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# UAE HSV – 2 Swift Incident Report, Bab el Mandeb, 1<sup>st</sup> October 2016



*HSV-2 Swift being recovered following the attack*

## Background

The UAE HSV-2 Swift supply vessel transiting from Aden to Al Hodeidah, Yemen on 1 October 2016 was hit by a missile and video released by the Houthi Yemeni rebels suggests that the missile strike set the vessel on fire and badly damaged it. Reports have been received this week that the vessel has been towed from the scene by vessels associated with the Saudi led coalition.

To view the video of the incident [click here](#).



## Scope of this Report

This report aims to describe the circumstances surrounding the missile attack on the HSV-2 UAE supply vessel so that an analysis can be made of the potential risks to shipping in the southern Red Sea, the Straits of Bab el Mandeb and the western Gulf of Aden close to the Yemeni coast.

It should be noted that the attack occurred less than a week ago and therefore, information surrounding the attack is still emerging. This report will be updated as new information on the attack becomes available.

## Executive Summary

It is believed that the attack on HSV-2 was conducted from a land position close to Mocha, Yemen during the night hours using a C704 anti-ship missile of Chinese manufacture. It is likely that targeting was a combination of radar and AIS. It is unlikely that the identity of the vessel was confirmed by visual means, though her general pattern of behavior was known thus allowing the attack to be carefully planned.

The use of a sophisticated and modern Chinese weapon system to carry out this attack suggests that the weapon and associated launch equipment was provided by the Houthi sponsors, the Iranians. The high levels of planning and coordination involved in this attack suggest that the Iranians might have been involved on the ground. The elan with which this attack was accomplished makes it quite possible that the Iranians have Revolutionary Republican Guards operating with the Houthis, to assist them with command and control and technical support.

Notwithstanding HSV-2 being a supply vessel and in commercial ownership, this was essentially a military on military engagement. It was pre-planned and the vessel was deliberately targeted to disrupt the Saudi led coalition in their operational support to the Yemeni government in the Hodeidha area.

The risks to commercial shipping conducting passage in the southern Red Sea and BAM is therefore considered relatively low. The next attack, should there be one, will most probably be targeted at a vessel known to the Houthis (and their Iranian allies) operating in vicinity to Mocha or Hodeidha. That said, given that the targeting in the case of HSV-2 was by AIS / Radar, there is a risk of misidentification. There is also a risk that the weapon fails to lock onto the chosen target and is “seduced” onto another vessel close by.

MAST recommends that vessels transiting the southern Red Sea and BAM transmit on AIS and maintain a steady course that makes it clear they are a transiting vessel in the shipping lane. Routing should, so far as the traffic separation schemes allow, be on the SW side of the Red Sea as close to the coast of Eritrea as possible.

## Analysis of Video of the Incident and Subsequent Photographs

The video of the missile attack on the HSV-2 Swift is filmed in four sections. The first section is film of the vessel. It is filmed in day light and the camera motion suggests the camera was at sea. This could be library footage, but it is just as likely that it was recent video of the vessel operating off the coast of Yemen. The second section is video of a radar screen and is meant to illustrate the target



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indication and perhaps weapon allocation. The third section is filmed on land and is video of weapon launch. This could be the actual weapon that struck the vessel, or might be generic video of a missile firing. The fourth and last section is probably taken afloat and is of the weapon strike and subsequent battle damage.



*Image showing the impact damage of the missile on HSV -2's Starboard bow*



*Image showing the exit blast damage on HSV -2's Port bow*

While it is possible that not all sections of the video relate directly to the actual missile attack on 1 October, the composite result is a relatively well thought through piece of communications and PR propaganda. The final section is the most interesting. The vessel on fire in the video is similar to the HSV-2 in profile. If this is genuine video of the HSV-2 post strike, the Houthi rebels must have had a vessel positioned close to where they expected the HSV-2 to transit. This implies significant pre-planning and organization.

## Analysis of the Targeting process

It is likely that target identification was achieved by radar and AIS. The attack on HSV-2 was conducted from land and at night. In the dark visual identification was unlikely. It is possible that the boat in which the camera was sited may have gained a visual sighting and was able to confirm the identification of the vessel to the missile battery ashore. However, the limited horizon and difficulties associated with positioning a small boat to get a visual identification on a moving vessel in the dark make this extremely unlikely. The positioning of a camera to record the strike and battle damage suggests that the vessels routine was known and her position off Mocha predicted.

Although the Houthis have claimed the missile was a C-802 missile, it has also been reported from a reliable source that the missile fired at the HSV-2 was a Chinese manufactured C-704 surface to surface anti-ship missile. The C-704 missile is designed to target vessels of Patrol Boat to Frigate size between 1,000 and 4,000 tons at ranges of up to 35km.

If it was a C704 that was used against the HSV-2 (gross tonnage of 5,936) the choice of missile was a good one despite the vessel being slightly bigger than the optimum size for the missile. HSV-2 was aluminium hulled and soft skinned. The weapon would easily penetrate such a hull, and this seems to have been the case on 1 Oct.

There are also unsubstantiated reports that the attack was conducted from a small boat using a shoulder launched rocket. The damage sustained to the vessel is greater than would be expected from such an attack and so far, everything we have seen fits with the assessment that this was a surface to surface missile attack.

It should be noted that the C-704 is not optimized for targeting large commercial vessels. This attack was specifically directed against a military target with involvement in supplying the Pro-Hadi government war effort. The threat to transiting commercial vessels lies with miss-targeting and collateral damage. For this reason MAST currently advises vessels to route as far to the west of the TSS as is possible. Fox News has reported that 3 US naval warships are moving into the area to bolster regional security.

## Previous Incidents of Weapon Shipments in the Region

In 2011 it was reported that a shipment of six C-704 missiles (among other weaponry) were intercepted by Israeli forces while being smuggled to the Gaza Strip. Evidence pointed to Iran as the supplier (to view the report [click here](#)). The Houthi's are backed by Iran, and the 2011 event suggests it is credible that this C-704 missile may have been Iranian sponsored. Furthermore, several sizeable weapon seizures at sea bound for Yemen from Iran within the last year support the notion (to view report [click here](#)). If the C – 704 missile was supplied by the Iranians, it is possible that there are Iranian Revolutionary Guards on the ground directing operations.

Several past incidents within the Yemen civil war support the Houthi's ability to obtain high grade missiles and accurately launch attacks. In August 2015, the Houthi's claimed to destroy an Abrams M1 battle tank with an anti-tank missile, to view footage [click here](#). In October 2015, the Houthi's claimed to have attacked a Saudi warship with a missile attack in the Bab el Mendeb. To read the report [click here](#). At the time it was claimed to be the 3<sup>rd</sup> attack launched on UAE coalition naval vessels.



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