

1776 K STREET NW
WASHINGTON, DC 20006
PHONE 202.719.7000
FAX 202.719.7049

7925 JONES BRANCH DRIVE McLEAN, VA 22102 PHONE 703.905.2800 FAX 703.905.2820

www.wilevrein.com

May 3, 2012

R. Michael Senkowski 202.719.7249 msenkowski@wileyrein.com

#### VIA ELECTRONIC FILING

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 Twelfth Street, S.W. Washington, D.C., 20554

**Re:** Ex Parte Notification

Application for Authority to Provide Aeronautical Mobile Satellite (Route) Service Over the IRIDIUM System, File Nos. SAT-MOD-19961204-00139, SAT-AMD-20050816-00160 and SAT-AMD-20051118-00236

Dear Ms. Dortch:

Yesterday, Donna Bethea Murphy, Vice President – Regulatory Engineering, Don Thoma, Executive Vice President – Marketing and Product Management, and Brian Pemberton, Director of Product Management, Aeronautical and Marine Products, of Iridium Communications, Inc. ("Iridium"), Thomas S. Tycz of Goldberg, Godles, Wiener & Wright, Don Jansky of Jansky-Barmat Telecommunications, and the undersigned of Wiley Rein LLP, on behalf of Iridium, met with Roderick Porter, Deputy Chief, Gardner Foster, Assistant Bureau Chief, Robert Nelson, Chief, Satellite Division, and Karl Kensinger Associate Division Chief, Satellite Division, of the International Bureau. The participants discussed Iridium's pending application for authority to provide Aeronautical Mobile-Satellite (Route) Service ("AMS(R)S") in the above-referenced dockets.

Consistent with the enclosed presentation and Iridium's prior advocacy in this proceeding, Iridium urged the Commission to expeditiously grant its pending AMS(R)S application. Grant of Iridium's application would serve the public interest by enhancing aviation safety and introducing competition to the provision of AMS(R)S. Indeed, on many flights that cross the Polar regions, Iridium's global mobile satellite system is the only communications system available. At this time, international standards are substantially complete and provide a basis for the Commission to proceed promptly with grant of Iridium's application.



Marlene H. Dortch May 3, 2012 Page 2

Sincerely,

/s/R. Michael Senkowski R. Michael Senkowski

Roderick Porter cc:

Gardner Foster Robert Nelson Karl Kensinger

Enclosures





Presentation to the FCC

May 3<sup>rd</sup>, 2012

Don Thoma don.thoma@Iridium.com +1-703-287-7422

RELIABLE · CRITICAL · LIFELINES

### Iridium Communications Overview

Iridium is a fast growing provider of mobile voice and data services via 66 in-orbit satellites to commercial and government

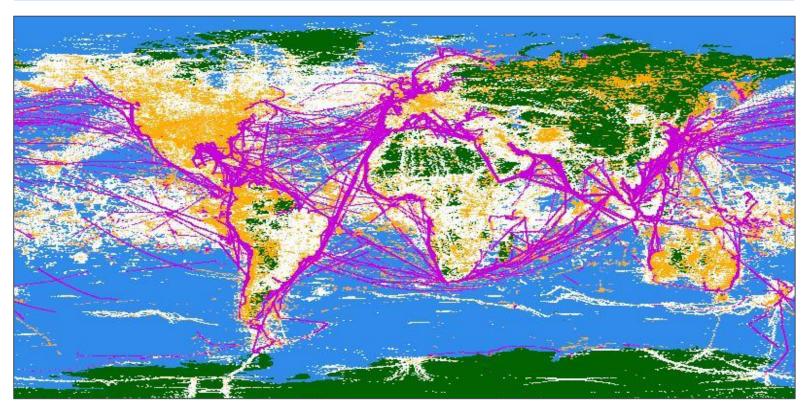
- Strong Customer Base Serves 523,000 subscribers across the land-based handset, maritime, aviation, machine-to-machine (M2M) and government markets (as of Dec 31, 2011)
- Anchor U.S. Government Customer 23% of revenue for the three-month period ending Dec 31th 2011
- Strong Cash Flow Full Year 2011 revenue of \$384 million and Operational EBITDA (OEBITDA) of \$190 million - and 2011 investor guidance of \$210 to 220 million OEBITDA
- Strong Growth 2007-2011 service revenue and OEBITDA CAGRs of 15% and 24%, respectively
- Next Generation Underway Comprehensive, fully financed
   \$3 billion plan to replenish the Iridium constellation
- Hosted Payload Opportunity Shares infrastructure of Iridium NEXT and the global networked communications architecture





# Network LEO Advantage Enables Global Usage

Iridium's network serves 100% of the globe, including coverage of oceans, poles and remote regions



M2M Data Transmission

Voice Call

High-Speed Data Traffic

Note: One week plot of customer origination points for the week of 2/13/11 to 2/19/11 (commercial traffic only)



### **Iridium Aviation Services**

- Iridium currently provides a portfolio of satellite communications services to the aviation industry
- Iridium services are used for both cockpit and cabin communications while in flight
- Iridium communications are used around the world on all types of aircraft
- Iridium boasts the largest installed base of satelliteequipped aircraft of any Satcom provider





### **Iridium Aviation Partners**

- Iridium has more than 20 aviation manufacturing and service partners
- Largest Satcom communications provider to the aviation industry
  - 30,000 devices installed on aircraft around the world
- More than 1,000 aircraft under contract to add Iridium communications capabilities



## AMS(R)S Overview



- International Civil Aviation Organization (ICAO) is responsible for developing the SARPS for AMS(R)S communications
- ICAO publishes the SARPS and provides guidance material to Civil Aviation Authorities for AMS(R)S implementation
- AMS(R)S establishes the communications requirements for aeronautical Satcom safety communications
- Aeronautical Satcom communications is the primary enabler for increased airspace capacity in oceanic regions for the next 20 years



# Process for Iridium AMS(R)S Authorization

Safety Services Authorization Checklist	Status
ICAO AMS(R)S SARPS and Guidance Material	√(Started 2005) (Published 2010)
Aircraft Installation Guidance - AEEC	✓
Communication Protocol Standards - AEEC	✓
Avionics Minimum Performance Standards - RTCA DO-262A	√ (Nov/08)
Network Minimum Performance Standards - RTCA DO-270	√ (Jan/09)
Avionics Technical Specification - TSO-C159A	√ (Jun/10)
FANS over Iridium Operational Evaluation	√ (Sep/10)
FANS over Iridium Authorization	<b>√</b> (Jun/11)
Revised FAA Advisory Circular (AC20-150A)	<b>√</b> (Jul/11)



# Iridium FAA AMS(R)S Authorization

- June 2011, the FAA issued a letter to industry informing aircraft operators that they will permit the use of FANS over Iridium (FOI) in U.S. airspace
- The FAA is coordinating with ANSPs from around the globe facilitate global adoption of FO
- ANSPs in the North Atlantic (NAT) and Pacific have also recognized/authorized FOI use in their airspace



U.S. Department of Transportation Federal Aviation

JUN 2 7 2011

Mr. Dave Nakamura
The Boeing Company
CNS Technical Standards and Requirements
P.O. Box 3707, MS 07-25
Seattle. WA 98124

Dear Mr. Nakamura:

Thank you for the Performance-Based Aviation Rulemaking Committee (PARC) recommendations on future air navigation system (FANS 1/A) over Iridium (FOI) operations and the performance-based concept for communications and surveillance. I commend the PARC Communications Working Group (CWG) for a very comprehensive and credible report and have coordinated my response with Air Traffic Organization (ATO). We agree with these recommendations and will work with PARC toward implementation.

I am pleased with PARC's progress in working with the international community to harmonize data link operations, procedures, and International Civil Aviation Organization (ICAO) standards, as demonstrated by the Global Operational Data Link Document (GOLD), issued in June 2010. The Federal Aviation Administration (FAA) accepted the GOLD for coordinating global guidance material for data link implementation and operations in its oceanic airspace and in the National Airspace System (NAS). The FAA already refers to the GOLD in Advisory Circular (AC) 20-140A, Guidelines for Design Approval of Aircraft Data Link Communication Systems Supporting Air Traffic Services (ATS) and AC 120-70B, Operational Authorization Process for Use of Data Link Communication System, issued April and August 2010, respectively.

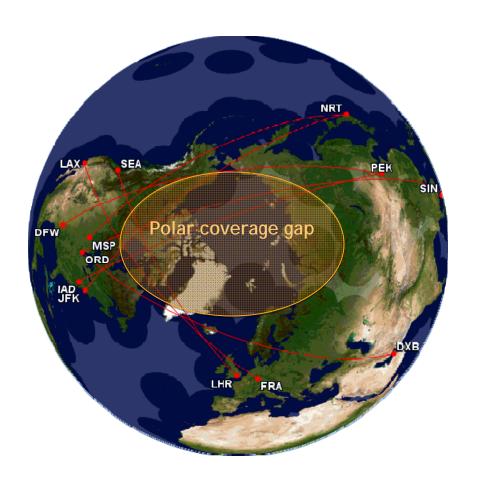
With proven benefits in operational efficiency, environmental impact, and safety, the FAA has identified FANS 1/A as an enabler for NextGen. It is already an important component in FAA programs such as the Asia and South Pacific initiative to reduce emissions (ASPIRE) and the Atlantic interoperability initiative to reduce emissions (AIRE). The FAA is also planning to support FANS 1/A+ in its domestic data communications program. The FAA agrees FOI will promote FANS 1/A expansion, and accepts FOI as a viable means for air traffic service (ATS) communications, particularly in accordance with performance specifications for reduced oceanic separations based on automatic dependent surveillance—contract (ADS-C).

FAA aircraft certification and flight standards offices will continue to certify aircraft with FOI installations and issue operational authorizations for data link operations per existing policies and guidance material. The FAA Technical Center will continue to monitor data link operations per the GOLD and the Flight Standards Service will establish a system with



### **Polar Route Communications**

- As newer aircraft enable longer routes more and more Polar routes are being used
- HF communications in artic regions have been shown to be heavily impacted by solar radiation
- Iridium is the only reliable means of communications for aircraft operating in Polar regions
- June 2011, the FAA recommended to the ICAO Cross-Polar working Group to remove any restrictions on Iridium AMS(R)S operation





### Airline Benefits of Iridium AMS(R)S Authorization

- Iridium is the only provider of polar communications increasing the safety of the increasing use of polar routes by commercial airlines
  - Allows for more direct cross-Polar routes saving airlines Millions in costs
- Provides a competitive alternative for airlines and aircraft manufacturers
  - The first approved alternative to Inmarsat's 20 year monopoly
- Reduces equipage cost for Satcom communications by more than 50%
  - Iridium-based avionics are by far the lowest cost option for Satcom communications to airlines around the world
- Reduces airline operational cost for Satcom communications
  - Iridium Satcom solutions save airlines Millions annually in fuel and operational costs versus alternative Satcom systems



# Airlines Using Iridium

- Several airlines have elected to outfit their fleet with Iridium for AMS(R)S communications
- More than 30 airlines worldwide have committed to adding to their fleet
- Five of the Top 10 airlines in the world are using Iridium
  - At least two more are expected to add Iridium to their fleet by 2015
- Adoption of Iridium by global airlines has been accelerating as a result of FAA authorization







### Iridium Services are Critical to Aviation

- Iridium has been providing communications services for over 12 years and has 30,000 devices installed on aircraft around the world
- Iridium has successfully completed the rigorous aviation certification process with ICAO and the FAA to provide critical flight safety services
- Iridium is the only provider of polar communications increasing the safety of the increasing use of polar routes by commercial airlines
- Significant investments have already been made by leading airlines to equip with Iridium aviation safety services
- The service is ready to be turned on today by commercial airlines.
   Without it there are gaps in safety communications

