

Flight Safety Foundation and the BARS Program

FSF IASS #71 – Nov 2018 Seattle

> David Anderson BARS Program MD

Agenda

- BARS- the Context and Environment
- Program History
- Operations
- Program Initiatives and Achievements
- Partners

BARS Environment and Operations





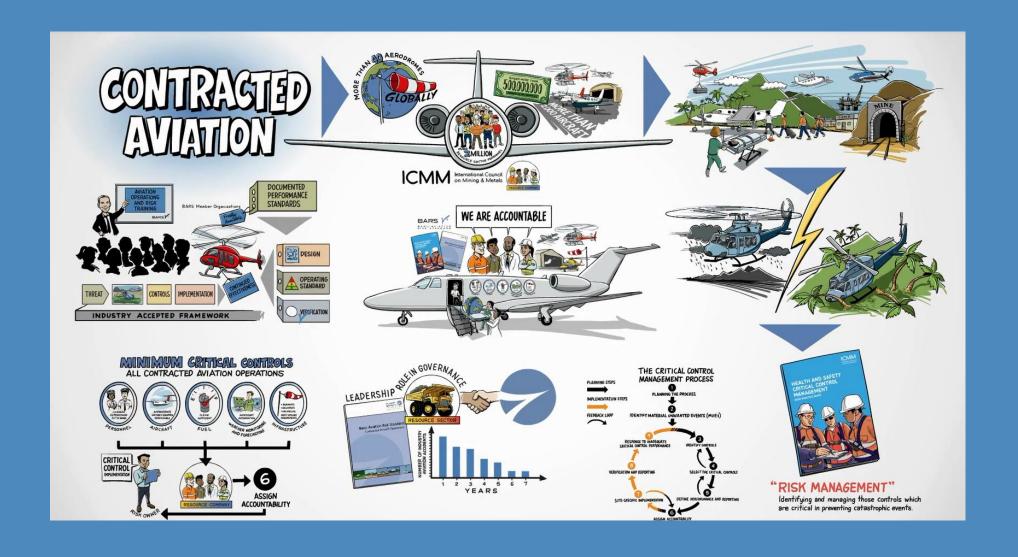


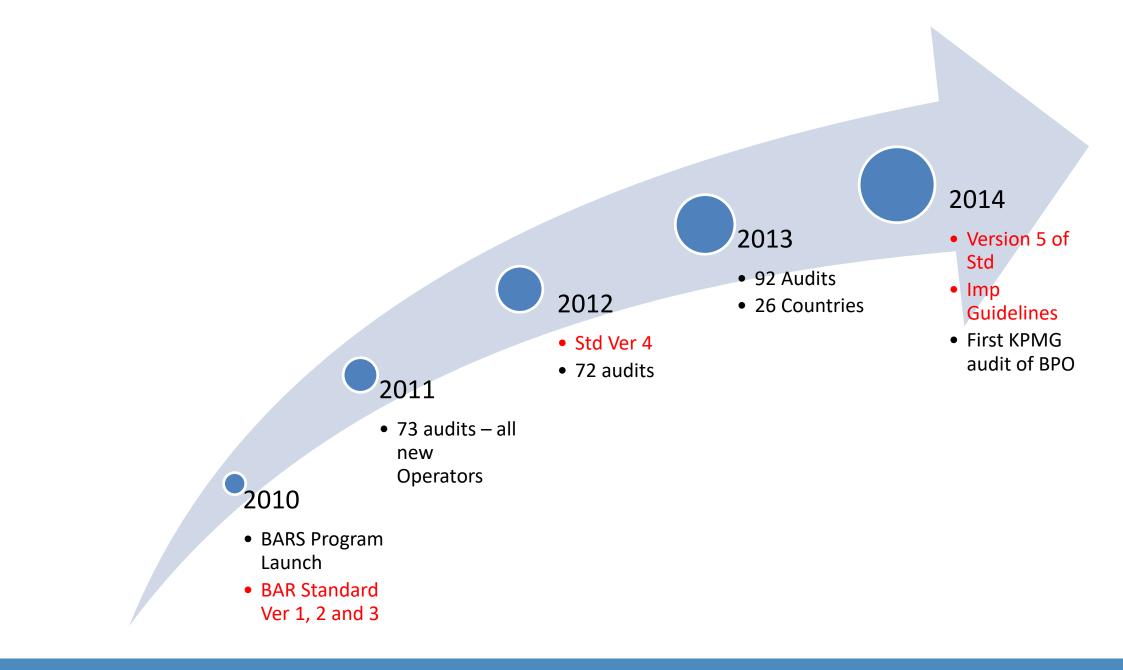


BARS Environment and Operations

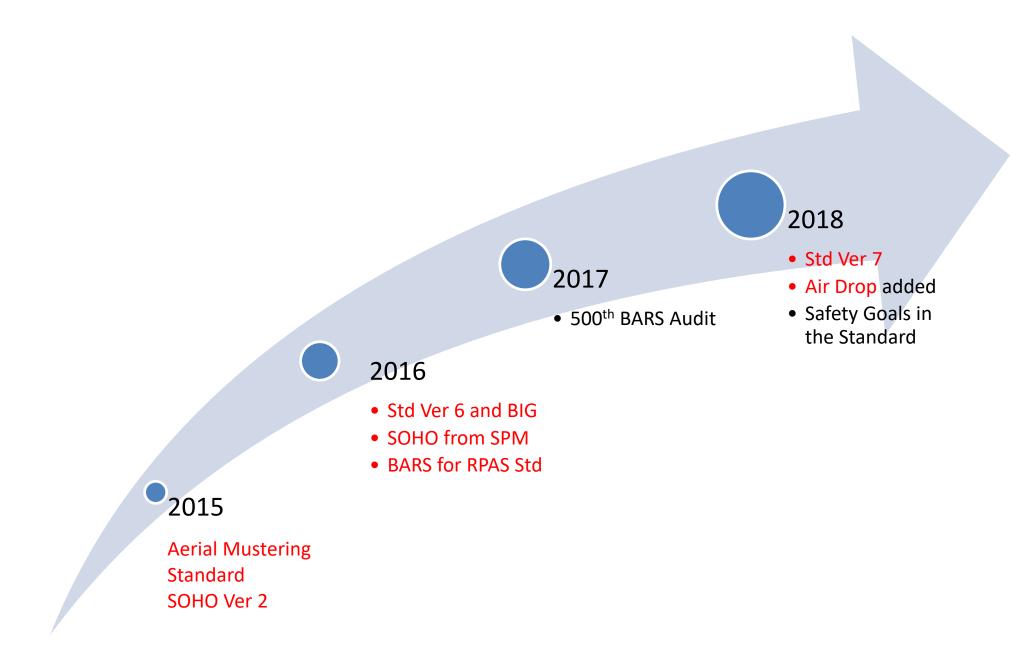


Contract Aviation Assurance and Critical Controls

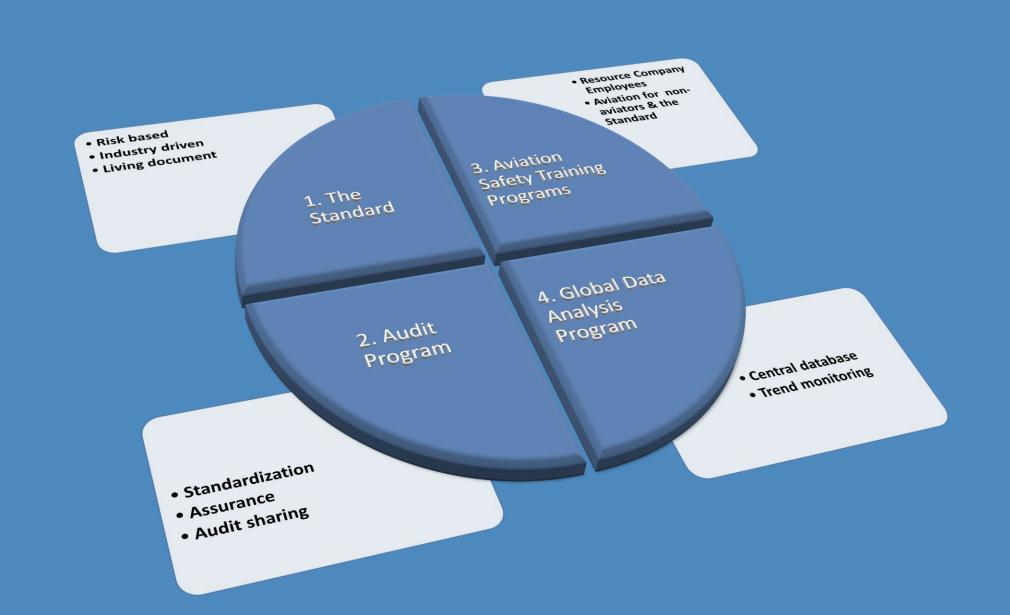




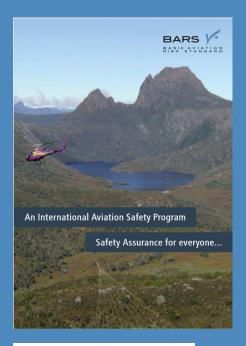
FSF Limited and the BARS Program time line (Pt 1)



Components of the BARS Program









844 Fixed wing aircraft Program participants in BARSoft database

partners

over 32+ countrie

- lowest accident numbers in resource sector

findings raised to analyze

Over 150,000 audit questions in the database

Accredited Auditors in Audit

y in

516 Rotary wing aircraft in

Companies

BARS V°

The BARS Program can run data analysis by region, country or subject matter where we have enough activity so it remains de-dentified. S data analysis reports completed on the data from the Program including external loads, prophysical operations, offshone helicogner operations and the repeat finding analysis. Flight Safety Foundation: Level 16, 756 Collins Street, Melbourne, Victoria 2001, Australia

A complete aviation safety program to assist you with the management of aviation risk for your people.

The award-winning Basic Aviation Risk Standard (BARS) Program was established by the Flight Safety Foundation, in conjunction with the resource sector, to provide organizations that engage contracted aircraft operators with a common global aviation safety assessment Standard and audit protocol.

The BARS Program require supplements, but do not replace, existing national and international regulations. It is based on proven aviation safety principles, tailored to the needs of the resource and allied sectors.

- BARS Auditor Training;

The Program uses a risk-based model framed around the actual threats to aviation operations and links these to associated controls, recovery and mitigation measures, as opposed to the outdated prescriptive format previously used by the industry. The BARS Program is expanding to support other high-risk operational industries with contracted aviation activities in remot locations such as insurance, commercial, defence and humanitarian sectors.

The Program provides a cost effective and robust means of monitoring, assessing and analyzing risks associated with the

BUM SAXMATER DYNAMIC ROLLOUT DURING HOISTING AND/OR EXTERNAL SLING LOAD OPERATIONS 1. Background Date of Incident: Various Aircraft Type: Rotany-wing Operation Type: Hoisting and external load operations The address safety alert is derived from CASA polity information plates 2018, 1815 (Seried 15 July 2018).

GSA characterized address and 3.70 (Seried Spale, 2018) and ADS 2018 (Seried Spale) and ADS Ensure implementation of all elements of BARS Controcted Aircroft Operations Threat 21.0: Failure
of Ulting Equipment – External Load Operations, Controls 21.1 to 21.4 and BARS offshore Sofety
Performance Requirements Threat 13.0: Role Specific Equipment; Controls 13.5 & 13.6.

BARS V

All operators should ensure load rings are compatible with their winch or external load hooks and should only utilize ring sizes that meet RPM supplement requirements to prevent 0-ring reversal or dynamic rollow. It is critical that load ring internal lengths lists that neight from the keeps to tip of the hook load beam, thereby preventing the ring from flipping up over the tip of the hook.

AVIATION SAFETY ALERT

Operators with the applicable equipment should immediately put into place operational defenses

Operators with the applicable equipment should immediately job into pace operators defended such as training and procedures to ensure that OPI reversal deport focus or can be detected upon initial winching and stred upon before a hazardous condition develops.
 Operators with the applicable equipment should consider airworthiness defendes such as revised equipment or equipment combinations that guard against such occurrences.

Fit keeperless hook systems that are immune to dynamic rollout.





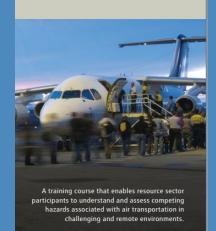
Yes. I'm the passenger who actually reads the safety card

BARS Auditor Accreditation Course

for Lead Auditors and Other Interested Personnel



Aviation **Coordinator Course** for Onshore Personnel



Helicopter External Load Operations

for Ground Personnel





Control 20.2: Low Level Light

Ensuring flight crew situational awareness with regard When available for the aircraft type, a fuel low level warning to available fuel reserves.

light must be fitted.

Control 5.3: Night or IFR - Aircraft Ensuring safety and redundancy for night and IFR Flights flown at night or under IFR must be conducted in a

Control 4.5: Drummed Fuel

Ensuring drummed fuel is handled in a manner that will not compromise fuel quality.

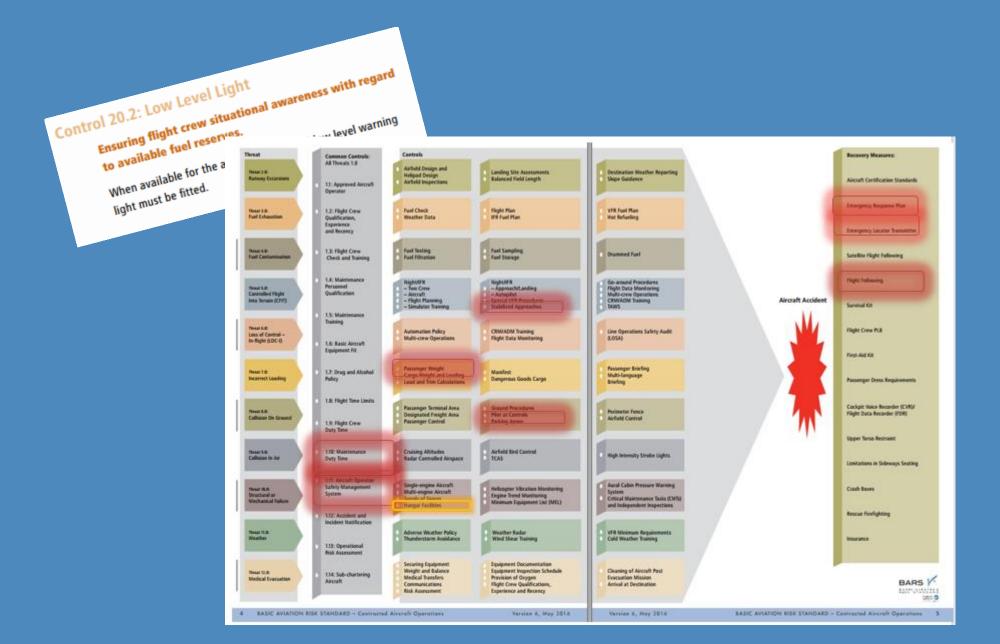
Aircraft operators who make use of drummed fuel in the course of their operations must have a procedure in place addressing the management and use of drummed fuel stock. The following performance requirements must be addressed:

Control 43.2: Transit Altitude

Eliminating the risks associated with low level operations when low level operations are not

Transit altitude must be above 500 feet above ground level.

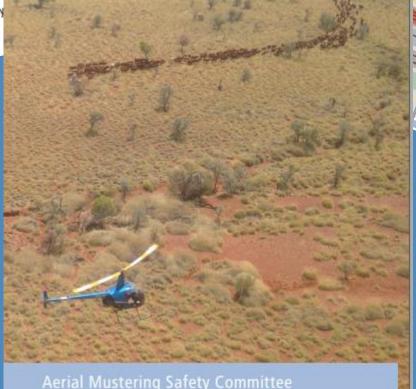
Ensuring helicopter systems cannot be fouled by Control 24.1: Weighted Lines The long-line must be suitably weighted if it is to be flown without a load attached. Implement pre takeoff checks which unweighted lines. are designed to ensure flight crew involved in repetitive loads are aware of when the line is attached.



Control 20.2: Low Level Light Ensuring flight crew situational to available fuel reserves.

When available for the aircraft ty light must be fitted.









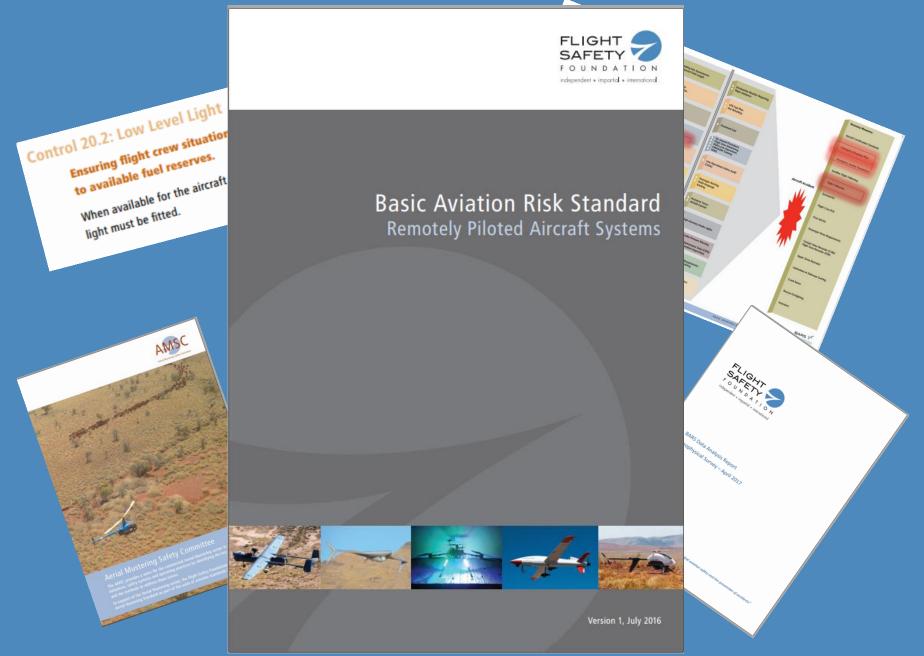


BARS Data Analysis Report Geophysical Survey – April 2017

Drafted: Peter Ayre

"Pursuing the continuous improvement of global aviation safety and the prevention of accidents"





Air Drop Bow-Tie – BARS Ver. 7 Appendix 7

Figure 6: BARS Bow Tie Risk Model – Schematic of Aviation R and Recovery Measures for Air Drop.

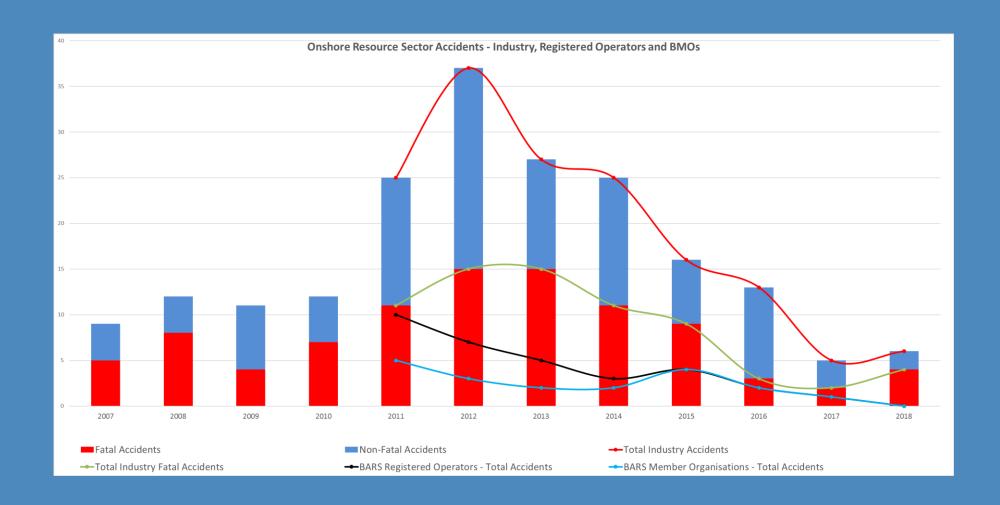






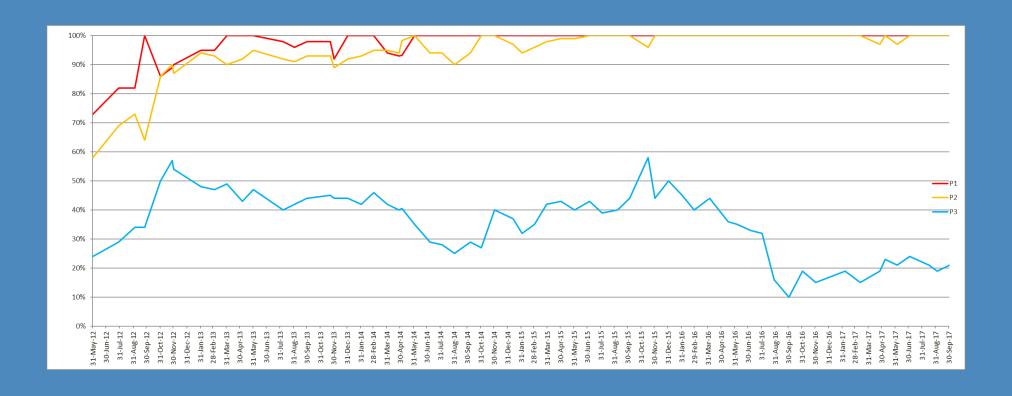


Onshore Resource Sector Accidents



World Wide Accident Stats

BARS Success Measurement



Close Out Rate Performance



BARS Aircraft Operators



Audit Companies

Partners and Collaborators













