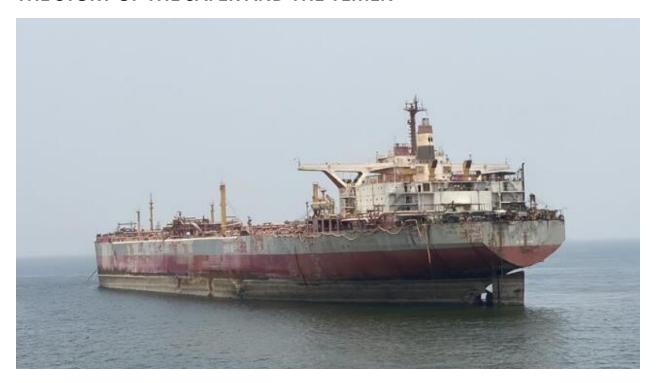
THE STORY OF THE SAFER AND THE YEMEN



Nearly six months ago, the Center for Collaborative Command and Leadership (CCCL) drew attention to the immense environmental dangers posed by the FSO (Floating Storage and Offloading vessel) Safer. Since 1988 this nearly 407.000 DWT Very Large Crude Oil Carrier (VLCC) has been moored to a CALM buoy located 5 miles off the Yemeni coast in the vicinity of Hudaydah. Underwater pipelines connect the buoy to the Ma'rib oil fields. Although nominally owned by the national Yemeni oil company, the rebel forces, who since 2018 control the coastline where the Safer is moored, became the de facto owners of the Safer. Yemen's civil war interrupted all maintenance activities aboard the FSO, and the ship's condition deteriorated rapidly from a modern offshore oil storage and shipment facility to that of a derelict hulk loaded with 1.2 million barrels of crude oil in danger of a catastrophic hull breach and/or explosion of the hydrocarbon vapors accumulated in the inner gas-unpurged tanks and sinking of the ship. Release of the oil stored aboard the Safer would result in a massive contamination of the Red Sea, and it is estimated that approximately 20 million people living in the region would be affected either directly or indirectly through habitat destruction, air pollution, and damage of Red Sea desalination plants causing extreme shortages of fresh water supply throughout the region. To prevent the catastrophe, transloading of the oil from the Safer to a new ship was necessary. Following protracted negotiations with Houthis, the United Nations supported by funds raised through international donations and crowdfunding (in which CCCL actively participated) acquired the relief VLCC, the Nautica which following a refit in China, arrived on station in July 2023. Performed by the Dutch company Smit-Boskalis, the transfer was completed in mid-August 2023 (Aug 11, 2023: UN plans for the FSO Safer) However, although the UN published a detailed trans-shipment protocol, subsequent communiques lacked precise information on the sequence of operations and details on the manner in which critical individual steps had been performed. We requested the UN to provide the needed clarification but never received a reply.



The Nautica, moored alongside the decaying FSO Safer, off Ras Isa, Yemen. Reuters (https://www.thenationalnews.com/mena/2023/08/09/fso-safer-saga-may-not-be-over-despite-oil-being-offloaded-experts-say/)

CURRENT STATE

The present hostilities in the Middle East critically affect the state of both the Safer and Yemen resulting, accordingly to a UN spokesperson, in "unforeseen operational and financial challenges". In translation, the crewing state of both ships remains unknown. Both require highly trained operators of their complex machinery, but, with the current dangers prevailing in the region, it is doubtful that such crew can be readily found, and the current condition of the Safer is entirely unknown. Of particular concern is the state of her pumping systems and tanks, and whether, in the absence of a technically competent tanker crew, monitoring of the derelict and hydrocarbon release is taking place following the departure of Smit-Boskalis personnel. If not, the danger of explosion aboard the Safer is imminent. With the distance separating the Safer from the Yemen of about 1000m, the risk for a complementary explosion aboard the Yemen is minimal, but a strike by a stray missile or drone is very significant. With well over 1 million barrels of oil on board, the consequent oil spill and fire would be more than catastrophic. The containment and fire fighting effort will be greatly compromised by the paucity of specialized equipment and trained fire-fighting crews, the latter present in limited numbers only aboard naval vessels present in the area; rapid expansion of the burning oil spill would be inevitable and magnify the already major dangers of navigating Bab-el-Mandeb strait.



The new FSO, the Yemen, poses her own challenges. When the UN acquired the Nautica from Euronay, the contract included a 6-month ship management agreement. That agreement is about to expire, and the material condition of the Yemen is unknown. During her conversion from a supertanker to an FSO, a Korean shipyard prepared the Safer for very harsh conditions around Ras Isa where the ship is moored. The nature of Nautica's refit is unknown (N AlTaher, Aug 9, 2023: FSO Safer saga not over despite oil being offloaded, experts say). Thus, considering the rapid deterioration of the Safer when proper maintenance of the ship ceased and only a skeleton crew remaining on board, the repeat of the "Safer Imbroglio" is more than likely. The potential for such an outcome has been amplified by a recent statement of the spokesperson for the UN's Development Program that "After much consideration, the UN had no option but to pause the project at this time" (France 24, Jan 23, 2024: Red Sea attacks latest threat to Yemen's decaying oil tanker). The UN gifted the Nautica to the People of Yemen but who represents the "people"? Houthis considered by the UN to constitute the de facto government of the country but a terrorist organization by the US, or the democratically elected and utterly defunct and powerless government of Yemen? Sitting in the midst of fiery conflict, with missiles and explosive drones flying around with an increasing frequency, mired in a legal quagmire, the rotting Safer, and the aboutto-start rotting Yemen add a nightmarish element of a massive humanitarian catastrophe to this already highly volatile part of the world.

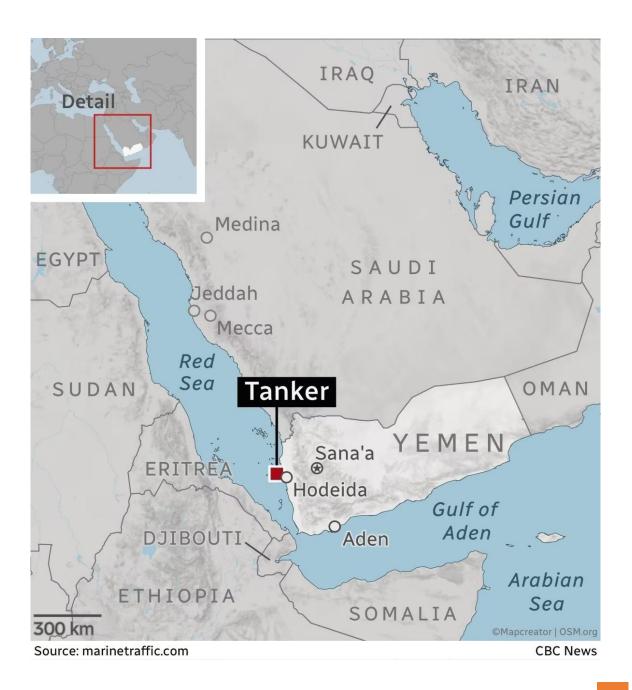
Yet another danger, seemingly totally unrecognized, is a possible "suicidal attack" at both FSOs: according to Bader al-Saif of the University of Kuwait "Houthis will use all cards at their disposal to tarnish this US-led coalition." (AFP, Jan 23, 2024: Red Sea attacks latest threat to Yemen's decaying oil tanker). Thus, purposeful targeting by the Houthis of the Safer, but particularly of the Yemen, the latter representing a far greater potential for causing an unprecedented environmental catastrophe, and then blaming the US and/or the Israelis as the "genocidally intended, criminally minded perpetrator of an

attack on purely civilian targets" represents a particularly chilling and not entirely dismissible possibility. The most perfidious outcome of such action would be the subsequent demand that the US bear the brunt of the subsequent recovery costs currently estimated at 20 billion USD.



WHAT NEXT?

The ownership status of both vessels and of the oil cargo aboard the Yemen must be unequivocally determined, the responsibility for crewing and maintenance contracted and transferred either to the owners or (preferably and for the duration of hostilities only) to an internationally recognized third party agency that is and will remain uninvolved in the current hostilities (UN?), and the ships must be removed from the danger zone with minimum delay.



Circulating water currents in the Red Sea and potential spread of oil from a spill in winter or summer.

