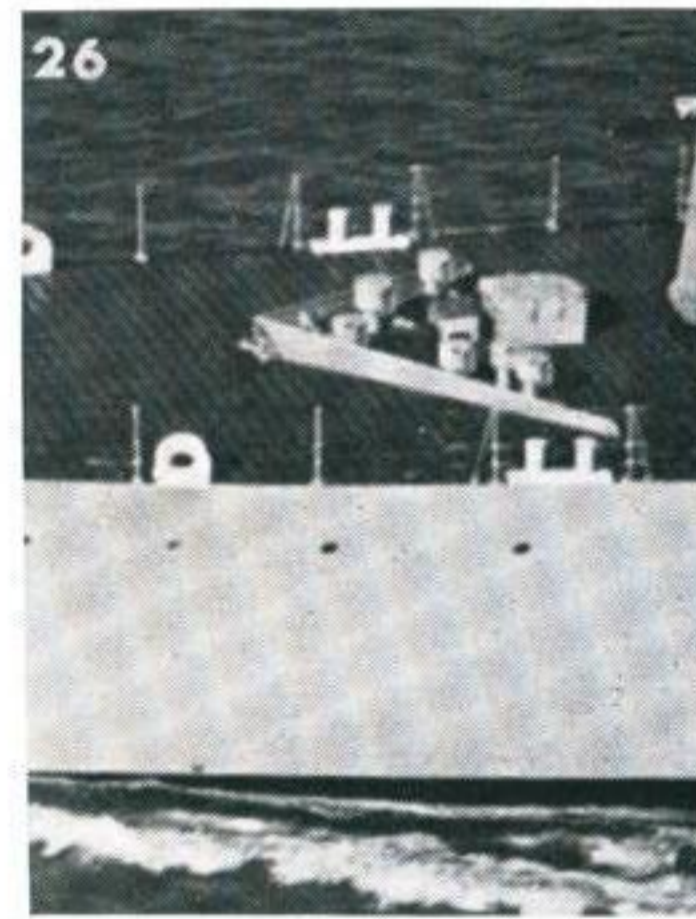
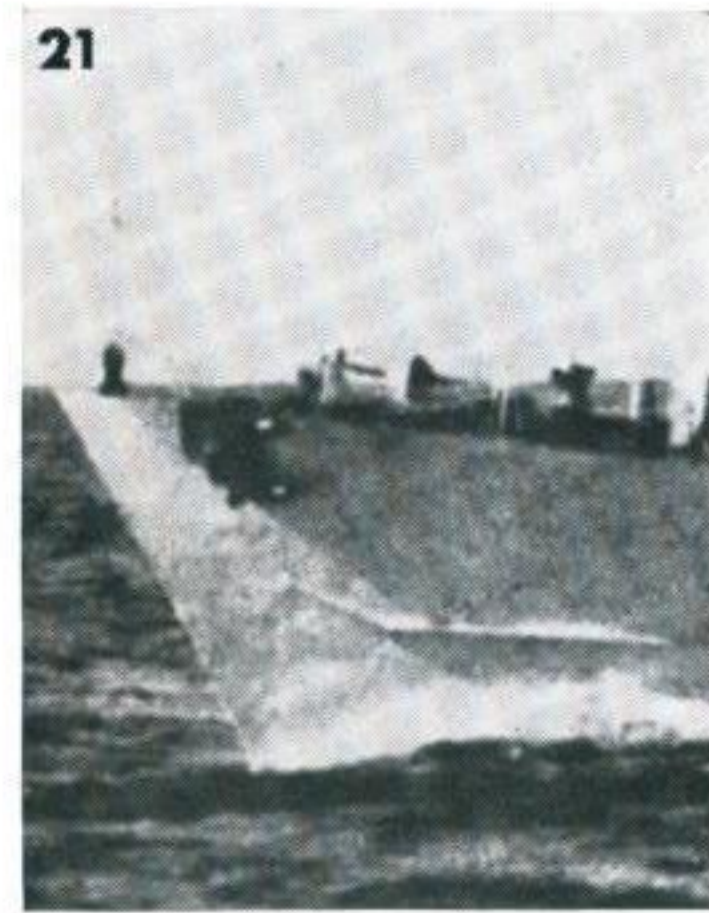
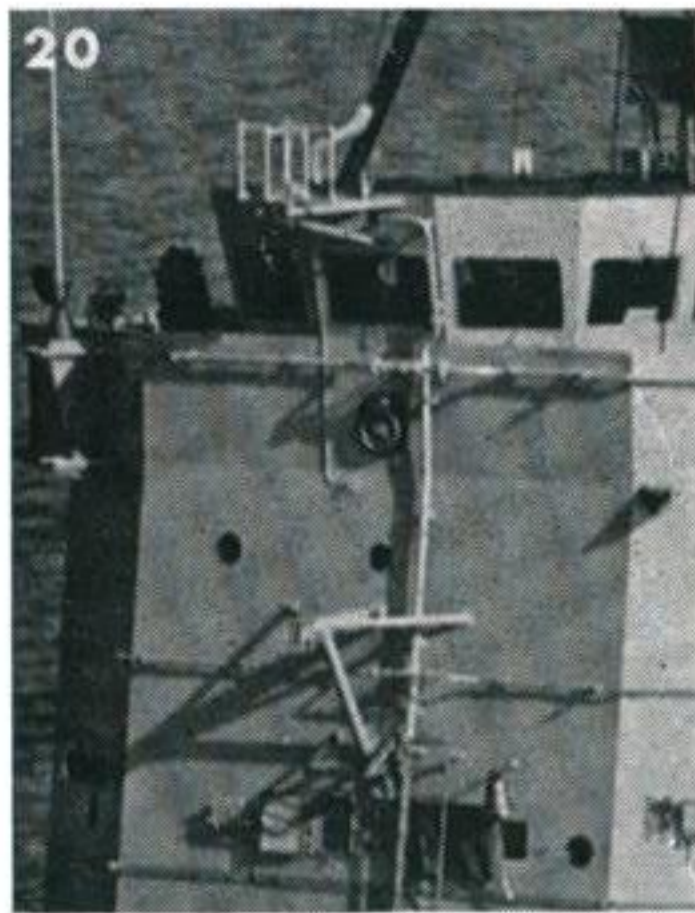
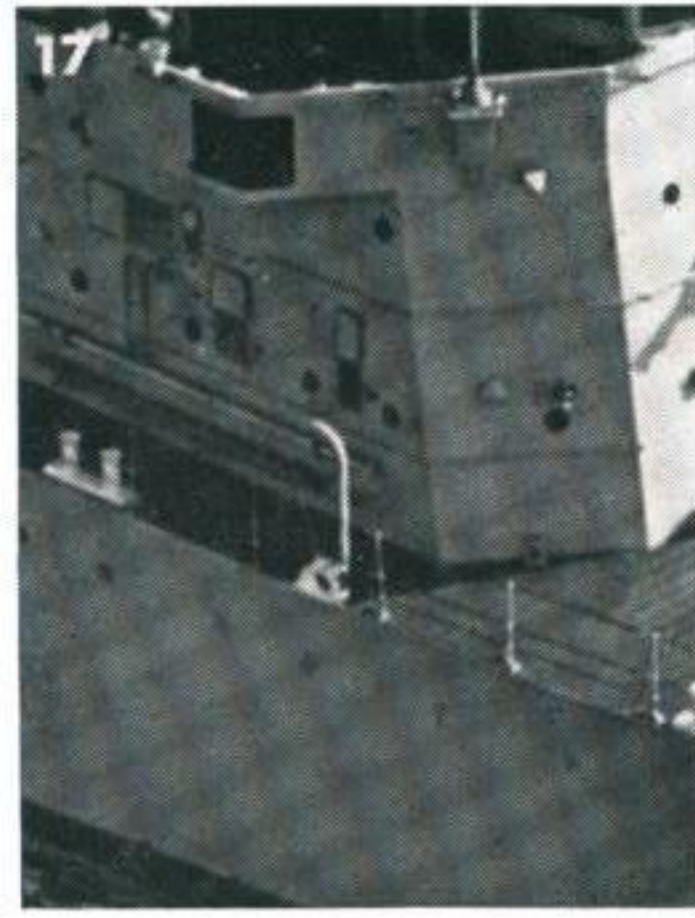


KEY

KEY

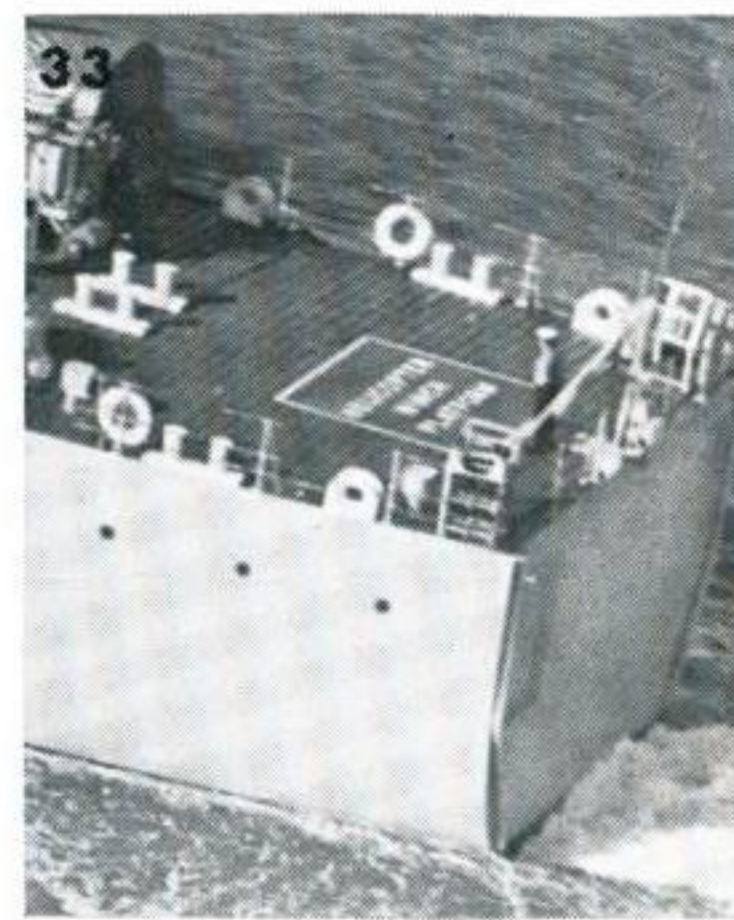
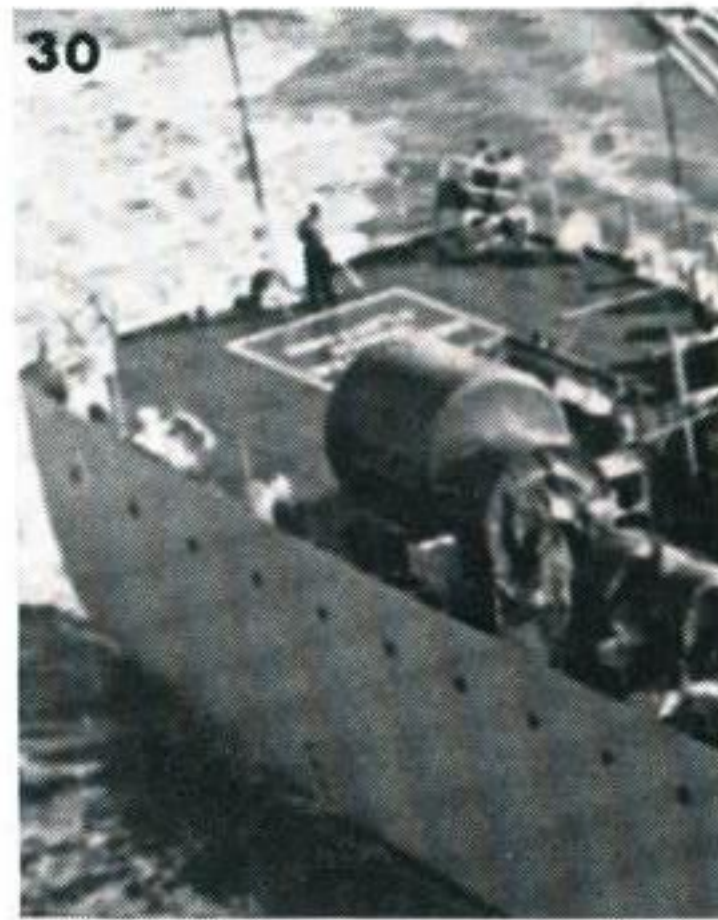


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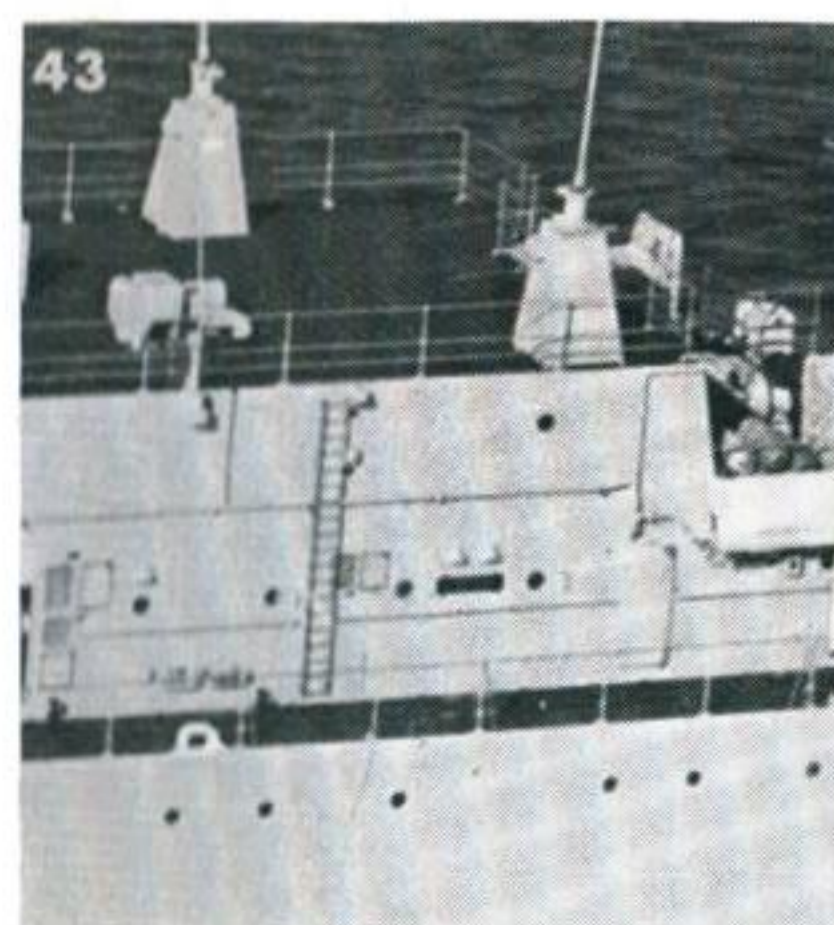


H.M.S. ABDIEL *continued*





*Lesson instructions are on page 2
Solutions are on the cover*



KEY



MITSUBISHI MU-2

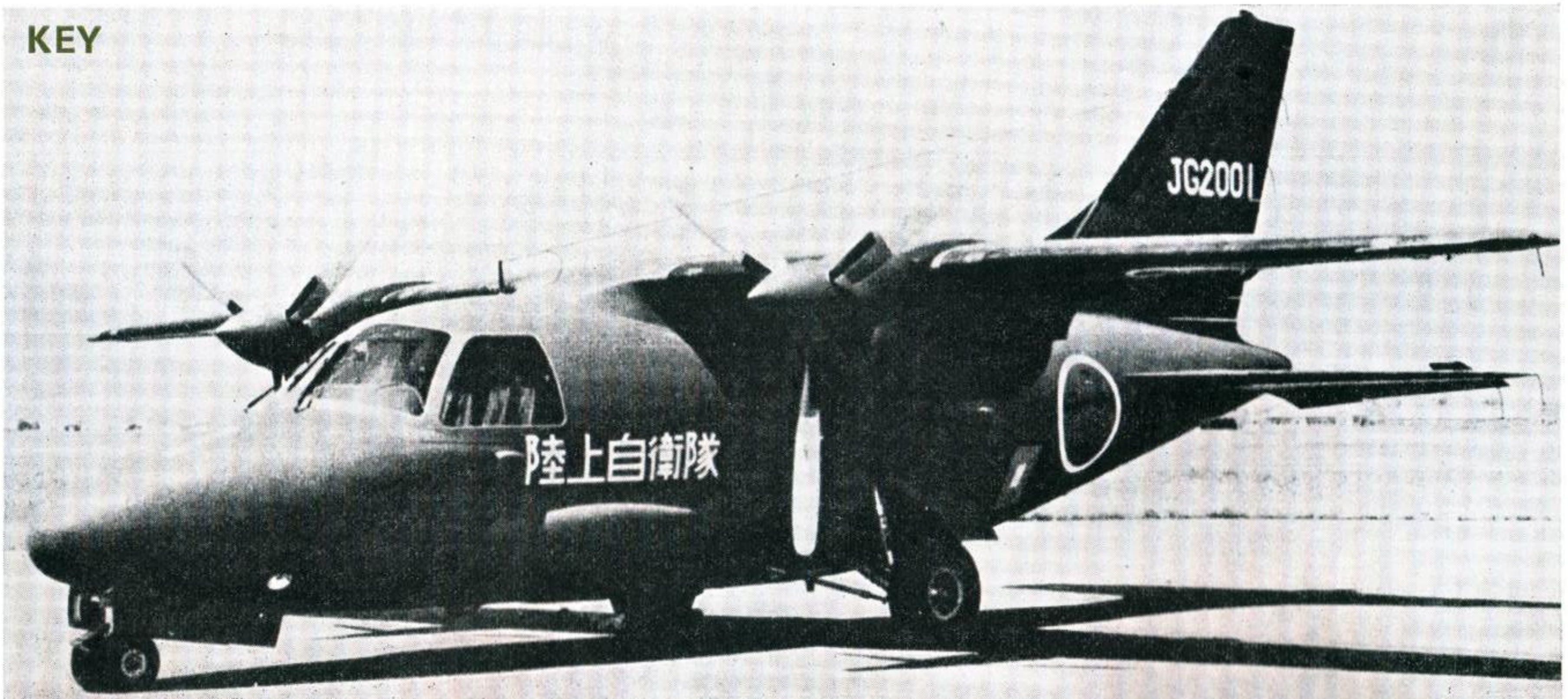
The Japanese Mitsubishi company's first post-war commercial aircraft construction, the MU-2A, is a light twin turboprop executive and general purpose transport seating six to nine occupants. The first three prototypes were fitted with Astazou engines and were designated MU-2As, the first one making its maiden flight in September 1963. In the fourth prototype a switch was made to Garrett Airesearch engines and this machine, which flew in March 1965, became the production prototype of the MU-2B model; first deliveries began later in 1965. Mooney Aircraft Inc.

markets the MU-2B in North and Central America and had assembled 32 by early 1967.

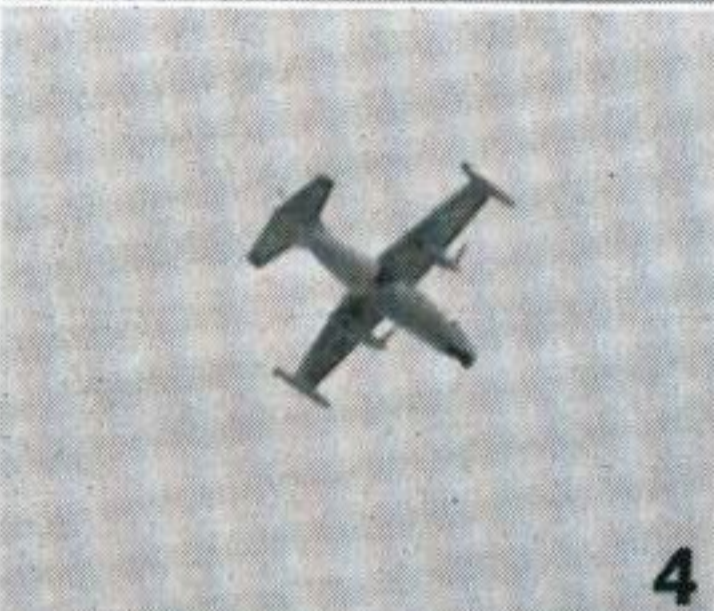
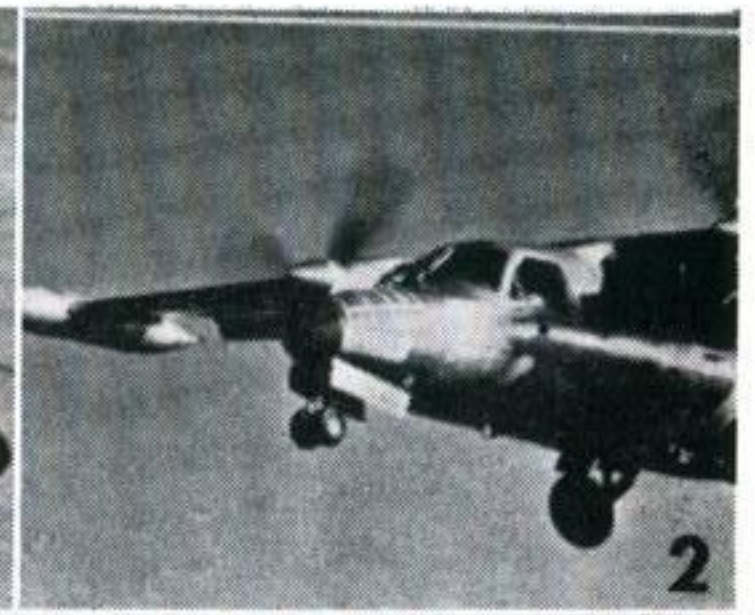
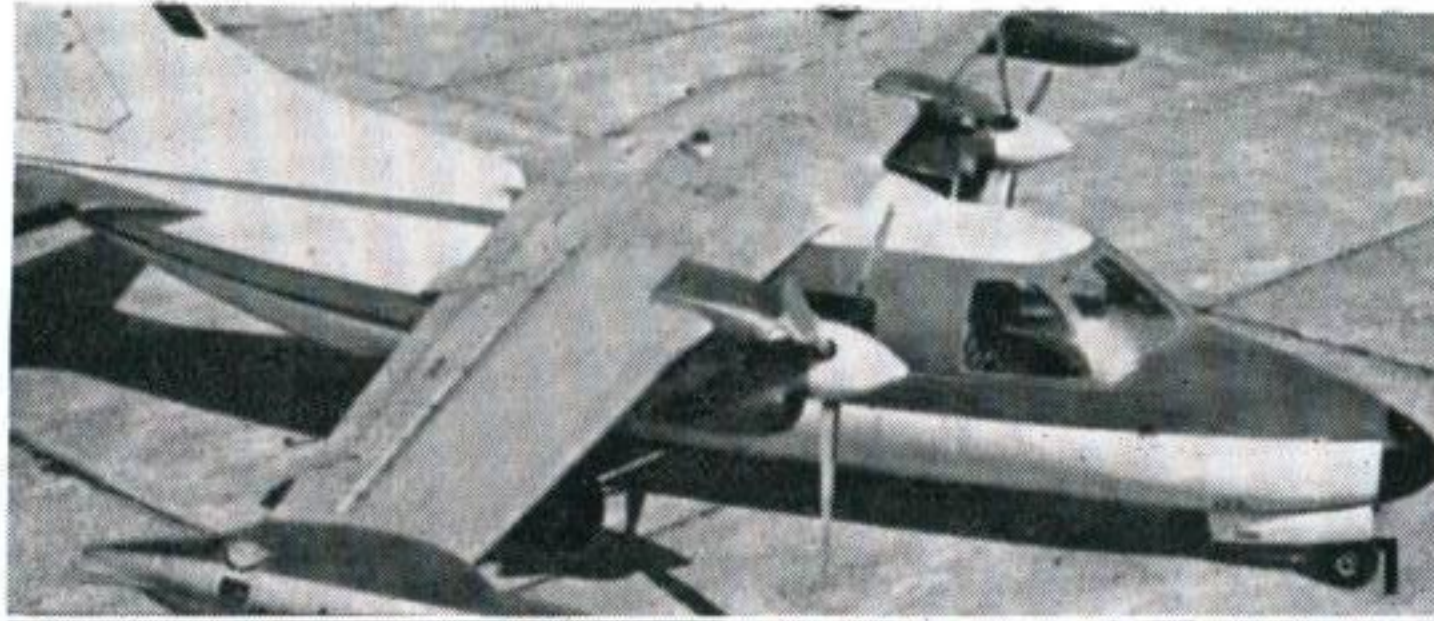
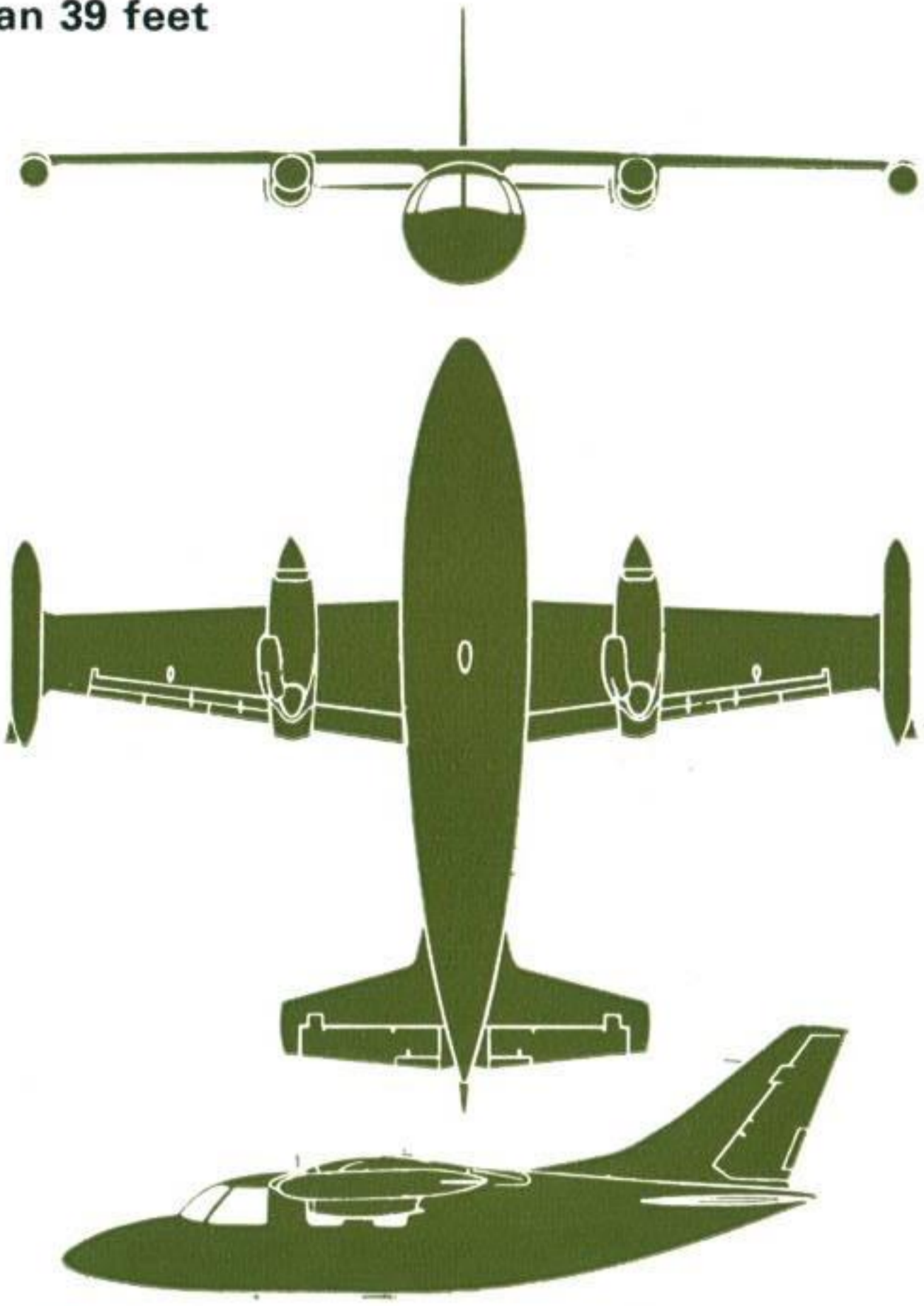
Other versions of the MU-2 are the MU-2D with integral wing tanks and more fuel capacity; the MU-2C, a transport and liaison version for the J.G.S.D.F. staff office; and the MU-2E, a search and rescue model for the J.A.S.D.F.

The MU-2 is not unlike the Portofino in general appearance so it needs to be learned properly. To do this, read the instructions on page 2 and report targets as MU-2—or otherwise if jokers.

KEY



Span 39 feet



KEY



continued overleaf

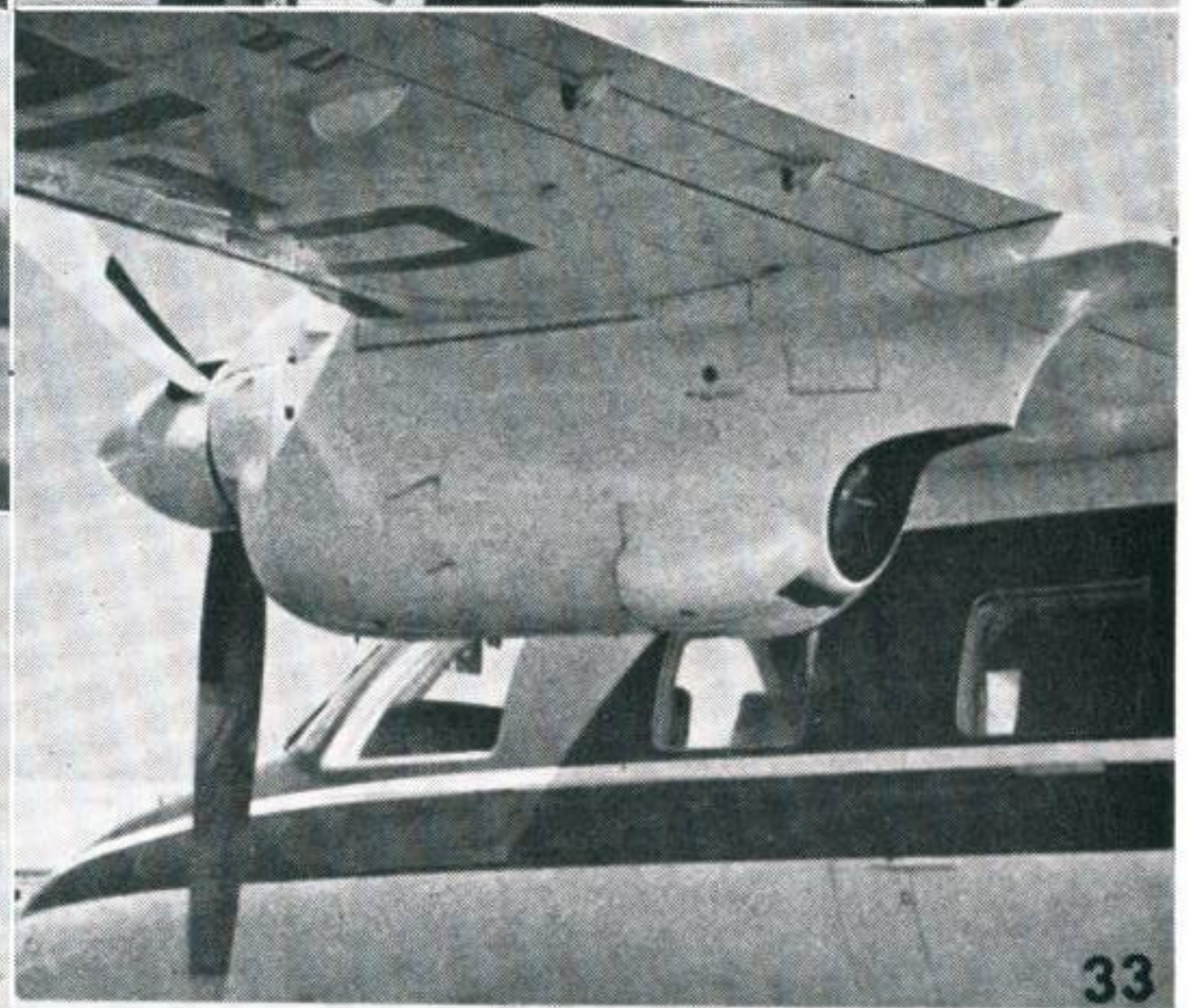
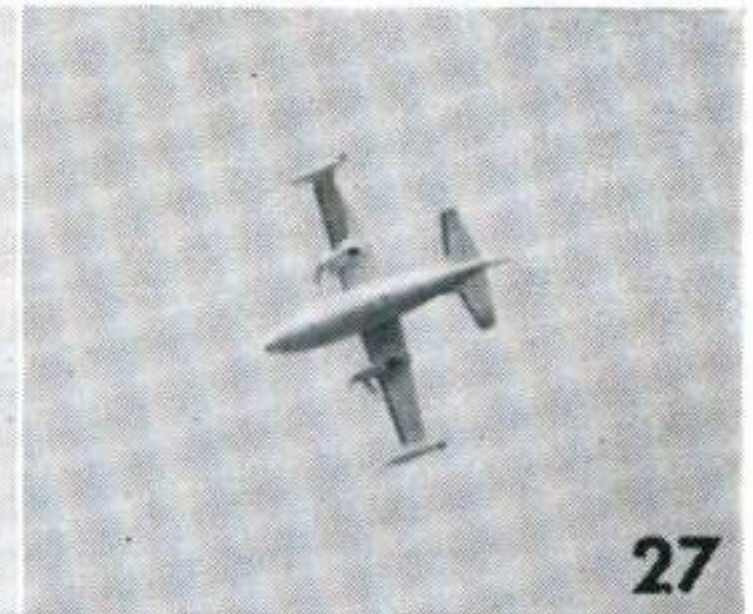
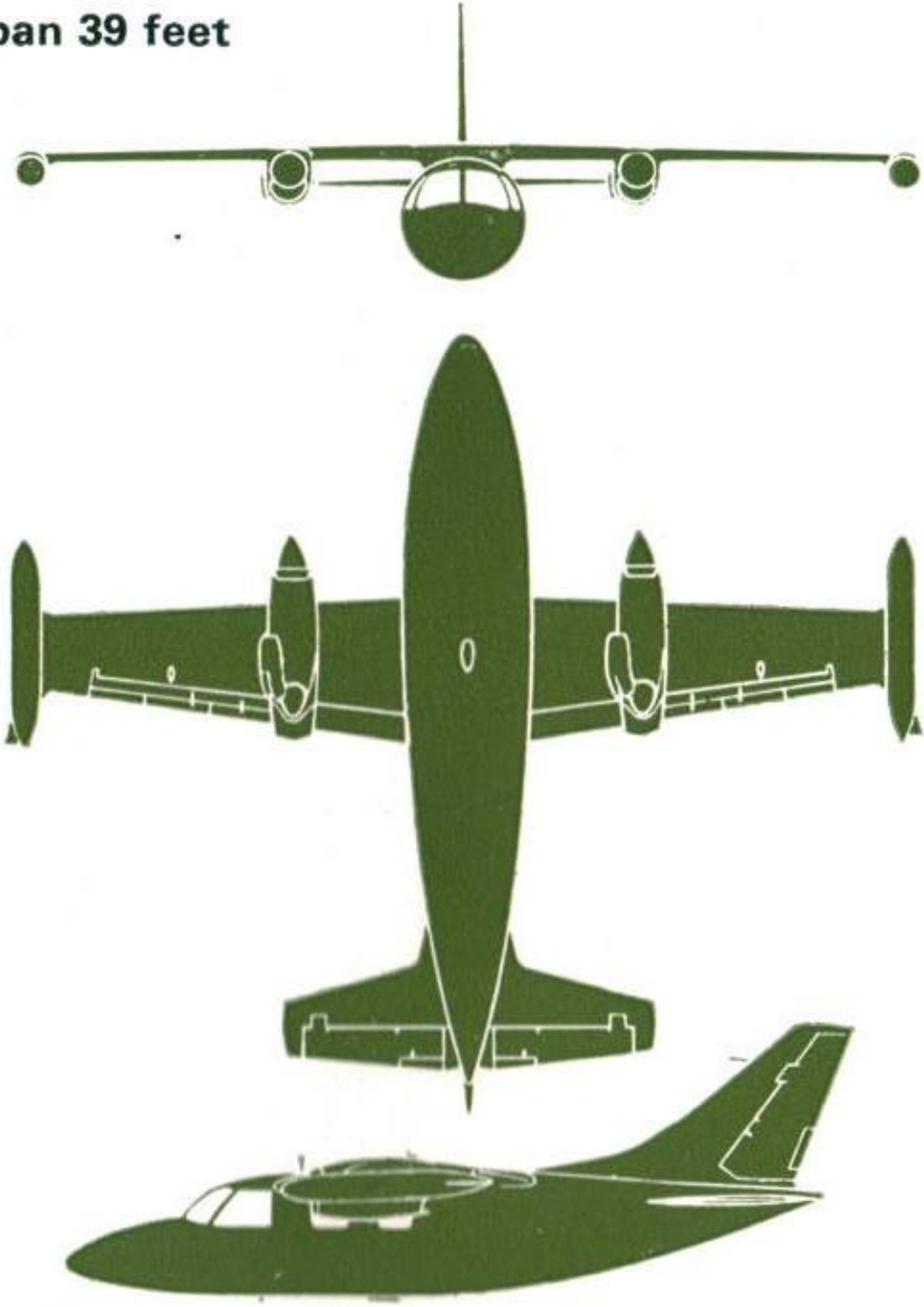
KEY



MITSUBISHI MU-2 *continued*



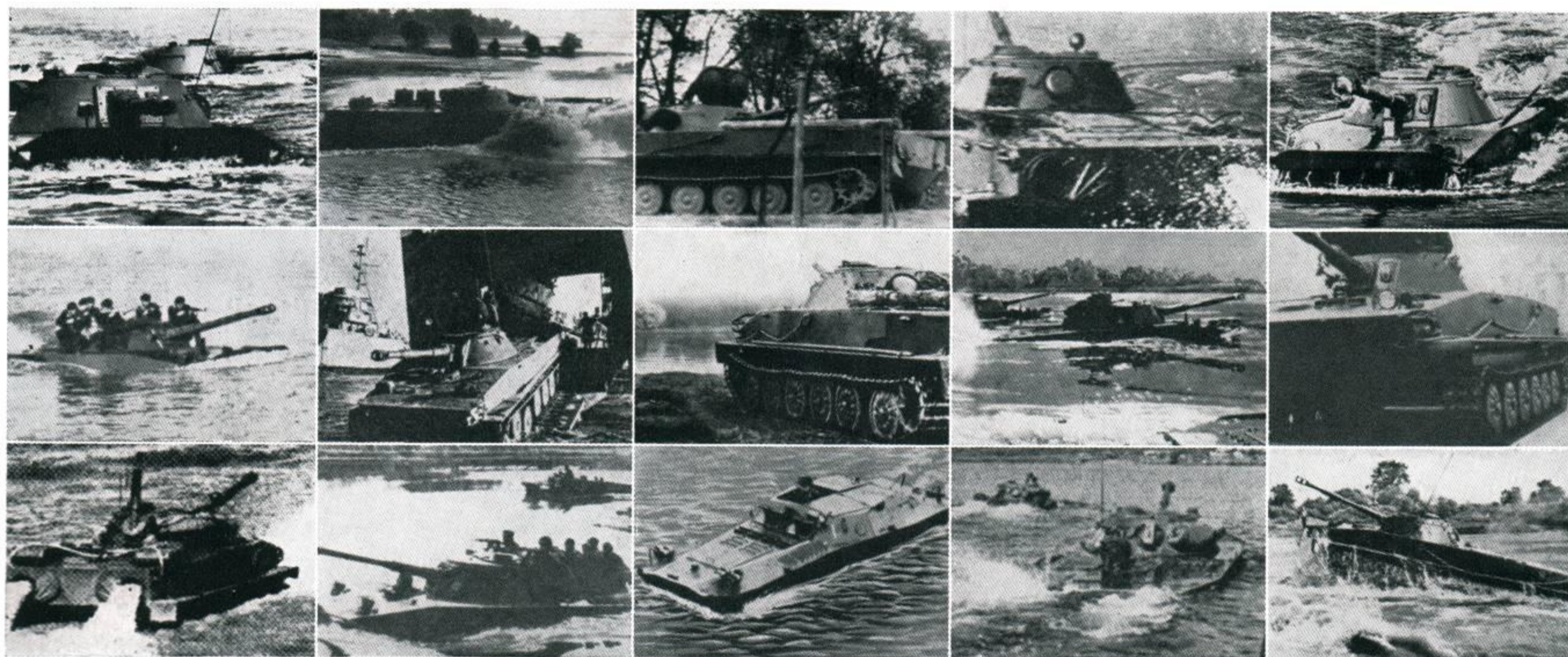
Span 39 feet



Lesson instructions are on page 2 Solutions on the cover

KEY





SOLUTIONS TO TESTS AND EXERCISES

Pages 2 and 28

TEST PAPERS

AMX-13: Joker is second line 1st picture.
LEOPARD: Joker is third line 2nd picture.
PT-76: Joker is third line 3rd picture.

Page 4

DC-8

All targets are of **DC-8s** except No. 4 **Boeing 707**, No. 16 **Convair 990**, No. 22 **B-52G** and No. 39 **Starlifter**.
 Nos. 6, 7, 13, 27, 28, 30, 35, 38 and 40 are **Super 61s**.
 Nos. 5 and 36 are **Super 62s**.
 No. 19 is a **Super 63F Jet Trader**.

Page 8

LEAR JET

All targets are of **Lear Jet** except No. 18 **Fan Jet Falcon**, No. 21 **Hansa Jet** and No. 39 **Rinaldo-Piaggio PD808**.
 No. 9 **Lear Jet 25** (stretched version)

Page 12

TANKERS. SHIPS OF THE DESERT

1 Asia Maru No. 2	See Number 6
2 Berge Racine	" " 1
3 Mermaid	" " 3
4 Manhattan	" " 15
5 Mermaid	" " 3
6 Patro	" " 7
7 Texapo Greenwich	" " 10
8 " "	" " 10
9 Marie Maersk	" " 5
10 Manhattan	" " 15
11 Tuareg	" " 18
12 Esso Lincoln	" " 13
13 Mobil Aladdin, Not on Large Sheet	
14 Patro	See Number 7
15 Hemland	" " 9
16 Afta	" " 8
17 Esso Lincoln	" " 13
18 British Hero	" " 2
19 Asia Maru No. 2	" " 6
20 Hemland	" " 9
21 Rigel	" " 11
22 Mermaid	" " 3
23 See No. 13 above	
24 Inago	" " 27
25 Berge Racine	" " 1
26 British Hero	" " 2
27 Marie Maersk	" " 5
28 Inago	" " 12
29 Marie Maersk	" " 5
30 Asia Maru No. 2	" " 6

Page 14

BTR-50P

All targets are of **BTR-50P** except Nos. 12, 19, 34, and 40 which are jokers.


Page 20

HMS ABDIEL

All targets are of **HMS Abdiel** except Nos. 14 and 21 which are **S01 Class Patrol Vessel USSR**.



Cover Photo: A Hawker Siddeley Nimrod on a test flight from the Company's Woodford airfield. Designed to go into service with the RAF Coastal Command in the late 1960's as a maritime reconnaissance aircraft, the Nimrod will fly at high subsonic speed and high-altitude to the search area, low speed low-level patrol and a fast return to base. The aircraft is powered by four Rolls-Royce Spey turbofan engines.



CORRECTION

In the July 1967 issue on page 190 the silhouette of the Vampire T.11 was incorrect. The correct silhouette is now given.

Page 24

MITSUBISHI MU-2

All targets are of **MU-2** except No. 8 **Cessna 411** and Nos. 17 and 28 **Piaggio P166B Portofino**.