

Seized At Sea: Iranian Weapons Smuggled to the Houthis



Seized At Sea: Iranian Weapons Smuggled to the Houthis

This product provides a visual comparison of Iranian weapons and weapon components interdicted in transit to the Houthis in Yemen on 11 and 28 January 2024. Photographs of missiles displayed by the Iranians—as well as debris acquired from previous Houthi attacks, compared with those of the interdicted materiel—strongly indicate their Iranian origin. Between 2015 and 2024, the United States and its partners have interdicted at least 20 Iranian smuggling vessels, seizing ballistic, cruise, and surface-to-air (SAM) missile components, antitank guided missiles (ATGMs), unarmed aerial vehicles (UAVs), and thousands of assault rifles, rocket components, and other illicit weapons destined for the Houthis. The Houthis probably have used Iran-supplied weapons to conduct more than 100 attacks against land-based targets in Israel, Saudi Arabia, the United Arab Emirates, and Yemen and dozens of attacks targeting ships in the Red Sea and Gulf of Aden.¹²



For more information about the Defense Intelligence Agency and to view this report, visit DIA's website at www.dia.mil
For media and public inquires about this report, contact DIA Public Affairs at DIA-PAO@dodiis.mil
Information cutoff date: 30 April, 2024

Cover images: USCENTCOM Intercepts Iranian Weapons Shipment Intended for Houthis Image sources: USCENTCOM, Youtube, Tasnim News, Fars News, US Institute for Peace, The Drive DIA_F_255LQ_A

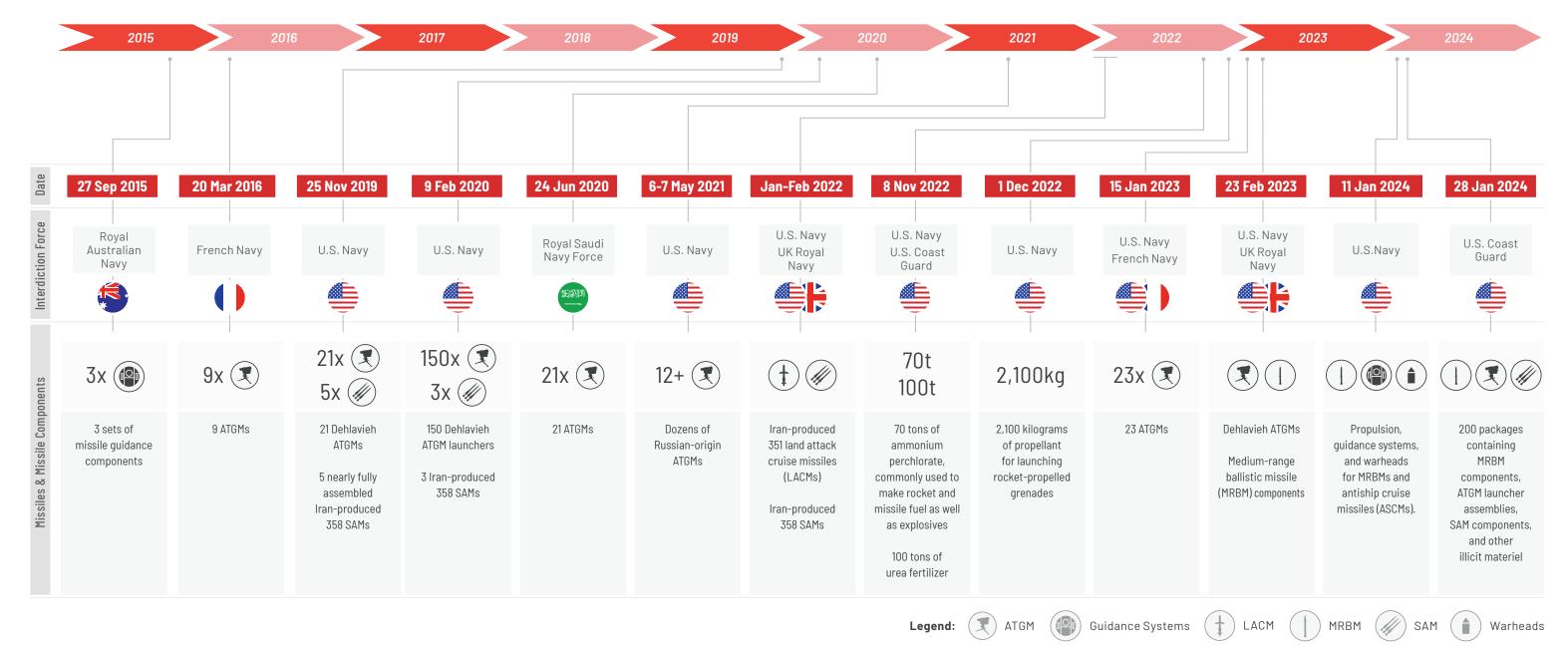
This report contains copyrighted material. Copying and disseminating the contents are prohibited without the permission of the copyright owners. Images and other previously published material featured or referenced in this publication are attributed to their source.



Iranian Smuggling Enables Houthi Attack Campaign

Since 2015, Iran's Islamic Revolutionary Guard Corps-Qods Force (IRGC-QF) has been smuggling weapons and weapon components to the Houthis, which has enabled the advancement of the Houthis' military capabilities.

As of 30 April 2024, the Houthis have used Iran-supplied ballistic and cruise missiles to conduct at least 100 attacks against land-based targets in Israel, Saudi Arabia, the United Arab Emirates, and Yemen and at least 56 attacks targeting ships in the Red Sea and Gulf of Aden. Between 2015 and 2024, the United States and its partners have interdicted at least 20 Iranian smuggling vessels, seizing ballistic, cruise, SAM missile components, ATGMs, UAVs, and thousands of assault rifles, rocket components, and other illicit weapons destined for the Houthis. This graphic is focused on Iran's provision of missiles and missile components to the Houthis because they represent the most technically sophisticated weapons Iran is providing the Houthis.





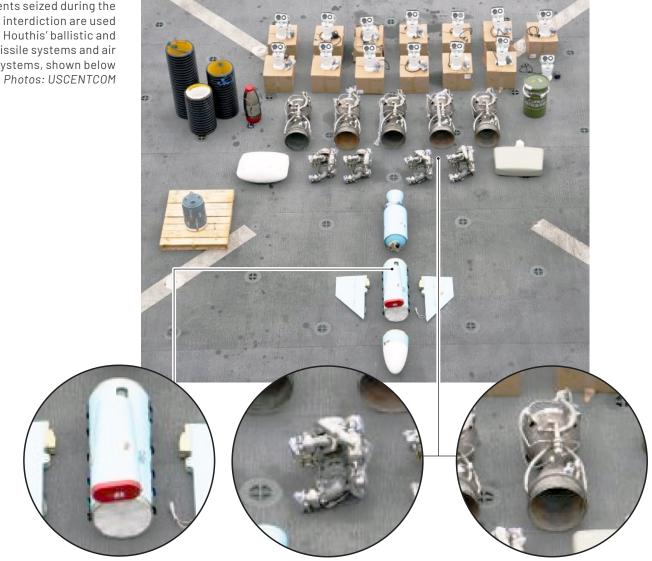
11 and 28 January Interdictions of Iranian Weapons

In January, U.S. forces conducted two operations to impede Iranian smuggling of lethal aid from Iran to the Houthis. On 11 January, the U.S. Navy conducted a nighttime raid of an Iranian dhow traveling near the coast of Somalia, resulting in the seizure of various components for ballistic and cruise missiles. On 28 January, a forward-deployed U.S. Coast Guard vessel interdicted a dhow operating in the Arabian Sea, again seizing components for Iranian-origin ballistic and antitank guided missiles. 19 20

11 January Interdiction

Components seized during the 11 January interdiction are used in the Houthis' ballistic and cruise missile systems and air defense systems, shown below

Antiship Cruise Missile Air-Intake



Ballistic Missile Engines

28 January Interdiction



Components seized during the 28 January interdiction are used in the Houthis ballistic missiles, antitank guided missiles, and other weapons systems Photos: USCENTCOM







Air Defense Navigation Systems



Iran and Houthi Antiship Cruise Missile Comparison

The interdicted materiel shares key identifiable features with Iranian antiship cruise missiles, including the stabilizer fin (1), rocket booster (2), air-intake cabin (3), and nose cone (4).

The Iranian Tolu-4 turbojet engine, used in the Noor ASCM, has unique features—including the **compressor stage (5)** and **stator (6)**— that are consistent with engine debris recovered from the 11 December 2023 Houthi attack on the M/T Strinda. 21 22 23 24

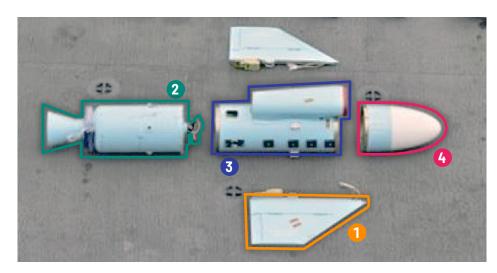
IRANIAN SYSTEM

Iran has developed the Noor family of antiship cruise missile *Photos: Tasnim News*



The Noor family of missiles uses the Tolu-4 engine, which Iran displayed at the International Air and Space Show in Russia in 2017 *Photos: Fars News*

INTERDICTED SYSTEM



Cruise missile parts interdicted on 11 Januarry en route from Iran to the Houthis match those of the Noor family of missiles

Photos: USCENTCOM

HOUTHI-LAUNCHED SYSTEM





On 11 December 2023 the Norwegian-flagged M/T Strinda (left) was attacked by a Houthi cruise missile (right)

Photos: Youtube





The turbojet engine debris recovered from the M/V Strinda are consistent with the Iranian Tolu-4 from the Noor ASCM Photos: USCENTCOM



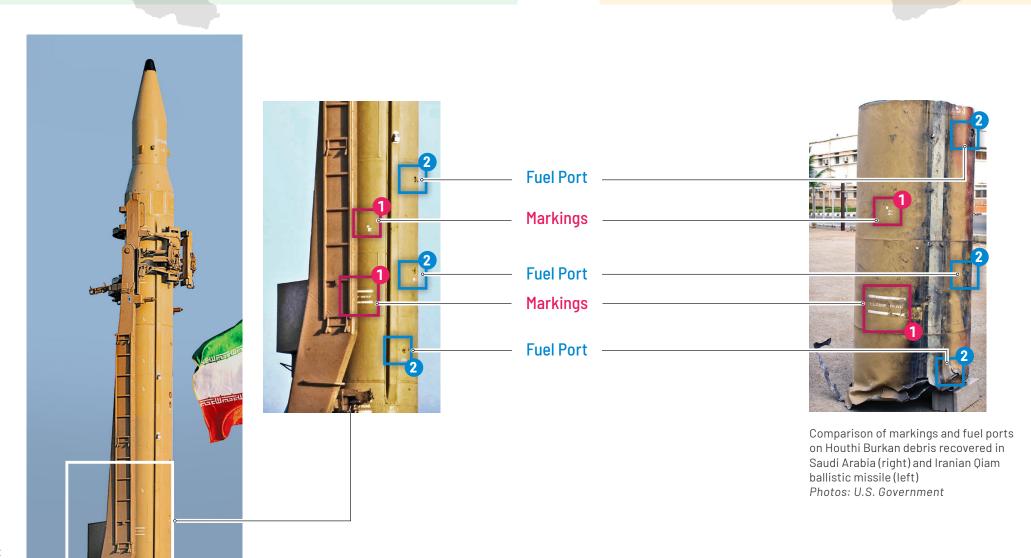
Qiam/Burkan Ballistic Missile Comparison

Since 2017, the Houthis have used Burkan missiles, the Houthi name for the Iranian Qiam. The Houthis have launched the Burkan-3 missile against several countries in the region.

Burkan debris recovered following a 2017 Houthi strike in Saudi Arabia features markings (1) and fuel ports (2) that are consistent with an Iranian Qiam variant. 25

IRANIAN SYSTEM

HOUTHI SYSTEM



An Iranian Qiam variant ballistic missile displayed in Iran, May 2011 Photos: Fars News



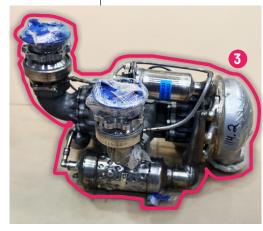
Qiam/Burkan-Ballistic Missile Engine Comparision

Iranian Qiam engines seized from an Iranian smuggler on 11 January near the coast of Somalia are consistent with Huthi Burkan-2H engines recovered from a 2017 Houthi attack in Saudi Arabia.

The combustion chamber (1), nozzle (2), and turbopumps (3) of the engines interdicted in January 2024 match the physical characteristics shown with the engine recovered in Saudi Arabia.

IRANIAN SYSTEM

Qiam engine from 11 January 2024 interdiction Photos: USCENTCOM & U.S. Government





HOUTHI SYSTEM



Burkan/Qiam engine debris recovered after a 4 November 2017 Houthi attack against King Khalid International Airport in Saudi Arabia Photos: DVIDS

358 (Saqr) Surface-to-Air Missile Comparison

The Houthis' Saqr surface-to-air missile (SAM) exhibits nearly identical features to a missile interdicted on a dhow headed to Yemen in 2020 as the Iranian 358 SAM displayed for Russian officials in Tehran in September 2023. The Saqr and 358 both have distinctive features, which include **front-mounted fins (1)** and **rear-mounted fins (2)** in an X-shaped orientation and the **engine (3)**.

The Houthis have used the Saqr to attack U.S. UAVs in Yemen. In addition to the Houthis, Iran proliferated the 358 to partners and proxies in Iraq and Lebanon. ²⁸

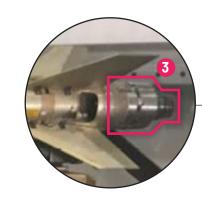
INTERDICTED SYSTEM

IRANIAN SYSTEM

An Iranian display of the 358 SAM to Russian officials in Tehran, September 2023 Photo: Reuters



An Iranian 358 missile interdicted from a dhow headed to Yemen, 2020 *Photos: U.S. Institute of Peace*



The engine of the 358 SAM interdicted en route to Yemen Photos: U.S. Institute of Peace

HOUTHI SYSTEM



The Houthis display the Saqr during a military parade in Sanaa, September 2023 *Photo: YouTube*



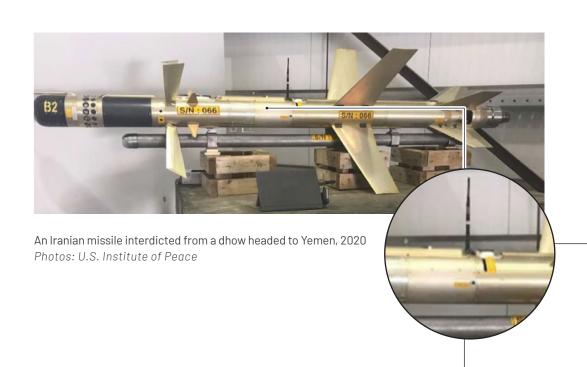
Photo: The Drive



Interdicted Components of the Iranian 358 Surface-to-Air Missile

A large number of inertial navigation systems and air data computers interdicted on January 2024 have the label 358 (1), which is associated with the Iranian 358 surface-to-air defense missile system. 29

INTERDICTED SYSTEM



Air data computers with Iranian labels interdicted on 28 January 2024 Photos: U.S. Government





Inertial navigation systems with Iranian labels interdicted on 28 January 2024 Photos: USCENTCOM

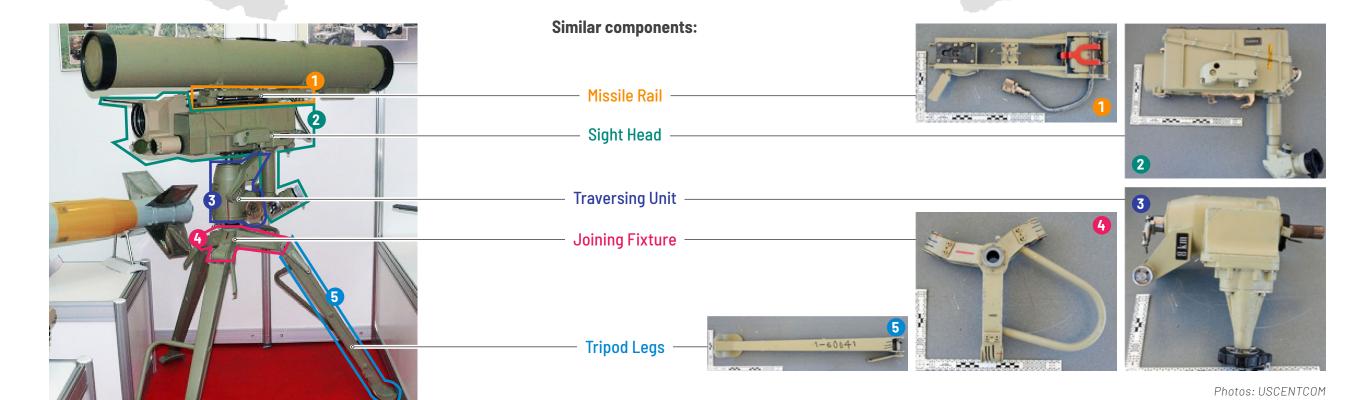




Dehlavieh Antitank Guided Missile Comparison

The Dehlavieh-2 is an Iranian-developed copy of the Russian Kornet-EM antitank guided missile (ATGM). The system has an extended range of 8 kilometers and an improved warhead capability. The interdiction on 28 January captured, for the first time, the Dehlavieh and Dehlavieh-2 launchers. The characteristics of these captured launchers—including the missile rail (1), sight head (2), traversing unit (3), joining fixture (4), and tripod legs (5)—are consistent with the Dehlavieh ATGM system displayed in Iran.

IRANIAN SYSTEM HOUTHI SYSTEM

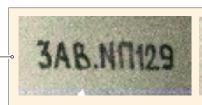


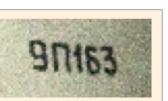
Photos: Mashreghnews.ir

English markings, commonly used by Iran on the Dehlavieh, interdicted being smuggled from Iran to Yemen Photos: USCENTCOM



The Iranian Dehlavieh has English markings compared to the Russian Kornet-EM, which has Cyrillic markings



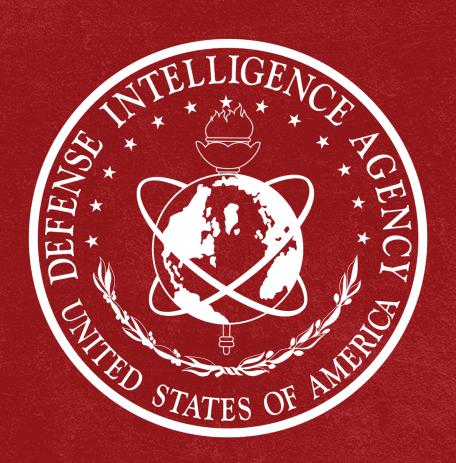


Cyrillic markings on Russian Kornet-E launcher Photos: U.S. Government

Sources

- 1 USCENTCOM; 15 FEB 24; CENTCOM INTERCEPTS IRANIAN WEAPONS SHIPMENT INTENDED FOR HOUTHIS; HTTPS:/WWW.CENTCOM.MIL/
- 2 WASHINGTON INSTITUTE; ACCESSED 18 APR 24; TRACKING MARITIME ATTACKS MIDDLE EAST 2019; HTTPS://WWW.WASHINGTONINSTITUTE. ORG/POLICY-ANALYSIS/TRACKING-MARITIME-ATTACKS-MIDDLE-EAST-2019
- 3 CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES; JUN 20; THE MISSILE WAR IN YEMEN.
- 4 WASHINGTON INSTITUTE; TRACKING MARITIME ATTACKS MIDDLE EAST 2019; HTTPS://WWW.WASHINGTONINSTITUTE.ORG/POLICY-ANALYSIS/TRACKING-MARITIME-ATTACKS-MIDDLE-EAST-2019
- 5 CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES; JUN 20; THE MISSILE WAR IN YEMEN.
- 6 USCENTCOM; 15 FEB 24; CENTCOM INTERCEPTS IRANIAN WEAPONS SHIPMENT INTENDED FOR HOUTHIS; HTTPS:/WWW.CENTCOM.MIL/
- 7 USCENTCOM; 16 JAN 24; USCENTCOM SEIZES IRANIAN ADVANCED CONVENTIONAL WEAPONS BOUND FOR HOUTHIS; HTTPS:/WWW.CENTCOM.MIL/
- 8 USCENTCOM; 06 SEP 18; JASON DUNHAM COUNTS 2,521 AK-47S; HTTPS://WWW.CUSNC.NAVY.MIL/MEDIA/NEWS/DISPLAY/ARTICLE/1621512
- 9 DOJ; 07 DEC 21; UNITED STATES PREVAILS IN ACTIONS TO SEIZE AND FORFEIT IRANIAN TERROR GROUP'S MISSILES AND PETROLEUM; HTTPS://WWW.JUSTICE.GOV/OPA/PR/UNITED-STATES-PREVAILS-ACTIONS-SEIZE-AND-FOREFIT-IRANIAN-TERROR-GROUPS-MISSILES-AND-PETROLEUM
- 10 NAVY.MIL; 08 MAY 21; USS MONTEREY SEIZES ILLICIT WEAPONS IN THE NORTH ARABIAN SEA; HTTPS://WWW.NAVY.MIL/PRESS-OFFICE/NEWS-STORIES/ARTICLE/2600834
- 11 NAVY.MIL; 07 JUL 22; NAVY DESTROYER SUPPORTS UK SEIZURE OF IRANIAN MISSILES IN GULF OF OMAN; HTTPS://NAVY.MIL/PRESS-OFFICE/NEWS-STORIES/ARTICLE/3085311
- 12 USCENTCOM; 15 NOV 22; U.S. NAVAL FORCES INTERCEPTED EXPLOSIVE MATERIAL BOUND FOR YEMEN; HTTPS://WWW.CUSNC.NAVY.MIL/MEDIA/NEWS/DISPLAY/ARTICLE/3218261
- 13 NAVY.MIL; 03 DEC 22; U.S. SEIZES 1.1 MILLION ROUNDS OF AMMUNITION, OTHER ILLEGAL WEAPONS IN GULF OF OMAN; HTTPS:/WWW.NAVY. MIL/PRESS-OFFICE/NEWS-STORIES-3235314
- 14 USCENTCOM; 01 FEB 23; U.S CENTRAL COMMAND SUPPORTS PARTNER FORCES IN MAJOR IRANIAN WEAPONS SEIZURE; HTTPS:/WWW.CENTCOM.MIL/
- 15 WALL STREET JOURNAL; 01 FEB 23; FRENCH FORCES SEIZE IRANIAN-SUPPLIED WEAPONS BOUND FOR YEMEN; HTTPS://WWW.WSJ.COM/ARTICLES/FRENCH-FORCES-SEIZE-IRANIAN-SUPPLIED-WEAPONS-BOUND-FOR-YEMEN-11675242819
- 16 DVIDS; 02 MAR 23; U.S. FORCES ASSIST UK SEIZURE OF MISSILES SHIPPED FROM IRAN; HTTPS:/WWWDVIDSHUB.NET/NEWS/439538/US-FORCES-ASSIST-UK-SEIZURE-MISSILES-SHIPPED-IRAN

- 17 USCENTCOM; 16 JAN 24; (U) USCENTCOM SEIZES IRANIAN ADVANCED CONVENTIONAL WEAPONS BOUND FOR HOUTHIS | CITED PORTION CLASSIFIED U | OVERALL DOCUMENT CLASSIFIED U | (U) OFFICIAL WEBSITE OF THE UNITED STATES GOVERNMENT, HTTPS://WWW.CENTCOM.MIL/
- 18 USCENTCOM; 15 FEB 24; CENTCOM INTERCEPTS IRANIAN WEAPONS SHIPMENT INTENDED FOR HOUTHIS; HTTPS:/WWW.CENTCOM.MIL/
- 19 USCENTCOM; 15 FEB 24; CENTCOM INTERCEPTS IRANIAN WEAPONS SHIPMENT INTENDED FOR HOUTHIS; HTTPS:/WWW.CENTCOM.MIL/
- 19 (U) CENTCOM | 20240116-01 | (U) USCENTCOM SEIZES IRANIAN ADVANCEDCONVENTIONAL WEAPONS BOUND FOR HOUTHIS | 16 JAN 24 | CITED PORTION CLASSIFIED U | 0 VERALL DOCUMENT CLASSIFIED U | (U) OFFICIAL WEBSITE OF THE UNITED STATES GOVERNMENT, HTTPS:/WWW.CENTCOM.MIL/
- 20 TASNIM; 19 JUNE 2018; TASNIM REPORTS ON THE ISLAMIC REPUBLIC OF IRAN'S 300-KILOMETER-RANGE GHADIR CRUISE MISSILE; HTTPS://WWW.TASNIMNEWS.COM/FA/NEWS/1397/03/21/1746519
- 21 (U) CENTCOM | 20240116-01 | (U) USCENTCOM SEIZES IRANIAN ADVANCED CONVENTIONAL WEAPONS BOUND FOR HOUTHIS | 16 JAN 24 | CITED PORTION CLASSIFIED U | OVERALL DOCUMENT CLASSIFIED U | (U) OFFICIAL WEBSITE OF THE UNITED STATES GOVERNMENT, HTTPS:/ WWW.CENTCOM.MIL/
- 22 IRAN DEFENSE MINISTRY; 17 AUGUST 2017; IRAN: DEFENSE MINISTRY, AEROSPACE COMPANIES PRESENT 'ACHIEVEMENTS' AT MAKS EXHIBITION IN RUSSIA; HTTP://WWW.FARSNEWS.COM
- 23 THE ROYAL UNITED SERVICES INSTITUTE FOR DEFENCE AND SECURITY STUDIES (RUSIA); 10 JAN 2024; SECURING THE RED SEA: HOW CAN HOUTHI MARITIME STRIKES BE COUNTERED?; HTTPS://WWW.RUSI.ORG/EXPLORE-OUR-RESEARCH/PUBLICATIONS/COMMENTARY/SECURING-RED-SEA-HOW-CAN-HOUTHI-MARITIME-STRIKES-BE-COUNTERED
- 24 THE INTERNATIONAL INSTITUTE FOR STRATEGIC STUDIES (IISS); 08 JAN 2024; HOUTHI ANTI-SHIP MISSILE SYSTEMS: GETTING BETTER ALL THE TIME; HTTPS://WWW.IISS.ORG/ONLINE-ANALYSIS/MILITARY-BALANCE/2024/01/HOUTHI-ANTI-SHIP-MISSILE-SYSTEMS-GETTING-BETTER-ALL-THE-TIME/
- 25 DIA; FEBRUARY 2024; IRAN ENABLING HOUTHI ATTACKS ACROSS THE MIDDLE EAST; HTTPS://WWW.DIA.MIL/NEWS-FEATURES/ARTICLES/ARTICLE-VIEW/ARTICLE/3662325/DIA-REPORT-CONFIRMS-THE-HOUTHIS-USE-OF-IRANIAN-MISSILES-AND-UNMANNED-AERIAL-VEH/
- 26 TWITTER; U.S. CENTRAL COMMAND SEIZES IRANIAN ADVANCED CONVENTIONAL WEAPONS BOUND FOR HOUTHIS; 11 JAN 2024.
- 27 (U) USG INSPECTION PHOTOS; 10 APR 2024; QIAM ENGINE AND TURBOPUMP EQUIPMENT ACQUIRED DURING JANUARY 2024 USG INTERDICTION, WITH PHOTOS TAKEN DURING USG INSPECTION.
- 28 DIA; FEBRUARY 2024; IRAN ENABLING HOUTHI ATTACKS ACROSS THE MIDDLE EAST; HTTPS://WWW.DIA.MIL/NEWS-FEATURES/ARTICLES/ARTICLE-VIEW/ARTICLE/3662325/DIA-REPORT-CONFIRMS-THE-HOUTHIS-USE-OF-IRANIAN-MISSILES-AND-UNMANNED-AERIAL-VEH/
- 29 USG INTERDICTION PHOTOS; U.S. CENTRAL COMMAND; 8 MAR 2024.



www.dia.mil