

# Basic Aviation Risk Standard

## Program Overview





ICMM supports the use of the Basic Aviation Risk Standard (BARS) to improve aviation safety. The BARS Program is specifically aimed at contributing to improved aviation safety in the extractive industries and was developed by the Flight Safety Foundation in conjunction with a number of extractive industry companies, including several ICMM member companies.

The Standard is developed from a risk-based model framed against the actual threats posed to aviation operations which are then directly linked to associated controls and recovery and mitigation measures. The BARS Program is a useful resource for any organization wanting to develop new flight safety requirements or review existing ones.



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# Program Overview

## Summary

The Flight Safety Foundation, in conjunction with the resource sector, established the Basic Aviation Risk Standard (BARS) Program that is designed to improve safety in contracted

aircraft operations within remote and hazardous environments. The Program aims to raise aviation safety standards and to assist organizations with the management of their aviation risk.

The program is world-class in the breadth and quality of its scope and its innovation. It takes contracted aviation safety practices:

From (pre BARS Program)	To (BARS Program)
Multiple annual audits for aircraft operators	Single annual audit for individual aircraft operators, examined in greater detail
Multiple aviation safety standards, subjecting aircraft operators to diverse and often ambiguous requirements	One internationally recognized best practice standard
Limited potential for individual resource companies to influence practices	One unified industry voice to influence global standards
Unregulated safety auditing with significant variation in auditor quality and audit consistency	Rigorous quality-controlled auditing and formal accreditation of auditors
Little independence in the auditing process	True third-party audits
Aviation risk-management skill largely confined to technical consultants	Resource sector employees associated with aviation activities provided with training to raise their awareness of aviation safety risks
No formal mechanism for sharing safety audits, accident data or safety findings between companies or across the resource industry	Sharing of audits and safety data within participating BARS Member Organizations

The BARS Program is a consensus-based industry standard consisting of four components:

- 1. A risk-based international aviation standard.
- 2. An auditing program, tailored to the Standard.
- 3. A range of aviation safety training programs.
- 4. A global safety data analysis program.





## Members of the Program

The BARS Program will benefit all companies that use contracted aviation services to carry their people. The following are some of our BARS Member Organizations.



## Benefits for Members of the Program:

- A single standard which should aid adoption and compliance by aircraft operators;
- Confidence that the BARS Program reflects aviation best practices and the needs of the resources and other sectors that use contract aviation services;
- Confidence in the quality and consistency of audits;
- Confidence in auditor standards;
- Access to audit reports, auditor performance and shared data identifying safety trends and issues;
- Access to a resource sector aviation safety forum to share safety-related learning and best practices;
- Ability for non-technical staff to become more skilled in managing aviation safety risks;
- Access to a large pool of pre-audited aircraft operators when undertaking exploration or new projects in different geographic areas; and
- Access to aviation risk management experience and expertise from other BARS Member Organizations.

## Benefits for Aircraft Operators:

- One aviation safety standard outlining clear, consistent industry-wide expectations, supplementing existing national and international regulations;
- Reduction in the audit burden;
- Access to de-identified accident and incident data and subsequent data analysis reports identifying emerging safety trends, drawn from a much larger data sample beyond that of their own operation; and
- Additional support from the Foundation, such as information campaigns based on needs identified through data collection and analysis.

## Management of the BARS Program

The structure the Foundation has put in place to manage the BARS Program consists of two key teams:

### 1. The Technical Advisory Committee (TAC)

The Technical Advisory Committee (TAC) is comprised of representatives from the BARS Member Organizations of the Program.

The TAC provides resource-sector-specific technical and operational input on the ongoing development of BAR Standard and the overall Program. Any changes to the Program will be developed by this committee to ensure that resource sector companies maintain confidence in and control of the quality of BAR Standard and its relevance to their needs.

### 2. The BARS Program Office (BPO)

A dedicated BARS Program Office, established under the Foundation's subsidiary, Flight Safety Foundation Limited (FSFL), and reporting directly to the Foundation's Chief Executive Officer manages the overall Program. The BPO also acts as an interface with the TAC.

## Key Stakeholder Groups of the Program

### 1. BARS Member Organization

An organization who is an end user of contracted aviation services, predominantly from the resources and allied sectors, who pays an annual subscription/membership fee to use the BARS Program to assist with the management of risk associated with their aviation operations.

### 2. BARS Accredited Auditor

Individual lead auditors who have both met the required experience levels and completed and passed the BARS Auditor Accreditation Training Course, who are thereby qualified to participate in the conduct of BARS audits.

### 3. BARS Registered Audit Company

A corporate entity that has met the requirements set down by FSFL to gain registration, which then enables them to conduct BARS audits using only BARS-accredited auditors.

### 4. BARS Registered Aircraft Operator

An aircraft operator that is registered by FSF in BARSoft and has undergone a BARS audit within the previous twelve months.



## Program Component 1: The Basic Aviation Risk Standard

The Basic Aviation Risk Standard is a common aviation safety standard for the resources and allied sectors.

The BARS Program requirements supplement, but do not replace, existing national and international regulations.

The BARS Program is based on best-practice aviation safety principles, tailored to the needs of the resources and allied sectors.

The Program uses a risk-based model framed around the actual threats to aviation operations and links these to associated controls and recovery and mitigation measures, as opposed to the outdated prescriptive format previously used by the industry.

The BAR Standard was developed by FSF in collaboration with the resource sector.



## Program Component 2: The Audit Program

The BARS Audit Program is based on the world's best-practice.

It involves a new three-way relationship between an aircraft operator, FSF and a registered BARS Audit Company.

It aims to reduce the audit burden on aircraft operators to one annual audit that can then be shared amongst BARS Member Organizations.

Audit Companies must be registered with FSF to conduct BARS Audits, and individual auditors must have BARS accreditation. To gain this, they first must meet experience and qualification requirements, and then complete the BARS Auditor Accreditation Course, which includes passing an examination.

To maintain their accreditation, auditors will need to complete ongoing periodic training and undergo a biennial performance review as part of monitoring by the BPO.

### Summary of BARS Audit Program

Audit Component	Old	New
Comprehensive Industry Audit Protocol defined	✗ <100 questions	✓ >700 controls
Audit fully documented for compliance and verification	✗	✓
Objective audit to an established industry standard	✗	✓
Two-person, two-day audits	✗	✓
Flight Operations and Engineering specialists involved	✗	✓
Auditors meet minimum experience requirement	✗	✓
Auditors accredited and examined for pass-fail	✗	✓
Auditors have recurrent training and assessment	✗	✓
Proactive measures to close-out of findings	✗	✓
External Third-Party Oversight of auditors and reports	✗	✓



## Program Component 3: Aviation Safety Training Programs

A range of aviation safety related training programs offered as part of the overall BARS Program aimed at personnel from both BARS Member Organizations and BARS registered aircraft operators.

### Aviation Coordinator (AVCO) Course

This two day course provides participants with an understanding of the Basic Aviation Risk Standard (BAR Standard) and how it can be used by resources sector personnel to help identify potential aviation safety risks. Participants will be able to use knowledge gained on the course to review their company's aviation management policies and procedures and formulate appropriate risk management strategies to manage identified day-to-day risks.

The course covers two primary modules: (i) the basic principles of flight and aviation operations ("Aviation 101") and (ii) an outline of the BAR Standard.

The Aviation Coordinator Course has been developed for personnel involved with the management and operations of their company's contracted aviation services. Eligible attendees include:

- Mine/site/asset managers;
- Contract administrators;
- Corporate assurance/risk managers;
- Onsite accountable persons;
- Executive managers (with accountability for decisions that directly impact on the selection of aviation service providers); and
- All personnel who are involved in aviation operations as part of their day-to-day activities.

## Other Training Programs

A number of other courses have been developed as part of the BARS Program:

- **Aviation Coordinator for Offshore Operations** – for resource and OGP sector employees in the field working with offshore helicopter operations;
- **Helicopter External Load Operations for Ground Personnel (HELO)** – for resource company employees in the field working with helicopter external load operations; and
- **Aviation Risk for Managers** – a half-day training course for senior management personnel without prior experience in the management of aviation activities involving company personnel and equipment. The course provides an understanding of aviation threats, consequent risks and their associated management

## Program Component 4: Global Safety Data Analysis Program

The Foundation will collect and retain de-identified data in a central database that will be subject to further analysis.

The Global Safety Data Analysis Program will support a data-driven approach to aviation safety in the resource sector.

The results of this analysis will be used to update the BARS Program and provide input into existing aviation safety programs, as well as to identify new opportunities to address safety risks.

### About the Flight Safety Foundation

The Foundation is an independent, non-profit, international organization engaged in research, auditing, education, advocacy and publishing to improve aviation safety. Its membership spans 150 countries and all segments of the global aviation industry. Its board of governors and broad range of technical/advisory committees represent a who's who of aviation industry leaders.

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