During flight, secure and reliable communications are essential, yet have not always been available or affordable for commercial helicopters and light aircraft. As a result, real-time flight following, point-to-point or multicast voice communication, and equipment health and usage monitoring systems (HUMS) are nonexistent.

**Reliable and affordable satellite connectivity**

The Viasat L-band Managed Service meets the need for secure, reliable, and affordable data and voice connectivity during all phases of flight. The service uses the Viasat aviation terminal 2220 (AT2220) offering the highest data rates among satellite terminals of its size. Wired and wireless terminal interfaces integrate your equipment and IP-based data and voice applications. Service advantages:

- Frequent GPS position reports while receiving weather updates and exchanging voice communications
- Transmission of HUMS data during flight to the maintenance center for real-time equipment monitoring
- Access to flight support websites using personal mobile devices
- Enables applications to extend smartphone voice, SMS, and email services through the satellite network
- Mission-critical, push-to-talk call groups for emergency response or business agility

### Two-way secure networking for helicopter and light aircraft

The Aviation Terminal 2220 is one of the smallest and lightest full-duplex aviation terminals on the market. The single line replaceable unit combines an antenna, RF front-end, and modem into one assembly. This makes installation easy, eliminating expensive RF cables, and reducing installation time and complexity.

In order to provide the most affordable communications, the terminal relies on remarkably efficient bandwidth usage, low-latency IP networking and optimized power consumption. In addition, the terminal includes embedded, beyond-line-of-sight voice connectivity for communications between the aircraft and end users through point-to-point or push-to-talk call groups.

Equipped with a dual channel receiver, Wi-Fi/Bluetooth, GPS, Automated Position Reporting/Automated Vehicle Location, and AES-256 data link encryption, the feature-rich Viasat 2220 terminal supports your secured communication needs.
Environmental (continued)

**Designed to RTCA/DO-160G**

- **Temperature**: Category F2
- **Humidity**: Category C
- **Vibration**: Category S and U2
- **Explosive atmosphere**: Category E
- **Waterproofness**: Category S
- **Fluid susceptibility**: Category F
- **Power input**: Category B
- **Voltage spike**: Category A
- **Radio frequency susceptibility**: Category T
- **Radio frequency emission**: Category H
- **Audio frequency conducted susceptibility**: Category B
- **Induced signal susceptibility**: Category AC

**Specifications**

- **Antenna polarization**: RHCP & LHCP, software configurable
- **Receiver Capability**: Can receive two independent channels simultaneously
- **Frequency band**:
  - TX: 1626.5 to 1675.0 MHz
  - RX: 1518.0 to 1559.0 MHz
- **Transmission security link encryption**: AES-256
- **GNSS**: GPS or GLONASS

**External Interfaces**

- **Power**: 10 to 32 VDC, via multi-pin connector
- **Wi-Fi**: IEEE 802.11 B/G, 2.4 GHz
- **Ethernet**: Via multi-pin connector
- **GNSS**: L1 frequency

**Mechanical**

- **Size (L x W x H)**: 225 x 146 x 53 mm
- **Weight**: 2 kg

**Environmental**

- **Operating temperature**: -55°C to +71°C
- **Operating altitude**: Up to +55,000 ft
- **Humidity**: Up to 95% at +55°C
- **Waterproofness**: IP 66 wet service operation
- **Sand and dust**: Sand and dust proof at +55°C and ambient
- **Fluid susceptibility**: Continuous spray of de-icing fluid
- **Salt fog**: 48-hour continuous exposure
- **Operational shock and crash safety**: 18 shocks of 6g at 11±1ms each

**Regulatory Approvals**

- **FCC**: Title 47 Section 15, Title 47 Section 25
- **RCM**: AS/NZS CISPR 22:2009
- **WEEE**: Per European Union Council Directive 2012/19/EU