



# MEDIA RELEASE Embargoed until Thursday 2<sup>nd</sup> March at 9:00am Come and see us at the Avalon International Airshow 2017 Expo Way 10 – Opposite Food Court 2

A-TACS™ Aviation Telemetry & Communication System

Some of Australia's leading and innovative aerospace engineers have developed a revolutionary way to obtain and distribute valuable accurate aircraft telemetry whilst pinpointing its location instantly. Aviation accidents and incidents will be solved in weeks not years...

# THE A-TACS™ STORY

In 2017 Australia is again at the forefront of aerospace innovation with the launch of A-TACS™ - Aviation Telemetry & Communication System.

In 1954 a young Australian Engineer, Dr David Warren, produced the first prototype of what we now know as the "Black Box."

Whilst it has served the aviation industry well and still does, it does have limitations.

- No connectivity with ground stations
- Can be damaged on impact with the possibility of all data being lost
- The likelihood of the Cockpit Voice Recorder (CVR) and the Flight Data Recorder (FDR) of not being recovered
- Not tamper proof and
- When recovered it can be days or weeks before information is made available to investigators

In 2003 the European Organisation for Civil Aviation Equipment (EUROCAE) committee, an international body on which the Australian Transport Safety Bureau (ATSB) was represented, revised the crashworthiness standards of flight recorders to withstand:

- an impact producing a 3,400-g deceleration for 6.5 milliseconds (equivalent to an impact velocity of 270 knots and a deceleration or crushing distance of 45 cm)
- a penetration force produced by a 227 kilograms (500 pounds) weight which is dropped from a height of 3 metres (10 feet)
- a static crush force of 22.25 kN (5,000 pounds) applied continuously for 5 minutes
- a fire of 1,100 degrees Celsius for 60 minutes.

Why? To increase the likelihood of data recovery after impact.

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# Australia is again at the forefront of aircraft safety and design with A-TACS™.

A-TACS™ provides tamper-proof, constant aircraft tracking and on-board equipment analysis that produces valuable aircraft data for performance, security and safety assessments and *immediate* data retrieval for investigators.

# How A-TACS™ works - Data Flow

An A-TACS™ fitted aircraft imports telemetry from the aircraft systems and sensors including the "Black Box".

It transmits that data "live" using Constant Adaptive Monitoring (CAM) from the aircraft to satellites, which is then sent to a secure A-TACS™ data recovery Hub.

Using ESSTRACK's SatGRAB™ web interface, this data can be made available to aircraft manufactures, airlines, air traffic control and most importantly search and rescue teams & investigators.

In the unfortunate event an aircraft crashes, A-TACS™ can immediately pin point the location anywhere on the globe.

Aviation accidents and incidents will be solved in weeks not years and stakeholders will never have to wonder what happened, where, how or why?

For the first time in aviation history, airlines can monitor their A-TACS™ fitted aircraft "live" for the total flight.

Aircraft manufactures will be able to monitor rich telemetry from aircraft and improve design features.

# **Bruce Byron AM**

### **Senior Aviation Advisor**

"The purpose of accident investigation is to prevent similar accidents, through analysis of evidence. Flight recorders capture that evidence but are useless if they can't be recovered. Without evidence investigations just produce theories. This technology provides a tamper proof, secure and affordable way to capture the 'where' and 'what' in real time. With that evidence an investigator is better equipped to work out the 'how'."

### Captain Lorne Cole

### **Manager Aviation Compliance**

"Like all businesses, aviation requires meticulous attention to operational costs and performance targets. A-TACS™ allows us to obtain real time data from our aircraft anywhere on the planet, and the SATGRAB™ app ensures that the data is available to those who need it most. Adjustments to flight parameters can be made to improve efficiency and safety unlike ever before."

# Why A-TACS™?

Because 71% of the world is ocean, and radar coverage only extends approximately 200 to 300 km's off-shore, all over water long haul flights between major cities can't be tracked or monitored. Until now.

Once the new global Nano-Satellite system from Sky & Space Global is fully launched, this will further enhance A-TACS's capabilities whilst driving down typically higher cost satellite operations for the aviation community.

# Darren Maggs CEO ESSTRACK

"Nothing presently available in aviation satellite solutions comes close to the A-TACS™ story, where satellite meets aviation and technology in a constant adaptive monitoring capacity using proprietary systems and software along with a tamper proof power supply design. The aviation community will directly benefit from this satellite A-TACS™ aircraft synergy."

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> SERIAL N 2015-9-000001

> > MODEL No 1-120815-0

### **A-TACS™ Power**

A-TACS™ carries a patented Tamper Proof power supply design and when combined with ESSTRACK's map software, SatGRAB™ allows users to log in via a web portal to track aircraft fitted with A-TACS, other assets or even third party GPS products.

Corporate fleet owners can now monitor where and how their leased aircraft are being used rather than just relying upon monthly written reports summarising flight hours.

Time-critical medical emergency aircraft can be tracked real-time, anywhere in the world delivering vital updates direct to mobile or email as required.

A-TACS™ opportunities are extensive.

Aviation, marine, recreational vehicles, military, or plant and equipment to name but a few.

At ESSTRACK we believe in taking innovative approaches to real world communication problems.

A-TACS™, Aviation Telemetry & Communication System - Safety has no boundaries..









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AVIATION TELEMETRY & COMMUNICATION SYSTEM

Designed and Manufactured in Australia

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