



# **IRIDIUM® GMDSS & IRIDIUM CERTUS®**

## **CHANGING THE FACE OF GLOBAL MARITIME COMMUNICATIONS**

KYLE HURST – DIRECTOR OF SAFETY SERVICES

DAN ROONEY – MARITIME DIRECTOR EMEA





# IRIDIUM SNAPSHOT

**1.33M**

Global  
Customers

**450+**

Technology  
Partners

Maritime



Land Mobile



Aero



IoT

As of the last reporting date (4/23/20)  
for the quarter ending 3/31/20

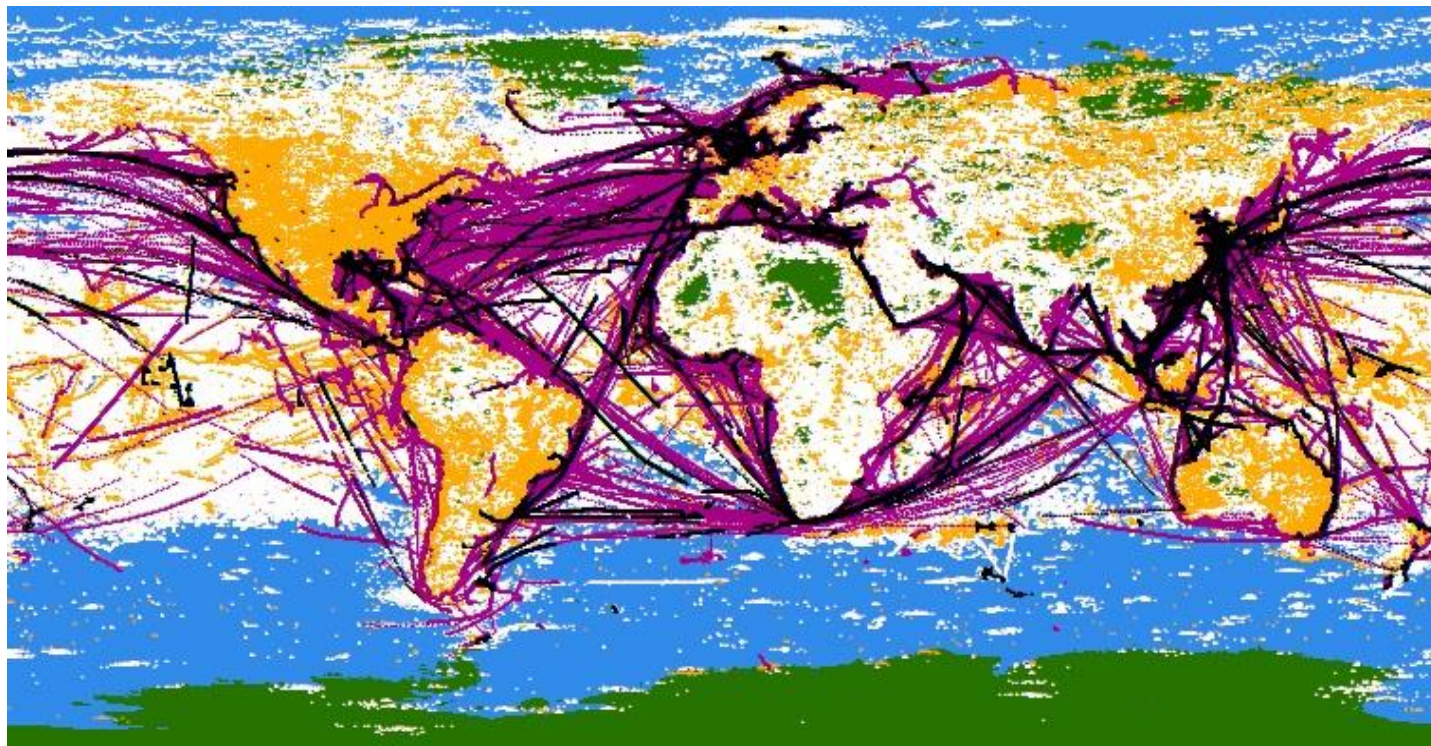
# THE IRIDIUM<sup>®</sup> NETWORK





- **66 Active Satellites**
  - 6 orbital planes with 11 satellites each
  - Plus 9 in-orbit spares
  - Plus 6 ground spares
- **Low-Earth Orbit (LEO)**
  - Enables reliable communications anywhere in the world, incl. the poles
  - Allows for power efficient, small form factor terminals & antennas
- **L-Band System**
  - Allows for transmissions even in adverse weather conditions
- **Satellite Crosslinks**
  - Creates low-latency, resilient, high-quality connections



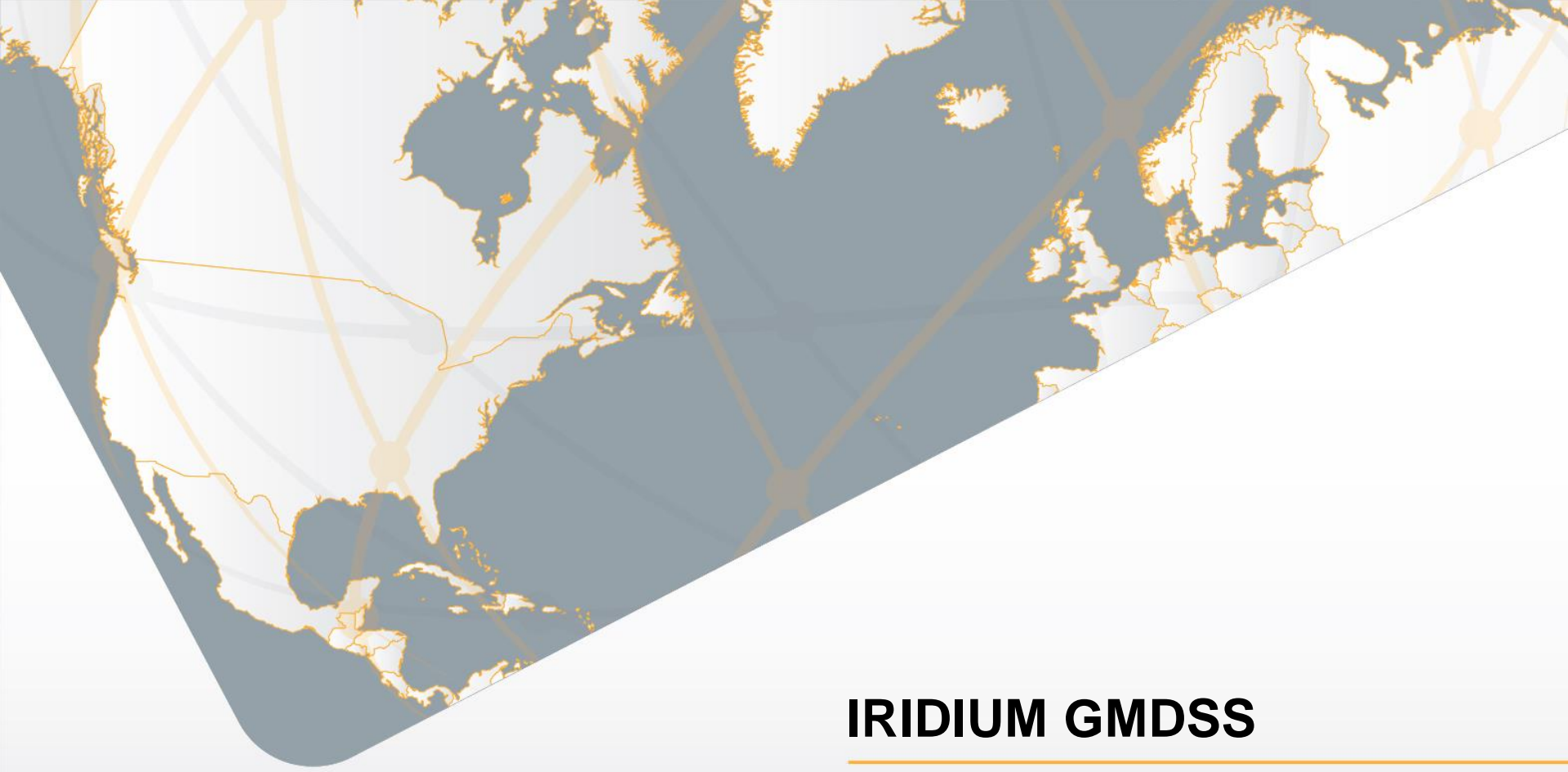


# 1.33 MILLION GLOBAL CUSTOMERS



-  Iridium Voice Call
-  SBD Data Transmission
-  Iridium OpenPort® High-Speed Data Traffic
-  Iridium Certus® Session

*Plot of Iridium Service Usage (Origination Points): April 19, 2020 – April 25, 2020*



# IRIDIUM GMDSS

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MAY 2018

# IMO RECOGNITION!

Making the **Global** Maritime Distress  
Safety System **truly Global**





# KEY SATELLITE GMDSS FUNCTIONS

## **Distress Alert**

ID, Status, &  
Position  
Sent to RCC

## **Distress Voice**

Direct call  
at highest priority  
to RCC

## **Maritime Safety Information (MSI)**

Navigational &  
Meteorological  
information  
broadcast

*Iridium SafetyCast<sup>SM</sup>*

## **Other Features**

Distress Alert Relay – Based on Area  
Shore-to-Ship Distress Calling – Two-Stage Calling  
Medical Assistance  
Medical Advice – Charged



# GMDSS TODAY

- Not truly Global
- 20-30 year-old technology (1991)
- Most vessels only use limited GMDSS Services:
  - Distress Alert
  - MSI
- RCCs cannot call an INM-C
- Very few vessels use Distress Voice
  - \$16,000
  - 1990s Tech non-IP
  - Closing 1 December 2020
- After 30 years it is time for change







# IRIDIUM GMDSS STRATEGY: THE THREE Cs

## Coverage

First and only truly global system – coverage over polar areas (Sea Area A4) not served today

## Capability

All functions (voice and data) in one terminal, more efficient gathering of information by RCC, SAR response can be initiated earlier, with more information

## Cost

~25% of the cost of current equipment supporting 3 GMDSS functions

**Iridium provides GMDSS Service Provider Diversity and Enhances Safety at Sea**

# LT-3100S GMDSS SYSTEM





# COMPETITIVE COMPARISON

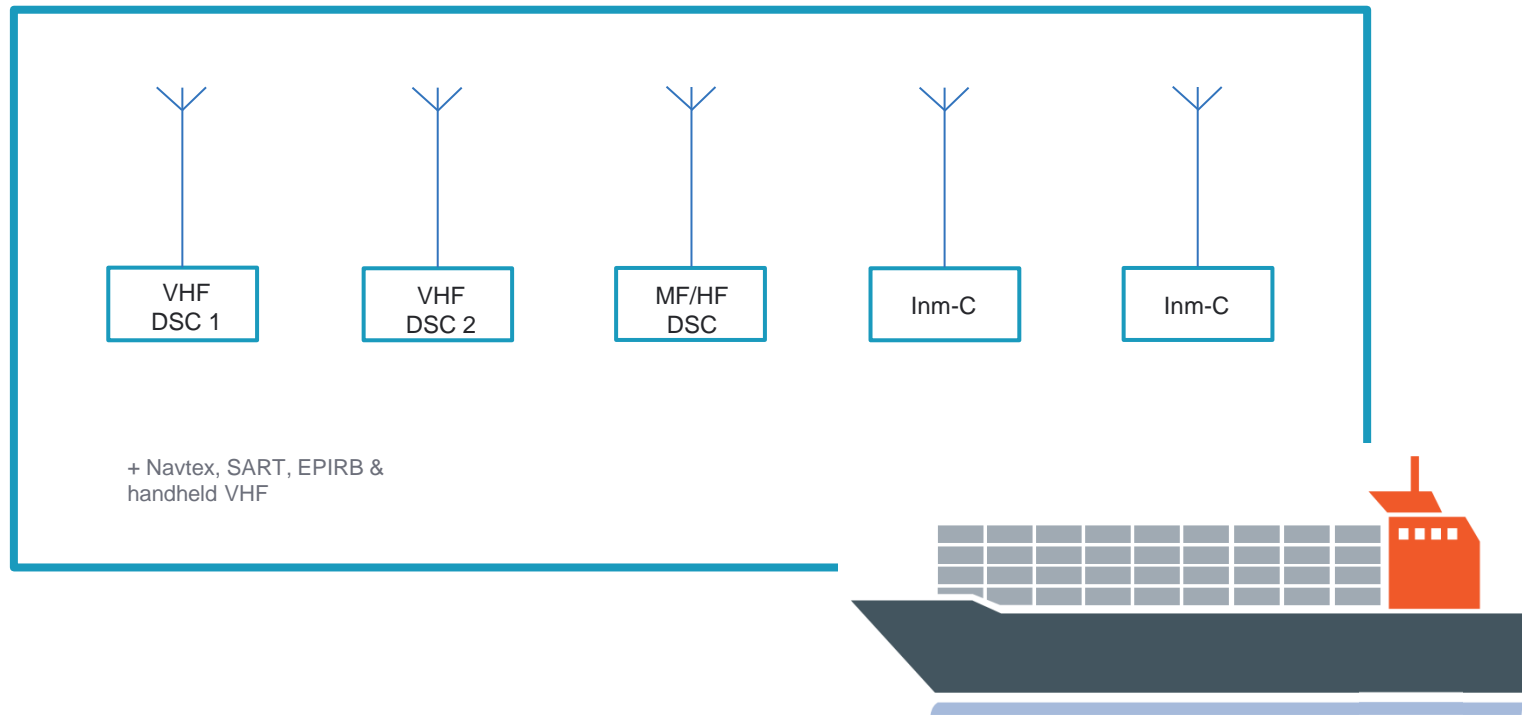
	Iridium GMDSS (LT-3100S)	Inmarsat C
<b>Coverage</b>	Truly Global	70° south to 70° north
Distress Alert + MSI	Yes	Yes
<b>Distress Voice</b>	Yes	No
LRIT + SSAS	Yes	Yes (but separate Terminal)
<b>Message Terminal</b>	Not required *	Required
<b>Printer</b>	Not required *	Required
Remote Distress Alarm Panel	Yes	Yes
Interface Unit	Yes	Yes
<b>Printer Adaptor</b>	Available	Not required

\* According to new IEC 61097-16 GMDSS standards by June 2019





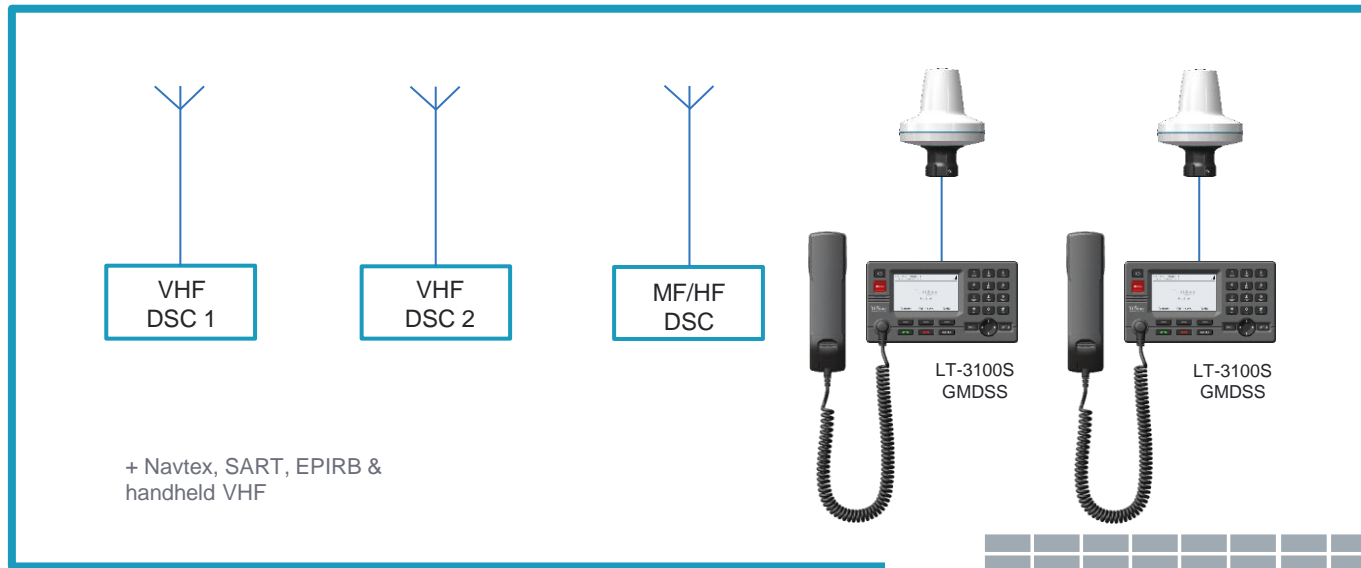
# TYPICAL A3 GMDSS SOLUTION





# NEW A3 IRIDIUM GMDSS SOLUTION

## CONFIGURATION EXAMPLE

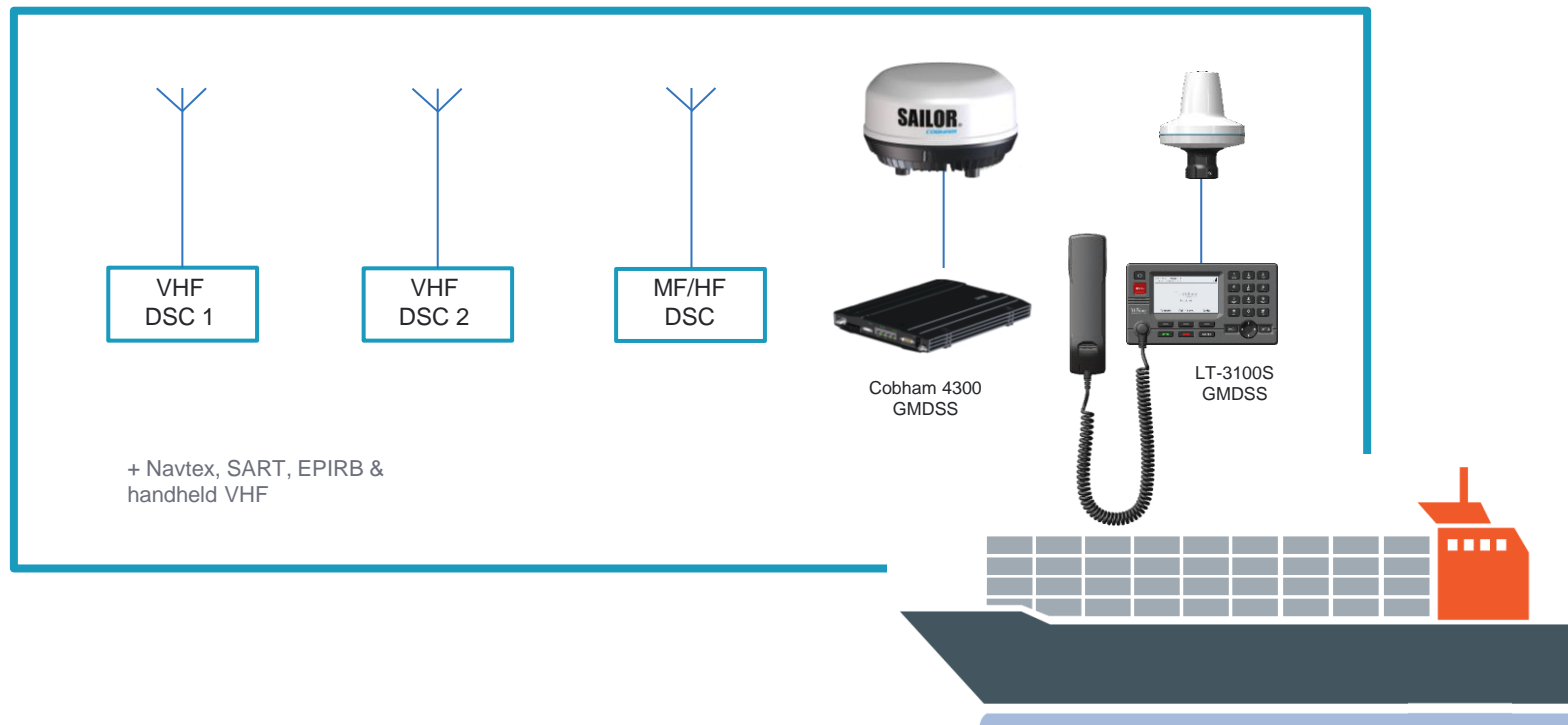


**Iridium provides choice to mariners, existing Inmarsat GMDSS systems can be displaced by Iridium GMDSS terminals!**



# NEW A3 IRIDIUM GMDSS SOLUTION

## CONFIGURATION EXAMPLE

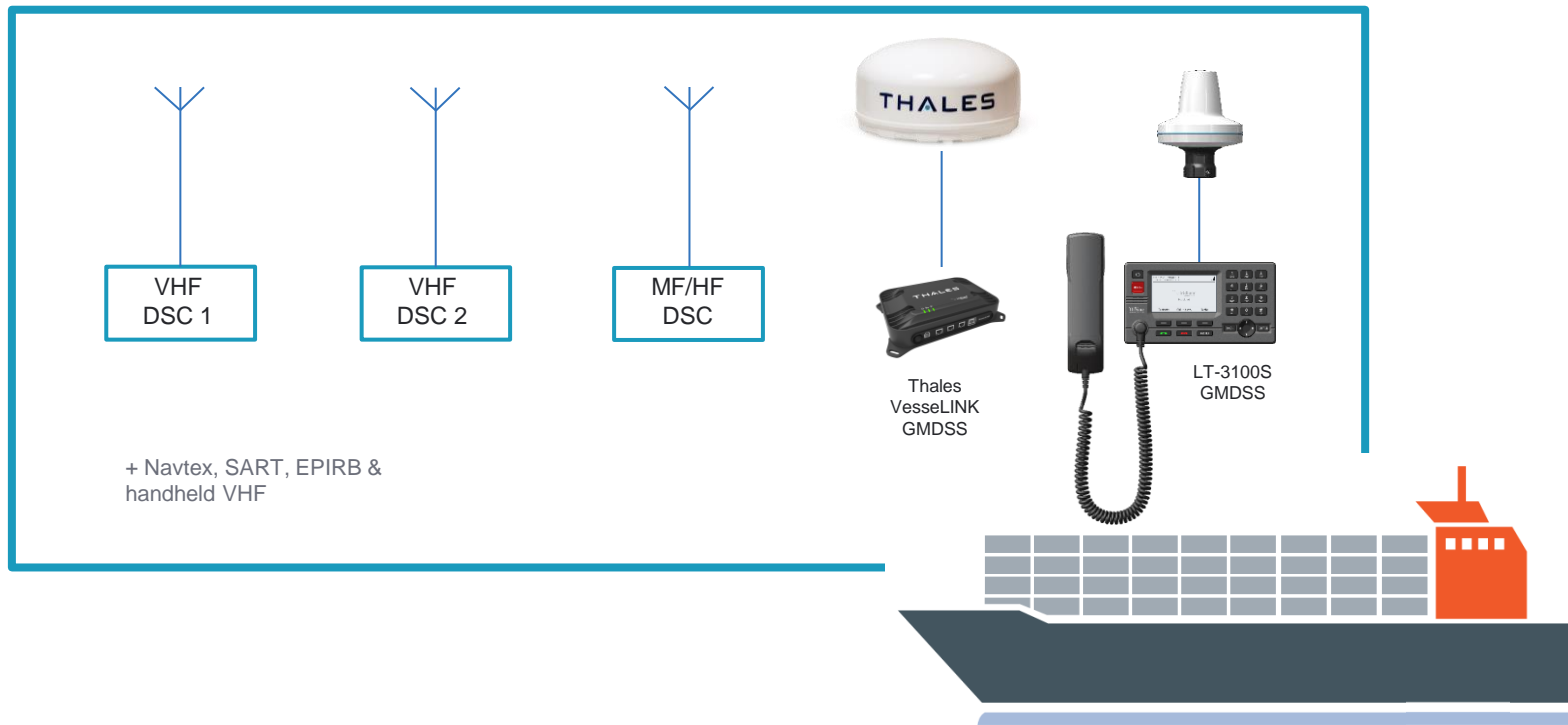






# NEW A3 IRIDIUM GMDSS SOLUTION

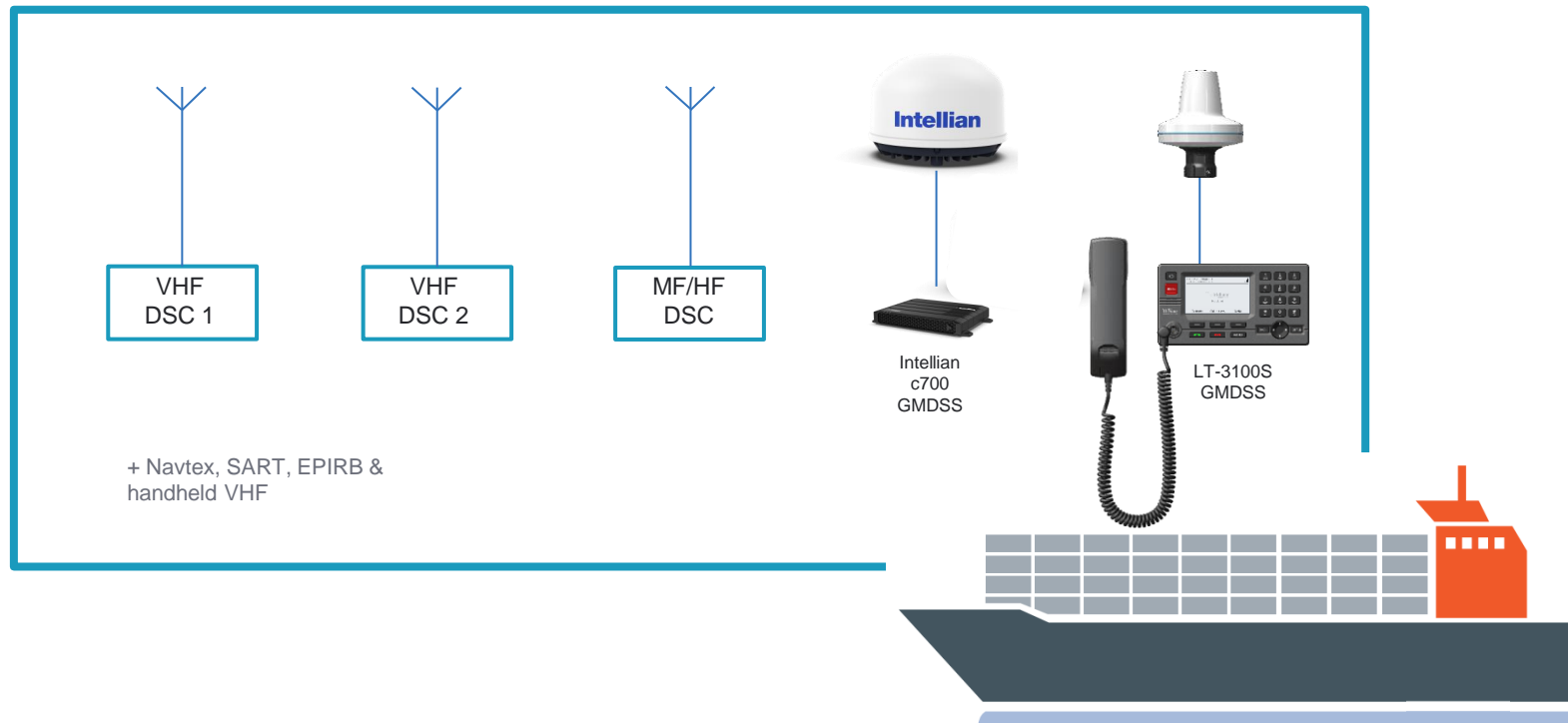
## CONFIGURATION EXAMPLE





# NEW A3 IRIDIUM GMDSS SOLUTION

## CONFIGURATION EXAMPLE



# IRIDIUM CONNECTED® GMDSS EQUIPMENT PLANNED



**Thrane**  
LARS  
communication systems

**LT-3100S**

**Q3, 2020**



**COBHAM**

**Intellian**

**THALES**

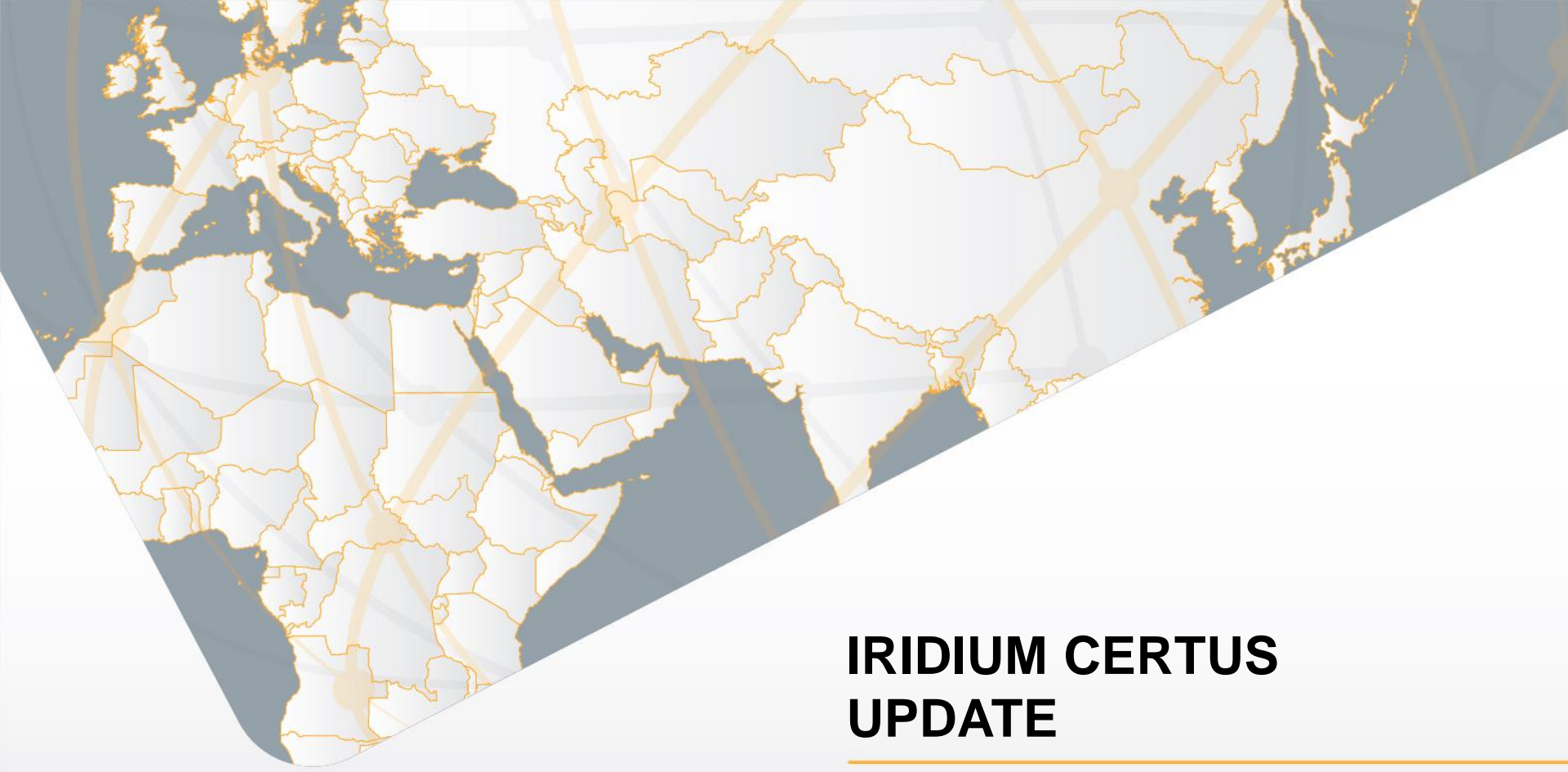
**Thrane**  
LARS  
communication systems

**IRIDIUM CERTUS**

**2021**

*Note: Iridium Certus GMDSS solutions are expected to become available following the initial Iridium GMDSS launch via below-deck hardware supplements.*





# IRIDIUM CERTUS UPDATE

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# IRIDIUM CERTUS - FULL STEAM AHEAD!



- ✓ Iridium Certus successfully introduced in 2019
- ✓ Rapid adoption by maritime subscriber base
- ✓ 3500+ maritime Iridium Certus terminals sold
- ✓ Iridium Certus 700 now live!





# IRIDIUM CERTUS 700 SERVICE



**'Primary' or 'VSAT Companion' use**



**Truly Global Coverage**



**Low Latency**



**All Weather Performance**



**High Quality Voice**

- ✓ Standard 3 HQ Voice lines
- ✓ Cellular smartphone-type voice quality
- ✓ Low latency for real-time connection



**Data**

- ✓ IP data – Up to 704 kbps  
Down < 704kbps  
Up < 352kbps\*\*



**Safety Services\* – GMDSS**



**IoT & Tracking Capabilities**

\* Expected GMDSS upgrade capability Q1 2021, \*\*Terminal dependent

# IRIDIUM CERTUS 350/700 HARDWARE



**Intellian  
C700\***



**Thales  
VesseLINK**



**Cobham  
SAILOR 4300**



**Robust**



**Powerful**



**Affordable**



**Safety**



**Easy install**



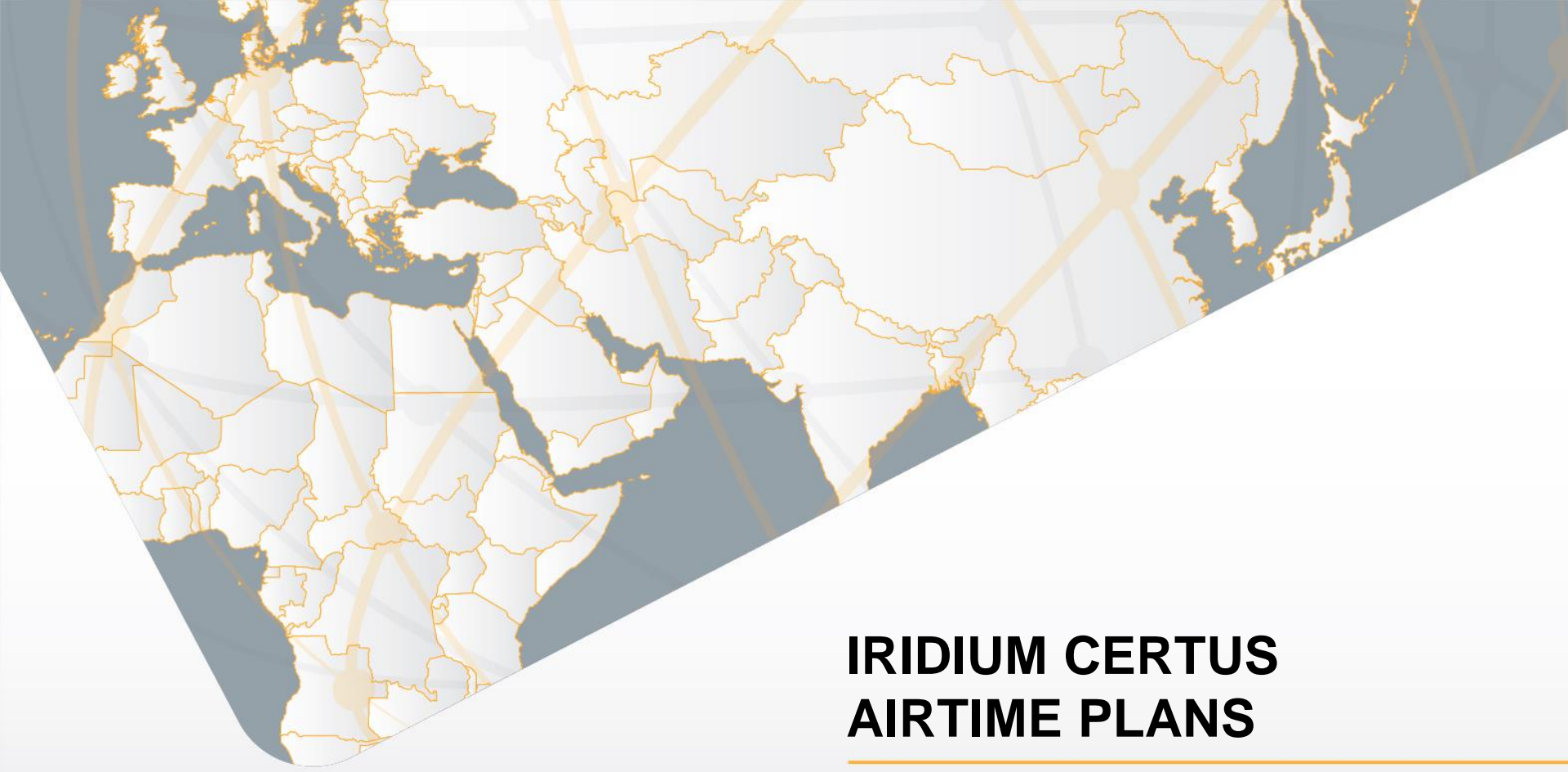
**Supported**

**Multi-Service Platform**



*\* Expected availability June 2020*





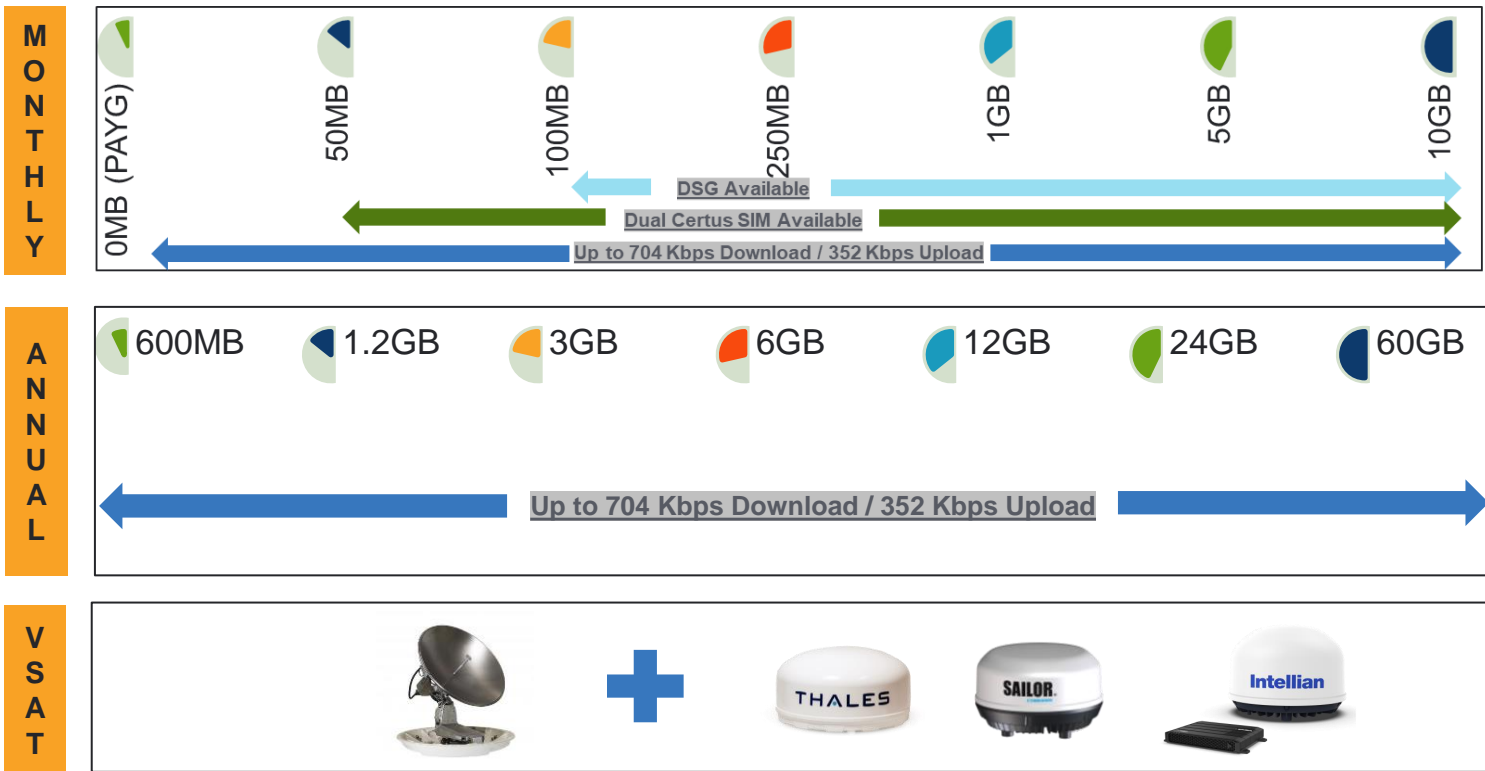
## **IRIDIUM CERTUS AIRTIME PLANS**

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# IRIDIUM CERTUS AIRTIME PLANS





SATCOM  
GLOBAL

## Exclusive Iridium Certus offers!

- Choice of airline package
- Iridium Certus terminal rental
- 12-month minimum term
- Faster speeds up to 704kbps
- Usage monitoring and alerts
- Truly global coverage

For a surprisingly low fixed monthly fee



## SWITCH AND SAVE!

SWITCH TO IRIIDIUM CERTUS 700® -THE FASTEST L-BAND SERVICE



### LIMITED TIME PROMOTION ONLY FROM AST\*

Switch your existing service plan to a 24 or 36 month Iridium Certus® plan and get a **FREE Iridium Certus® terminal** AND 6 months **FREE INTEGRA Control Lite** and **IRIS Tracking**

**PLUS, GET AN ADDITIONAL \$500 BONUS CREDIT ON A 36 MONTH PLAN**

iridium  
certus

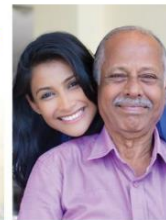
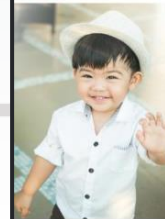
AST  
American Satellite Technology



## Q&A

## Double Data Promos

Call Home  
on Us.



### FREE CREW CALLING

Receive up to 500 minutes per vessel with Iridium Certus® or Iridium OpenPort® primary service plans.

Up to 100 consecutive minutes per call. See your Iridium Certus® or Iridium OpenPort® primary service plan for details. ©2019 Iridium LLC. All rights reserved.

IEC telecom

iridium



### SWITCH TO CERTUS!

Experience the fastest L-Band speed – now with a free terminal!





# IRIDIUM GMDSS A NEW AND BETTER CHOICE

- Iridium GMDSS brings more comprehensive solutions and improved coverage at a lower cost.
- Once launched, it will be possible to use “Iridium only” GMDSS equipment for SOLAS compliance.
- **Iridium GMDSS services introduction expected by Q3 2020.**



**Iridium for GMDSS**  
*You Deserve Real Choice*