AVIATION STANDARD



Standard

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Standard

1 Purpose

Glencore is committed to protecting the health and safety of our workforce, host communities, contractors and others who may be impacted by our operations.

The purpose of this Standard is to define the minimum requirements for Glencore assets to identify, assess and manage the risks associated with the different categories of aircraft services and infrastructure used across Glencore.

This Aviation Standard (herein referred to as the "Standard") has been developed to align with the requirements of our Health and Safety Policy and to meet our internal and external commitments.

2 Scope

This Standard applies to all employees, directors and officers, as well as contractors under Glencore's direct supervision, working for a Glencore office or industrial asset directly or indirectly controlled or operated by Glencore worldwide. It also applies to land holdings (whether owned or leased) that are under Glencore's operational control and tenants on Glencore-owned land. It also applies to activities related to the handling, storage and transportation of commodities, including third-party products that are under Glencore operational control.

We assert our influence over joint ventures we don't control or operate to encourage them to act in a manner consistent with the intent of this standard.

This Standard applies throughout the entire lifecycle from exploration and development of new projects and expansions to operation, decommissioning, closure, disposal and relinquishment, as well as mergers and acquisitions.

This Standard applies to all aircrafts whether short or long term chartered, or commercial and to remotely piloted aircraft (drones).

3 Key terms

- Ad hoc aviation charter one off use or for a limited period (i.e., single travel event or use up to six months).
- Basic Aviation Risk Standard (BARS) an international aviation safety standard developed by
 the Flight Safety Foundation which establishes a risk based model to support organizations in
 managing aviation risks in a consistent manner globally. The BARS Standard provides users of
 aviation support with a framework against which aviation support providers can be assessed.
- **Competent Aviation Specialist** a company appointed advisor to the Aviation Coordinator (may be a combined role), with strong technical knowledge in flight operations and/or maintenance

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regulatory compliance. When possible, the person shall be an active participant in the regular BARS technical meetings (BARS TAC).

- Competent Aviation Coordinator a company appointed individual who has completed a BARS
 Managing Contract Aviation Risk (MCAR) competency, is familiar with the relevant Glencore
 requirements and is appointed to advise and/or manage aviation related activities. The
 coordinator will seek specialist advice from the appointed Competent Aviation Specialist as
 necessary.
- **Dangerous goods** includes solids, liquids, or gases that are:
 - explosive substances,
 - goods which, by reason of their nature, are liable to endanger the safety of an aircraft or persons on-board an aircraft; and/or
 - o goods that regulations declare to be dangerous goods.
- Long-term aircraft charter any service exceeding 6 months in length or scheduled flight services e.g., fly in fly out, exploration program etc.
- Hostile Territory (Oil and Gas standard, BARS standard) an environment in which a successful
 emergency landing cannot be reasonably assured or the occupants of the aircraft cannot be
 adequately protected from the elements, or search and rescue/response capability cannot be
 provided consistent with the anticipated exposure.
- **Regular air services** aircraft using Glencore owned or managed aerial infrastructure e.g., aerodromes, heliports etc. more than two times per month.

4 Requirements

The requirements in this Standard, alongside those of the HSEC&HR Management Standard, are mandatory. Directly inter-linking standards are outlined in Section 5.0, as well as relevant guidance and references (Additional Resources).

In addition, legal compliance with relevant local legislation and local planning, regulatory and reporting requirements in all jurisdictions is mandatory. Where local legal requirements are of a higher standard than the minimum requirements documented in our HSEC&HR Standard, we will adhere to the higher requirement(s).

4.1 Risk Assessment and Aviation Management Plan

All Assets must:

 Conduct aviation risk assessments to identify and assess the risks associated with the use of aviation services (other than normal commercial travel), following the Glencore Catastrophic Hazard and Critical Control Management Guideline and the Glencore Corporate Aviation Risk Assessments and bowties;

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- Identify appropriate controls (including identification of critical controls and performance standards) required to manage the risks that are identified. When selecting controls, the hierarchy of control should be utilised;
- Develop and implement Aviation Management Plans to document the identified controls and management processes;
- The Aviation Management Plan must address how the following sections of the Standard are managed;
- Communicate the findings of risk assessments and Aviation Management Plans to relevant stakeholders; and
- Review aviation risk assessments and Aviation Management Plans every 3 years as a minimum, or sooner if material changes occur.

4.2 Management of air services

All Assets must:

- Appoint an Aviation Coordinator and/or a Competent Aviation Specialist where the asset or management entity conducts regular aviation services, manages or operates aircraft and/or aviation infrastructure;
- Include a requirement to appoint a Competent Aviation Coordinator or Competent Aviation
 Specialist in written contracts, where air services are provided by long-term chartered aircraft or
 providers of regular air services using Glencore owned or operated air transport infrastructure.
 This role is responsible for managing the contract and communicating with the Glencore
 responsible person/s.

4.3 Corporate commercial air travel

All Assets must:

- Manage all corporate commercial air travel in accordance with Glencore Travel Safety and Security Policy;
- Use only use airlines services that have been selected from the latest IATA-IOSA Registry (HSEC+HR Corporate will maintain and publish a Preferred Airlines List). Use of services with expired registration is not permitted;
- Where there is no commercial carrier available with the appropriate registration, complete an additional risk review referencing the ICAO USOAP and the EASA Blacklist and other detailed information to provide a "Preferred", "Acceptable" or "Refrain from Use" rating. This risk review must be conducted by a Competent Aviation Specialist.
- Make alternative travel arrangements (e.g., rail or road) or choose alternative accommodation (to wait for an acceptable flight option) where "Preferred A List" or "Acceptable B List" carriers are not available, considering all risks;

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• Minimise the number of senior executives of the company or operations travelling on the same flight wherever practical.

4.4 Aircraft chartering – ad hoc / short term

All Assets must:

- Prioritise the use of BARS registered aircraft operators with confirmation that aircraft to be
 contracted are fitted according to Flight Safety Foundation (FSF) Basic Aviation Risk Standard
 (BARS) Contracted Aircraft Operations. Where a BARS registered aircraft operator is not
 available, an operator holding a currently approved IS-BAO or ARGUS (ARGUS Gold, ARGUS Gold
 Plus or ARGUS Platinum) registration may be accepted. Use of an operator with expired
 registration is not permitted.
- Engage a Competent Aviation Specialist to conduct a review or the operator's history and to make a recommendation as to their suitability where the above cannot be achieved;
- Assess whether a country has an adequate level of regulatory structure to issue acceptable
 operating certificates by reviewing the BARS Aviation Regulatory Geographical Performance
 Table. Operators holding certificates issued by countries not having a "Green" rating must not
 be engaged without further investigation/audit to determine their acceptability. The Regional
 Aviation Coordinator must be contacted to obtain details on countries' regulatory structure and
 other such information;
- Minimise, wherever practical, the number of senior executives of the company or operations travelling on the same flight where chartering is for personnel transport. This consideration must be of an even higher priority where helicopters are involved.
- 4.5 Aircraft chartering long-term and regular air services using Glencore air transport infrastructure

All Assets must:

- Engage BARS registered aircraft operators and obtain confirmation that aircrafts to be contracted are fitted according to FSF BARS Contracted Aircraft Operations;
- Where the above is not readily available, a BARS audit of available operators must be initiated with BARS registration applied as soon as practical.

4.6 Management of high-risk air operation processes

All Assets must:

 Conduct a risk assessment to identify and assess potential high-risk aviation operations conducted by the location. Regardless of the nature of the operations, helicopter use must be considered high risk at all locations;

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- Complete an Issue Based Risk Assessment (Level 3) where a high risk aviation activity is conducted. The outcomes of this assessment must be recorded in the asset/location risk register;
- Prioritise the selection of BARS registered operators to undertake high risk activities, who have been assessed against the specific requirements within BARS criteria;
- Where it is not practical to select a BARS registered provider, consideration must be given to the BARS documents listed in the high-risk processes below:
 - Helicopter onshore refer to and apply FSF BARS Implementation Guideline as relevant.
 - Overwater operations or offshore refer to and apply, as relevant:
 - o FSF BARS Offshore Helicopter Operations Safety Performance Requirements;
 - FSF BARS Offshore Helicopter Operations Safety Performance Requirements -Implementation Guidelines; and
 - FSF BARS Flight Crew Competency Based Training Framework- Offshore Helicopter Operations.
 - Helicopter external load refer to and apply as relevant FSF BARS Implementation Guidelines Appendix 4.
 - Geophysical surveys / monitoring including aerial photography refer to and apply as relevant FSF BARS Implementation Guidelines Appendix 6;
 - Mustering (and crop dusting) refer to and apply as relevant FSF BARS Aerial Mustering;
 - Hostile territory e.g., extreme climates or conflict zone a specific risk assessment must be conducted and controls identified/implemented. Suitable expertise should be involved the risk assessment; and
 - Dangerous goods management appropriate procedures must be established and personnel trained for the carriage and acceptance of dangerous goods – refer to and apply as relevant FSF BARS Implementation Guidelines.

4.7 Emergency evacuation services

All Assets must:

- Wherever practicable, establish a contractual arrangement with a medical service provider
 which engages BARS registered operators for air medical or other emergency evacuations. These
 arrangements must be linked with Glencore wide AIG and ISOS contracts and reference the
 Glencore Travel, Safety and Security Policy;
- When engaging medical evacuation (medevac) services or other emergency situations requiring
 the use of aircraft on short notice, consider the balance of risks associated with being able to
 respond quickly to an emergency situation and the additional risks of using sub-standard aircraft
 operators which might put the aircraft (and all passengers) at risk;

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- Make all reasonable effort to obtain input from a Competent Aviation Specialist prior to management decision in using a non-compliant aircraft operator for use in an emergency; and
- Consider the associated comparative risks to personnel health or safety from using a noncompliant aircraft operator or delaying the process until an approved operator can be on-scene.

4.8 Aircraft/infrastructure owner and operator

In circumstances where operations have a need to own and/or operate their own aircraft and/or establish and manage infrastructure, all Assets must:

- Conduct an issue-based risk assessment identifying causes/controls for owner operated aircraft or infrastructure. For guidance refer to FSF BARS Implementation Guidelines;
- Ensure that a Flight Operations Safety System is developed by the owner or operator, addressing the hazards identified in the risk assessment. The system must meet local aviation regulations, or where these are identified as deficient through the audit, supplemented as recommended. For guidance in implementation, refer to FSF BARS Implementation Guidelines;
- Check that the owner or operator's Safety System and/or infrastructure standards has been reviewed/ audited by an external certified auditor (with preference to establish BARS registration), to assure it is effective in managing the relevant risks;
- Appoint a Competent Aviation Specialist to the role of overseeing the conformance to the above requirements;
- Establish and implement an Aviation Crisis Management Response Plan for the potential crisis events within the area of operations.

4.9 Other issues

All Assets must:

- Establish and implement management procedures consistent with FSF BARS Remotely Piloted Aircraft Systems (PPAS) where remotely piloted aircraft (drones) are used;
- For "no fly zones", identify and assess the risks to aircraft operations whether or not controlled by the operation from mining activities e.g., blasting. Risks must be registered with the relevant local aviation/transport authority; and
- Gain approval through the Glencore Crisis management chain of command for any aircraft operations which enter national or international "no fly zones" for humanitarian missions.

4.10 Review

Assets must review their compliance to this Standard on an annual basis, or when there have been significant operational changes, new projects or expansions, or as specified by regulatory requirements.

Asset-specific risk assessments must be renewed at a suitable frequency with the goal of achieving continuous improvement.

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5 Additional resources

5.1 Internal resources

- Fatal and Catastrophic Hazards and Critical Controls Management (G-S-GDL-0004).
- Aviation/Aircraft Incident bowtie (G-S-DGM-0017).
- Aviation/Aircraft Incident High Level bowtie (G-S-DGM-0015).
- Corporate Travel Safety and Security Policy.
- Glencore Preferred Airlines List (G-S-GDL-0010).

5.2 External resources

- FSF BARS, Contracted Aircraft Operations.
- FSF BARS, Implementation Guidelines.
- FSF BARS, Offshore Helicopter Operations Safety Performance Requirements.
- FSF BARS, Offshore Helicopter Operations Safety Performance Requirements Implementation Guidelines.
- FSF BARS, Flight Crew Competency Based Training Framework- Offshore Helicopter Operations.
- FSF BARS, Aerial Mustering.
- FSF BARS, Remotely Piloted Aircraft Systems (PPAS).
- https://flightsafety.org/bars/the-bar-standards-and-manuals/
- https://www.iata.org/en/programs/safety/audit/iosa/registry/
- https://www.icao.int/safety/CMAForum/Pages/default.aspx
- https://ec.europa.eu/transport/modes/air/safety/air-ban_en

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