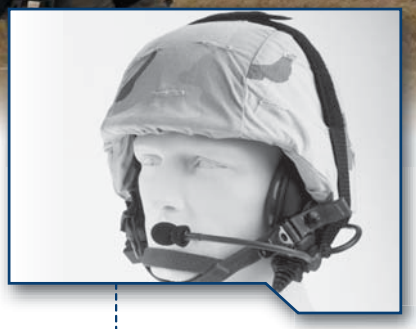
Flightcell®

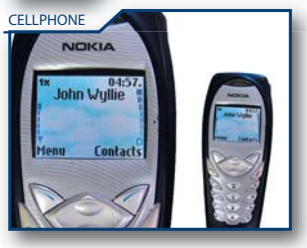
CONNECT | COMMUNICATE



TACTICAL RADIO

IRIDIUM SATELLITE PHONE

CELLPHONE



LAPTOP / MUSIC PLAYER

Flightcell® Pro™

Customized multi-link communications hub

CUSTOM BUILD | MILITARY

Flightcell®

CONNECT | COMMUNICATE

CUSTOM BUILD | MILITARY

Connect and communicate with Flightcell® Pro

Modern military operations require the use of a range of communications equipment, whether in aircraft, vehicles or on foot.

Growing demand for secure point-to-point communication is leading to increased use of satellite and cellular links, but inbuilt phone systems are expensive to install, less secure and require certification.

Hand-held phones and portable radios provide personal communication and portability, but can't be used in aircraft or tactical vehicles because of high ambient noise levels. Hand-held phones and radios are also inconvenient to use when the hands are required for other tasks.

Flightcell Pro provides the leap forward in communications integration by simultaneously connecting one or more complementary communications options into a military headset whilst remaining connected to the aircraft or vehicle interphone (ICS) and radios:

- Cellphones, for deep penetration calls in densly inhabited areas
- Iridium satellite phones, for fully global communication at any altitude, anywhere
- Military tactical radios for close contact group operations.

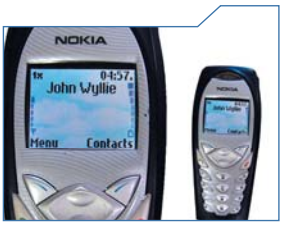
Flightcell Pro provides high-quality audio in high-noise environments, enabling hand-held phones and radios to be operated where in the past they were unusable.

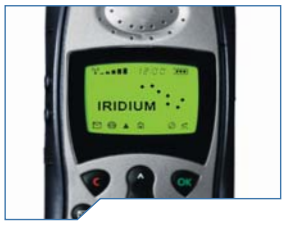
Flightcell Pro enables portable phones and radios to be used through a headset, leaving the hands free for other tasks.

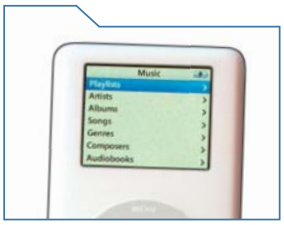
Because Flightcell Pro is portable and battery powered, it enables rapid and very cost effective deployment of a portable phone or radio in an aircraft or military vehicle.

Functions

- Master volume control adjusts all inputs and outputs simultaneously
- Individual inputs and outputs can be adjusted to optimize audio levels
- Isolate function allows phone and radio to be isolated while user is talking on ICS
- Optional cable allows second user full access to connected communications or other audio devices
- Optional injector cable allows incoming phone or radio audio to be provided to all crew via ICS, or to a second headset
- Flightcell also doubles as a portable, dual VOX two-place intercom, and supports the connection of a second headset via an optional cable.







Interfaced devices

Flightcell Pro can be used to interface virtually any communications or audio device:

- Satellite phones – Flightcell is optimized for the Iridium 9505
- Cellphones
- Hand-held radios, including tactical radios
- Audio recorders and cameras
- Other audio sources - for example an iPod/CD/MP3 player, laptop computer or specialised audio monitoring equipment.

Flightcell Pro can be used as a portable, dual VOX two-place intercom in aircraft without radios.

Secure Communication

The Iridium 9505 satellite phone, used with the encryption module, provides secure global communications to Tempest (TS) level. Flightcell Pro now enables the benefits of this secure link to be extended to operational aircraft and other military vehicles.

Power Options

Flightcell Pro can be powered by an internal rechargeable battery with up to 40 hours operation - or operate and/or recharge battery from aircraft DC power supply:

- 110V or 220V AC (with supplied power adaptor)
- 9-32V DC from vehicle or aircraft power
- LC Display indicates battery status, volumes, menu settings and connection states.

Flightcell® Pro provides a high-quality multi-link communications hub for high-noise environments, enabling hand-held phones and radios to be operated where in the past they were unusable.

Flightcell® Pro™

See back of brochure for full specifications.

Customised solutions to meet your specific operational requirements

Specialising in custom solutions designed to meet the specific needs of the military customer, Flightcell® can develop a custom multi-link communications hub to interface your preferred communication devices and to suit your physical environment.

Flightcell can provide or custom build a range of devices to simultaneously interface one or more communications options, such as satellite phones, cellphones and tactical radios:

Flightcell Pro panel mounted

- Flightcell Pro®: The production model is a fully portable, battery powered hub which can be used with one or two headsets. Flightcell Pro can be used stand-alone or in conjunction with an existing intercom
- Installed hubs connected to an existing intercom. Users connected to Flightcell Pro can use the phone or radio as well as the intercom
- Fully integrated hubs, which enable the phone or radio to be used from all ICS stations
- Multi-position installed or portable hubs suitable for aircraft or vehicles without an intercom. This provides access to phone and radio by all connected users, plus full voice-activated intercom functionality.

Global asset tracking

Custom Flightcell® models can be fitted with a GPS tracking module, which uses the Iridium SMS system to provide fully global asset tracking. Position data can be transmitted to base or to other operating aircraft or vehicles at preset intervals or on demand, even when the phone is being used for voice calls.

Position data can be viewed using Flightcell® software, or your existing situational awareness package.

Potential applications

Flightcell's communications hubs provide greatly improved military communications. Applications include:

In the air

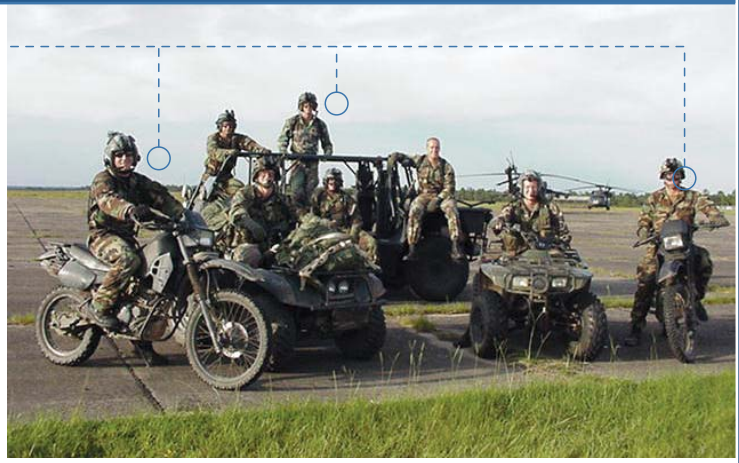
- Retrofit satellite communications to existing aircraft – Flightcell Pro provides a cost effective way to fit secure satcoms
- Support Below Line of Sight operations – coupled with an Iridium satellite phone, Flightcell Pro can provide direct air-to-base communications and aircraft tracking without the need for additional ground stations or relay aircraft
- Improve rescue and medical evacuation outcomes – paramedics and aircrew can communicate directly with evacuation site and call ahead for specialist assistance

On the water

- Provide enhanced communications for special boat teams and interdiction operations
- Enable clear communications on noisy high speed landing craft and AAVs

On the ground

- Provide hands-free communications in noisy combat and transport vehicles, such as APCs, tanks and trucks, and track vehicle position and movements
- Facilitate pre-mission intra-team briefings on Humvees and APCs
- Provide hands-free communications on ATVs and motorcycles.



Homeland security

- Improve air to ground communication, especially between different organisations with differing communications equipment.

Flightcell® Pro is portable and battery powered, providing rapid and cost effective deployment of a cellular or satellite phone or tactical radio in any aircraft or high-noise environment.

Cost effective solutions

Flightcell® International has agility and responsiveness as core competencies, enabling it to deliver cost effective solutions to multiple customers in reduced time frames. Direct contact with the development team is part of the process of gaining a comprehensive understanding of the user's requirements leading into the design phase. Time frames and costs are further reduced as the core technology platform has been specifically designed with adaptation to diverse requirements.

If you have a communications requirement that seems out of the ordinary, contact the Flightcell® team for a rapid feasibility assessment.

Multi-link communications hub

See back of brochure for full specifications.

Flightcell®

PRODUCT SPECIFICATIONS

MILITARY / LOW IMPEDANCE

Batteries:	4.8V 1200mAh NiMH
Battery Life:	30 hours typical
DC Power Supply:	12-30VDC 500mA
DC Power Supply connector:	Centre Positive
Main MIC Circuit:	Isolated
Main MIC Impedance:	Dynamic
Main MIC Sensitivity:	5mV
Main MIC Frequency Response:	150Hz - 5kHz
Main Headphone Impedance:	8-16 ohms
Main Headphone Power:	100mW
Aux MIC Circuit:	Non-Isolated
Aux MIC Impedance:	Dynamic
Aux MIC Sensitivity:	5mV
Aux Frequency Response:	150Hz - 5kHz
Aux Headphone Impedance:	8-16 ohms
Aux Headphone Power:	100mW
Aux Music Frequency Response:	70Hz - 20kHz
Typical Cell Phone Sensitivity:	200mV
Cell Phone Frequency Response:	70Hz - 20kHz
Typical Sat Phone Output:	200mV
Sat Phone Frequency Response:	70Hz - 20kHz
Plug:	U174/U
Temperature Range:	0-55°C
Weight:	360g (13oz)
Dimensions (mm):	140 x 65 x 30mm
Dimensions (inches):	5.5 x 2.6 x 1.2in

Case: Flame retardant polycarbonate/ABS alloy (V_0 rating)
ICS Cable Jacket Material: Matte black polyurethane
EMC: Complies with the relevant provisions of:
AS / NZS CISPR 22:2002, FCC 47 Part 15:2002
and VCCI for Class B
Explosive Atmosphere: MIL-STD-810, Method 511.4,
Procedure I.

MILITARY / DUAL IMPEDANCE

Batteries:	4.8V 1200mAh NiMH
Battery Life:	30 hours typical
DC Power Supply:	12-30VDC 500mA
DC Power Supply connector:	Centre Positive
Main MIC Circuit:	Isolated
Main MIC Impedance:	Electret
Main MIC Sensitivity:	5mV
Main MIC Frequency Response:	150Hz - 5kHz
Main Headphone Impedance:	8-600 ohms
Main Headphone Power:	100mW
Aux MIC Circuit:	Non-Isolated
Aux MIC Impedance:	Electret
Aux MIC Sensitivity:	5mV
Aux Frequency Response:	150Hz - 5kHz
Aux Headphone Impedance:	8-600 ohms
Aux Headphone Power:	100mW
Aux Music Frequency Response:	70Hz - 20kHz
Typical Cell Phone Sensitivity:	200mV
Cell Phone Frequency Response:	70Hz - 20kHz
Typical Sat Phone Output:	200mV
Sat Phone Frequency Response:	70Hz - 20kHz
Temperature Range:	0-55°C
Weight:	360g (13oz)
Dimensions (mm):	140 x 65 x 30mm
Dimensions (inches):	5.5 x 2.6 x 1.2in

Plug: NATO-U174/U, BOSE-Lemo, GA/Civilian-PJ051/68

Case: Flame retardant polycarbonate/ABS alloy (V_0 rating)
ICS Cable Jacket Material: Matte black polyurethane
EMC: Complies with the relevant provisions of:
AS / NZS CISPR 22:2002, FCC 47 Part 15:2002
and VCCI for Class B
Explosive Atmosphere: MIL-STD-810, Method 511.4,
Procedure I.

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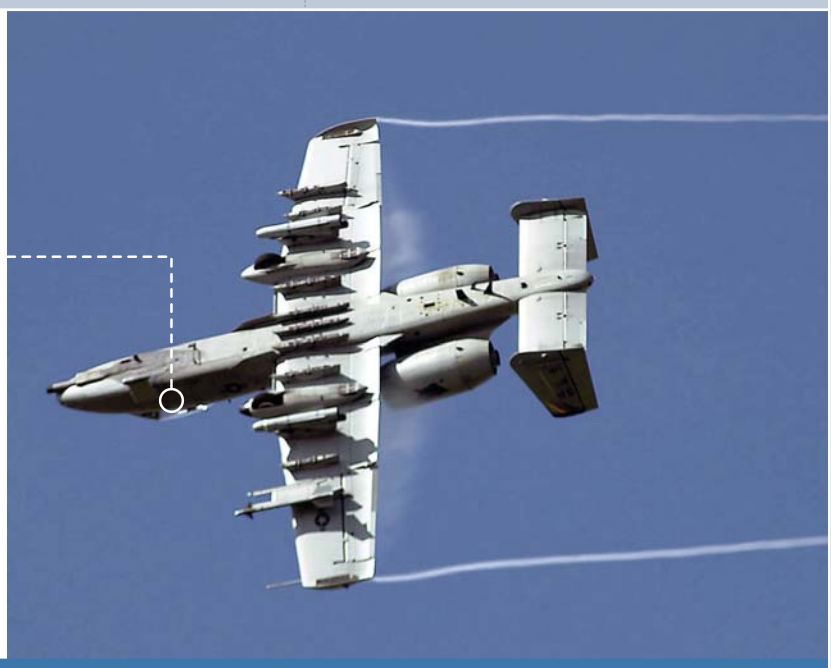

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