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JOINT



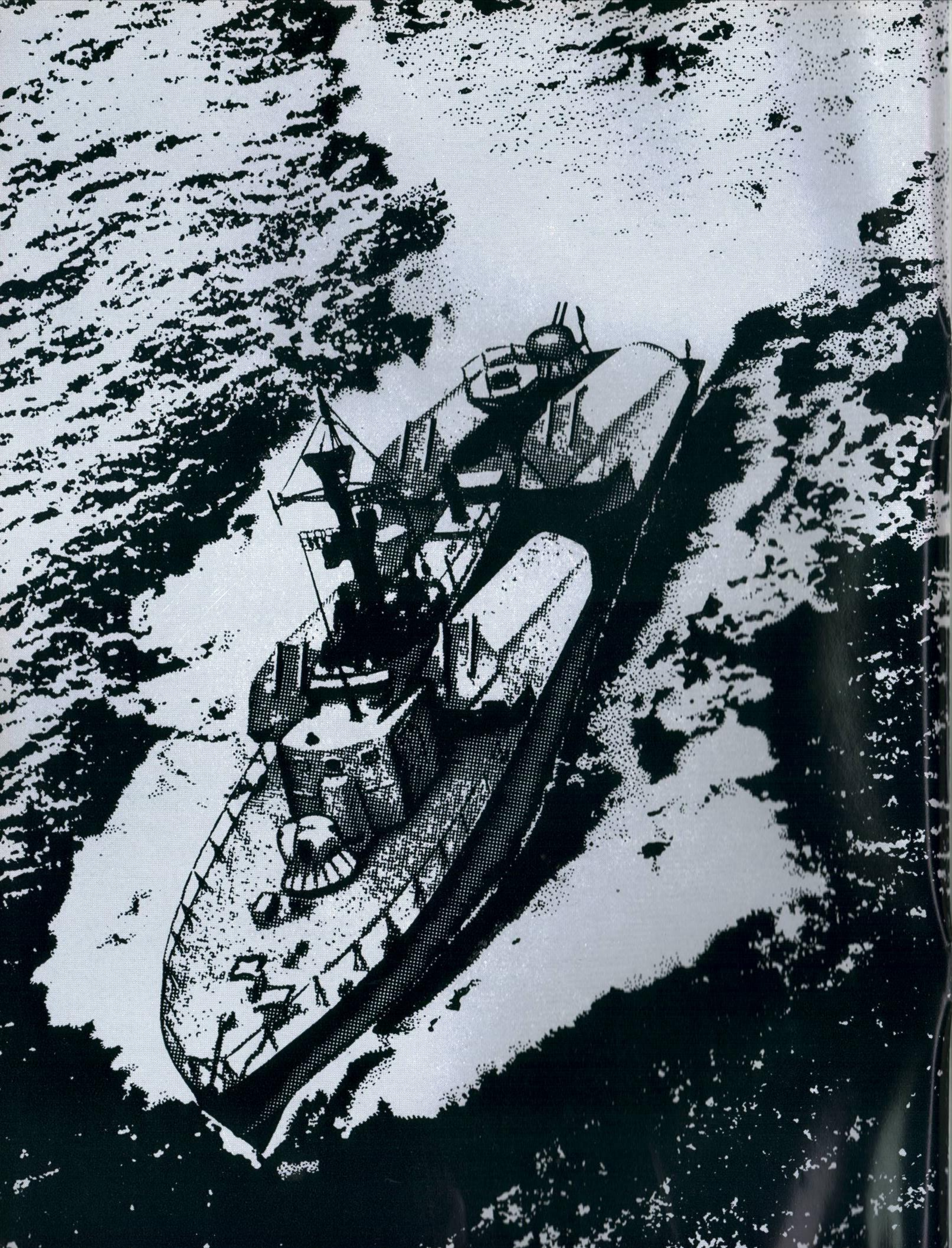
SERVICES

RECOGNITION

Journal



Vol. 23 NOVEMBER 1968 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.), 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.

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FAST PATROL BOATS OF THE COMMUNIST BLOC COUNTRIES

The U.S.S.R. is credited with having no less than about 450 Fast Patrol Boats of various types. To this formidable total must be added nearly the same number in the fleets of other Communist countries or of countries within the Russian sphere of influence. Most of them are of Russian design or build and so present a homogeneous fleet.

Some of the earlier craft are interchangeable as gunboats of which the most numerous are those of the P classes, a long series of which were produced, starting with the P4 Class, first of which was launched between 1952 and 1958. They were small craft of 45 tons displacement and a length of 82 feet. Armament consisted of two anti-aircraft guns and the speed was 40 knots. They were known as the intermediate type. They were followed by the medium type—the P6. Tonnage was raised to 50 although length remained the same. Anti-aircraft armament was doubled and in addition two 21-inch torpedo tubes were fitted. Speed remained at 40 knots and all the craft were capable of conversion into gunboats.

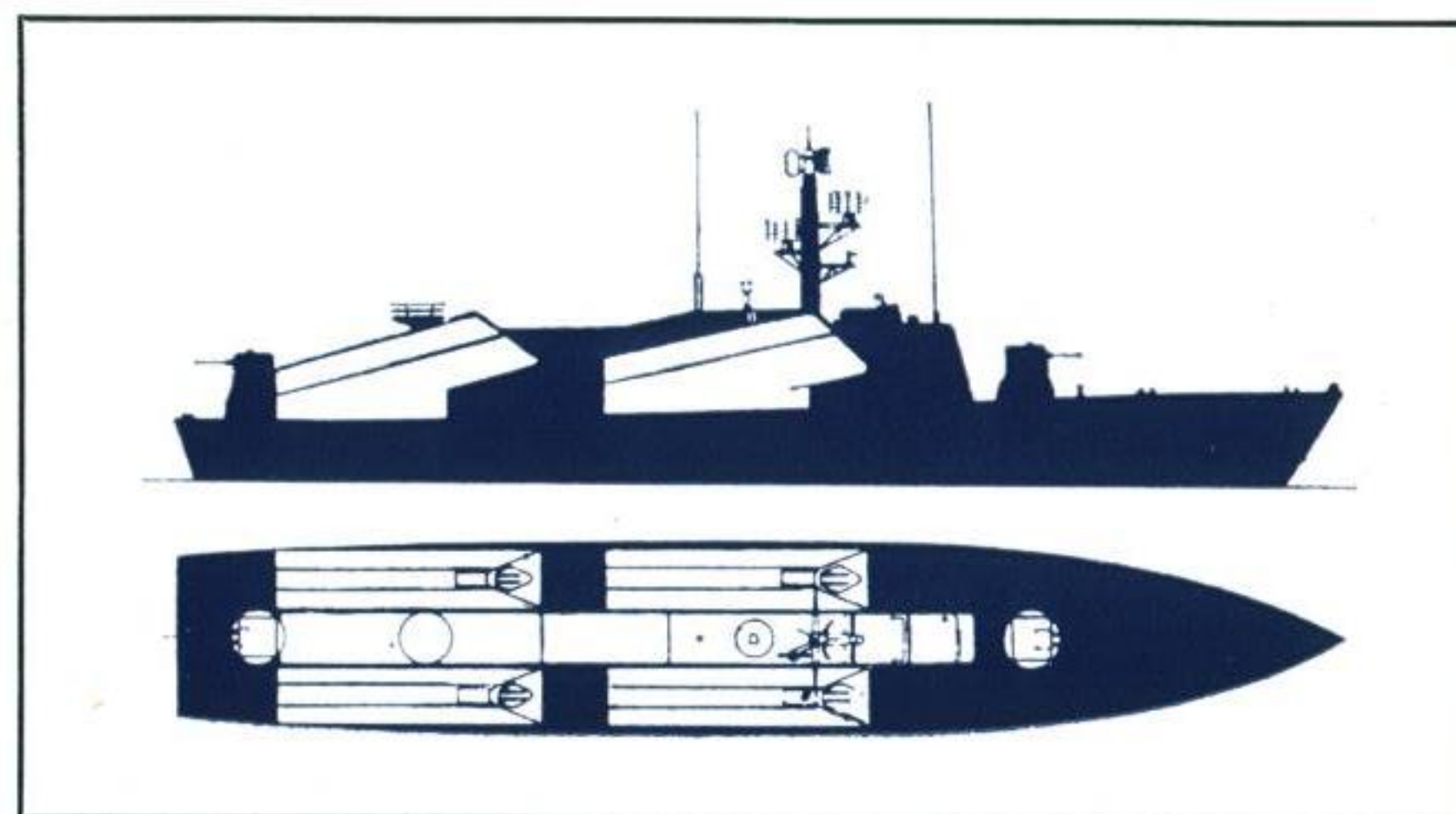
About the same time a very numerous class with an aluminium hull was constructed. This was the P8 in which the tonnage was raised to 55, length increased to about 86 feet and speed to 42 knots. The torpedo tubes were omitted. In about 1961 the still larger P10 class appeared. Speed was increased to 47 knots and armament consisted either of four 21-inch torpedo tubes and two anti-aircraft guns or of two torpedo tubes and four anti-aircraft guns.

The final development in this series was the P12. Displacement rose to 73, speed dropped to 42 knots and the armament varied. The main feature of these craft is that they are fitted with hydrofoils.

The next development about 1960–1961 was the conversion of about 50 of the P6 class motor torpedo boats into the missile patrol boats of the Komar class. Displacement was increased to 75 tons or 100 tons on full load. Length was increased to 88 feet on a beam of 21 feet. Two anti-aircraft guns were carried in a twin-turret forward and two missile launchers were fitted within a hooded casing aft, one on either beam, at approximately 45 degrees to the centre line. These were surface to surface missile launchers for weapons with a range of 15 miles.

Following these formidable boats came 50 of the larger Osa class, carrying four launchers in two pairs. Speed dropped to 35 knots, displacement rose to 160 tons standard and 200 tons full, and the length was increased to 131 feet. The draught rose to 6.5 feet as against the 5.5 of the P classes and the 6 feet of the Komars.

These missile firing craft were designed for attacking merchant ships primarily; they can remain below the horizon for most of the time. As "The Navy" so rightly states "These two classes of missile patrol boats in the Soviet Navy represent just about the most economical maritime striking weapon it is possible to build and operate when compared with larger and less effective warships in terms of size, cost and manpower". It was, incidentally, a missile fired from one of these craft serving in the Egyptian Navy which sank the Israeli destroyer during the war of 1967. The Osa is featured opposite.

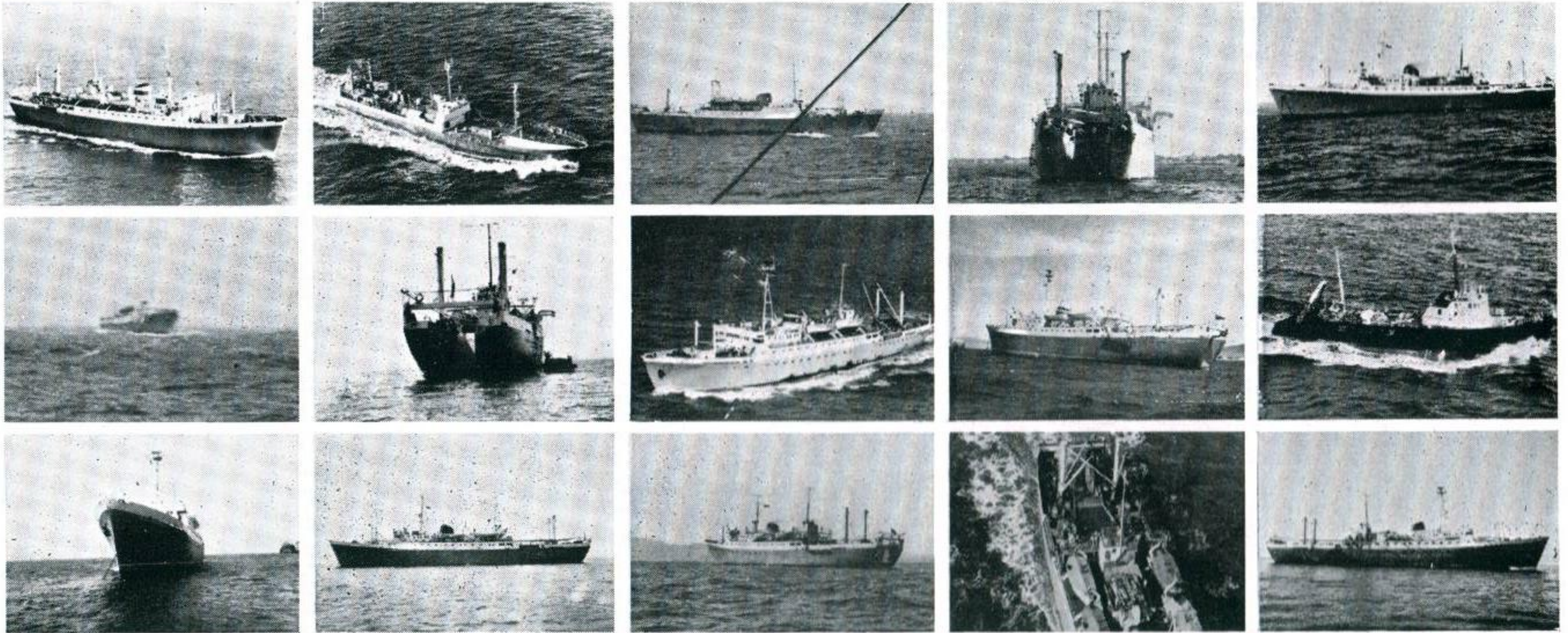


The most recent development has been the Motor Torpedo Boats of the Shershen class which have the same basic hull and layout as the Osa class but without missile launchers. Carrying four anti-aircraft guns in two twin turrets, one forward and one aft and four torpedo tubes, their distinctive feature is that they are powered by gas turbine in place of the diesel engines of their predecessors.

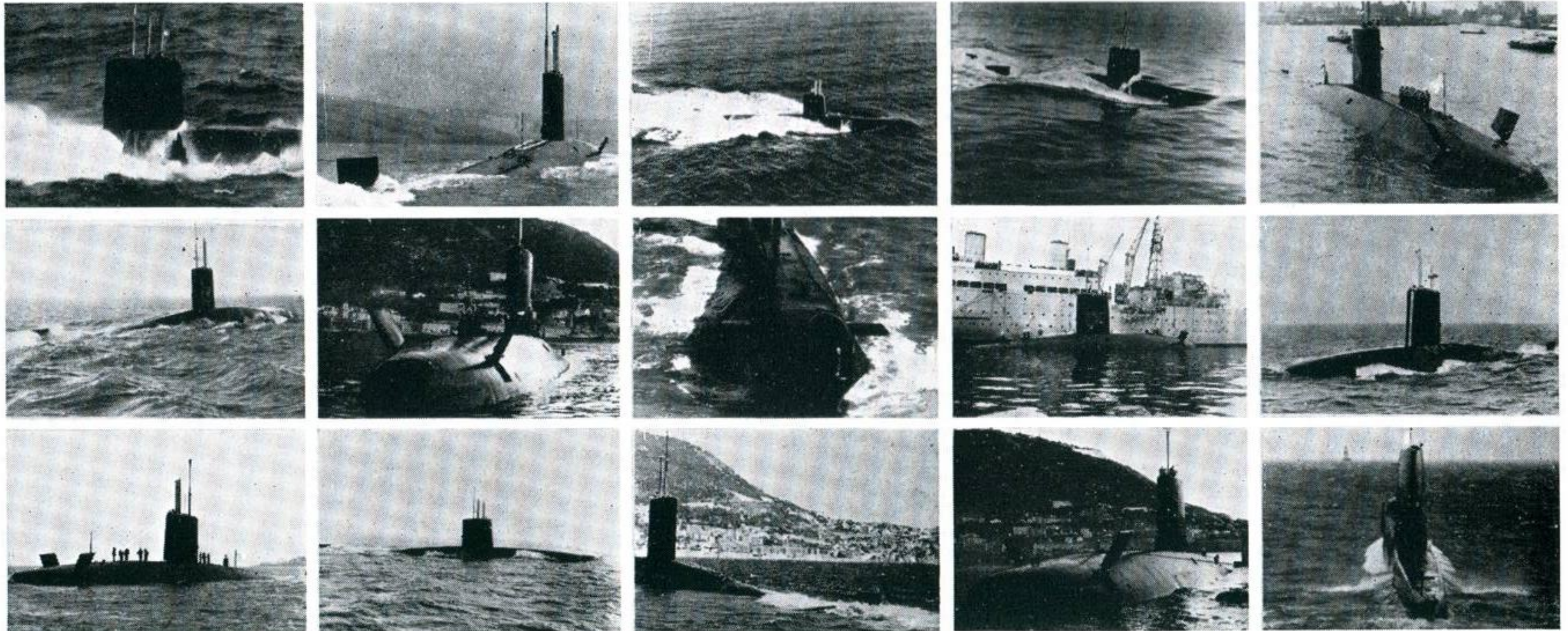
TEST PAPERS

Something to show you how good you are—
or are not—at identifying these ships at sea

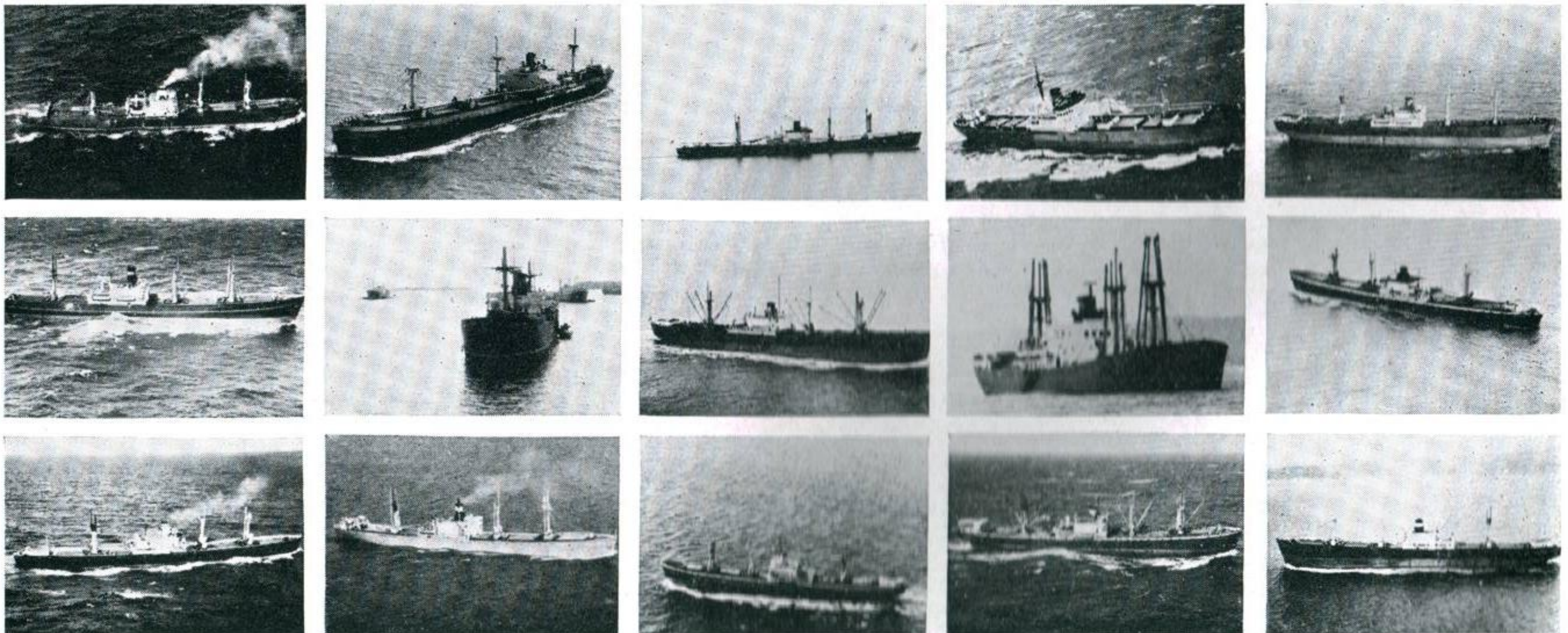
RUSSIAN STERN TRAWLERS?



H.M.S DREADNOUGHT?



LIBERTY TYPE?



LESSON INSTRUCTIONS

Identity Training is a matter of "doing", not of gathering information. Submit to the instructions given below, and in every edition of the *Journal*, and your ability to identify will develop automatically.

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 and so gain experience: spend no time on difficult ones. 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.** Do not use abbreviations: write down the name given in the title.
5. It is more important to identify accurately than quickly. Lessons should not be hurried or given a time limit.
6. Do not attempt conscious memorising of details, shapes, or names: the procedure will take care of that. Do not attempt the lesson without using the key: wait until your ability to do so 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.

Gebrauchsanweisung für die Typenlehre

Um den größten Nutzen aus den Übungsbildern, die in diesem Heft veröffentlicht werden, zu ziehen, sollte wie folgt verfahren werden.

1. Den zur Lehre gehörigen Text lesen.
2. Eine numerierte Typenliste vorbereiten, in der angesprochene Typen in eine gewisse Ordnung gebracht werden können.
3. Typen ansprechen durch Vergleich mit den Hauptansichten (von oben, von unten, von vorne, von hinten und von der Seite). Anfangen mit den einfachen Bildern, um Erfahrung zu bekommen. Die angesprochenen Typen zur Ansprache der schwierigeren benutzen.
4. Wichtig: Sobald ein bestimmtes Flugzeugbild mit Sicherheit richtig angesprochen ist, sofort die Typenbezeichnung in die entsprechende Stelle der Liste eintragen.
5. Bei der Übung nicht beeilen oder eine zeitliche Begrenzung festlegen. Für Anfänger ist es wichtiger, richtig anzusprechen als schnell.
6. Nicht mit Einzelheiten, Umrissen, Namen aufhalten.

KEY



WARSHIPS OF THE U S S R KYNDA CLASS DESTROYERS

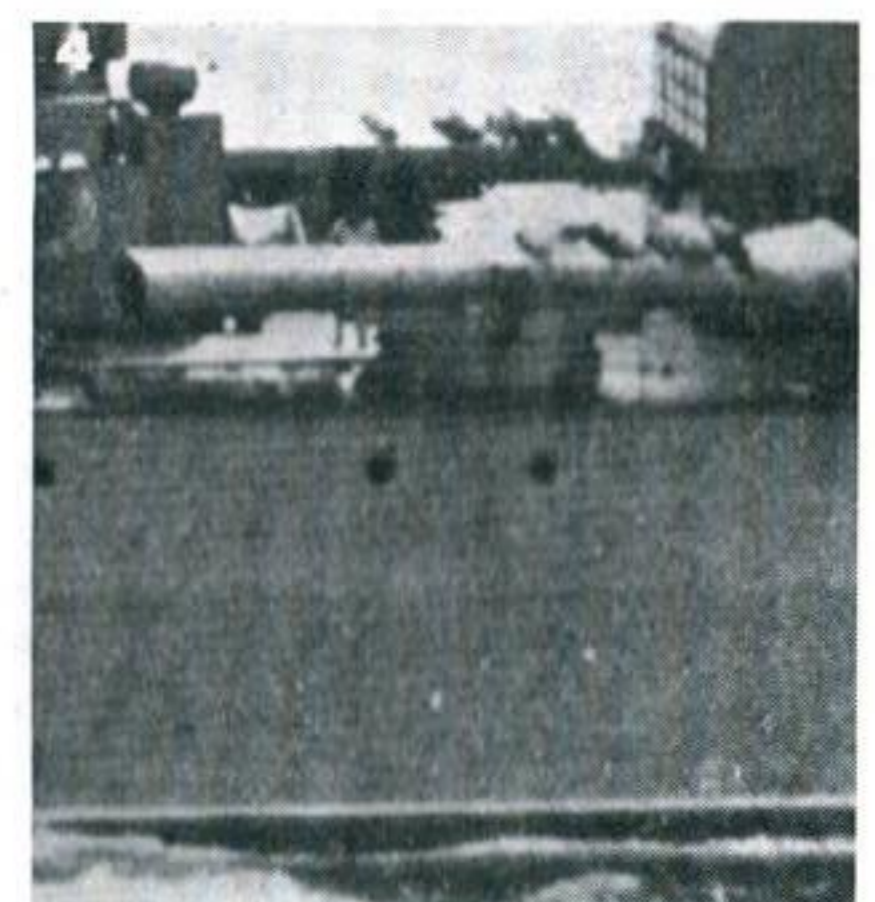
Lesson instructions are on page 285

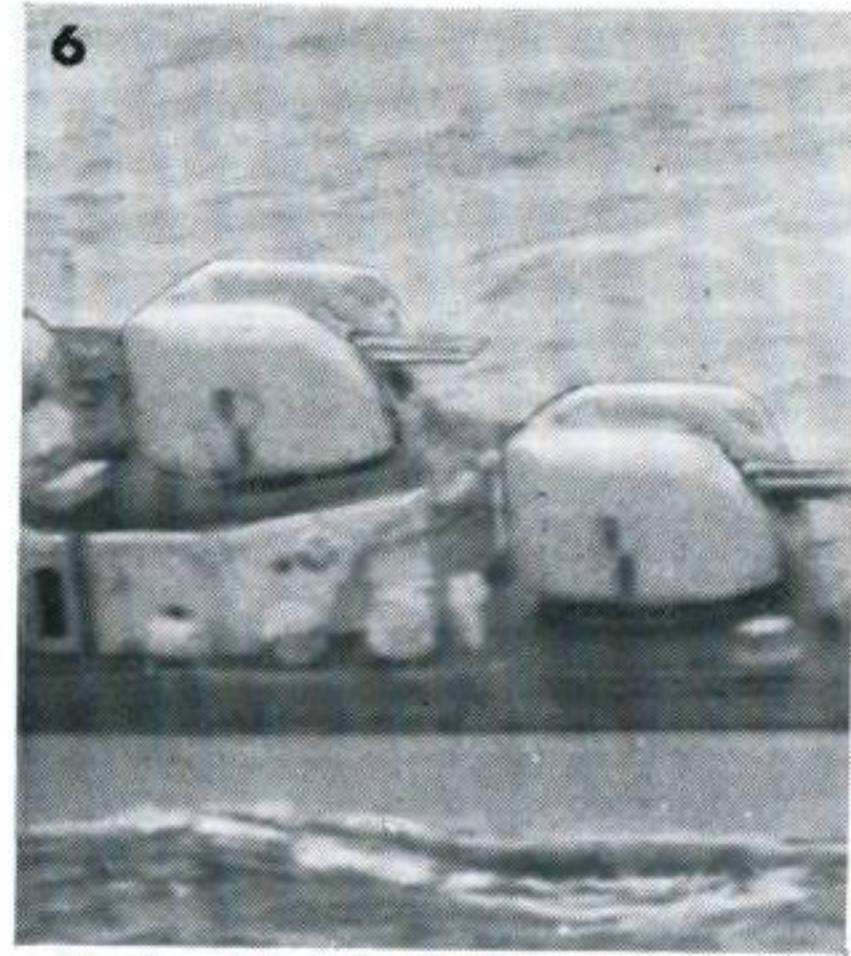
These Guided Missile Destroyers are characterised by the long forecastle suggestive of the Sverdlov Class cruisers. Indeed they bear a superficial resemblance to those ships, especially as some Sverdlovs are reported to have been refitted with the tower-like masts. The Kyndas, however, have two heavily raking low funnels. There are believed to be four of these ships. They are of 4,300 tons standard and 5,200 tons maximum displacement. Their length is 475 feet.

They carry two twin-mounting anti-aircraft guns aft but have two distinctive looking quadruple mounting surface-to-surface missile launchers and two 12-barrelled rocket launchers (anti-submarine) on fore-castle. Amidships are two triple-mountings for 21-inch torpedo tubes.

Combined steam and gas turbines drive twin screws to give a speed of 35 knots.

Solutions on the back cover

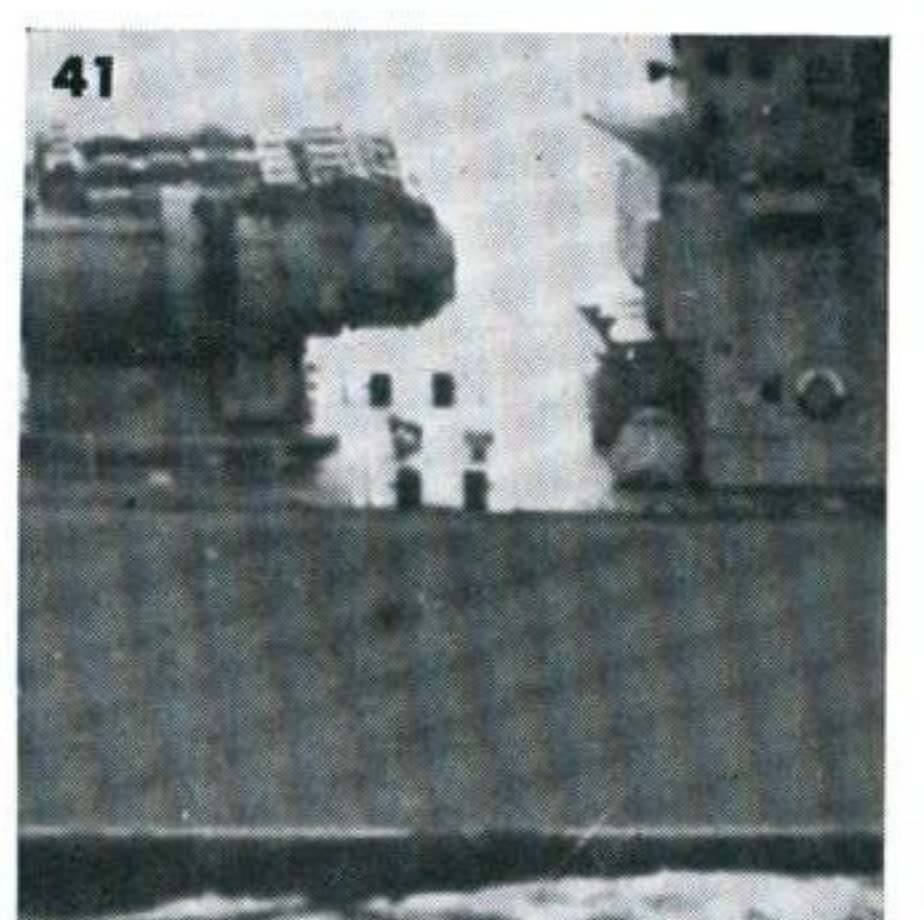
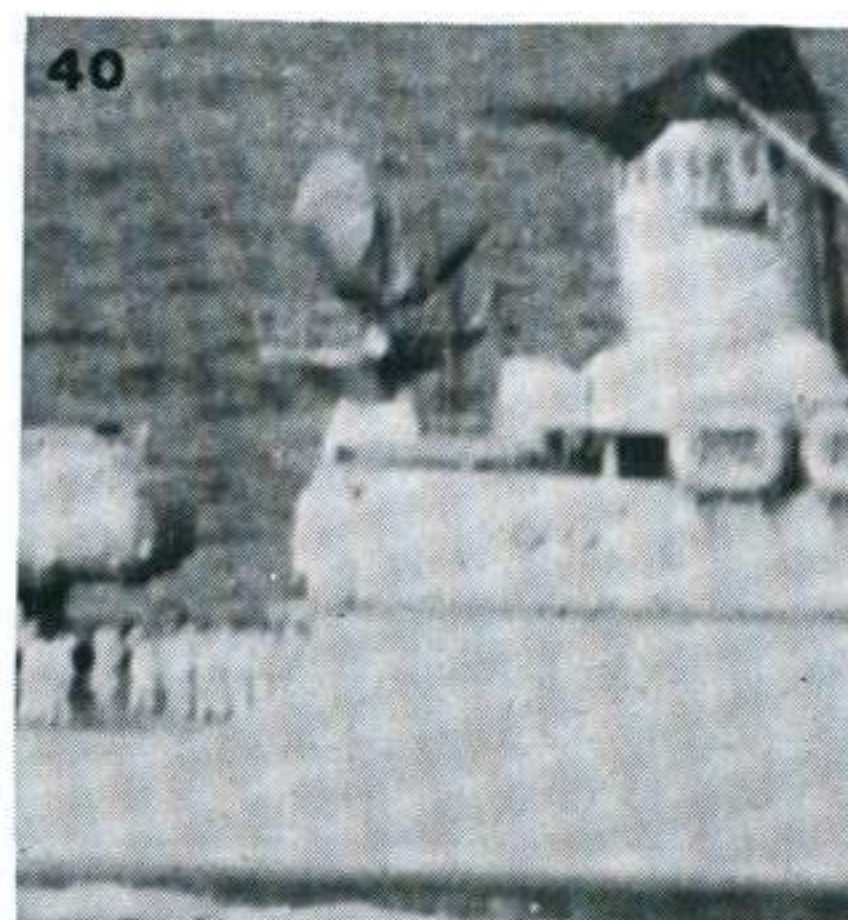
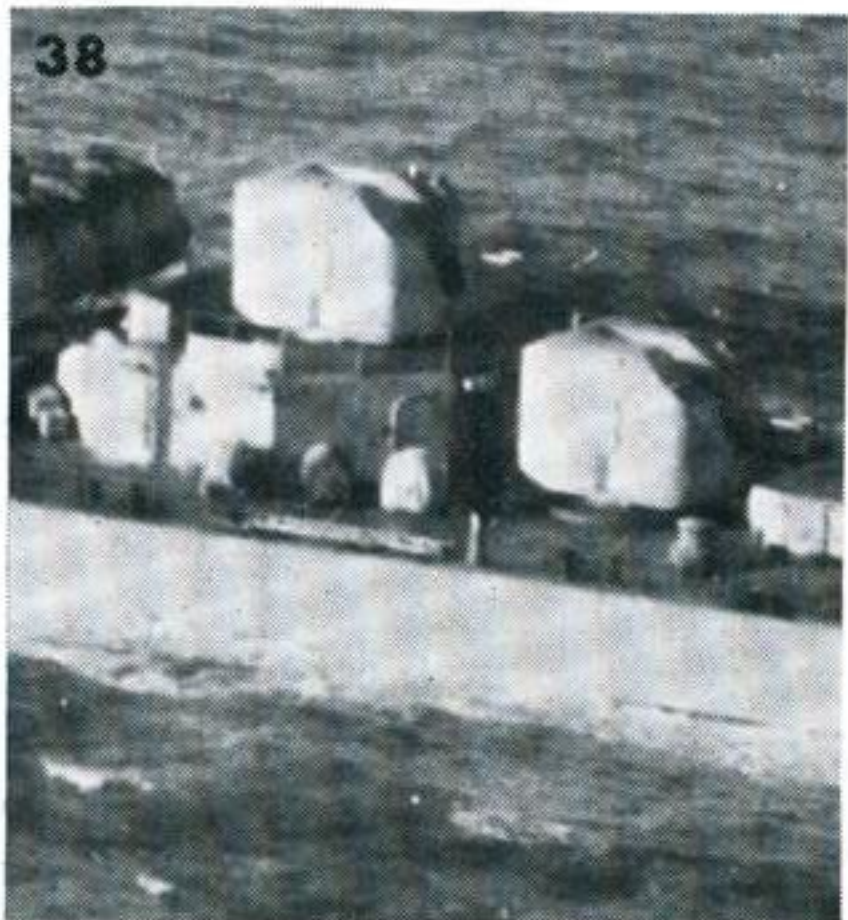
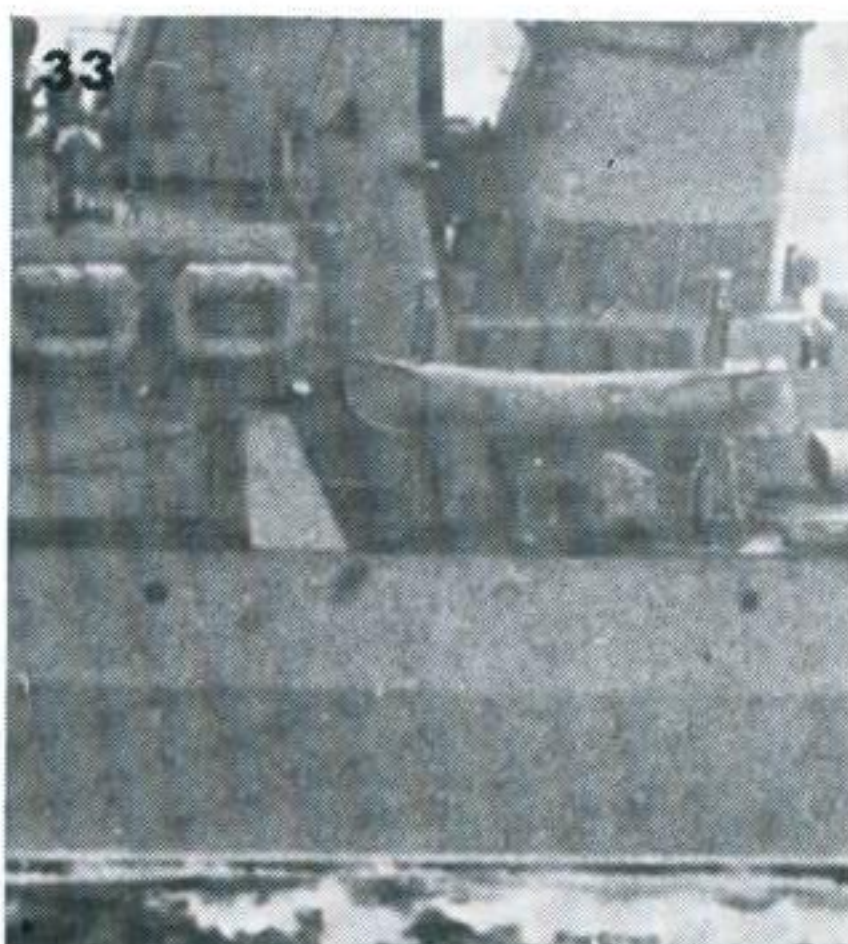
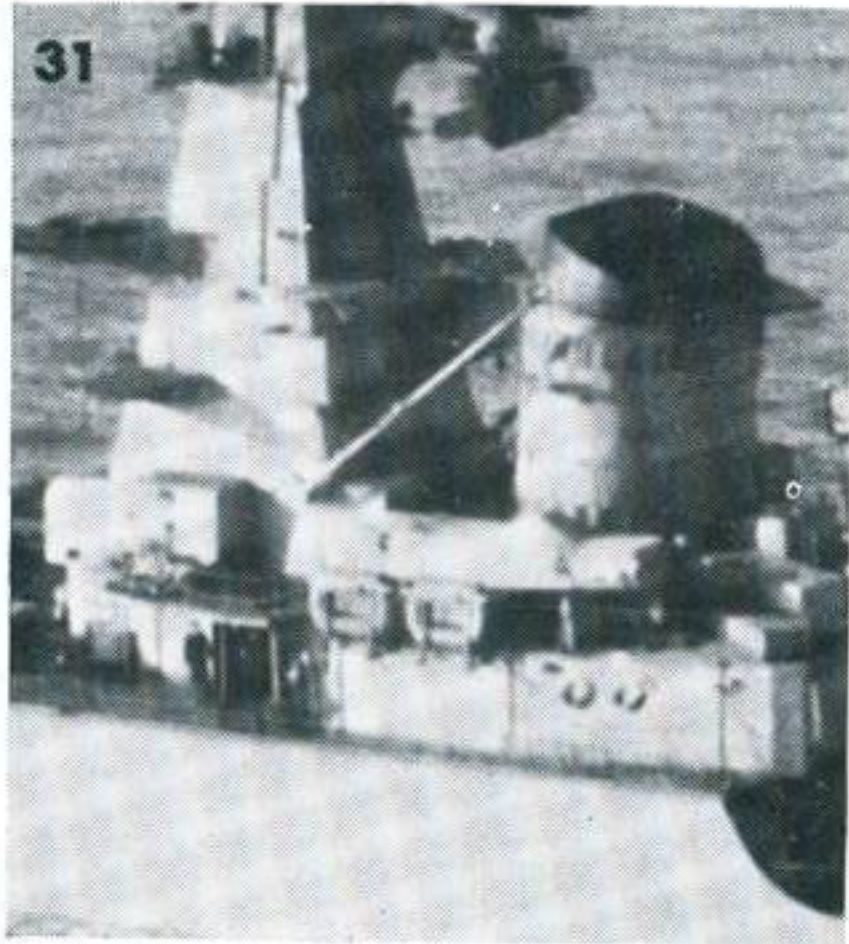




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KEY





KEY



VICTORY TYPE STANDARD SHIP

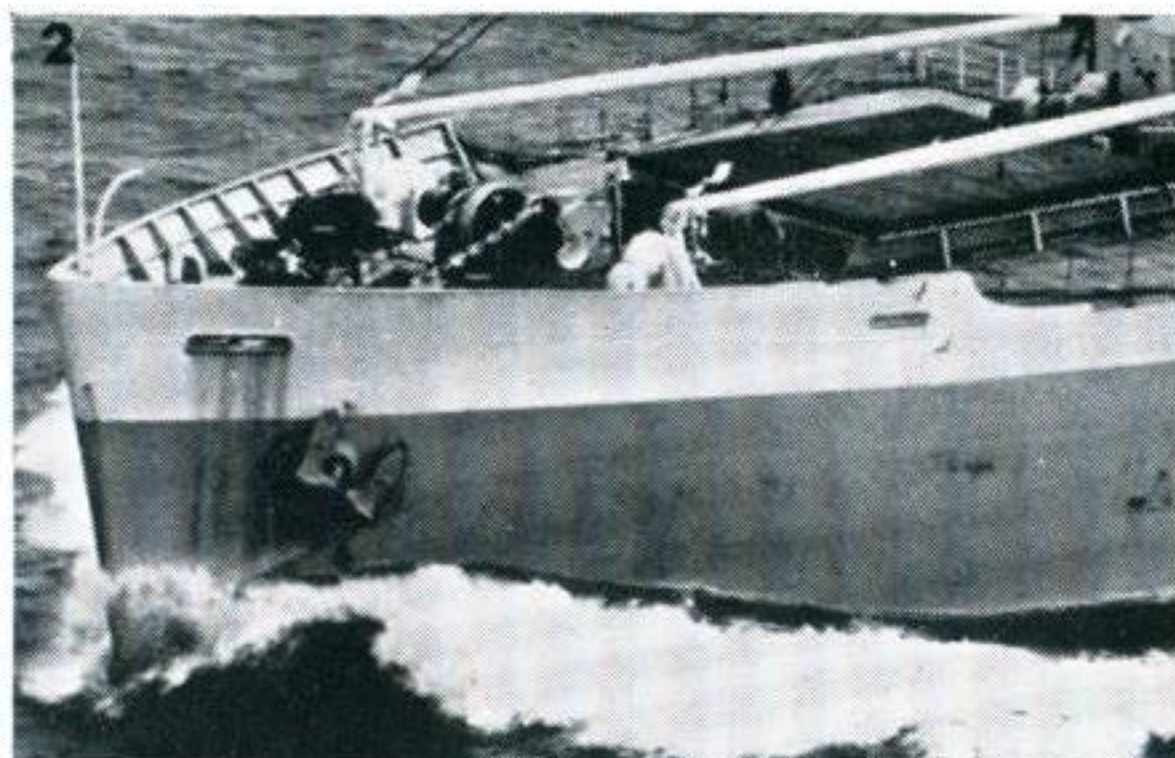
Lesson instructions are on page 285

More than twenty years after they were built there are still a very considerable number of the American-built Victory type ship. Officially designated the VC2-S, the Victory was the successor of the more numerous Liberty type, based on a British design. There were about 500 Victories built, and they were driven by steam turbines at a speed of about 17 knots as against the 11 or so of the reciprocating-engined earlier type. The only exception was *Emory Victory* which was a motor vessel. The first thirty-three ships were given names of countries in the United Nations with the suffix "Victory" and these were followed by about a hundred bearing names of representative American communities.

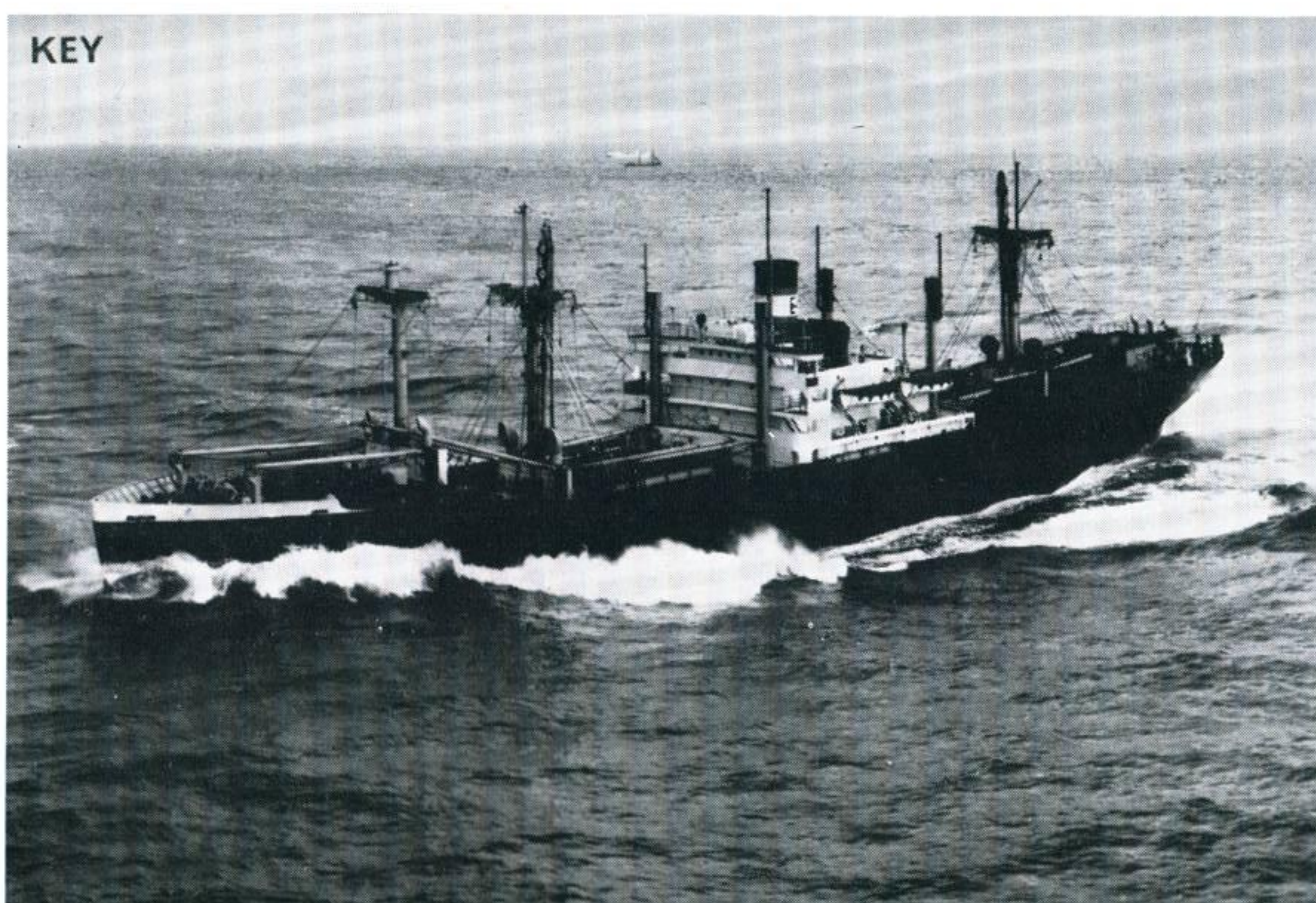
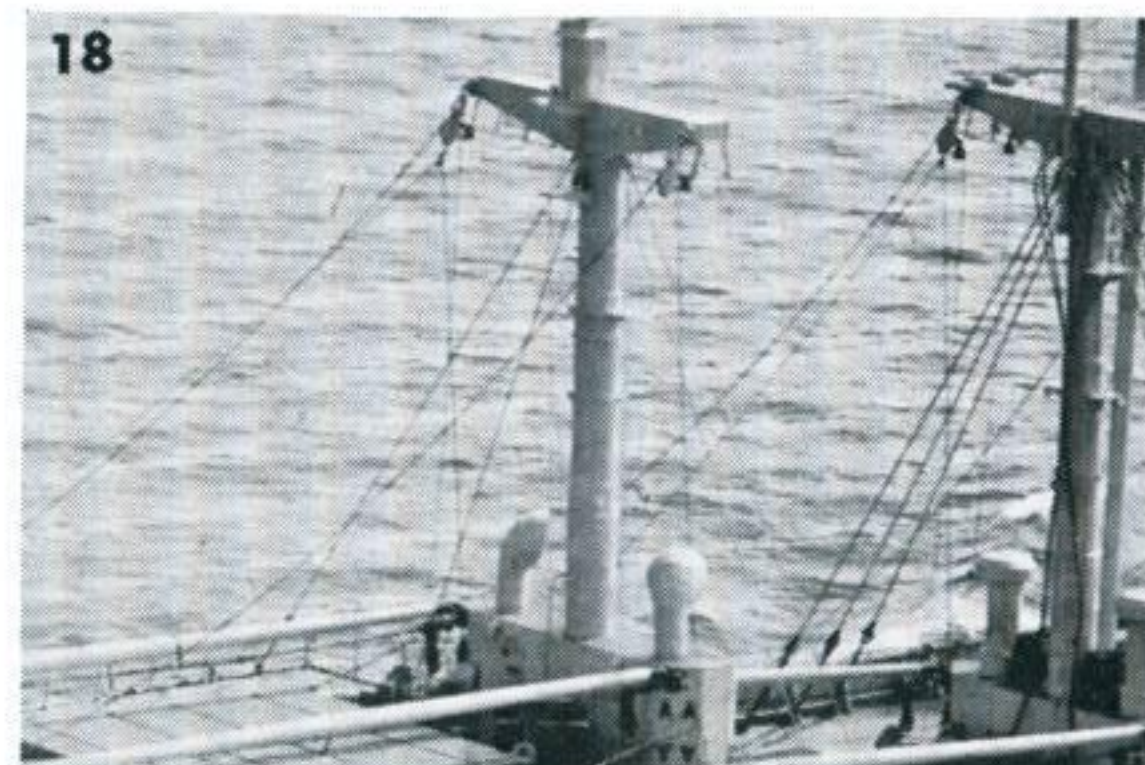
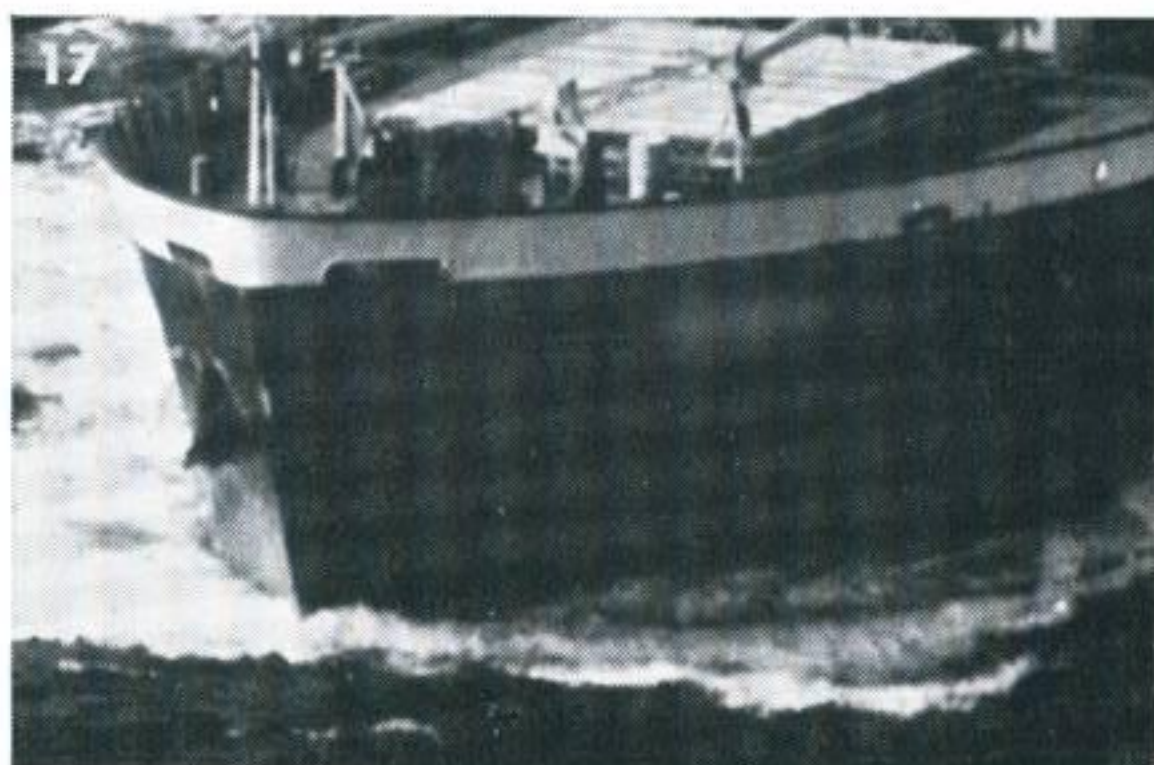
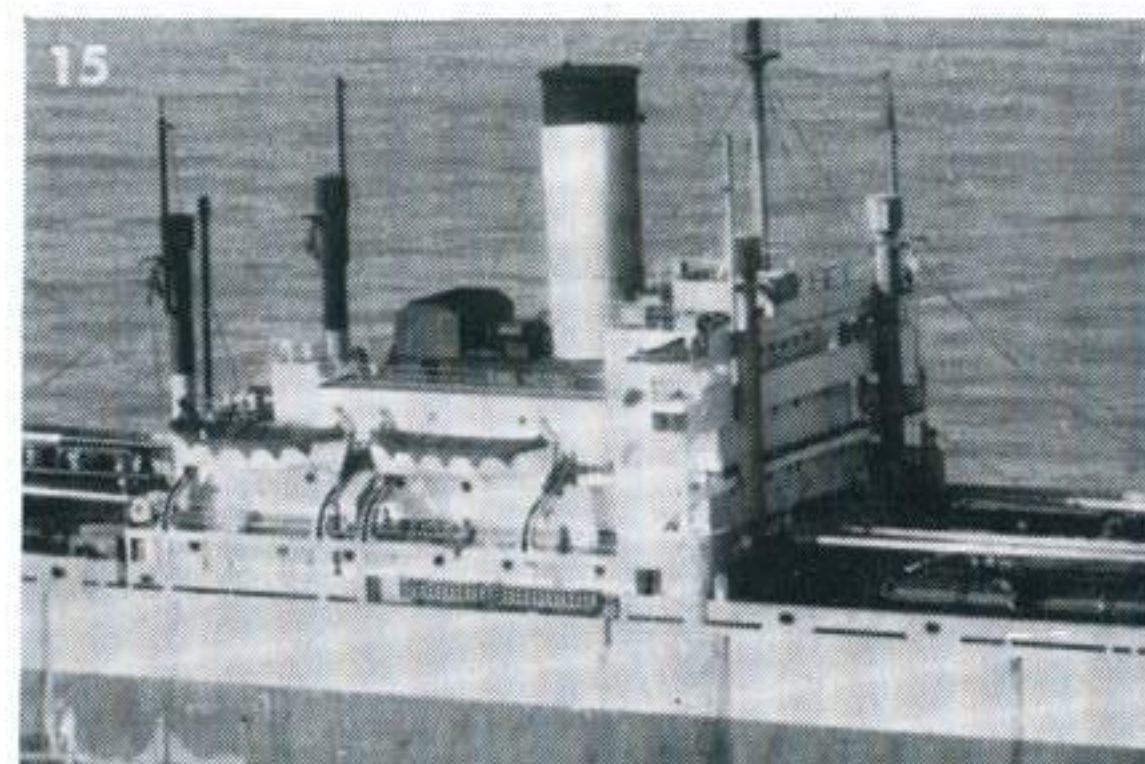
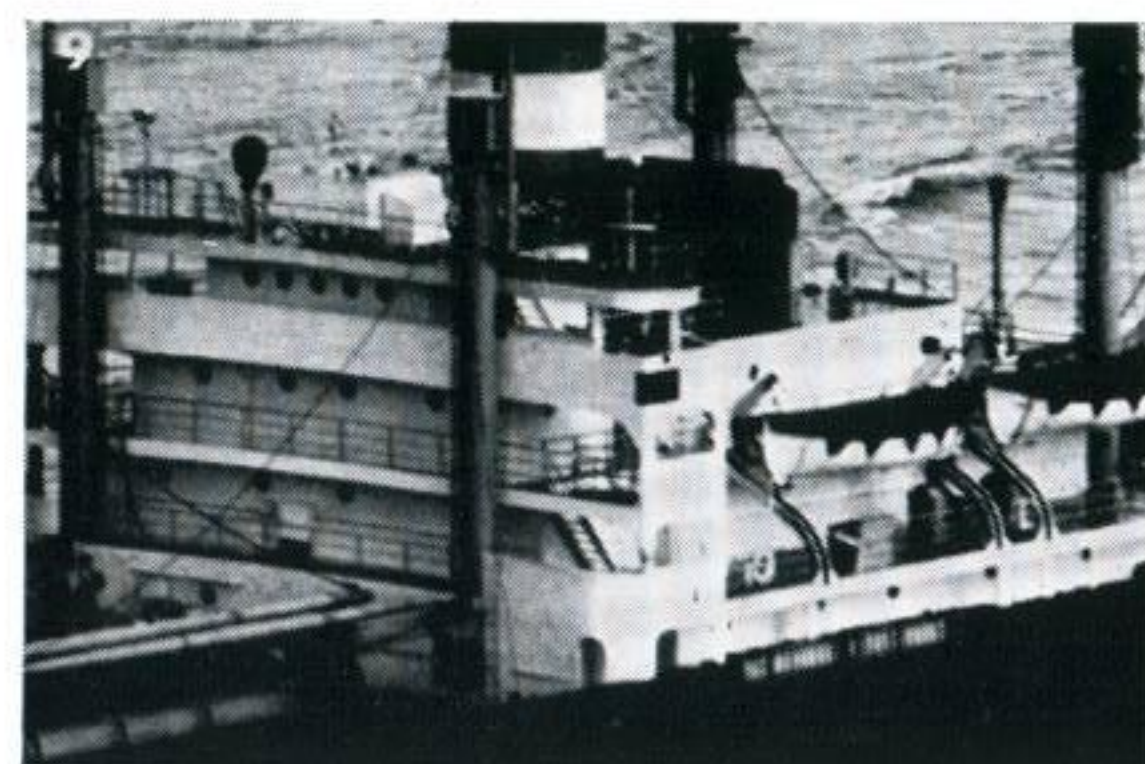
Deadweight tonnage is about 10,800 and gross tonnage about 7,600. They have an overall length of 455 feet and a beam of 62 feet.

They feature a long forecastle, extending to the first kingpost. The funnel is usually thin and possibly with a cowl top though some have been modified and look different. There are minor differences among the ships and some have undergone a complete transformation but by-and-large they all have the same silhouette and usually conform to the KMKFKM sequence.

As with all ships, paint-work makes an enormous difference and in the liveries of some companies, the Victory ship is not only attractive but seems to belie her age. Take care, therefore, to train well on this type of ship.

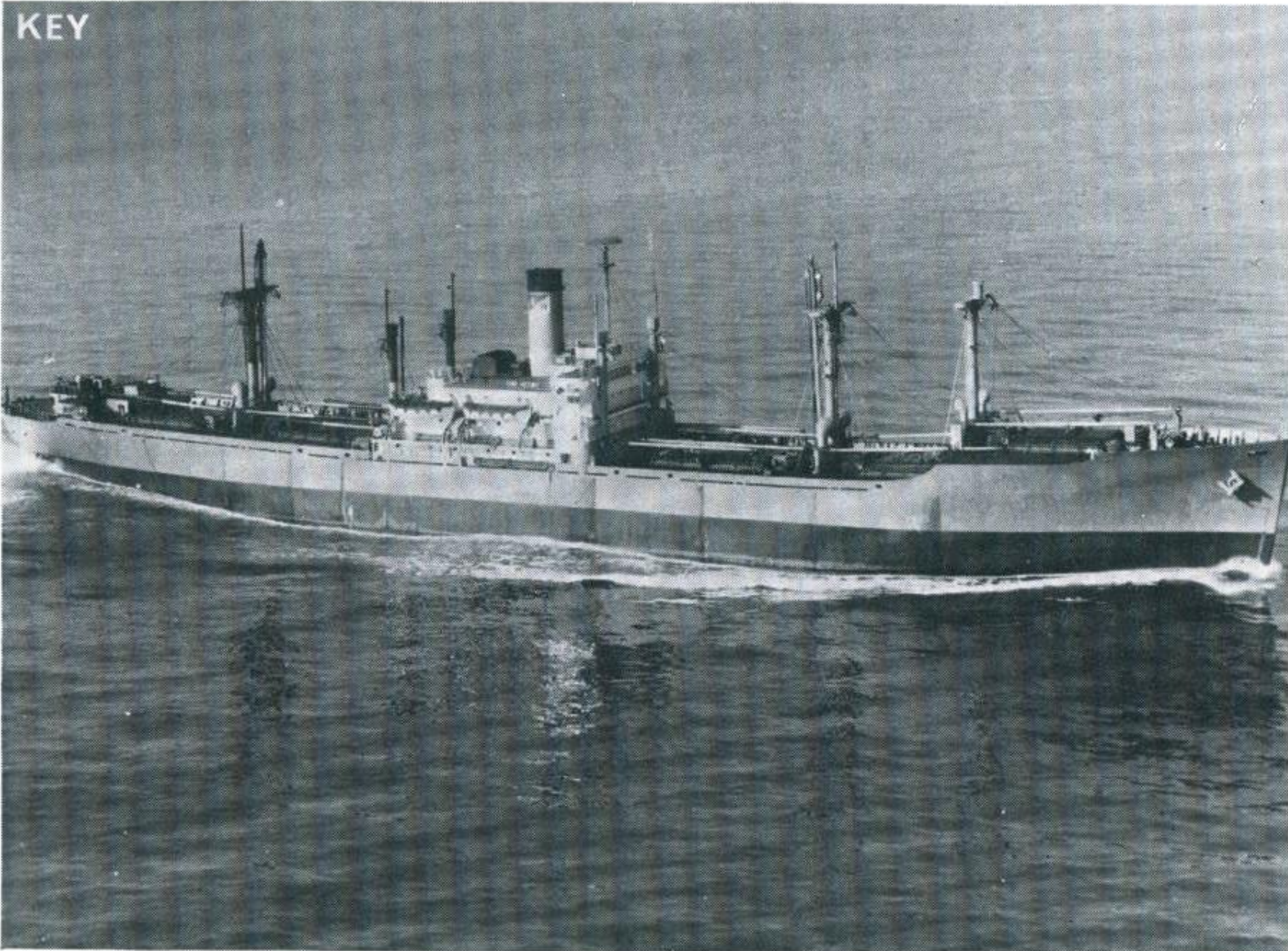
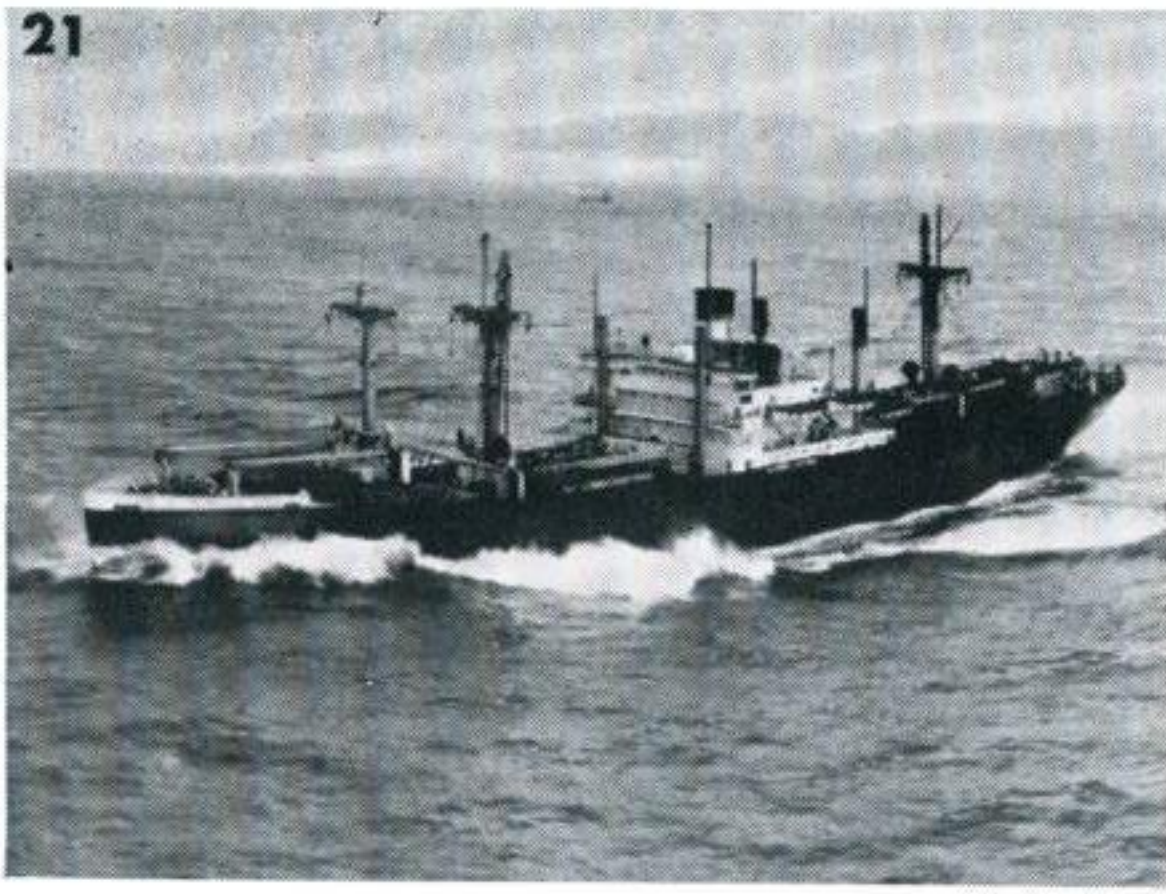


Solutions on the back cover



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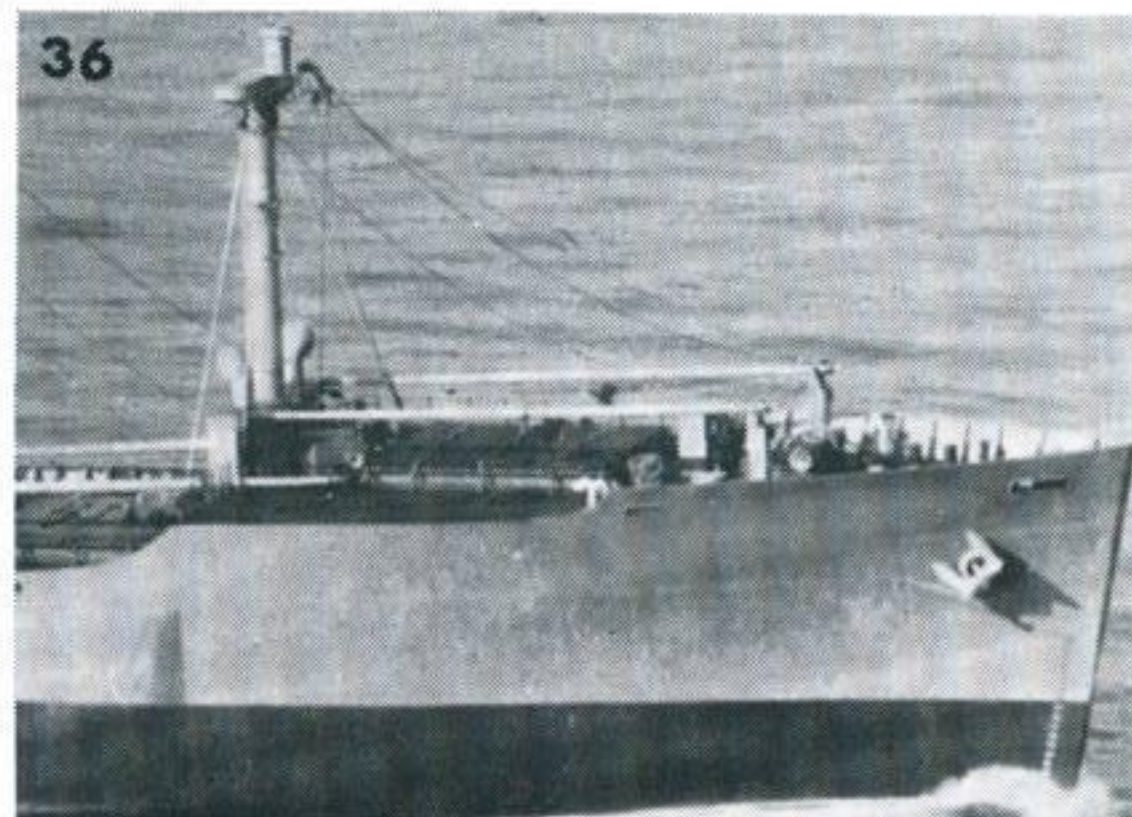
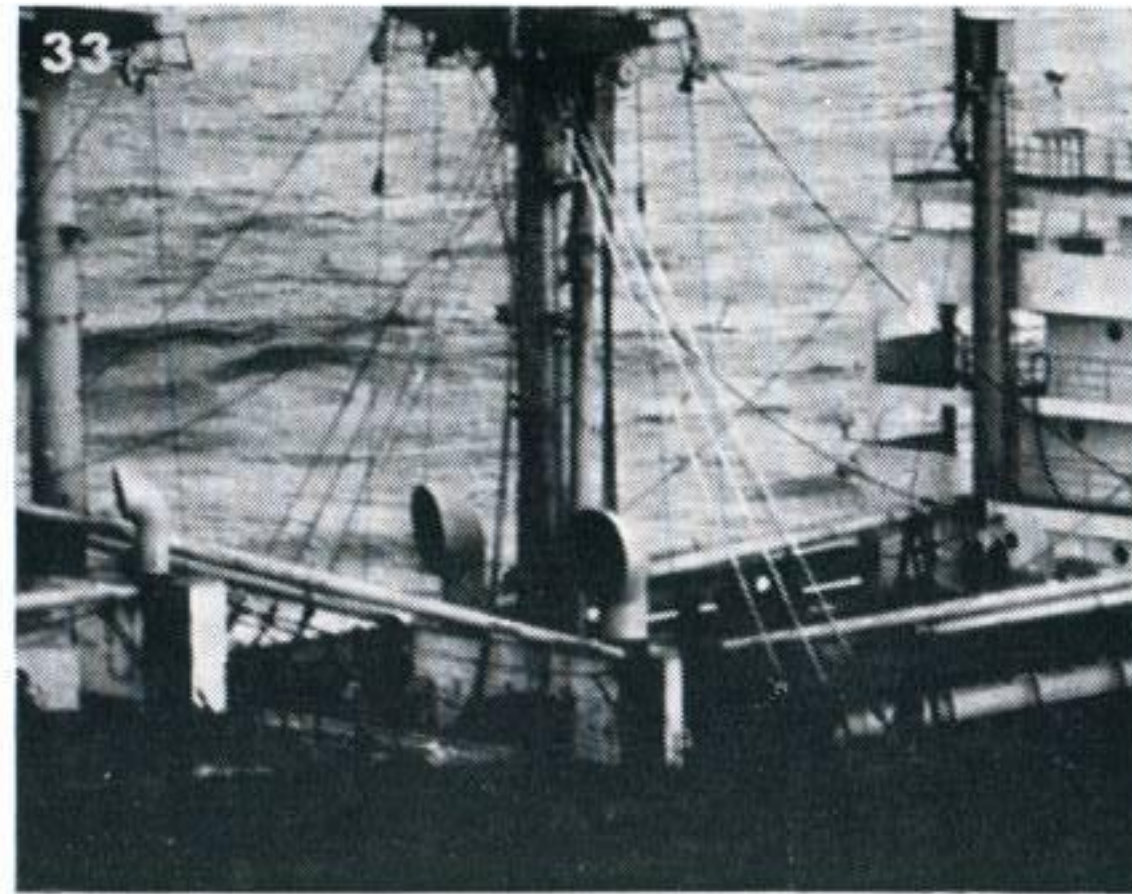
VICTORY TYPE STANDARD SHIP *continued*



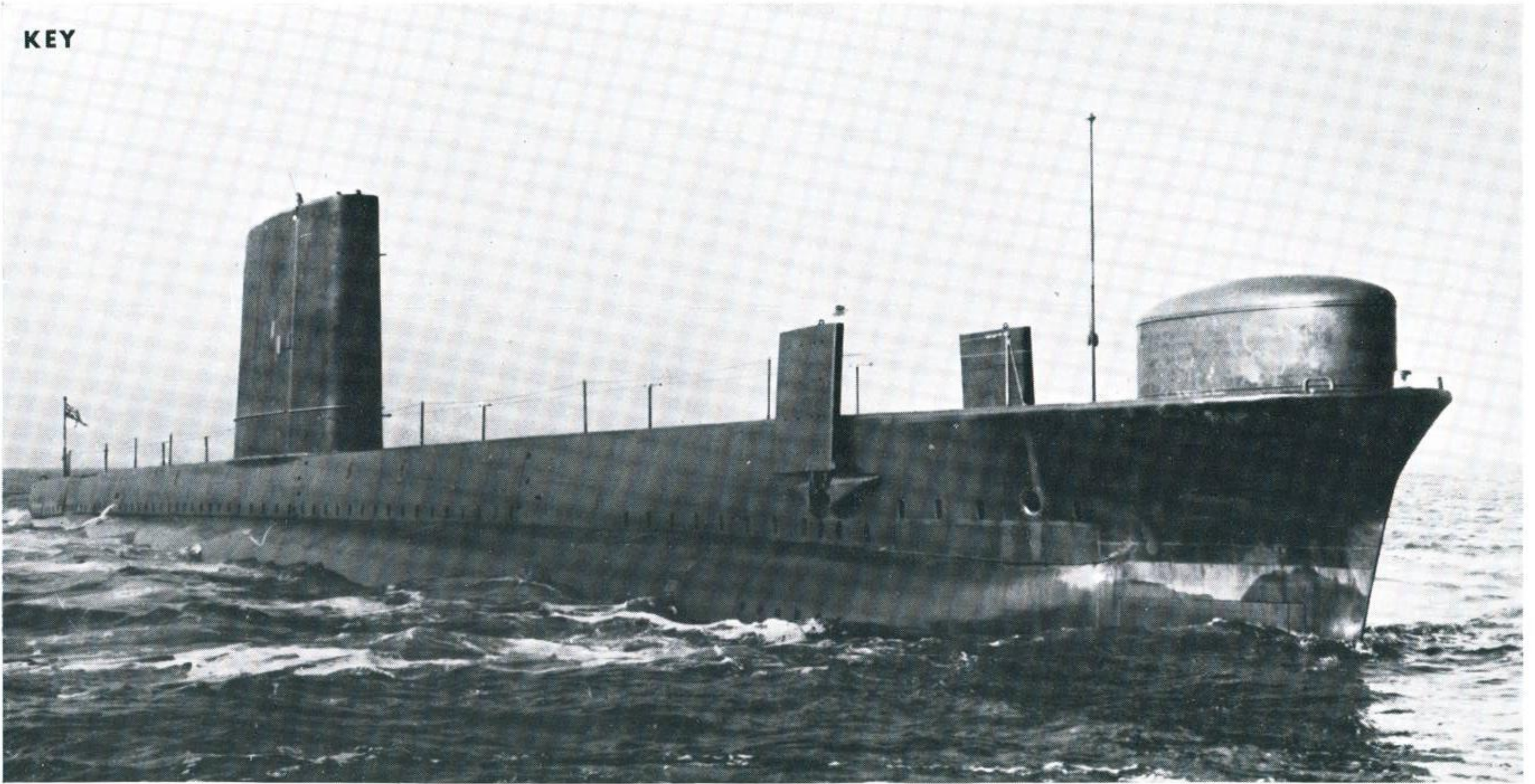
Lesson instructions are on page 285



Solutions on the back cover



KEY



OBERON CLASS SUBMARINES

Oberon is one of the 13 ships of the class in the Royal Navy. Classed as Patrol Submarines they are generally regarded as being the finest class of conventional craft ever built. Following closely on the Porpoise class they have the exceptionally high underwater speed of 17 knots. Another feature is their capability of remaining submerged in any ocean of the world for long periods. The name ship was completed in 1961 at H.M. Dockyard, Chatham.

Displacement is 1,610 standard and 2,410 submerged. Overall length is 295 feet, surface speed is 12 knots and there are eight 21-inch torpedo tubes for homing torpedoes.

In appearance they are very close to the ships of the Porpoise Class, but a skilled and experienced observer can distinguish one from the other in reasonable circumstances.

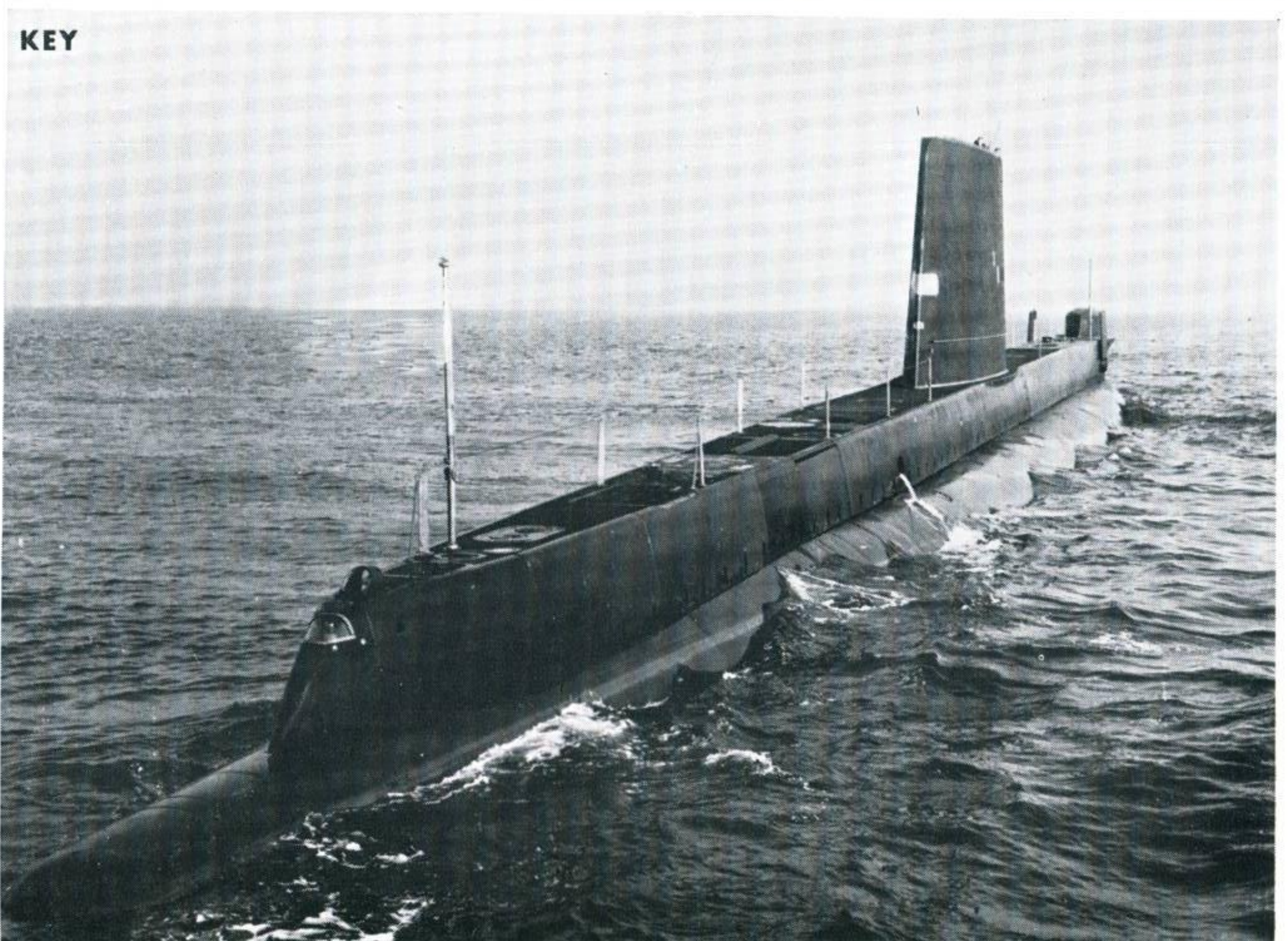
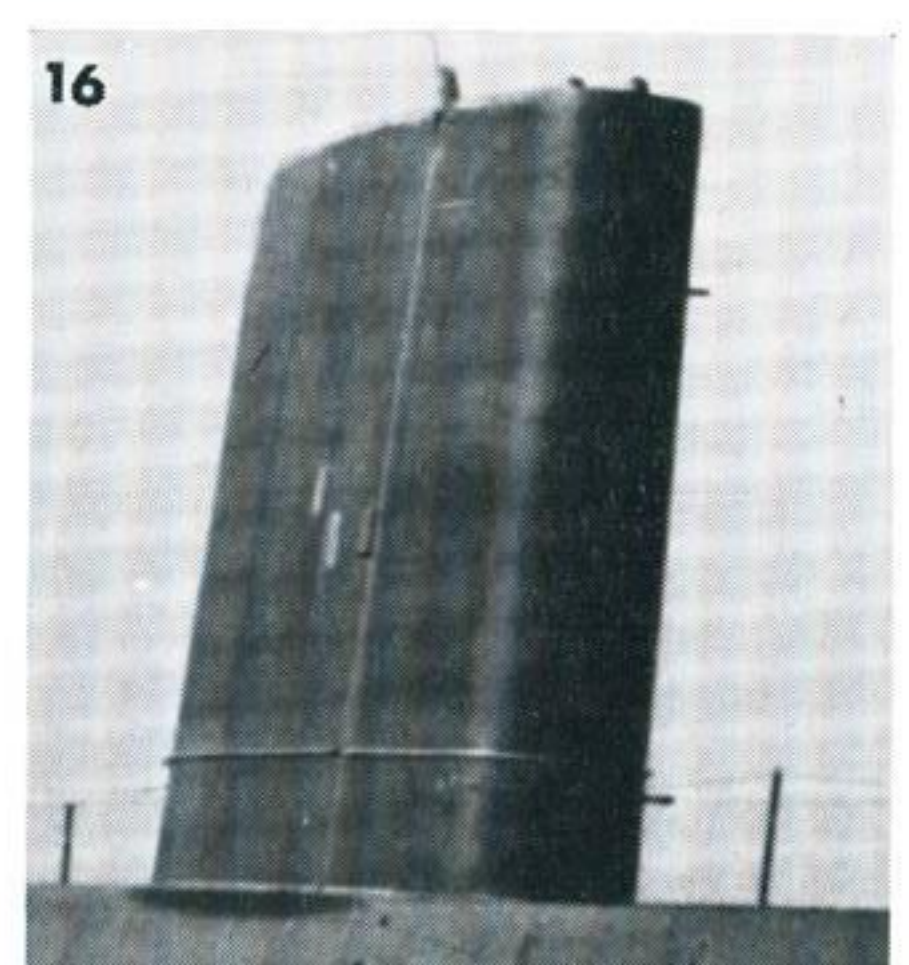
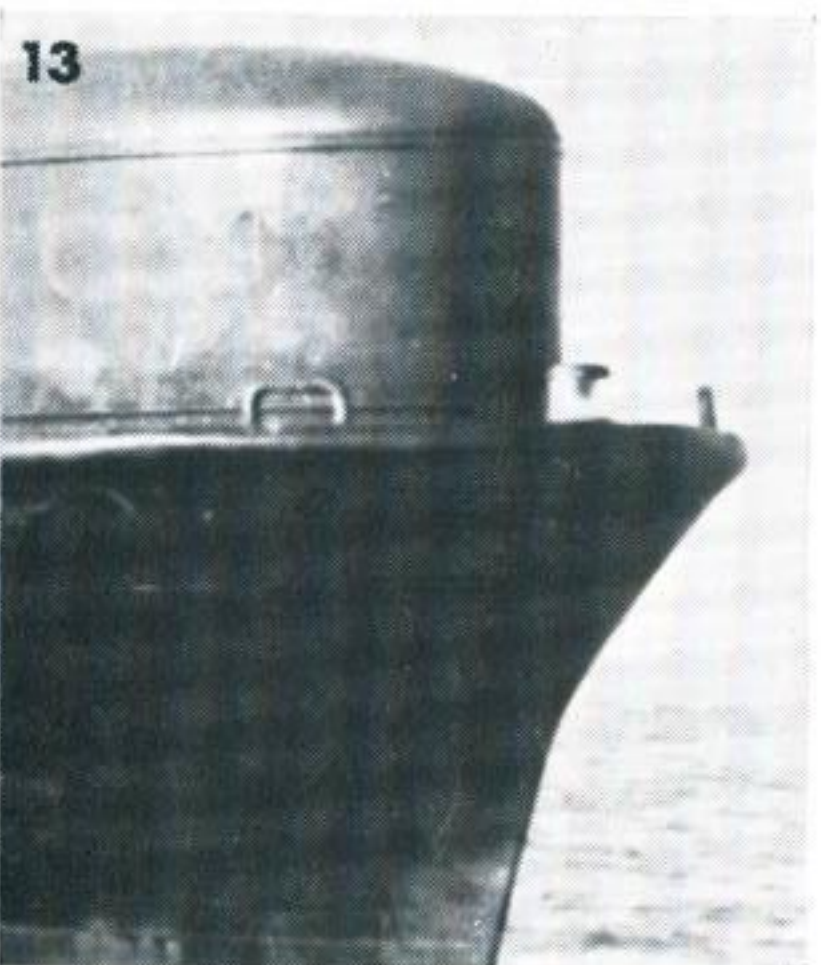
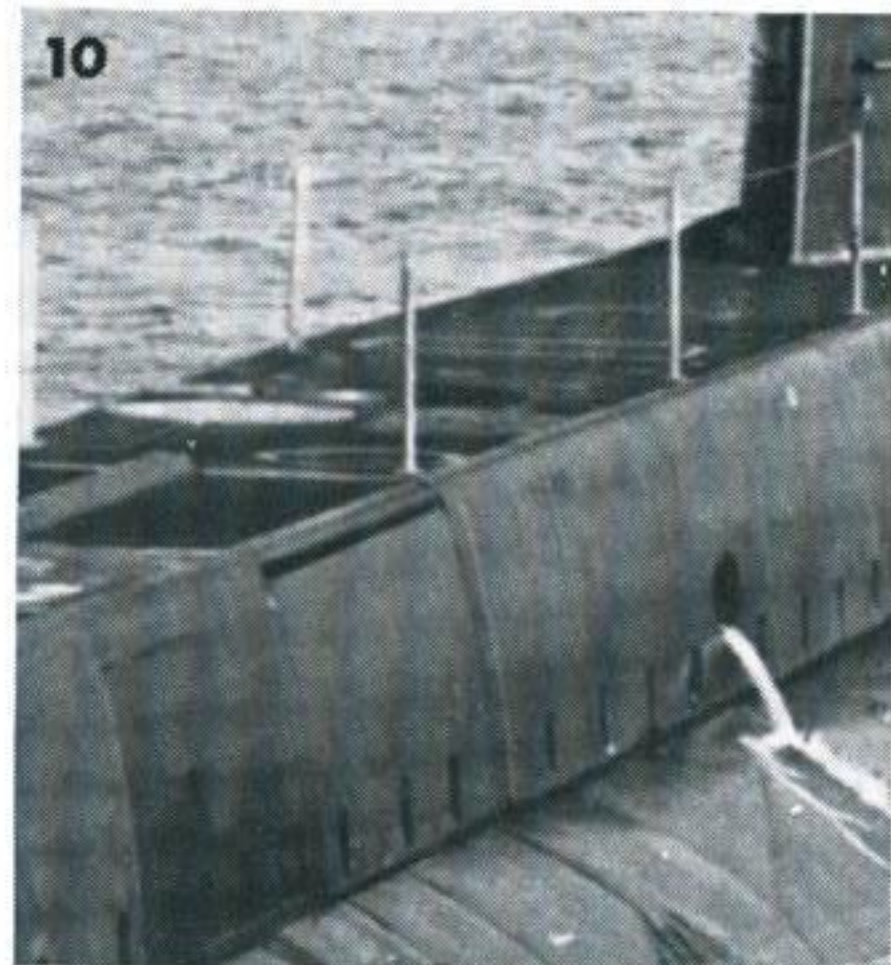
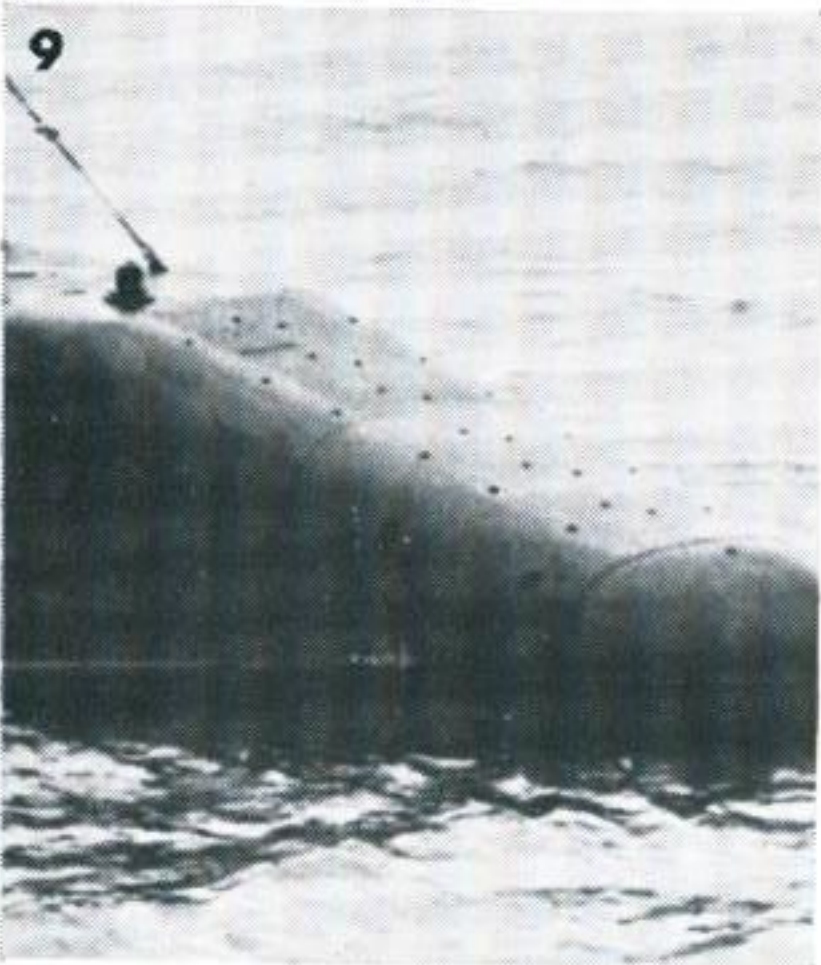
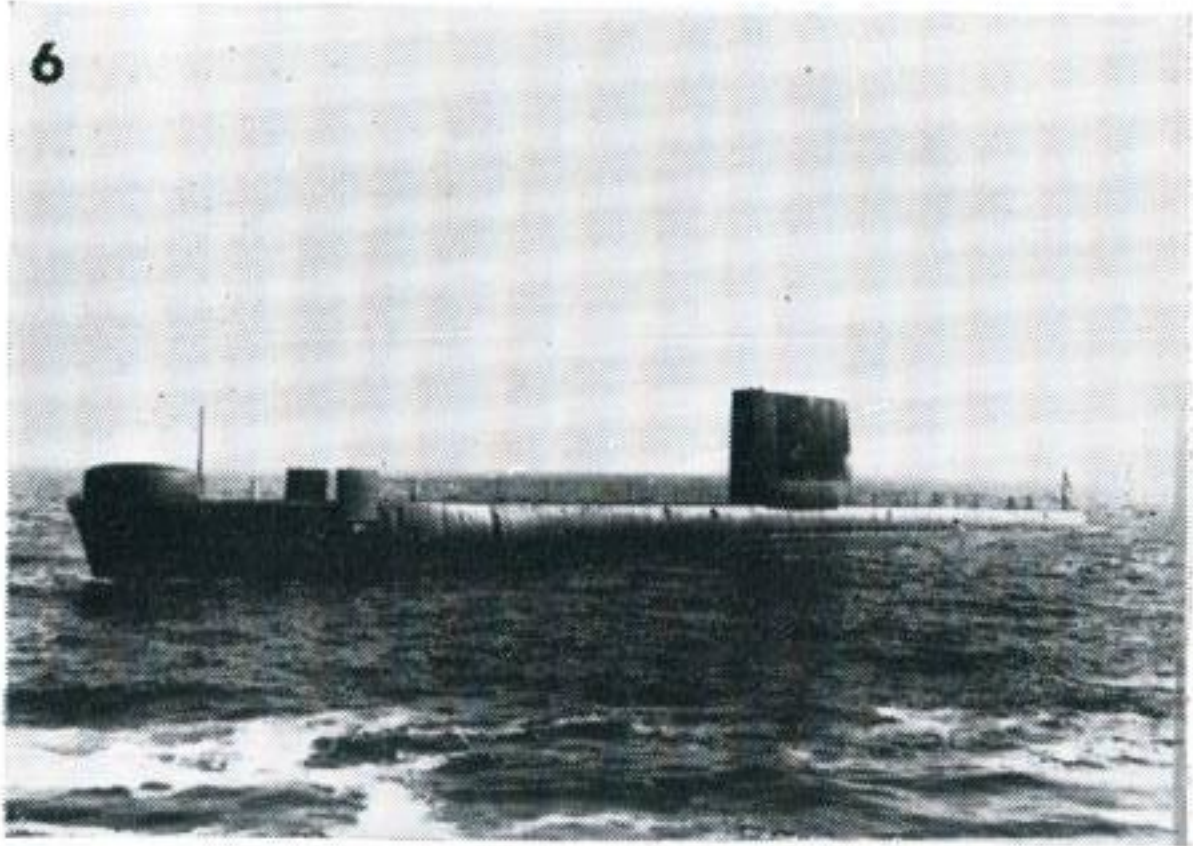
There are four Oberon class ships in the Royal Australian Navy and three in the Royal Canadian Navy.

In writing your answers down, use the identity "Oberon Class".

Lesson instructions are on page 285

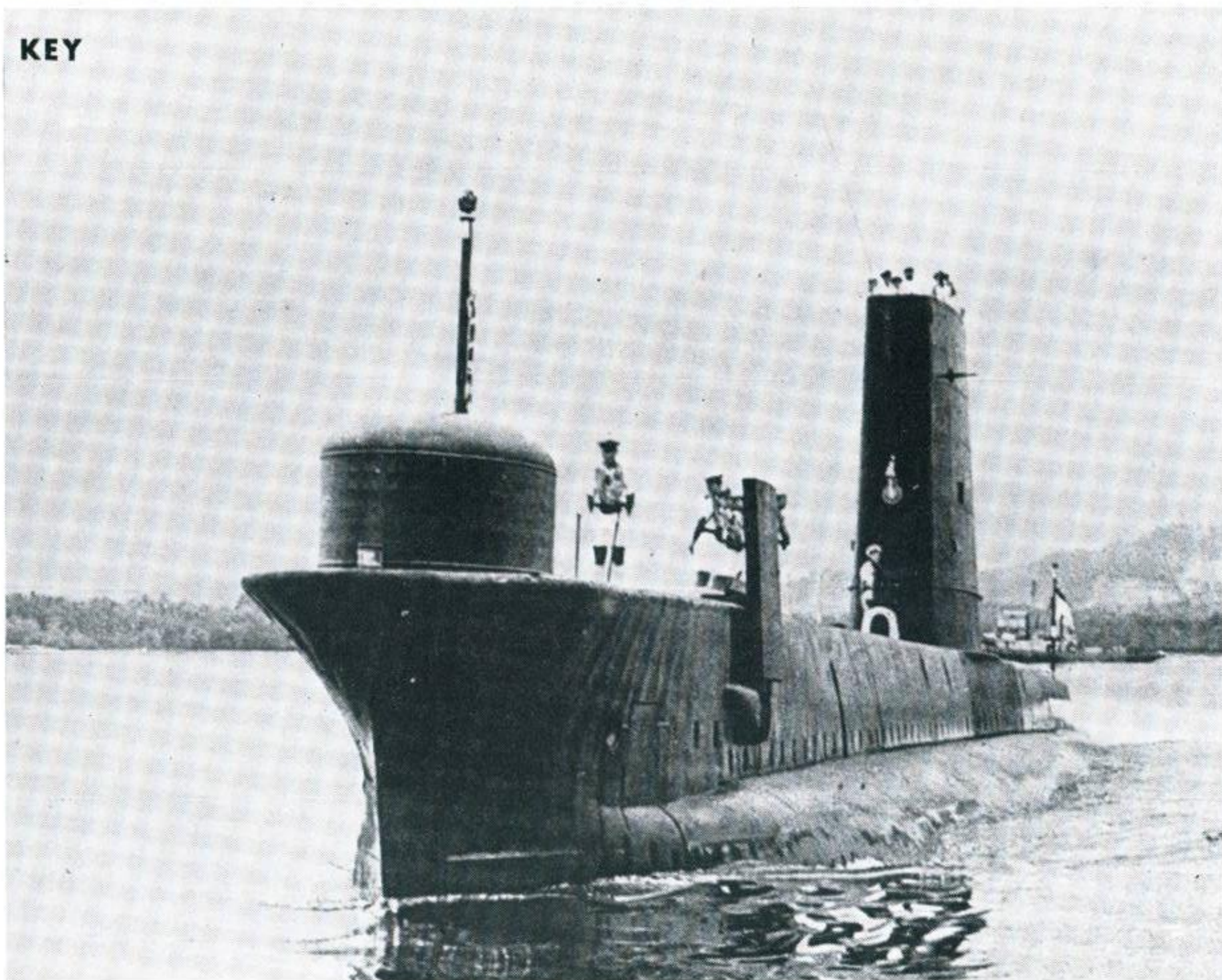
Solutions on the back cover





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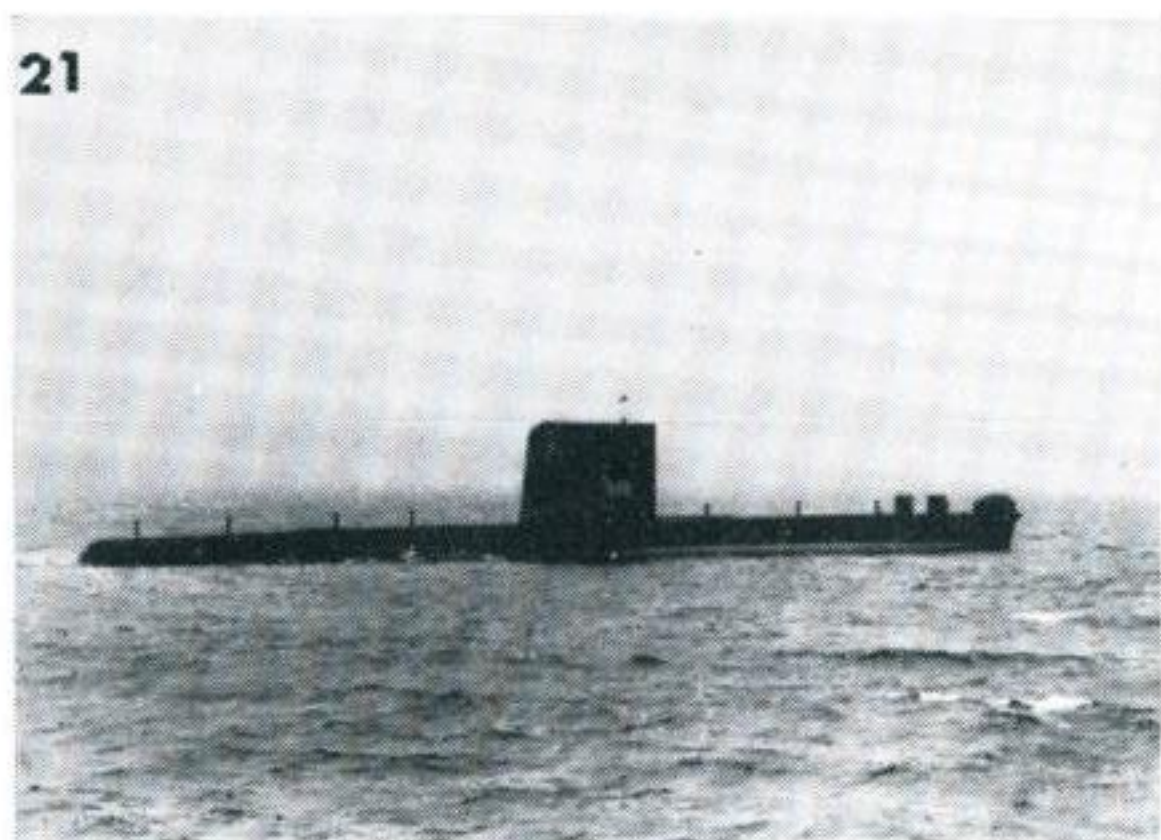
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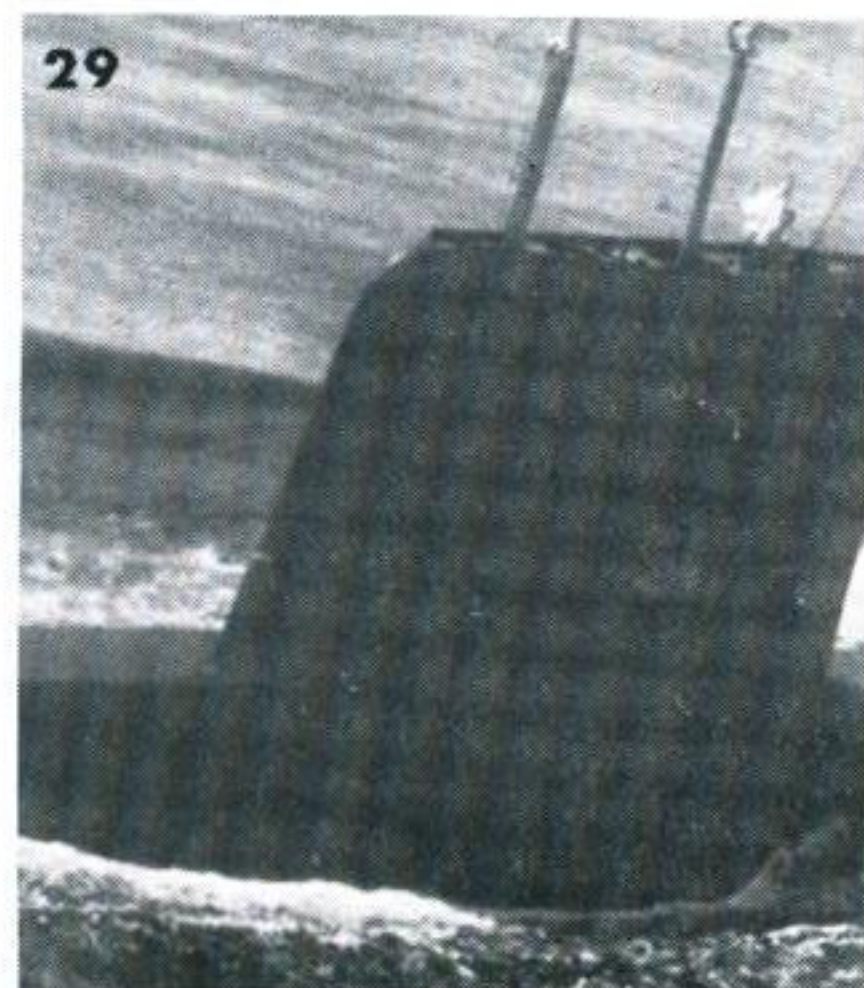
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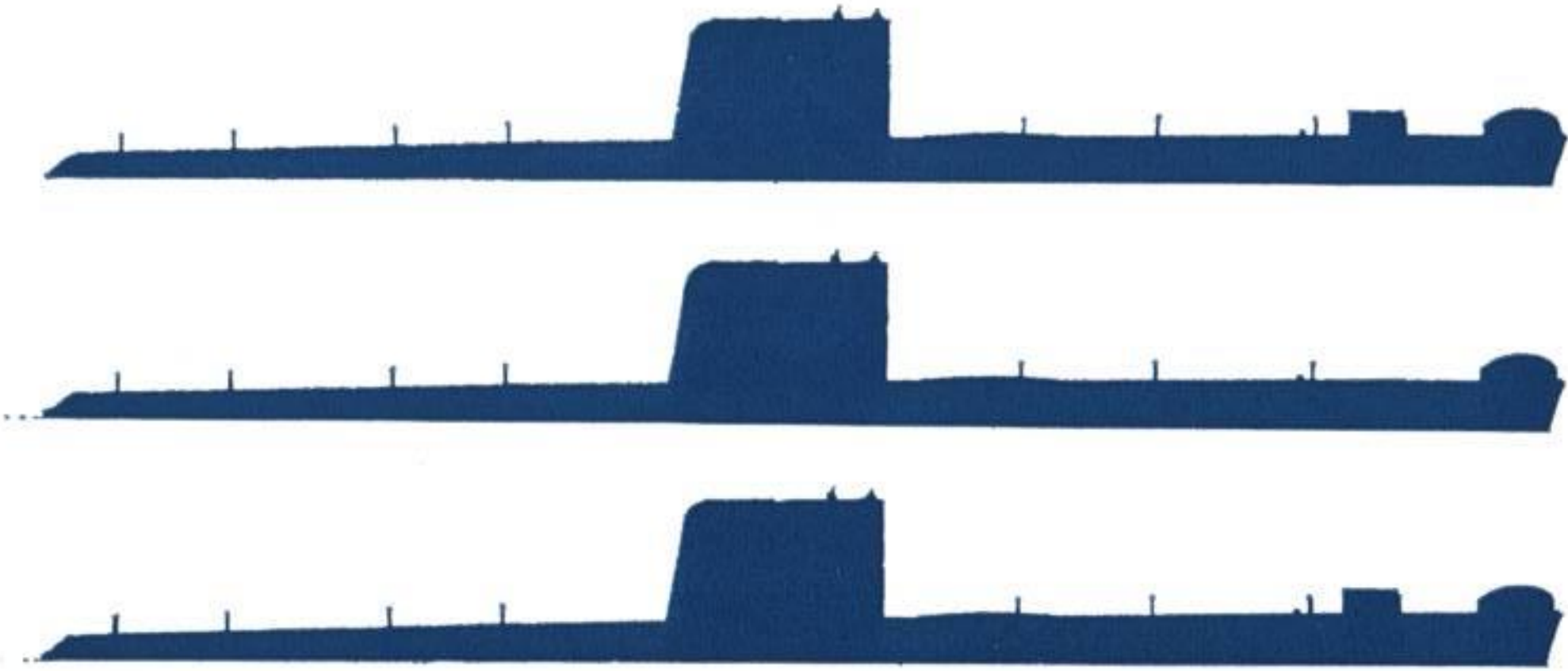


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Solutions on the back cover

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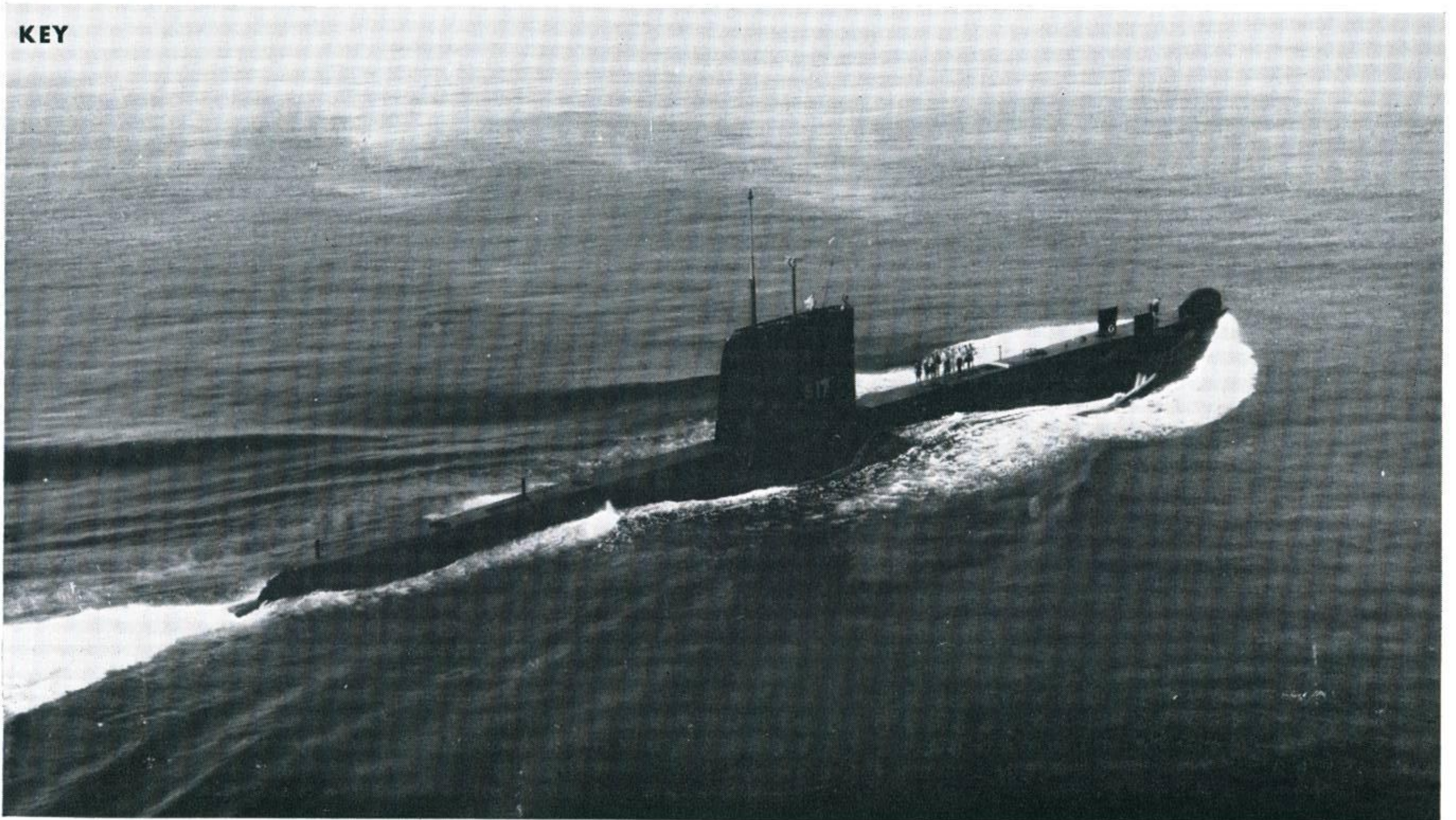
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KEY



WARSHIPS OF THE USSR KASHIN CLASS GUIDED MISSILE ARMED DESTROYERS

Officially classed in the Soviet Navy as Rocket Cruisers these formidable craft merit the description by virtue of their size and potentialities. Although only about half a dozen are actually known to have been completed to date, it is expected that others will be built.

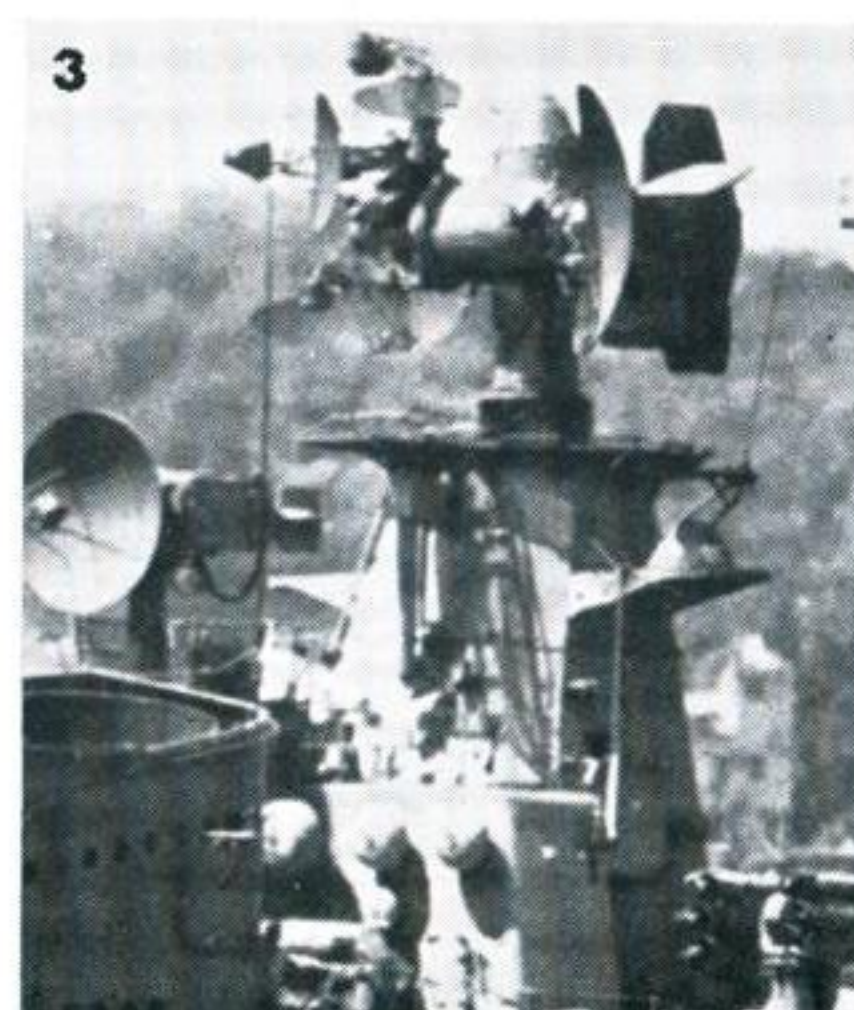
Standard displacement tonnage is 4,800 with a full load of 6,000 tons. Overall dimensions are slightly under 500 feet long, a beam of 51 feet and a draught of 19 feet. Four sets of gas turbine engines develop a shaft horse-power of 100,000 to give a service speed of 36 knots.

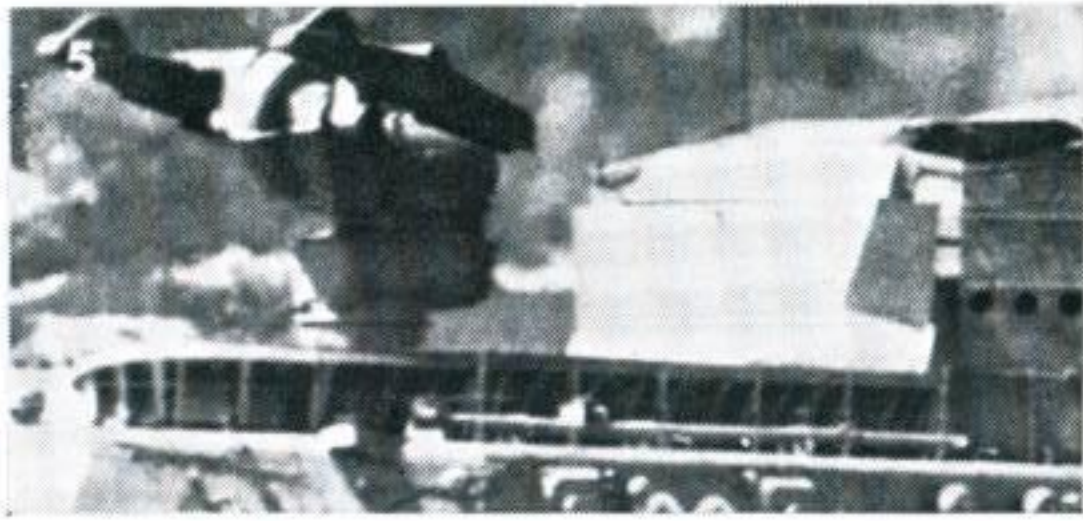
Two anti-aircraft launchers occupy "B" and "X" turret positions and there are two 12-barrel and two 6-barrel anti-submarine launchers. At "A" and "Y" positions are twin-turret 3-3" AA guns. On the superstructure

amidships are five 21-inch torpedo tubes in a quintuplet mounting. In appearance these craft have an overall pyramidal "hallmark" giving an aggressive and "piled up" effect. The hull is flush decked with a short, steep sheer forward, a sharply raking stem and cut-away stern.

Four towers or bridges carry the radar for missile guidance anti-aircraft and gunnery purposes. The tallest lattice tower is placed just forward of the first squat "funnel". This funnel is approximately amidships and the second, even lower and squat, is widely separated from it. Note vents in funnels.

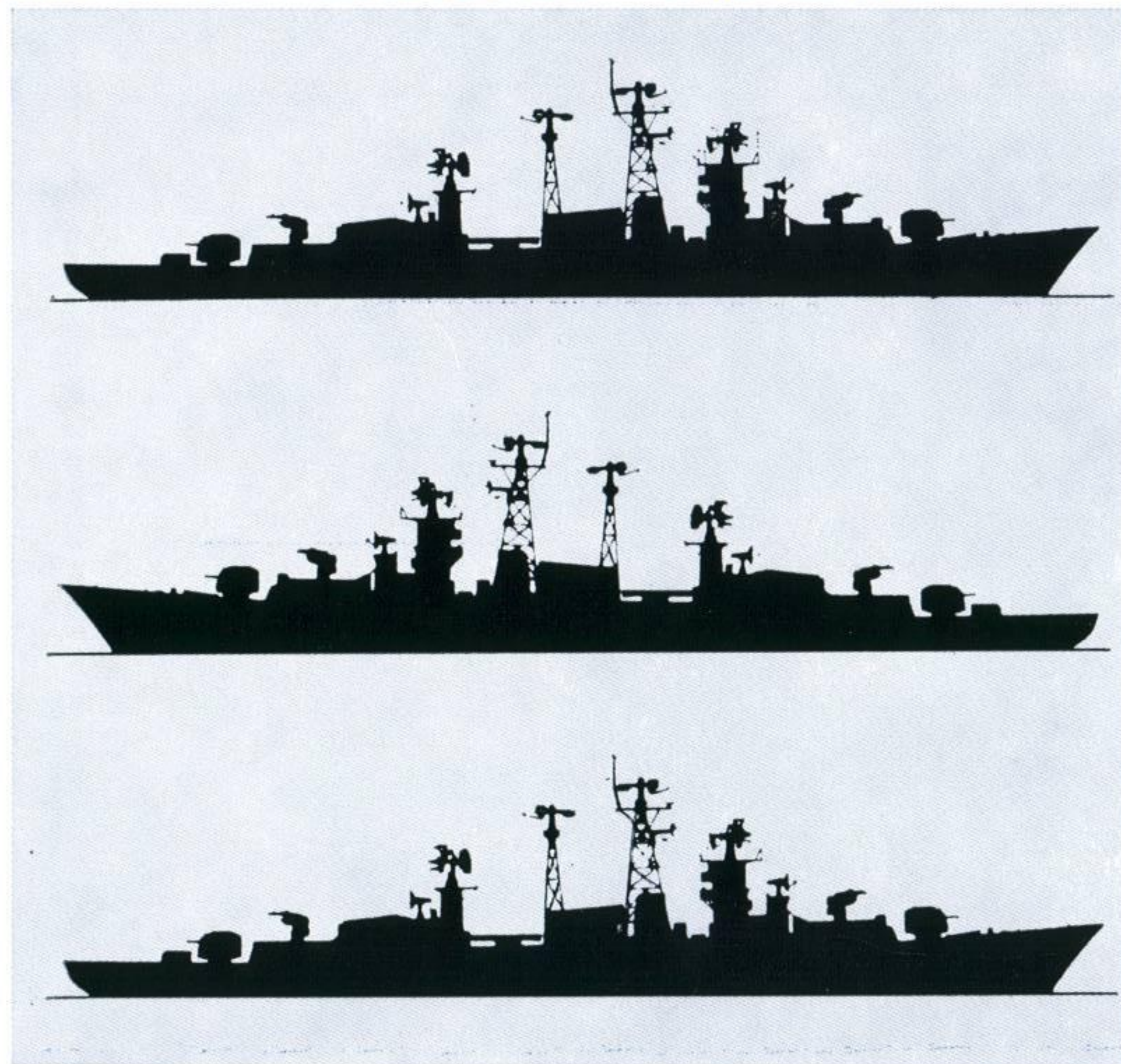
The ships of the Kynda, Kashin and Kresta classes might be regarded as Russian counterparts of our own County Class destroyers.



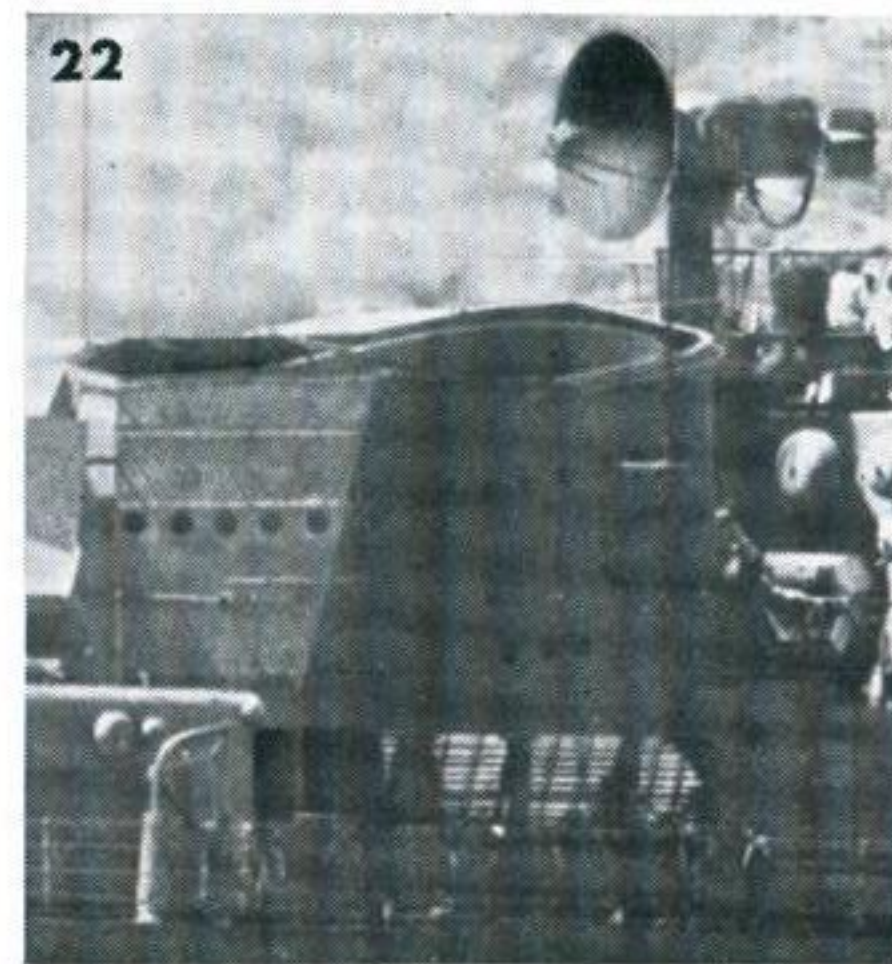
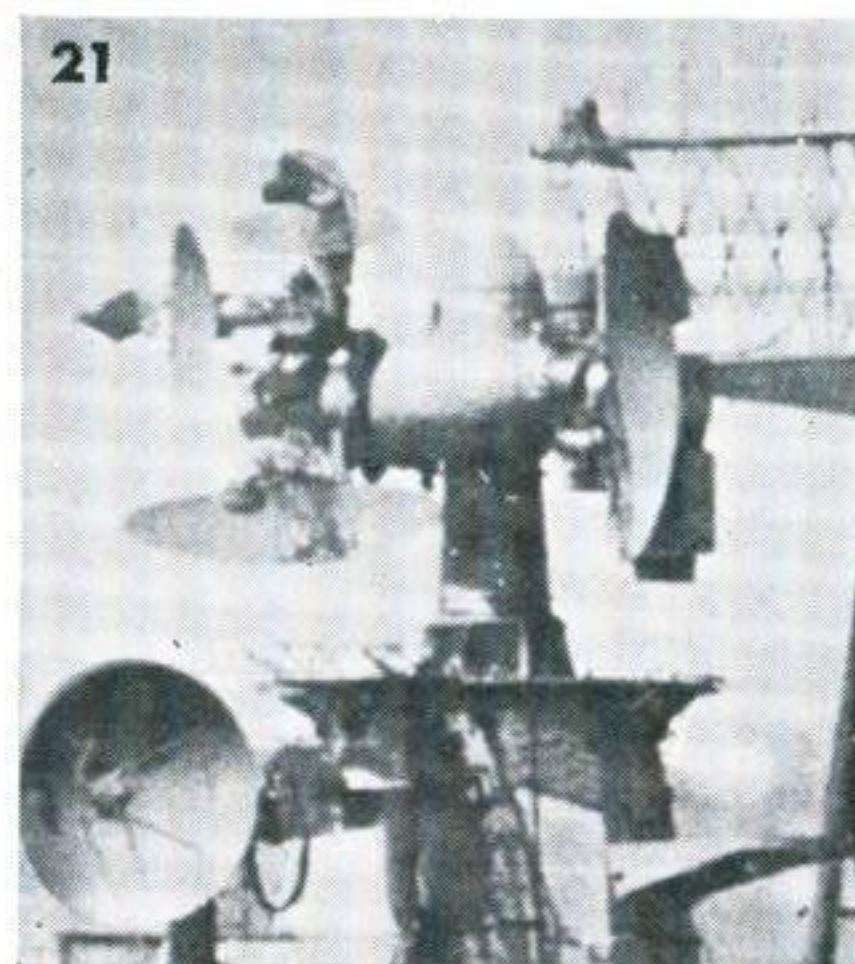
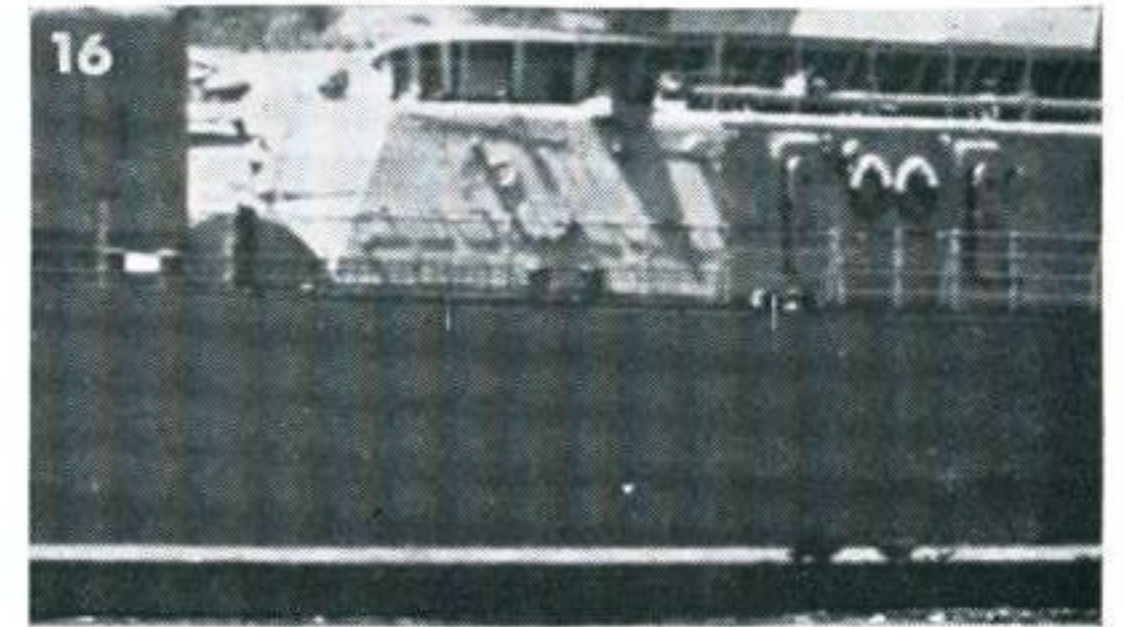


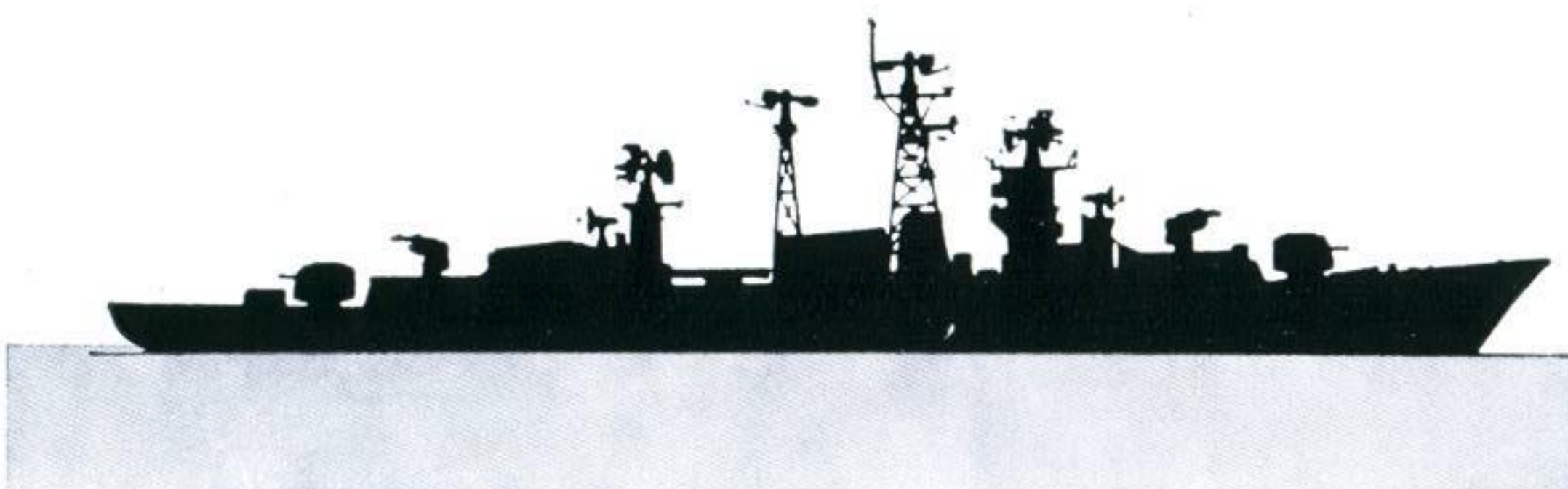
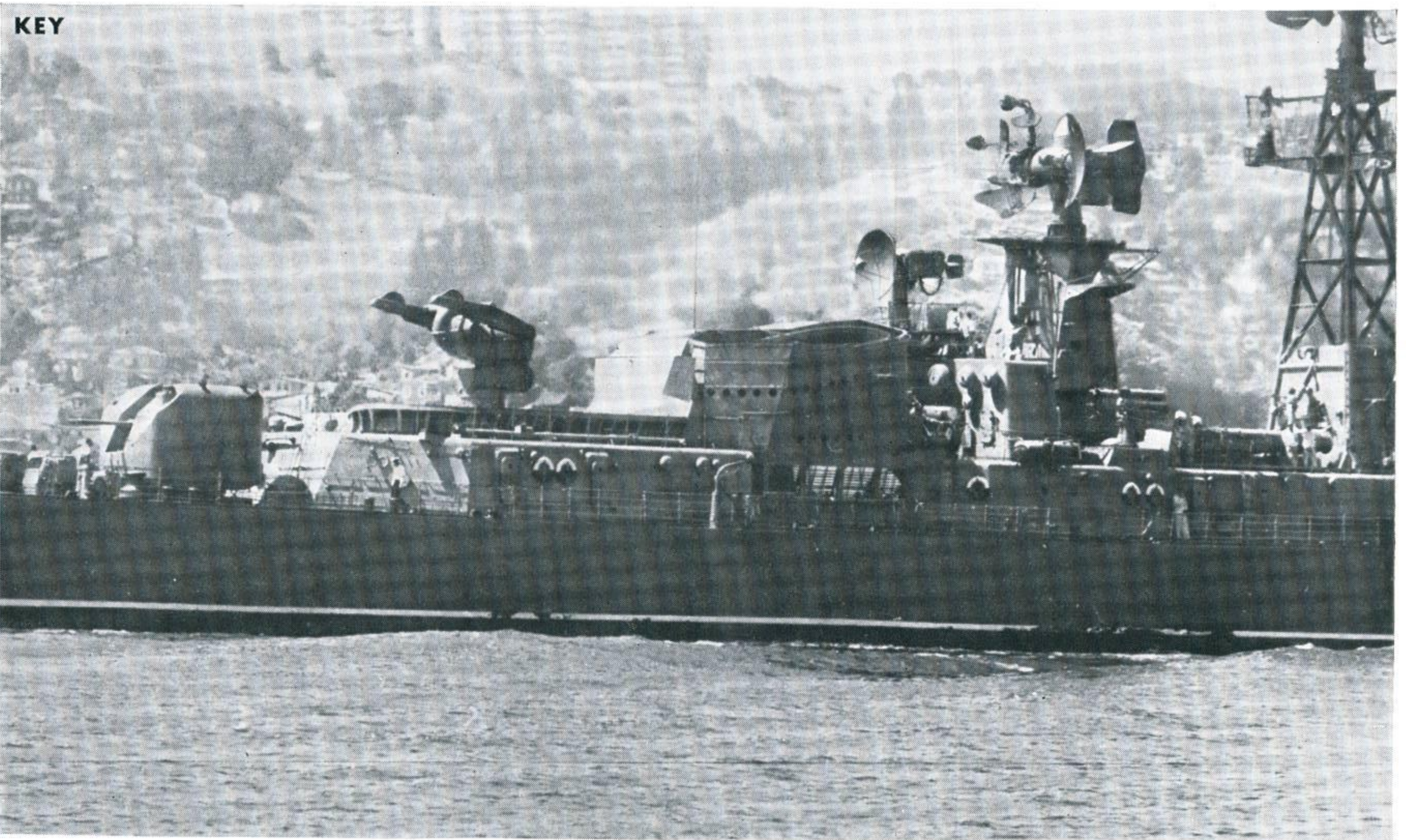
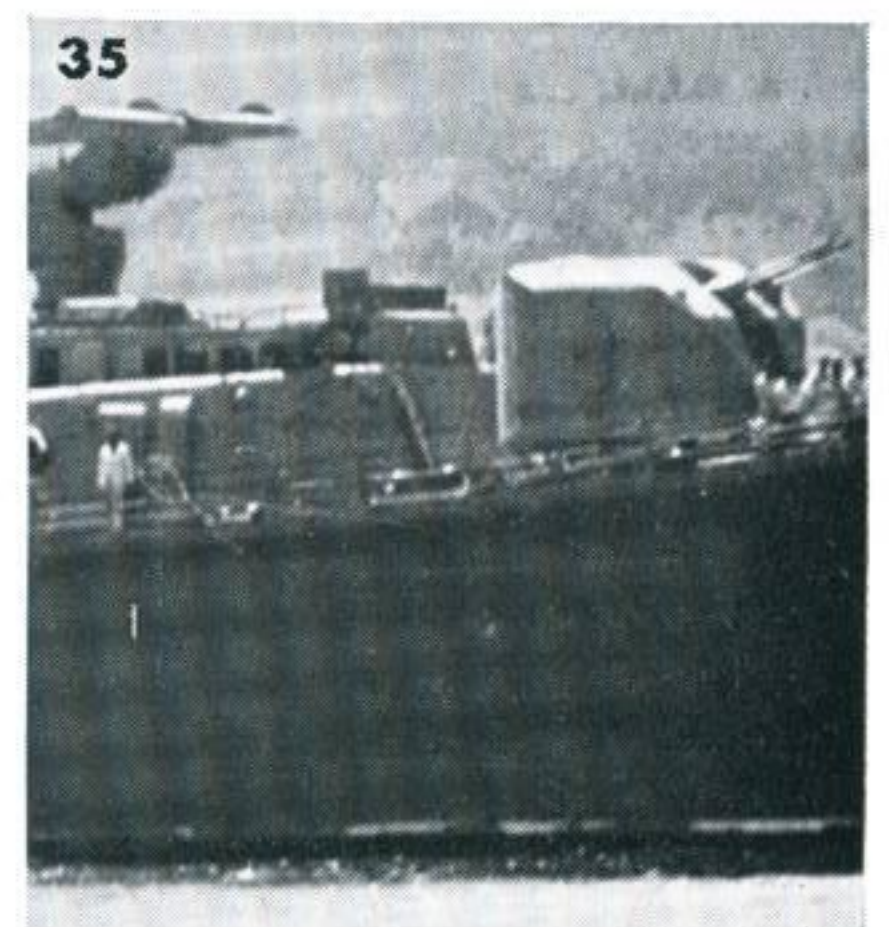
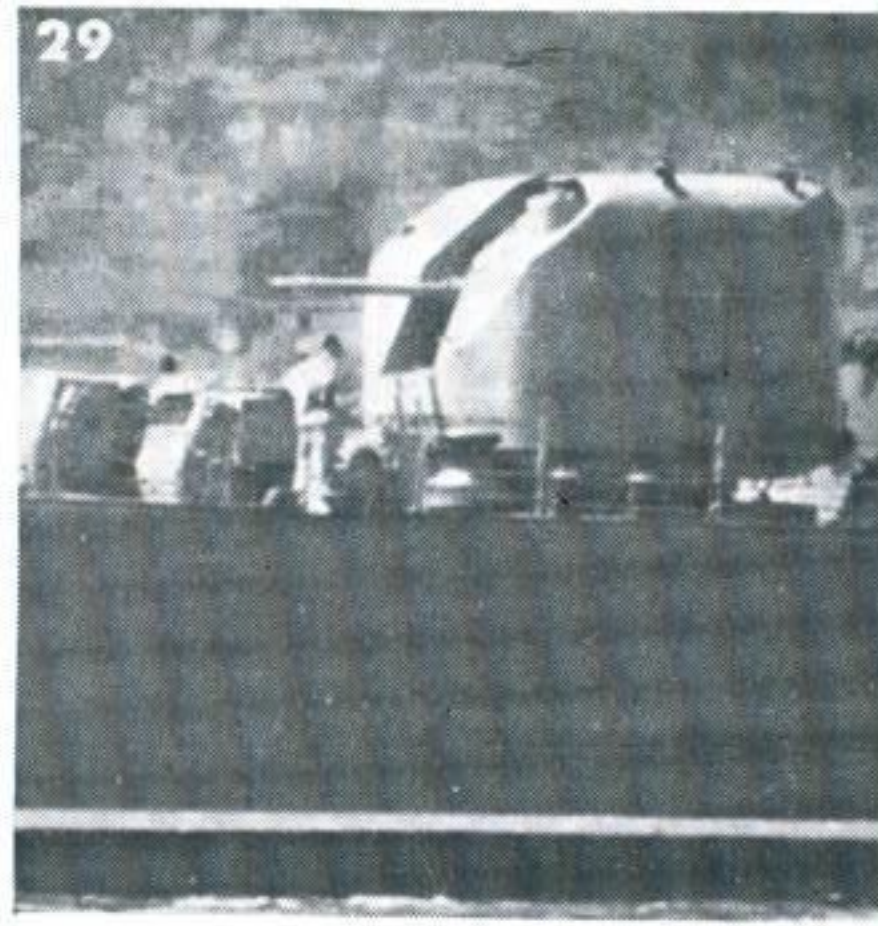
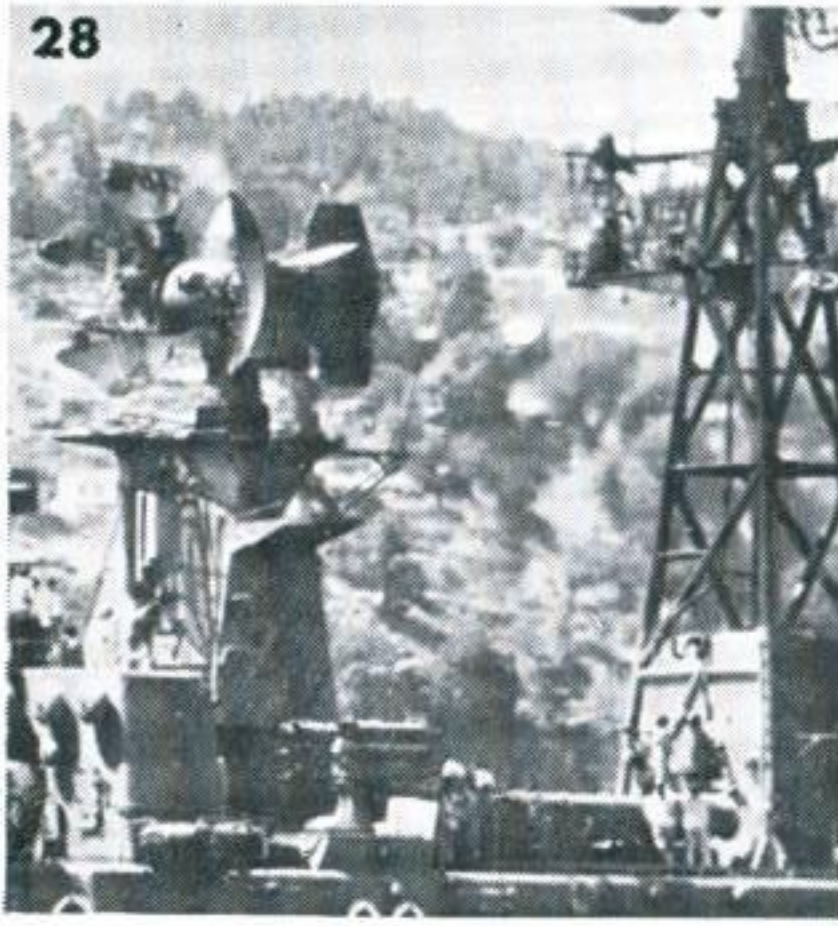
Lesson instructions are on page 285

Solutions on the back cover



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KEY



H.M. HELICOPTER SUPPORT SHIP ENGADINE

This ship is of a completely new type and is a unit of the Royal Fleet Auxiliary by whom it is manned except for Royal Naval personnel undergoing training in anti-submarine defence. She may also serve as an Headquarters Ship. Her name, incidentally, perpetuates the sea-plane carrier of World War I, from which an aircraft first sighted the High Seas Fleet before the Battle of Jutland in 1916.

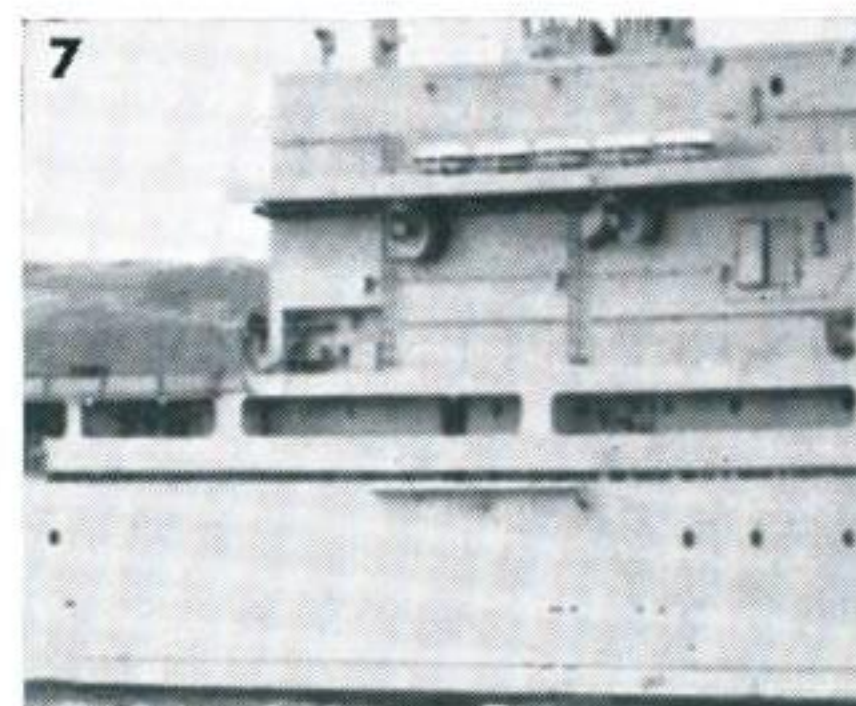
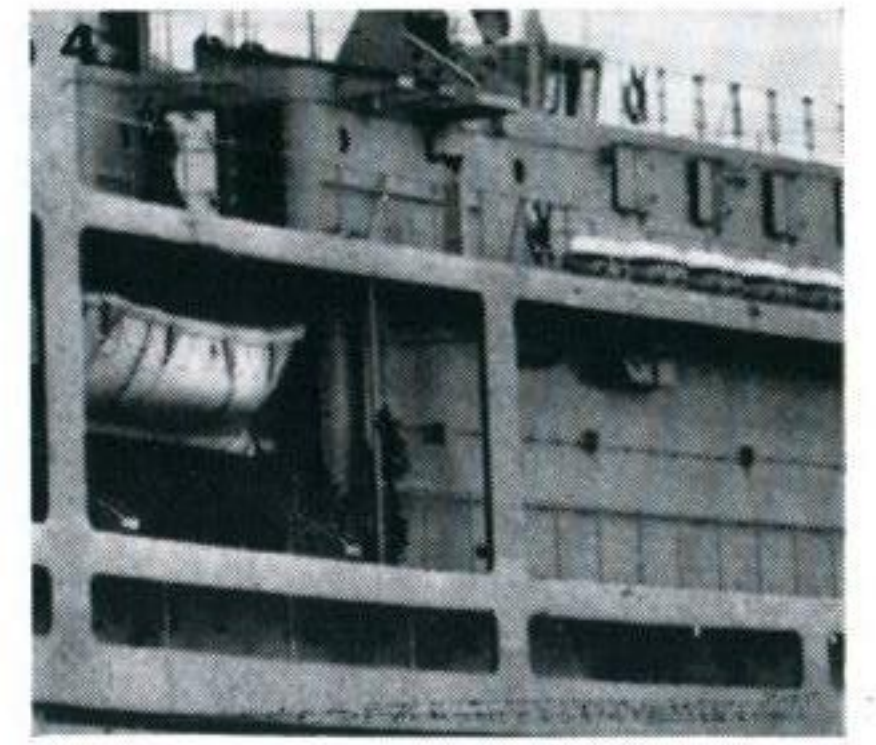
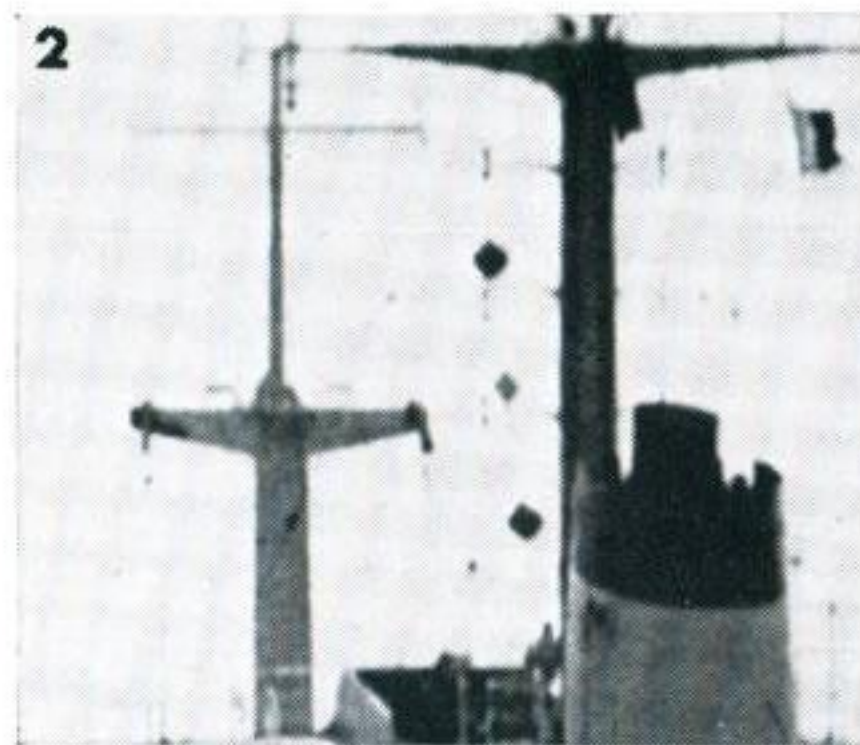
In appearance she is unique, with a flush deck, tall superstructure on top of which set slightly forward of amidships is a small funnel. Aft of the superstructure

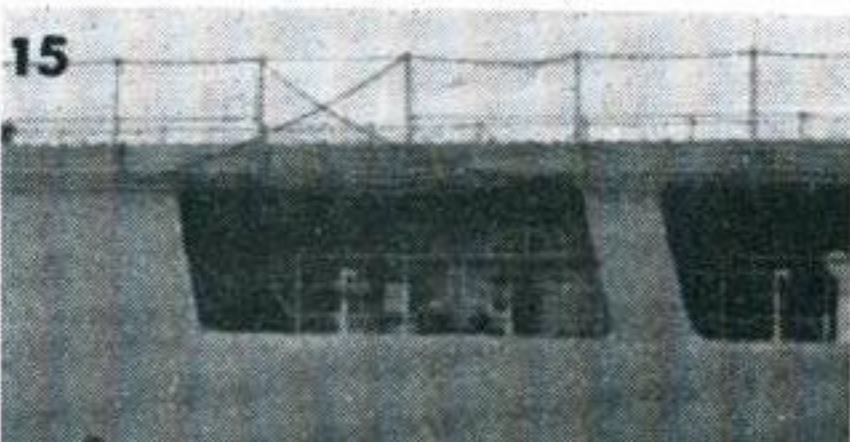
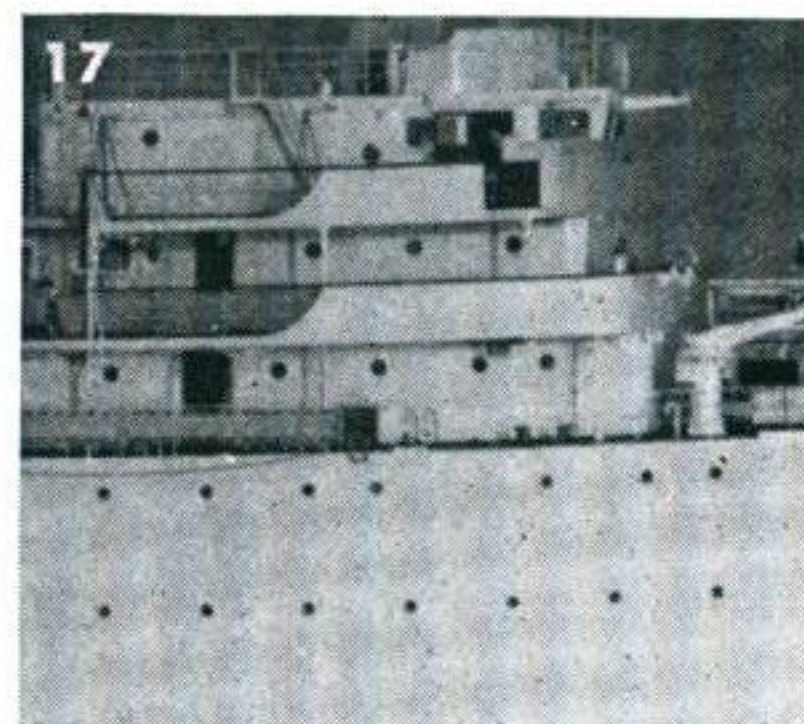
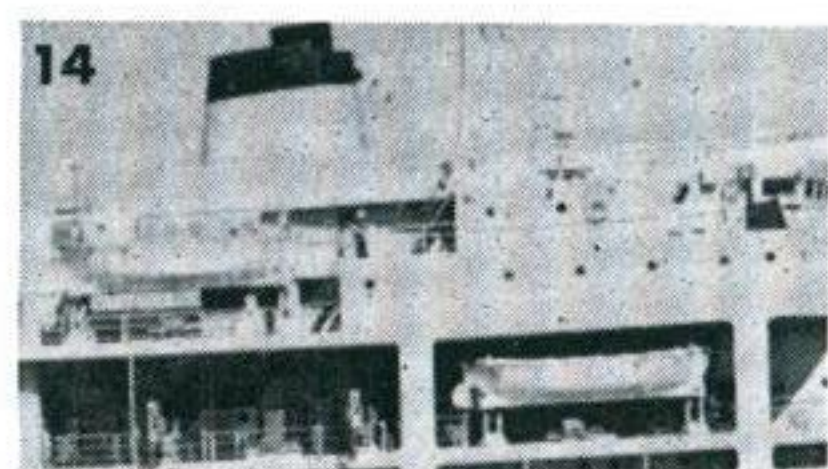
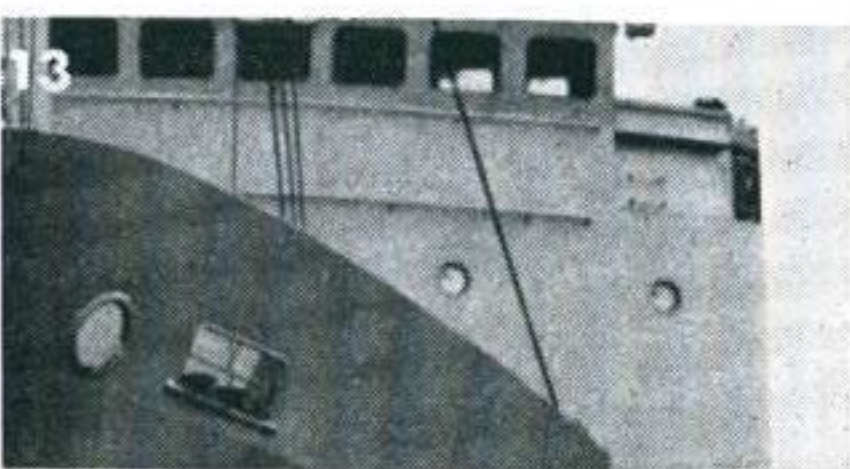
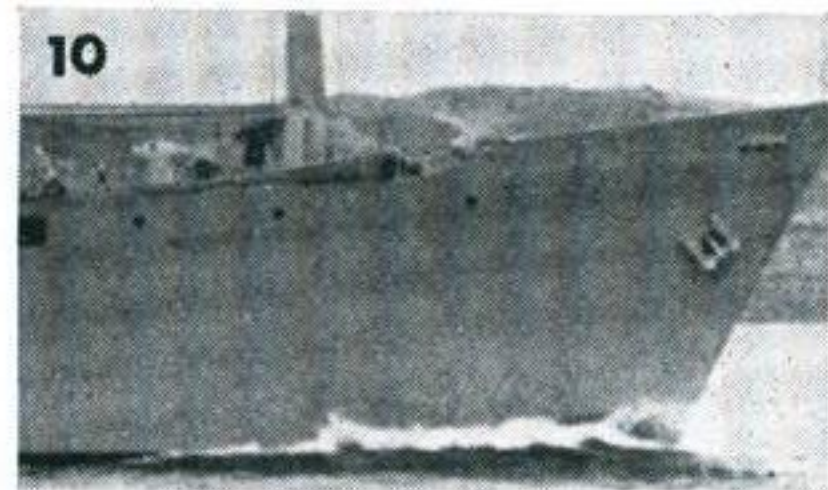
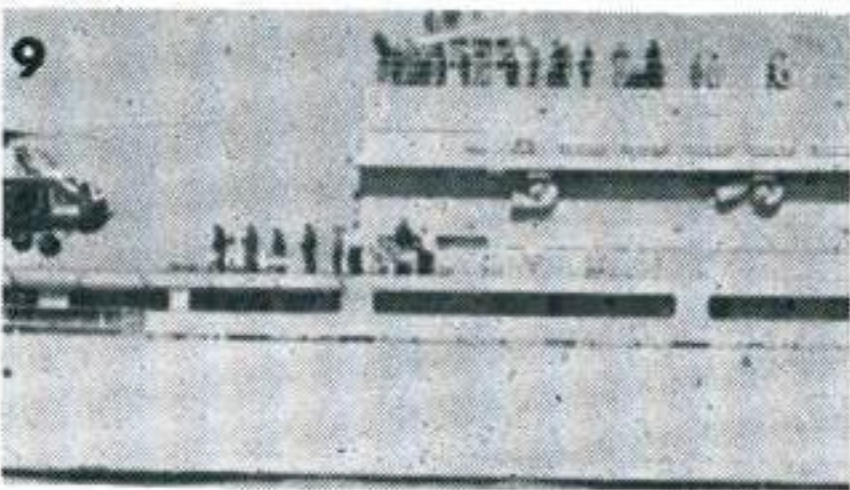
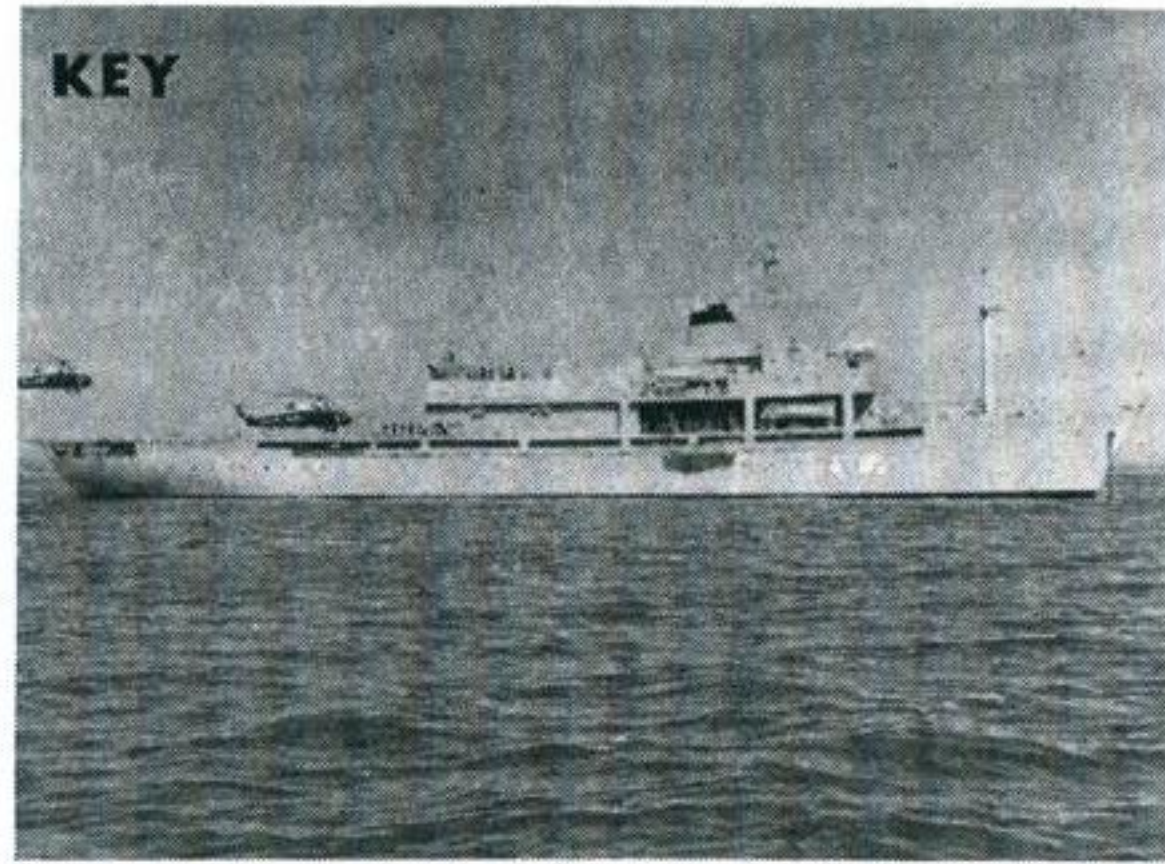
is a large helicopter deck. Her general appearance at a distance, as may be judged from the photographs, and taking into account her high freeboard, might lead an observer to think he was looking at an aircraft carrier.

Her performances (speed etc.), are not yet revealed. Built by Henry Robb and completed in 1968, she bears Pendant Number K08. Her displacement is about 8,000 tons on a length of 425 feet. Performance in service will be watched with the keenest interest and she may well be the fore-runner of a new class of warship.

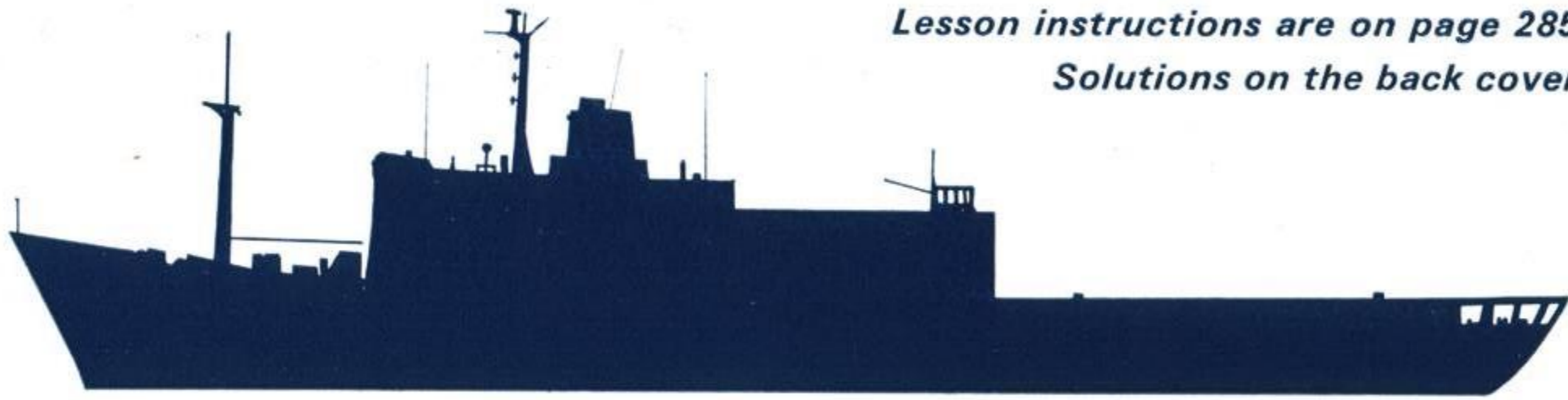
Lesson instructions are on page 285

Solutions on the cover

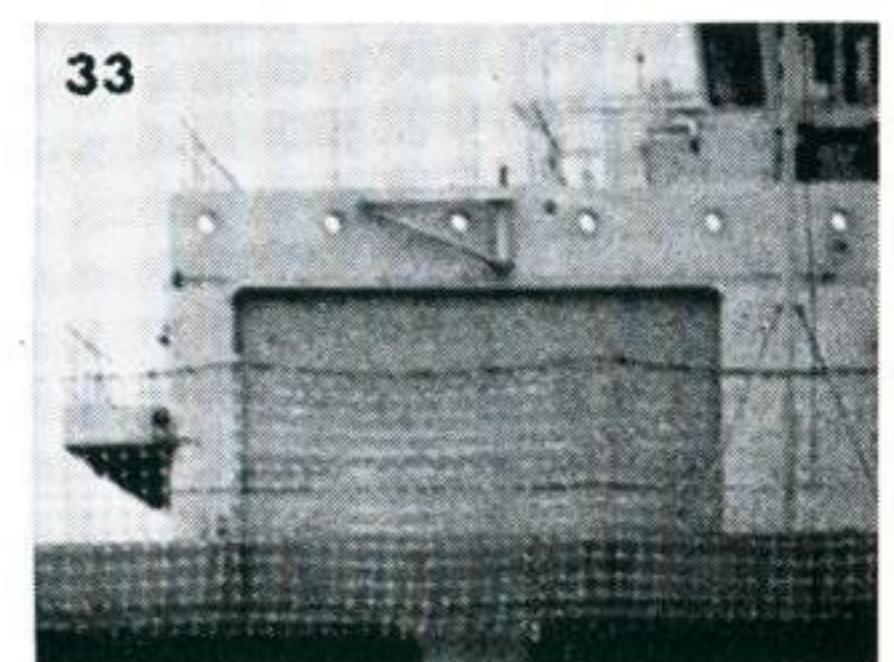
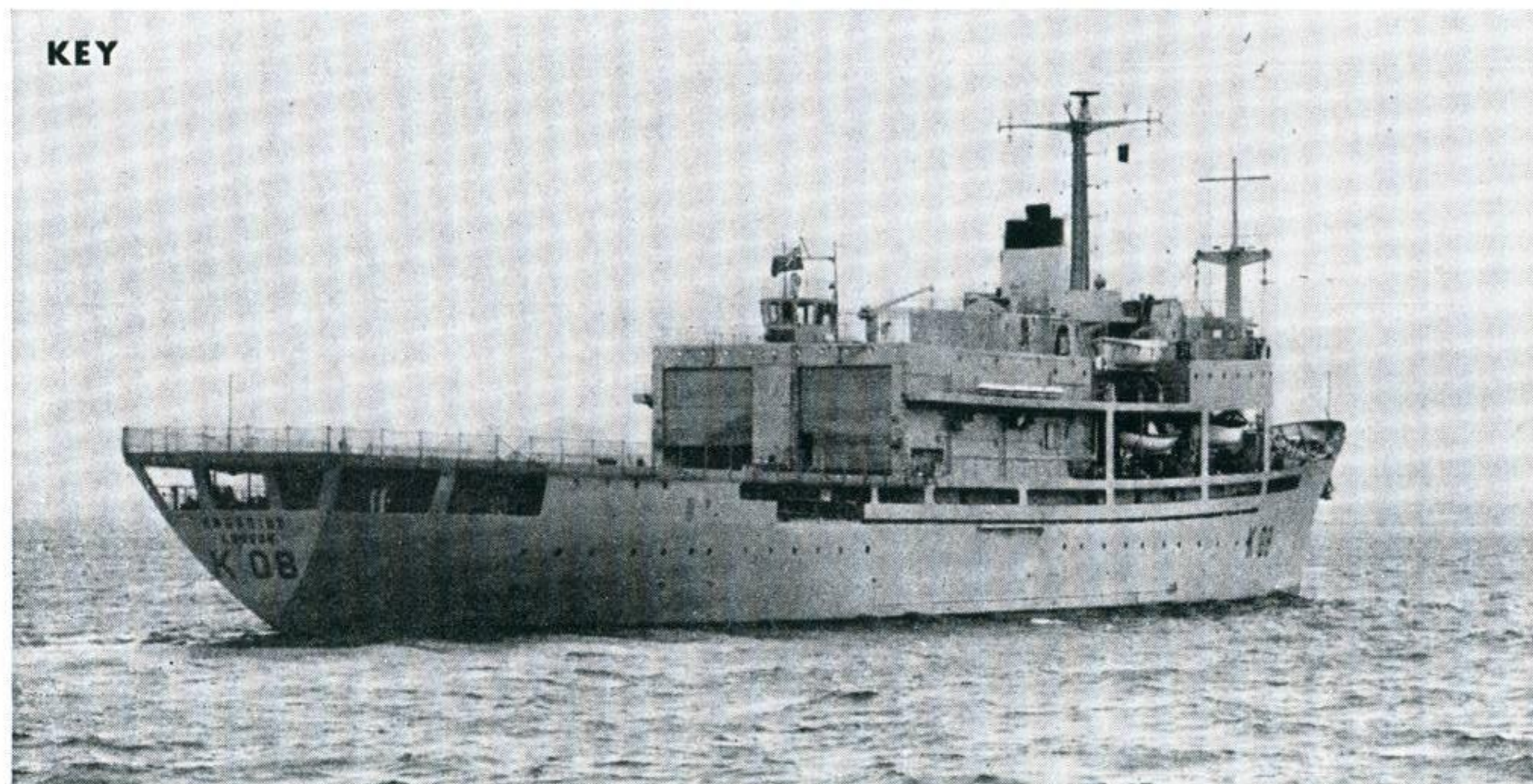
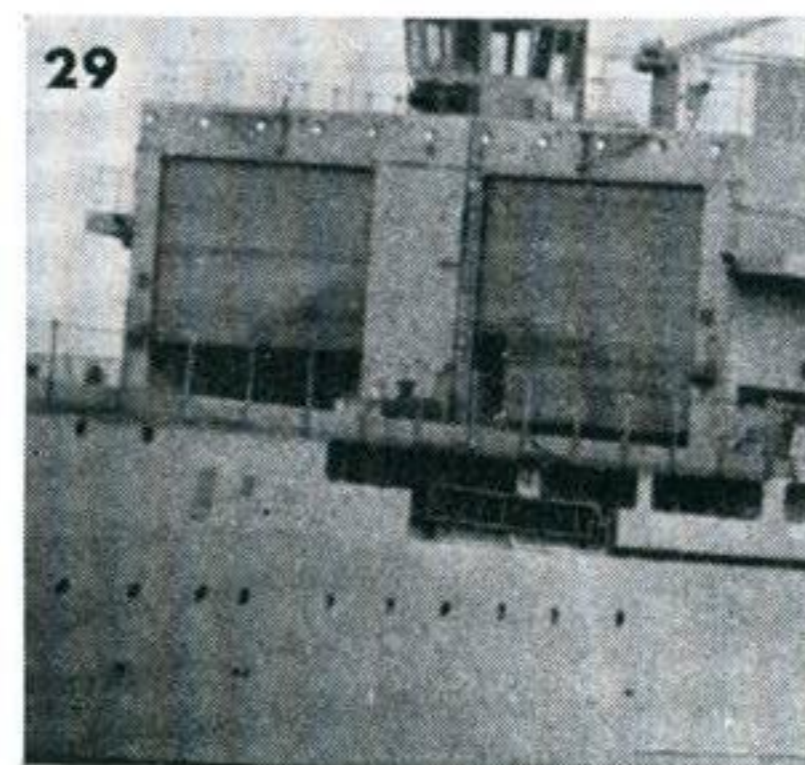
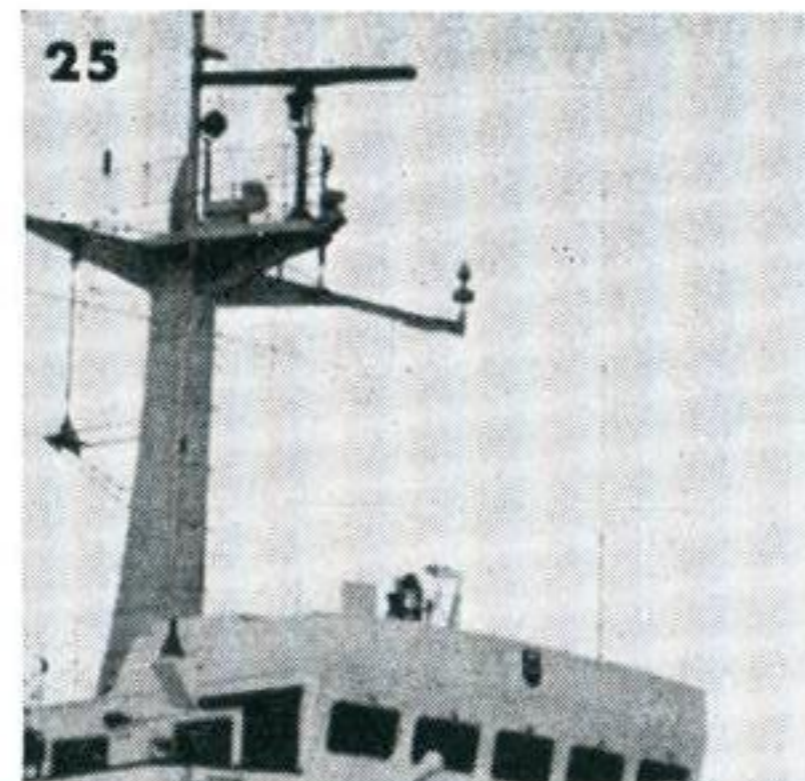


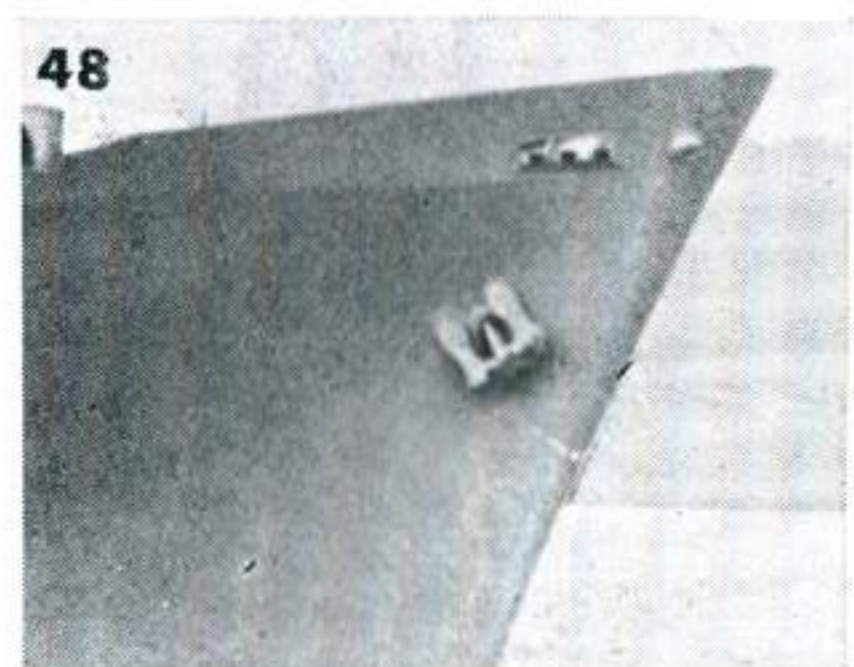
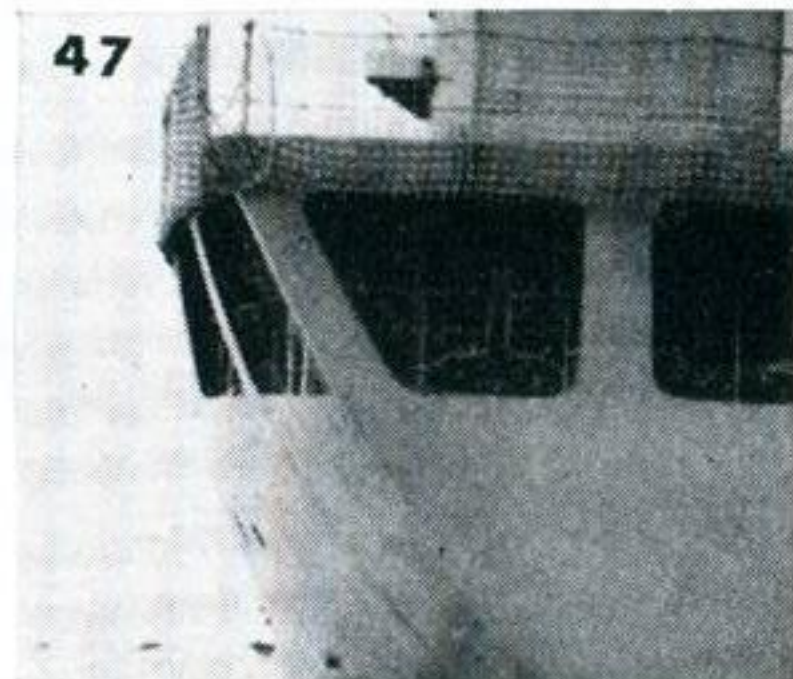
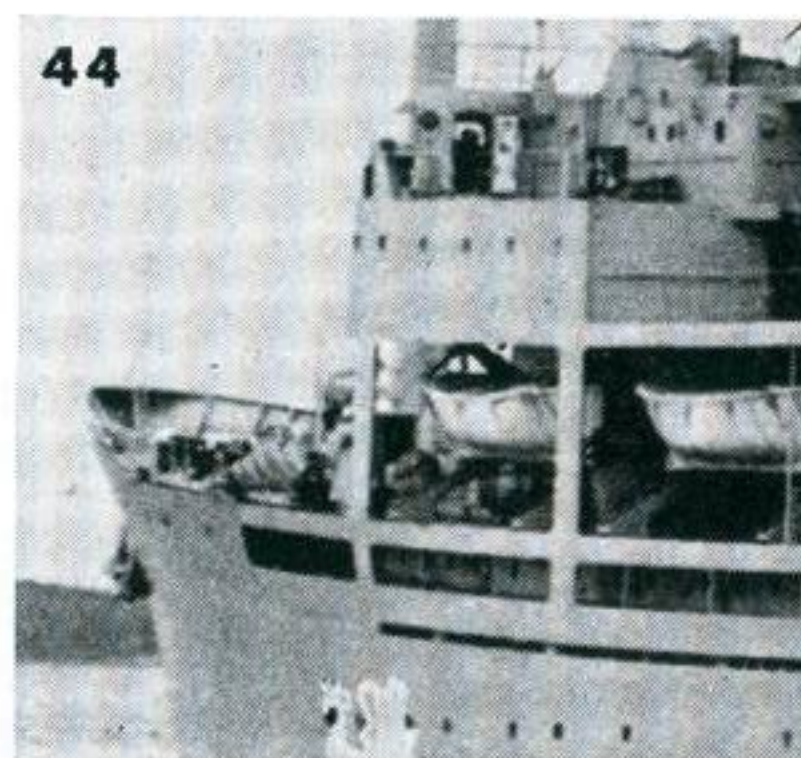
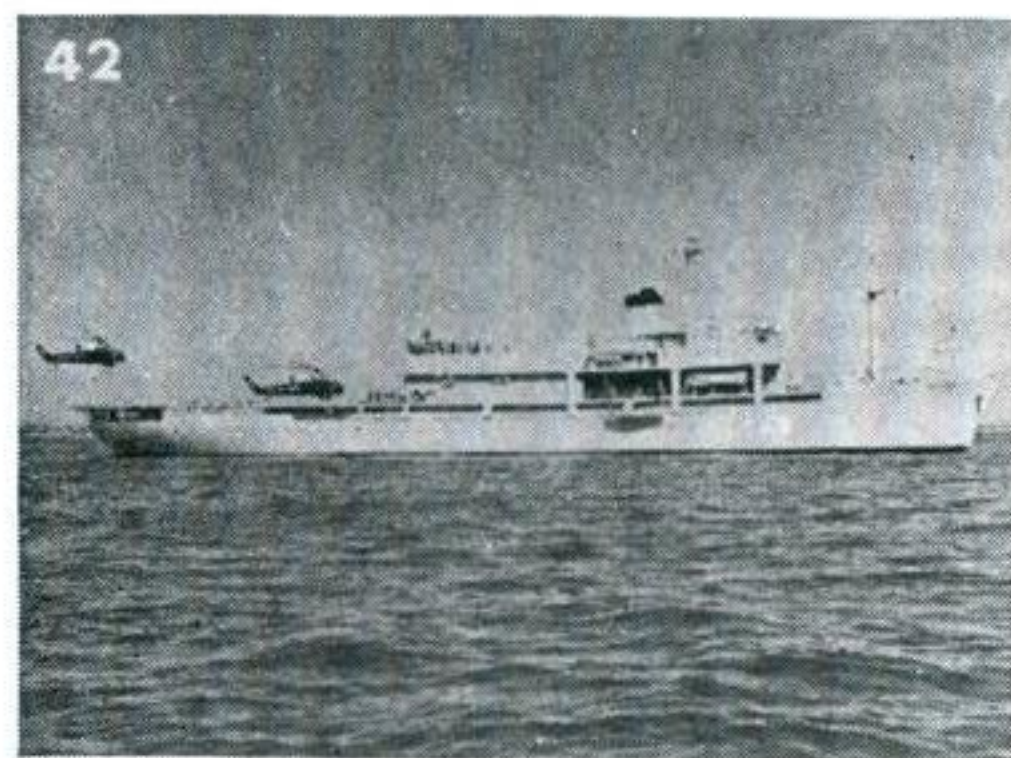
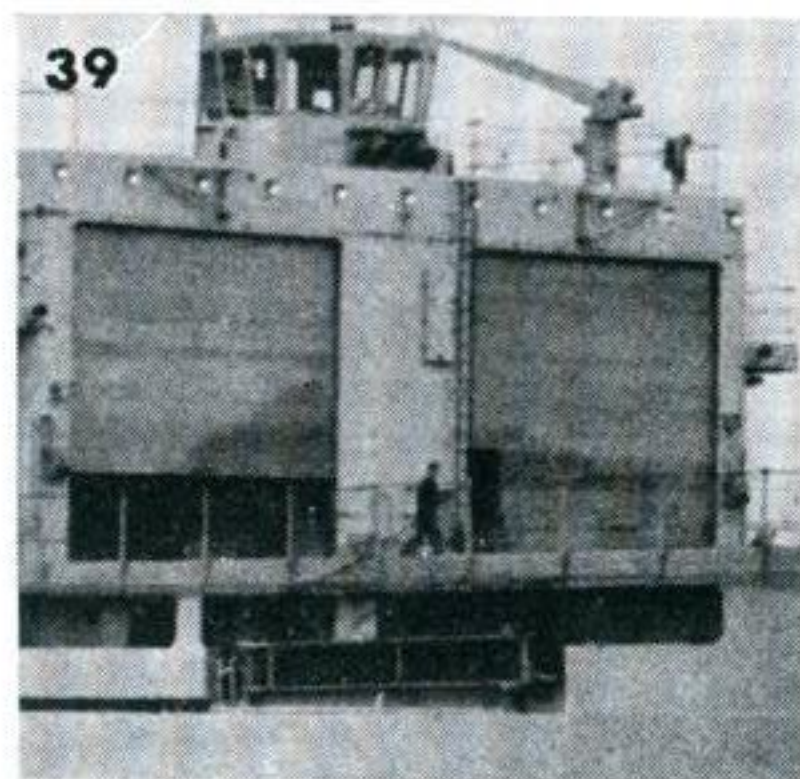
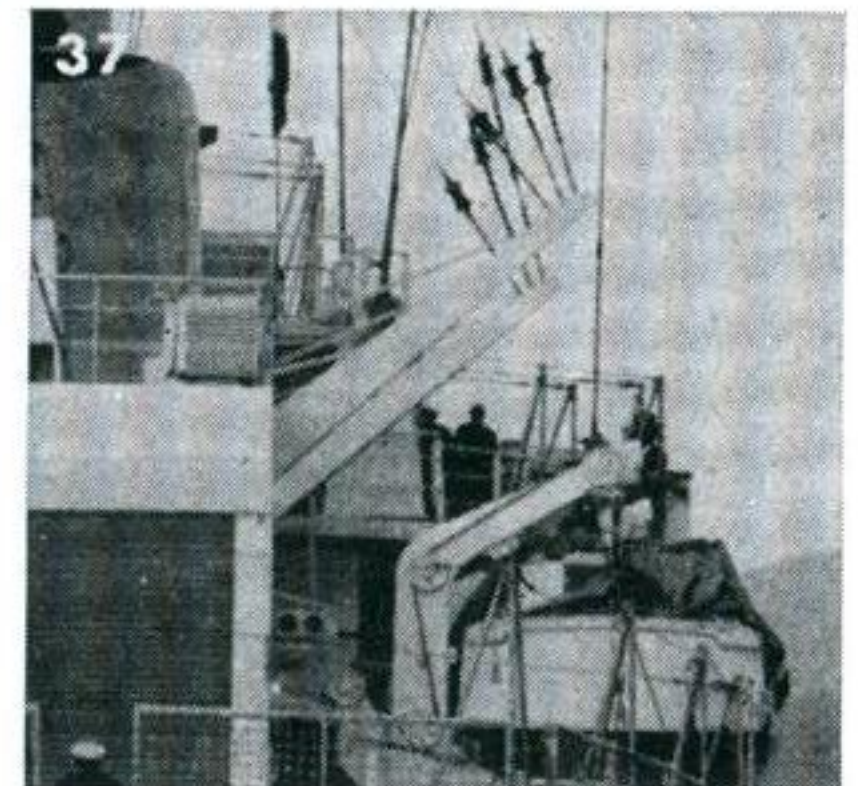
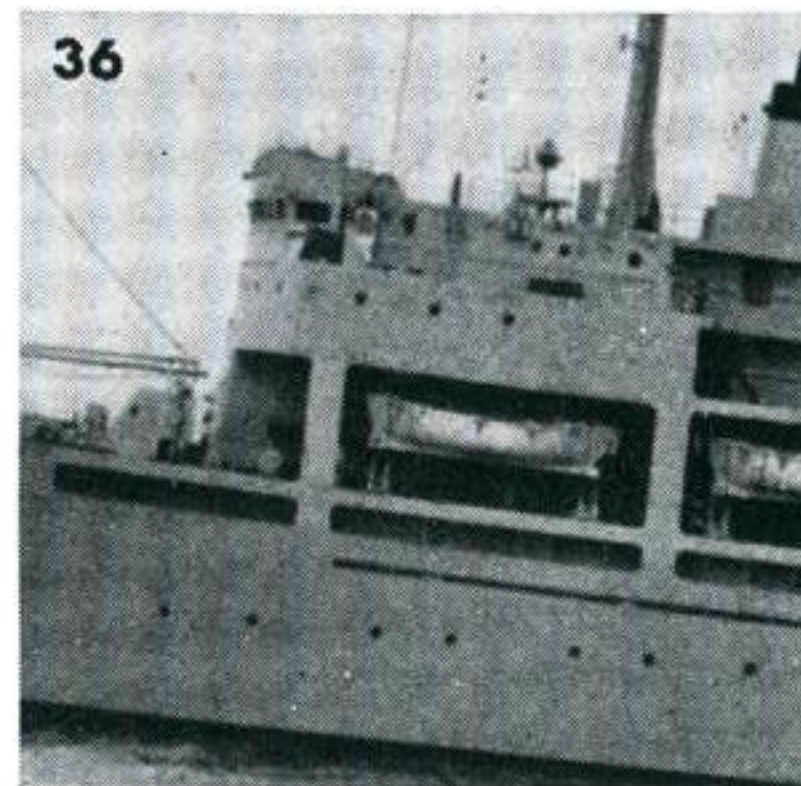
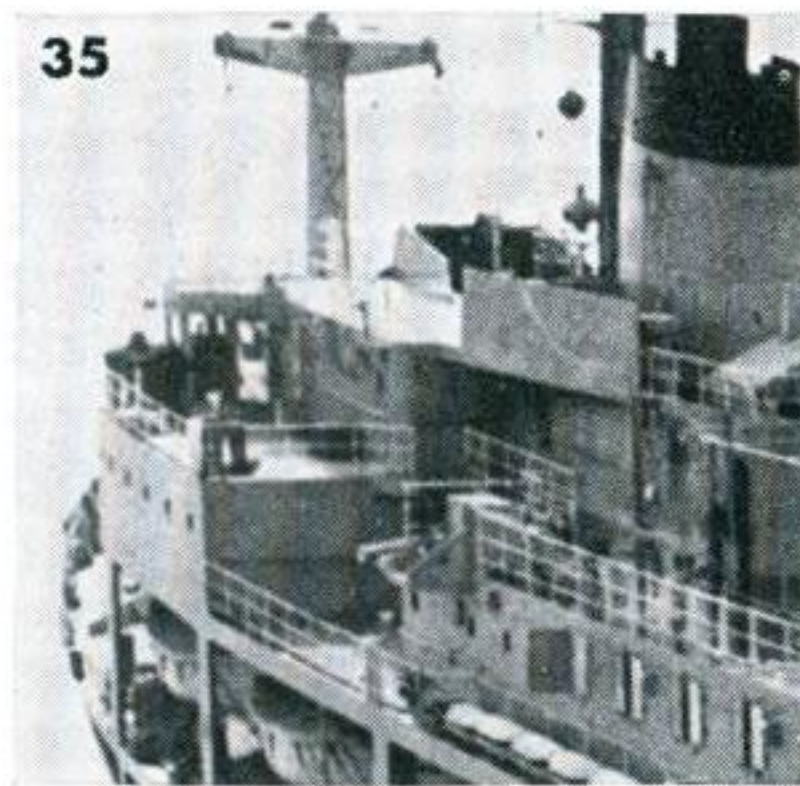


continued overleaf



*Lesson instructions are on page 285
Solutions on the back cover*





WARSHIPS OF THE U S S R

KRESTA CLASS GUIDED MISSILE ARMED DESTROYERS

Known variously as cruiser frigates or rocket cruisers, the eight ships of the Kresta Class are the latest development of the Kashin Class, combining features of that class together with others of the Kynda Class. They are very formidable craft believed to be of about 6,000 tons displacement with an overall length of 509 feet, a beam of 56 and a draught of 20 feet. The prototype carried out her sea trials in 1967.

Weapons comprise two twin launchers for surface missiles, two twin launchers for anti-aircraft missiles, four anti-submarine rocket launchers, four anti-aircraft guns in two twin mountings and two twin torpedo tubes.

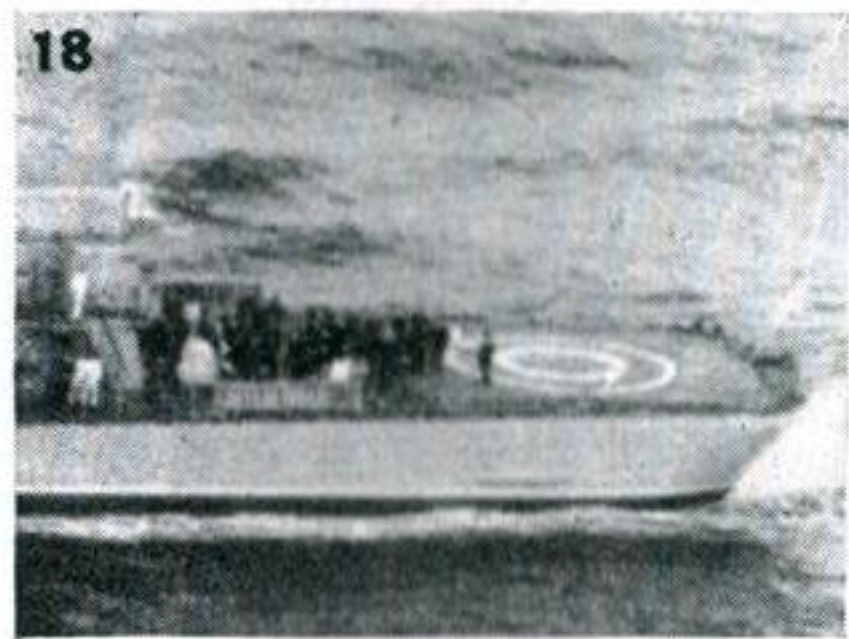
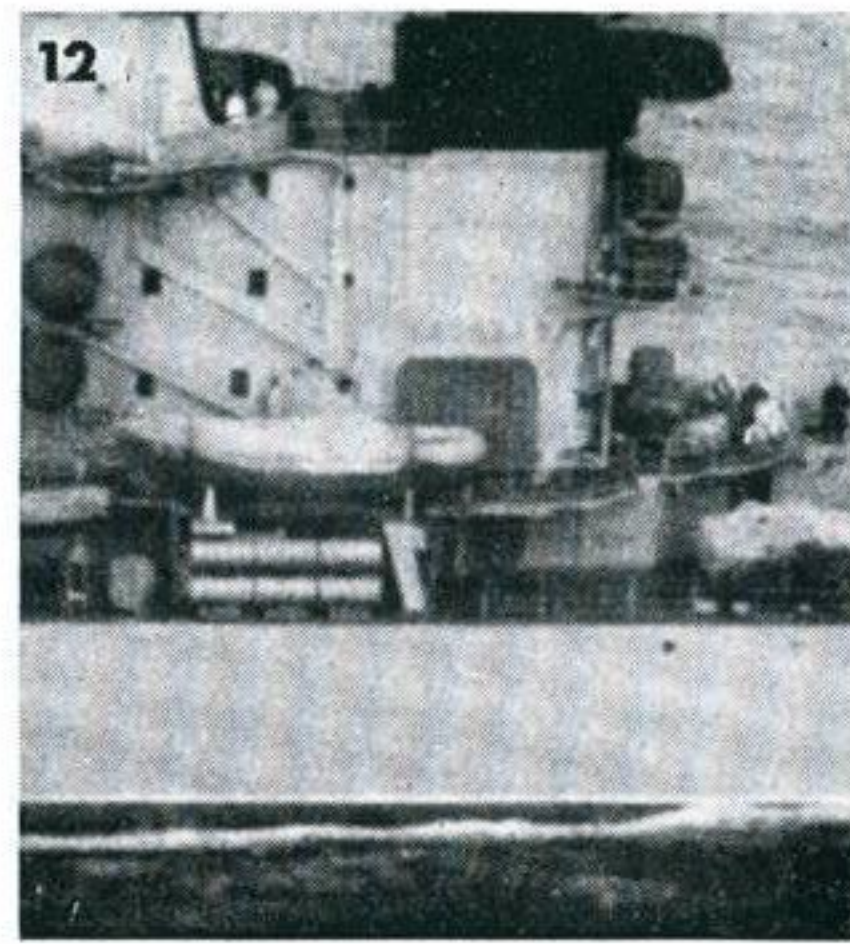
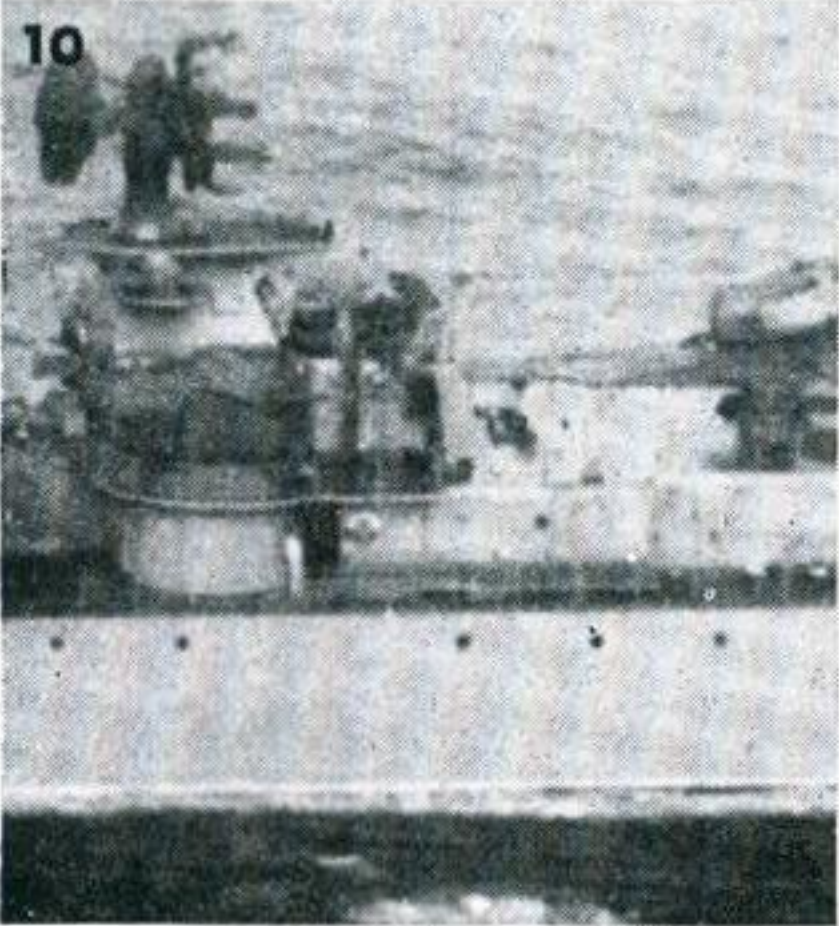
One helicopter is also carried. Service speed is about 35 knots.

In appearance they are unique. The hull is a reversion to the long forecastle type of the Kyndas and there is a tall enclosed mast structure about amidships and in silhouette the thick funnel merges into the base of this structure. But uniqueness does not mean that the lesson need not be done.

Follow the lesson instructions on page 285 reporting all targets as Kresta or as Jokers. Solution on the back cover.



KEY





Cover Photo: OSA guided missile-carrying fast patrol boat of the U.S.S.R. We shall be publishing further material on this class of vessel in the near future.

Page 306 **U.S.S.R. KRESTA CLASS GUIDED MISSILE ARMED DESTROYERS**

All targets are **Kresta** except Nos. 8, 13 and 14.

SOLUTIONS TO TESTS AND EXERCISES

Page 284

TEST PAPERS

RUSSIAN STERN TRAWLERS: Jokers are first line 2nd picture and second line 5th picture
H.M.S. DREADNOUGHT: Jokers are second line 3rd picture and third line 5th picture
LIBERTY CLASS: Joker is first line 4th picture

Page 286

U.S.S.R. KYNDA CLASS DESTROYERS

All targets are **Kynda** except Nos. 5, 18 and 32.

Page 290

VICTORY TYPE STANDARD SHIP

All targets are **Victory Type Ship** except Nos. 8, 17, 26, 30 and 34.

Page 294

H.M.S. OBERON CLASS

All targets are **H.M.S. Oberon** except Nos. 5, 9, 14, 19, 25 and 33.

Page 298

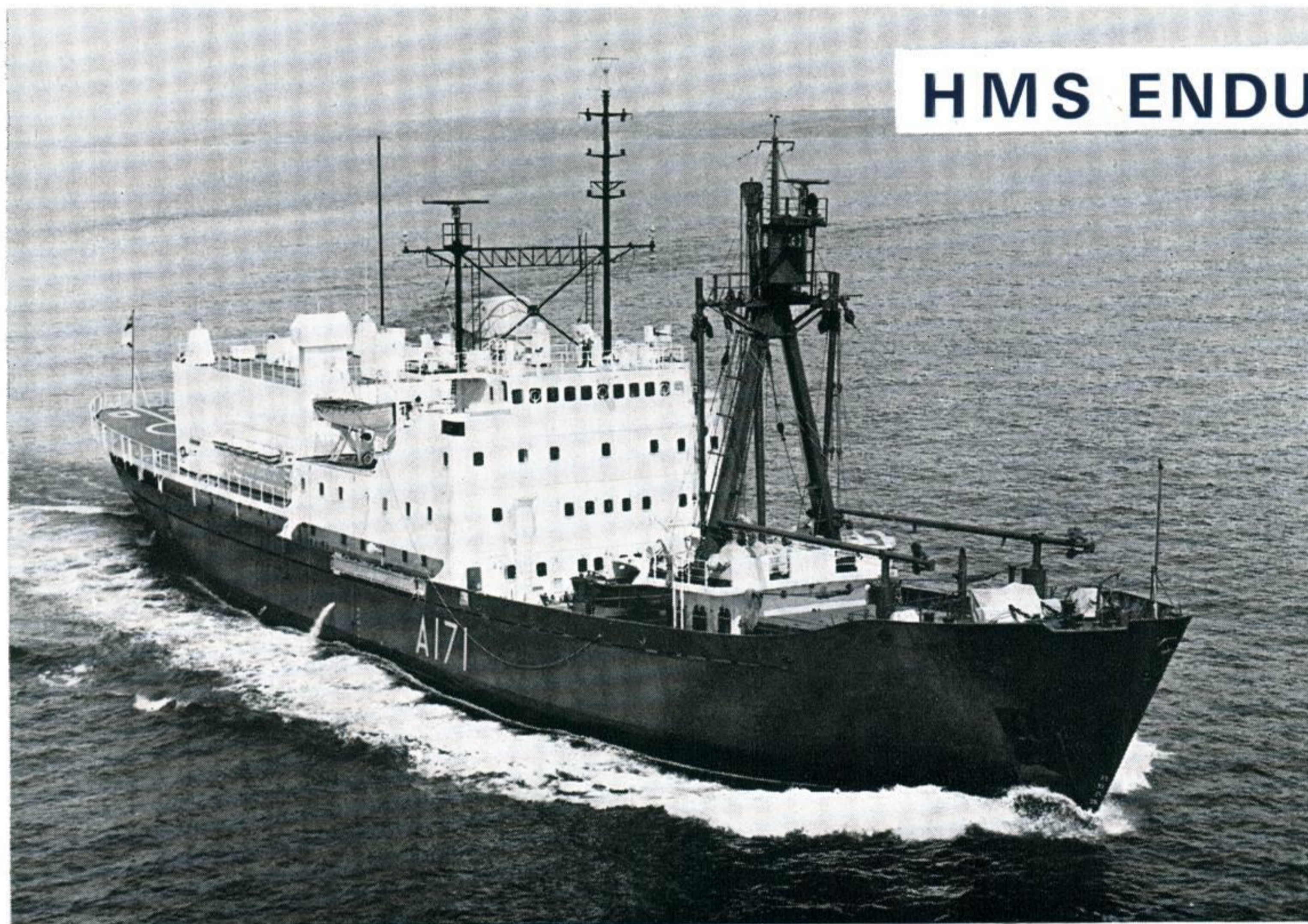
U.S.S.R. KASHIN CLASS GUIDED MISSILE ARMED DESTROYERS

All targets are **Kashin** except Nos. 13, 26 and 34.

Page 302

R.F.A. ENGADINE

All targets are **R.F.A. Engadine** except Nos. 8, 17, 25 and 37.



This vessel is the replacement for the well known ice-patrol ship "Protector" which dates from 1936. She was built in 1956 for the Danish firm of J. Lauritzen for their Polar services.

A motor vessel of about 2,600 tons, she measures 273 feet between perpendiculars. As built she had an ice-breaking stem, ice fins and a crow's nest with navigational instruments built into the foremast. She was acquired by the U.K. in 1967 in order to save the time in new construction, and taken in hand for

conversion to Royal Navy requirements. She retains many of her commercial features and equipment but now operates a helicopter and has greatly increased accommodation.

The main change in silhouette is the tall hangar abaft the funnel. "Endurance" has the white superstructure and buff funnel of the Royal Naval survey ships, but in view of making her conspicuous in ice conditions, she retains the red hull and foremast of the Lauritzen ships.