

Message for Industry: Global Positioning System (GPS) Interference 2017-2019

Maritime Administration (MARAD) Advisories: <https://www.maritime.dot.gov/msci-advisories>, MARAD Advisories are a streamlined interagency approach to communicate with United States (U.S.) maritime industry stakeholders regarding potential maritime security threats. This information is available for commercial industry use and may be relevant beyond the Maritime community. MARAD Advisories expire after 6 months. To be added to the email distribution list for U.S. Maritime Alerts and Advisories, e-mail a request to: MaradSecurity@dot.gov.

Reporting GPS Interference: The U.S. Coast Guard's Navigation Center (NAVCEN) looks into reports of GPS interference by civil, non-aviation GPS users and researches these reports and, if possible, determines the mostly likely cause. GPS disruptions or anomalies should be reported immediately to NAVCEN at <https://www.navcen.uscg.gov/?pageName=gpsUserInput> (bottom of the page) or via commercial phone at 703-313-5900. For aviation-related GPS issues (domestic or international), please use the following link to report directly to the FAA: http://www.faa.gov/air_traffic/nas/gps_reports/.

GPS Interference Reported to NAVCEN (civil, non-aviation GPS users): The bulk of reported GPS interference instances (37) were reported by vessels operating in the Mediterranean Sea, with a concentration in the vicinity of (IVO) Egypt (22). On 24 September 2019, MARAD issued an Advisory covering GPS interference in the Eastern/Central Mediterranean Sea and Suez Canal which will expire on 22 March 2020: <https://www.maritime.dot.gov/content/2019-013-easterncentral-mediterranean-sea-and-suez-canal-gps-interference>

In addition to the GPS interference in the Mediterranean Sea there were (2) in the Black Sea ((1) IVO Odessa, Ukraine, and (1) IVO Novorossiysk, Russia). Further, there was (1) IVO Hodeidah, Yemen, (1) IVO Strait of Hormuz, and (2) IVO Jeddah Port, Saudi Arabia which are also represented on the map.

Approximate locations are on the map below; instances where there are (1) or more report are represented by only (1) red dot on the map.



During the same period, there were (4) reported instances of GPS interference IVO Shanghai in Eastern China, (1) IVO Qingdao in Eastern China, and (1) IVO the Sea of Japan.

The chart below shows the reported instances in this report and the dates the incidences occurred.

Date of Disruption	Location	Date of Disruption	Location
09/08/2019	Shanghai, PRC	3/7/2019	Dongguan, China
09/02/2019	Shanghai, PRC	11/17/2018	Egypt, Straits of Tiran
09/02/2019	Shanghai, PRC	11/04/2018	Egypt
08/14/2019	Alexandria, Egypt	11/01/2018	Haifa Port, Israel
08/12/2019	El Shaikh Mobarak, Egypt	10/29/2018	Strait of Hormuz
08/06/2019	Mediterranean Sea, South of Sicily	10/13/2018	Jeddah Port, Saudi Arabia
08/01/2019	Mediterranean Sea, East of Malta	10/15/2018	Jeddah Port, Saudi Arabia
06/20/2019	Tripoli, Libya, Malta	10/01/2018	Port Said, Egypt
07/24/2019	Sabratha Oilfield - Offshore Libya	08/11/2018	50 miles from Qingdao, China
07/23/2019	Mediterranean	07/23/2018	Port Said, Egypt
07/16/2019	Shanghai, PRC	07/04/2018	Port Said, Egypt
07/10/2019	Port Said, Egypt	07/04/2018	Port Said, Egypt
07/03/2019	Libya	05/18/2018	100NM off Port Said, Egypt
06/26/2019	Port Said, Egypt	05/18/2018	35 NM North of Egyptian coast
06/20/2019	Sabratha Field - Offshore Libya	05/10/2018	Port Said, Egypt
06/12/2019	Ukraine, South of Odessa	04/18/2018	Eastern Mediterranean Sea
05/20/2019	Port Said, Egypt	04/16/2018	Port Said, Egypt
05/15/2019	Larnaca, Cyprus	03/22/2018	Mediterranean
5/12/2019	Port Said, Egypt	03/21/2018	Port Said, Egypt
05/06/2019	Port Said, Egypt	03/21/2018	Suez
04/27/2019	Damietta, Egypt	03/19/2018	Cyprus
04/25/2019	Port Said, Egypt	03/18/2018	Port Said, Egypt
03/19/2019	Pireaus, Greece	10/24/2017	Sea of Japan
02/09/2019	Hodeidah, Yemen	06/22/2017	Black Sea, Novorossiysk, Russia
11/18/2018	Hadera, Israel		

Authors: Commercial Industry Branch; 618-220-6816 or transcom.scott.tcj3.mbx.j38-comm-component@mail.mil

Dataset Note: The dataset used in this USTRANSCOM Message to Industry was sourced from <https://navcen.uscg.gov/?Do=GPSReportStatus>. It covers reported GPS Interference attributed to a variety of causes, to include equipment or mapping failures. USTRANSCOM converted these reports into an Excel spreadsheet (attached) before removing fields/data irrelevant to this message.