

# Hovercraft in the Middle East

by B J Russell

**At the present time the largest operational fleet of military hovercraft is to be found in the Middle East. There are a number of reasons which have led to this particular area adding hovercraft to their armoury, at a faster rate than the countries producing hovercraft, or those who have quantified the craft's potential.**

Many Armed Forces of countries throughout the world have witnessed the capabilities of hovercraft during military exercises and demonstrations. A number concluded that hovercraft would bring advantages to a number of roles. However, it is one thing to define a need, but another to procure the vehicles to satisfy that need. Thus the primary requirement satisfied by the Middle Eastern countries, with their revenue from oil, was available finance.

Secondly, many Middle Eastern countries have a long association with the primary source of military hovercraft - the United Kingdom. Indeed, a number of these countries rely on the UK for procuring their military equipment, training their military or para-military personnel, and in some cases providing the officers and skilled personnel to maintain their defence forces operational capabilities.

Finally, and perhaps most significant of all the factors, it is the geography of the Middle East that has made hovercraft so attractive and their true potential exploited. For this area can be truly said to be 'hovercraft country'.

## Geography

A study of the area will indicate why hovercraft have been so readily adopted by the major Middle Eastern Countries, for there are areas of relatively sheltered waters.

In the North-Western corner, the area is bounded by the Mediterranean, the Suez Canal linking this area to the Red Sea and Gulf of Aden. Further East is the third major sea area - the Arabian Gulf and Gulf of Oman.

It is not surprising that with coastlines forming the boundaries of Middle Eastern countries, that the water was regarded as a major transport medium, both for commerce and for military purposes. For although the major centres of population are linked by roads, the coastal areas are not so well served. Equally, shallow waters prevent deep draught ships gaining general access to the shore. Thus, there is a lack of effective communication between points along the coasts.

The problem is further exacerbated by the shallow approaches to the beaches, with continually changing extensive sandbanks making navigation by conventional vessels extremely difficult. Add to this a lack of naviga-

tional aids away from the main ports and inaccurate charts, and it is seen why communications are difficult, particularly at night.

Saudi Arabia, with 300 miles of coastline in the Arabian Gulf and over 1,000 miles in the Red Sea, is typical of many Middle Eastern countries. The Arabian Gulf coastline is sandy, with land transport, particularly in the hot season being extremely hazardous. The proximity of Iran, Pakistan and adjacent Gulf countries enables access to be gained by small native craft and this presents a problem in the control of smuggling and illegal immigrants. The Red Sea coast presents similar problems, consisting of both sand and stone deserts. The coast is bounded by a coral reef, extending off-shore by between a half to five miles, often exposed at low water and bounded by surf. Access to the reef is virtually impossible to anything other than small fishing vessels, as the area is virtually uncharted and water depths can change from 200m to 2m in a horizontal distance of 10m.

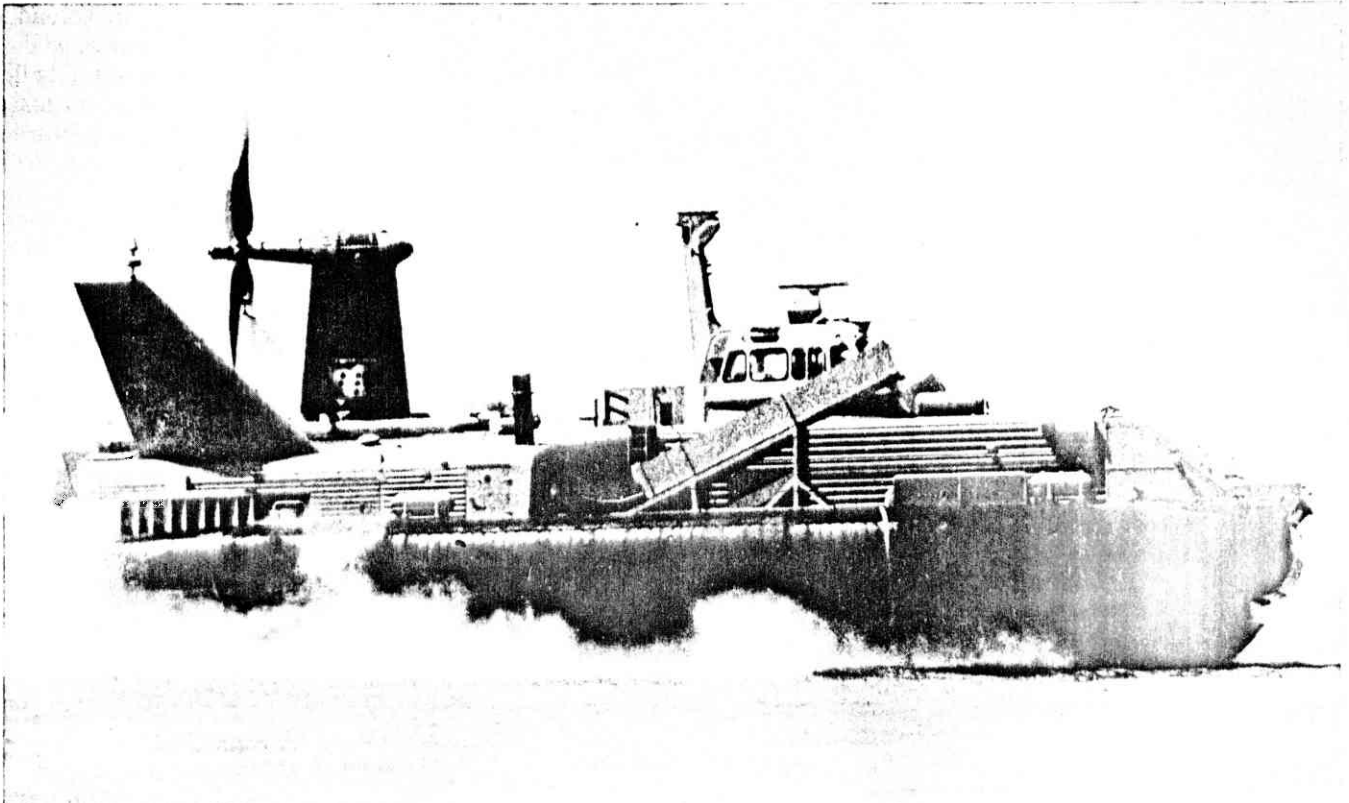
Iran, situated on the Eastern shore of the Arabian Gulf, has similar patrol problems with a 600 miles coastline and the oil-producing islands in the south. Communications with these off-shore islands from the mainland is often made difficult by un-navigable straits, full of sand or mud banks.

## Iran

Eight SRN6's were delivered to the Imperial Iranian Navy in 1968 and were based at a specially constructed operating and maintenance base near Abadan at the head of the Gulf.

Two of these craft are of the Mk3 variant, used for logistic support and have a roof loading hatch and strengthened side decking for carrying loads of up to ½ ton. Lightweight armour may be fitted and defensive armament is provided by a roof-mounted light machine gun (7.62mm or 0.5in). Twenty fully equipped troops, or loads up to 5 tons can be carried, and an auxiliary motor driven generator provides power whilst the main engine is stopped.

The Iranian fleet of hovercraft is completed by two BH7 Mk4's, and four Mk5A's. The Mk4 is a logistic support variant, a bow clamshell door giving access to the 56m<sup>2</sup> stowage area. Two side cabins can take up to sixty troops



An Iranian BH7 Mk4 showing the arrangement for fitting missiles on the wide side decks.

Photograph by courtesy of BHC

and their equipment. One hundred and seventy fully equipped troops can be carried, or a variety of vehicles and stores. Two machine guns can be fitted on the roof on fittings either side of the cabin. The Mk5A is similar, except the side cabins have been removed to allow the fitting of medium range ship-to-ship missiles, such as EXOCET.

The Iranian hovercraft are employed mainly for logistic support and patrol, but have proved useful in other ways. On at least two occasions, the SRN6's have been employed on relief work when flooding occurred in the Karun Valley area. They were used to rescue stranded families and to transport much needed food and other supplies.

The Hormuz Straits have been in the news recently, with concern over the supply of oil from the Gulf, but they were also featured in Iran's activities in late 1971 with the annexure of three strategically placed islands. Both BH7 and SRN6 hovercraft were used to land troops, who encountered some resistance on the two smaller islands. This was the first known use of Iranian hovercraft 'in anger' in the amphibious assault role.

Although the main hovercraft base is at the head of the Gulf, other facilities have been established, to enable more flexible deployment of craft to meet any requirement. These have included the main Iranian oil terminal on Kharg Island, seventy miles out to sea from Abadan and Bandar Abbas near the Straits of Hormuz.

#### Saudi Arabia

The Saudi Arabian Coastal and Frontier Guard currently operate eight SRN6's from two bases - Jeddah on the Red Sea coast and Aziziyah on the Gulf coast. As with the Iranian situation, this enables flexibility in craft deployment.

The prime task of the Saudi craft is to provide coastal patrols, to prevent smuggling of both contraband and

illegal immigrants. In addition the craft are employed on liaison duties, and in the search and rescue role. Craft are maintained on standby and have had many successes in the latter role, locating and rescuing fishermen and weekend sailors, and both locating and assisting in the recovery of crashed military aircraft.

It is difficult to quantify the deterrent effect of the coastal patrols in preventing the landing of contraband and illegal immigrants. However, the presence of the hovercraft is well established and well-known, and local opinion suggests that the situation has changed considerably since their introduction.

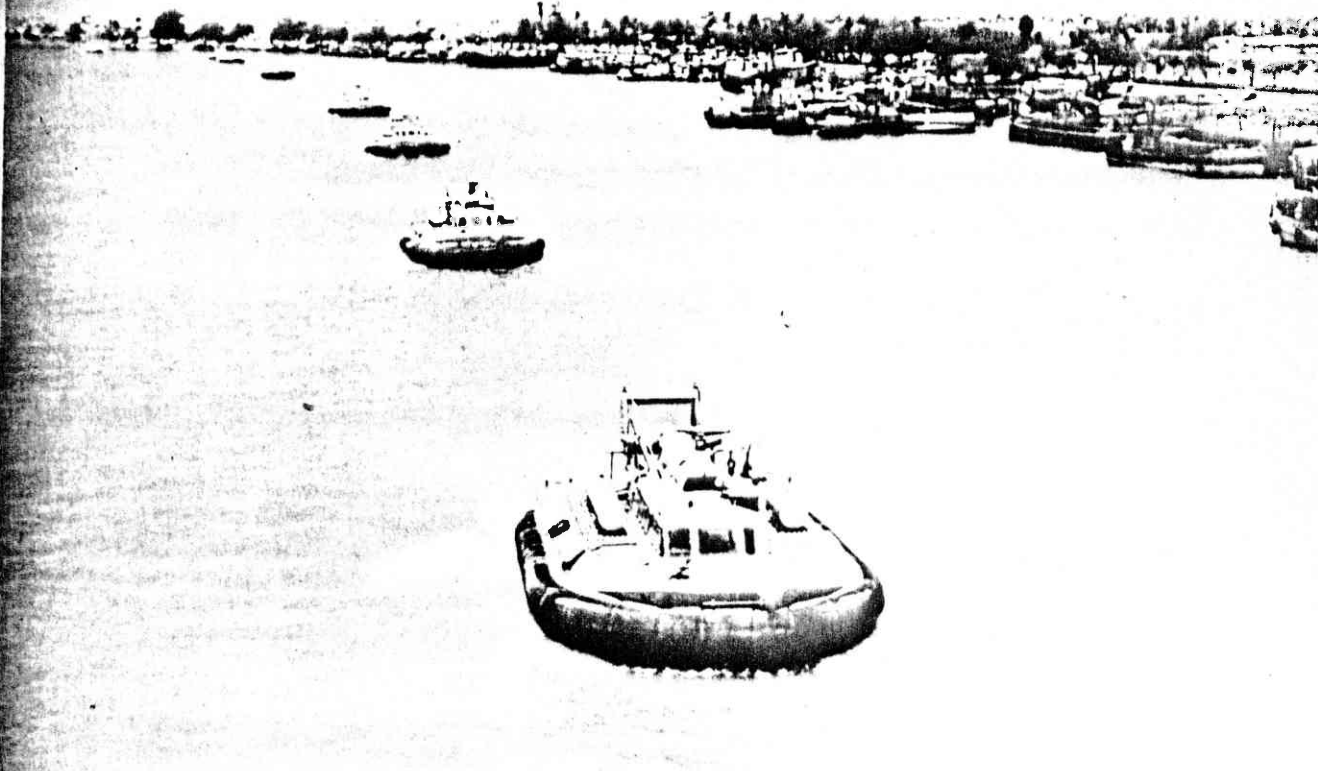
The range of the SRN6 initially presented problems, particularly when patrolling the 1,000 mile Red Sea coastline. This was overcome by pre-positioning fuel dumps, thus enabling local patrols of up to ten days to be executed. More recently, small bases have been built along the coastline, to accommodate and sustain local patrols for longer periods.

The Saudi hovercraft are operated purely in defensive or deterrent roles and thus are only armed with a 0.5in machine gun. This role has increased in importance with the industrialization and expansion of the country's activities, the re-opening of the Suez Canal and the general awareness of the importance of internal security.

#### Other Applications

Although the Iranian and Saudi Arabians are the major users of hovercraft in the Middle East, other countries too have realised their usefulness in particular applications.

Egypt also has an extensive coastline, including around 500 miles bordering the Red Sea, and the Nile Delta area. There thus exists a coastal patrol requirement similar to those of Iran and Saudi Arabia. Egypt has purchased three refurbished SRN6's to undertake coastal patrols. The craft were very soon in action, for whilst on a training mission, one of the SRN6's was involved in investigating a



*The eight SRN6s of the Iranian Navy on exercise.*

vessel suspected of gun running. An interesting addition to the SRN6's capabilities is their ability to lay up to four 227kg (500lb) ground mines – the first time hovercraft have been used for this purpose.

Other military or para-military usage of hovercraft in the area have involved smaller craft. For example, three Pindair 8-metre long Skima 12's were purchased by the Sultan of Oman. This craft has a central inner aluminium hull with a heavy duty inflatable attached to the front and sides. Two of the craft were fitted with flexible roofs over the cockpit, the third a grp hardtop. The three craft were used as personal transport for the Sultan of Oman and the Royal Guard. The craft proved particularly useful in amphibious landings, often on sandy beaches incapable of supporting wheeled vehicles.

Another area of operation is Bahrain, where hovercraft were seen as a useful rescue vehicle for Bahrain International Airport, adjacent to the Arabian Gulf shore. An Air Vehicles AV Tiger is currently being used for this purpose. Although the craft is only 8m long and its empty weight is 1,400kg it can carry nearly 1,000kg of disposable load. By carrying a number of life-rafts the craft has the capability of supporting the passengers and crew of a large aircraft.

#### **Training and Support**

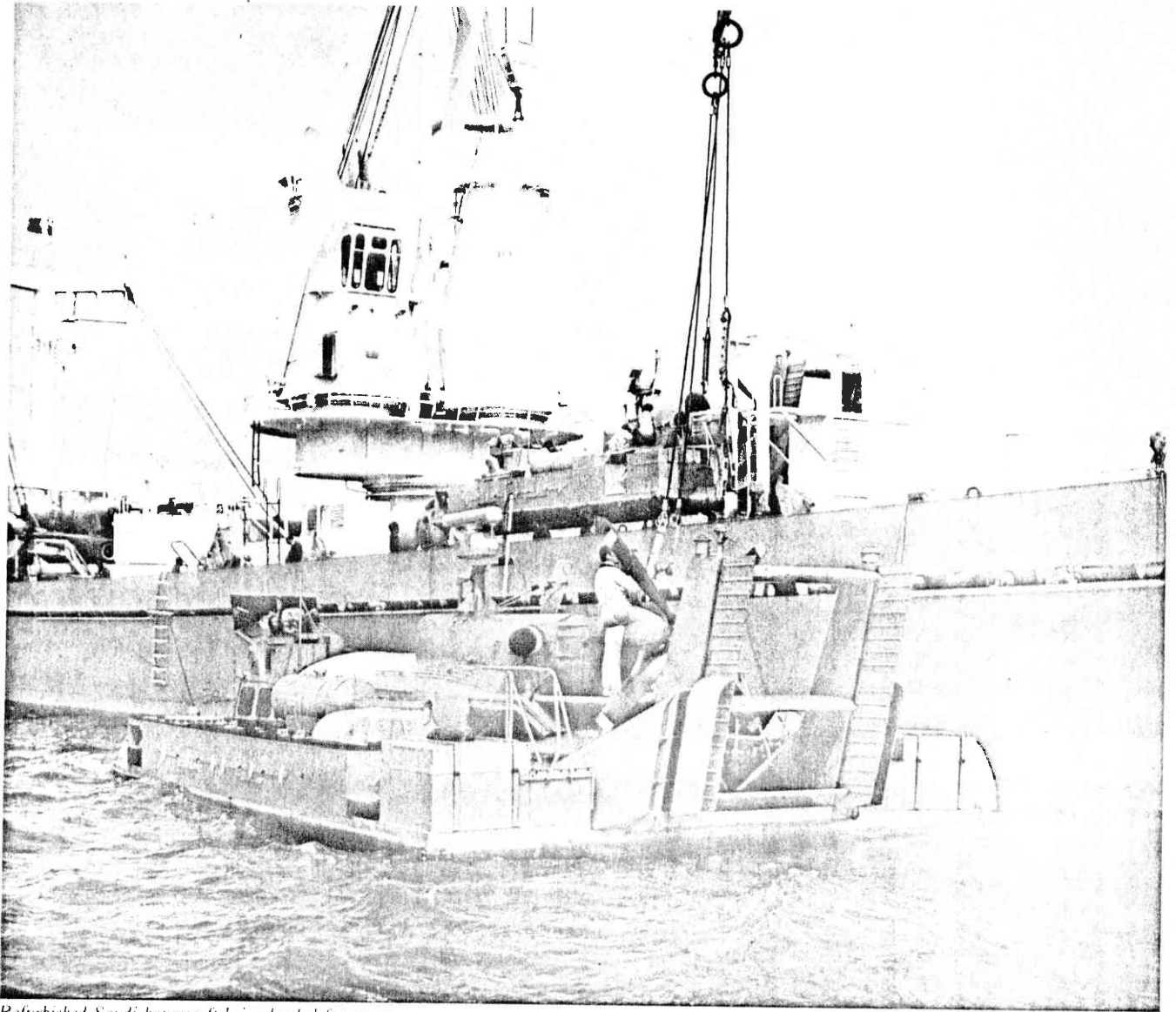
Important features of the successful operation of the hovercraft in the Middle East have been the training required for both hovercraft crews and maintenance teams

and the spares and technical back-up to maintain craft serviceability.

A hovercraft was a strange beast when introduced to the area, and training consequently had to cover both theoretical and technical aspects. An additional difficulty to overcome was that only a small number of the indigenous support staff had had any formal education at secondary or high school level. However the training programmes, initially in the UK and later in the countries concerned, have overcome these difficulties, as witnessed by the continuing successful hovercraft operations. How long will this remain true for the Iranian craft, as a result of the changes after the over-throw of the Shah and the more recent conflict with Iraq, remains to be seen.

*A Pindair Skima 12 similar to those built for Oman.*  
Photograph by courtesy of Pindair Ltd





*Refurbished Saudi hovercraft being loaded for return.*

### **The Future**

The British Hovercraft Corporation is currently servicing two contracts for a total of 14 SRN6's to be delivered to two Middle Eastern countries during the next two years.

Six of these craft are twin propeller Mk6 versions, the remaining eight being configured as Mk8 variants. The SRN6 Mk8 is a stretched version of the standard SRN6, being some 18m (59ft) long and capable of carrying 55 fully equipped troops at speeds up to 50 knots. An auxiliary power unit is fitted on the starboard side decking to power the two air conditioned modules located above the cabin. It is understood that the Mk8's are destined for the Saudi Arabian Coastal and Frontier Guard. The destination of the Mk6's has yet to be revealed. These hovercraft are configured for coastal patrol and counter insurgency roles.

From time to time, other Middle Eastern countries have expressed interest in hovercraft, fuelled perhaps by the success of their neighbours' operations. Also, like the Saudi's, countries already operating craft have expressed interest in additional craft, for example the Egyptians have considered BH7's for coastal patrol duties.

### **Concluding Remarks**

Hovercraft ranging in size from 8m long 12-seaters to 24m long craft capable of carrying a 14 tonne payload, have proved their usefulness in the Middle East. Their amphibious capabilities have been employed to good effect, and tasks virtually impossible by other means have been completed.

The internal security of the area has undoubtedly been improved by their use; but in turn, conflict may mean that the full back-up from the UK may be lost – as in the case of Iran. As in other situations, successful operations may lead to further orders to augment existing fleets, or initiate others.

This article has dealt with the military and para-military use of hovercraft in the area, but many civil requirements, mainly in the conduct of surveys, have also been met.

To some early observers, the hovercraft was a solution looking for a problem. In the Middle East, the problem existed, and the hovercraft has provided the solution. ■