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	AVIATION CRITICAL RISK CONTROL STANDARD	Revision:	00
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# AVIATION CRITICAL RISK CONTROL STANDARD


## TNCL-OHSS-STD-0001



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**APPROVALS:**




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## 1. PURPOSE

These Standard details the requirements related to the operation and maintenance of Company-owned aircraft as well as chartered aircraft and helicopters used to transport personnel and materials in support of Tembo Nickel Company Limited (TNCL) operations. The purpose of the Aviation Critical Risk Control Standard is to eliminate or minimise the risk of fatalities, injuries, and incidents arising from aviation-related activities, consistent with the principle of “Every person going home safe and healthy every day.”

This Standard is intended to supplement all applicable rules, regulations, and other corporate policies and standards. It establishes the minimum controls required for aviation activities and aligns them with the requirements of the Tanzania Civil Aviation Authority (TCAA) and with international good practice, including the International Finance Corporation (IFC) Performance Standards and the World Bank Group Environmental, Health, and Safety (EHS) Guidelines.

If this Standard conflicts with any applicable rule, regulation, or other corporate policy or standard, the most stringent components of each shall apply while always maintaining compliance with legal obligations. TCAA regulatory requirements always prevail, and no provision of this Standard, and no exemption granted under it, shall reduce or override any TCAA or other statutory requirement.

The OHSS department shall develop more detailed processes and procedures to address the requirements contained in this Standard.

## 2. APPLICATION

This Standard applies to all fixed-wing and rotary-wing aviation activities conducted for, on behalf of, or contracted by TNCL, including scheduled charter, ad hoc hire, aerial survey, emergency medical evacuation, and any flight carrying TNCL employees, contractors, visitors, or family members.

This Standard applies to all TNCL-controlled sites (including Kabanga and Buzwagi) and activities, and to all TNCL employees, business partners, contractors, and visitors when involved in controlled aviation activities.

This Standard does not apply to:

- scheduled commercial air carriers operating under a valid TCAA or equivalent Air Operator Certificate (AOC) on published scheduled services;
- military operators; and
- charter operators providing a one-time passenger service who hold current industry accreditation or certification granted by a reputable audit programme (including but not limited to ARGUS, BARS, IS-BAO, or Wyvern). Operators who do not hold such accreditation are subject to this Standard and shall be assessed using the TNCL Aviation Operator Audit Questionnaire.

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TNCL shall operate at all times in accordance with the Tanzania Civil Aviation Act (Cap. 80, R.E. 2020) and the subsidiary Civil Aviation Regulations made under it. This Standard supports the TNCL On-Demand Air Transportation Policy and Procedures.

**Flight categories.** For the purpose of applying the aircraft and operational requirements of this Standard, all flights are classified into one of three categories:

- International flights – flights between Tanzania and another country;
- In-country (domestic) flights – flights wholly within Tanzania, other than flights to or from the Kabanga Site; and
- Flights to the Kabanga Site (Ngara) – flights to or from the airstrip serving the Kabanga Nickel Project in Ngara District, Kagera Region.

The aircraft permitted for each category are specified in Section 6.2 (Aircraft Selection by Flight Category). The requirement to use a defined flight category, and to select only a permitted aircraft type for that category, is a critical control under this Standard.

### 3. REASONS FOR INCLUSION

Aviation activities have caused fatalities and can contribute to significant incidents. They are generally associated with high-energy, uncontrolled events with the potential for multiple fatalities. It is therefore necessary to ensure that equipment, processes, and behaviours are developed and adopted that will manage the risk associated with all aviation activities.

The causes and contributing factors to these incidents have historically included:

- a) At-risk maintenance activities.
- b) Insufficient management of risk.
- c) Equipment failure.
- d) Inadequate emergency response.
- e) Pilot error or exceedance of flight and duty time limits;
- f) Controlled flight into terrain (CFIT) and mid-air collision;
- g) Loss of control during external load or low-level operations;
- h) Uninspected or unsuitable airstrips and helipads; and
- i) Inclement weather and degraded visibility.

Aviation is recognised as a critical (potentially fatal) risk for TNCL. This Standard establishes the critical controls that must be in place, verified, and maintained for every flight.

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#### 4. DEFINITION OF ACRONYMS

Table 1: Definition of Acronyms

Acronym / Term	Definition
<b>Aerodrome</b>	A defined area of land or water intended to be used for the arrival, departure, and surface movement of aircraft.
<b>Airstrip</b>	A runway without normal air-base or airport equipment.
<b>AOC</b>	Air Operator Certificate – a certificate issued by the TCAA (or equivalent authority) authorising an operator to conduct commercial air transport operations.
<b>Approved Operator</b>	An aviation operator listed on the TNCL Approved Aviation Operators database that has successfully completed an aviation audit conducted by a qualified aviation auditor.
<b>Aviation Audit</b>	An audit focusing on the aviation procedures, operations, prescribed standards, and regulatory requirements of an aircraft operator, maintenance organisation, or third party involved in an aviation operation.
<b>Chain of Custody</b>	A traceable process documenting the transfer of responsibility in the transportation of goods (including fuel) from a recognised source.
<b>CRM</b>	Crew Resource Management.
<b>Crisis</b>	An unexpected situation or period of uncertainty in which direct action must be taken to avoid an adverse impact on operations and persons.
<b>CVR</b>	Cockpit Voice Recorder.
<b>Drape</b>	A flight trajectory that follows the terrain.
<b>EGPWS / TAWS</b>	Enhanced Ground Proximity Warning System / Terrain Awareness and Warning System.
<b>Flight – International</b>	A flight between Tanzania and another country.
<b>Flight – In-Country (Domestic)</b>	A flight wholly within Tanzania, other than a flight to or from the Kabanga Site.
<b>Flight – Kabanga Site (Ngara)</b>	A flight to or from the airstrip serving the Kabanga Nickel Project in Ngara District, Kagera Region. Only the Dash 8 Q300 is permitted for this category.

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Acronym / Term	Definition
<b>ELT</b>	Emergency Locator Transmitter.
<b>Emergency Flight</b>	A flight undertaken where there is grave and imminent danger to persons on board or on the ground requiring immediate aviation support.
<b>ERP</b>	Emergency Response Plan.
<b>FDR</b>	Flight Data Recorder.
<b>FRA</b>	Formal Risk Assessment.
<b>IFC</b>	International Finance Corporation (member of the World Bank Group).
<b>IFR</b>	Instrument Flight Rules.
<b>IMC</b>	Instrument Meteorological Conditions.
<b>MEL</b>	Minimum Equipment List.
<b>PAPI</b>	Precision Approach Path Indicator.
<b>Pilot in Command (PIC)</b>	The pilot designated as being in command and charged with the safe conduct of a flight.
<b>Rest Period</b>	A period during which a flight crew member is relieved by the operator of all duties associated with their employment.
<b>Routine Flight</b>	A flight occurring more than once per month.
<b>SMS</b>	Safety Management System.
<b>TCAA</b>	Tanzania Civil Aviation Authority.
<b>TCAS</b>	Traffic Alert and Collision Avoidance System.
<b>TNCL</b>	Tembo Nickel Company Limited.
<b>Tour of Duty</b>	A period from the time a flight crew member commences any duties before a flight or series of flights until finally relieved of all such duties, including any required standby at an aerodrome.
<b>Weak Link</b>	A device incorporated into a towline designed to separate at a tension point at which the aircraft would otherwise be jeopardised.

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## 5. INTERPRETATION AND EXCEPTIONS

Exceptions to this Standard must be requested by presenting written justification to the General Manager of Operations Support (Custodian of this document), supported by a Formal Risk Assessment (FRA).

An exemption request shall:

- Be submitted by the responsible Aviation Manager;
- Be subject to review by the TNCL Aviation Manager and the applicable General Manager;
- Include an FRA identifying the hazards, risks, and the controls that will manage the exemption;
- Specify a defined validity period; and
- State any restrictions or required mitigating actions.

Exemptions shall be considered on a case-by-case basis and may not be granted. Exemptions to this Standard cannot and do not apply to any TCAA or other regulatory requirement. Completed exemption forms, whether approved or rejected, must be provided to the OHSS Manager and the Aviation Manager and retained on the project register.

All questions, comments, and suggestions related to this Standard and its supporting documents must be communicated to the Document Controller. Responsibility for the interpretation of this document rests with the Custodian.


## 6. DEPLOYMENT

This section sets out the plant, procedural, infrastructure, and people requirements that constitute the critical controls for aviation activities. The requirements are aligned with the Tanzania Civil Aviation Act (Cap. 80) and its subsidiary regulations, IFC Performance Standard 2 (Labour and Working Conditions) and Performance Standard 4 (Community Health, Safety, and Security), and the World Bank Group General EHS Guidelines.

### 6.1 Aviation Operator Approval (Internal TNCL Process)

Before any aviation operator that is not a pre-approved TNCL contractor is engaged, the project lead or appointed TNCL representative shall complete the Aircraft Operator Approval Request form and submit it to the TNCL Aviation Department. All aviation operations shall:

- a) Be assessed and audited using the TNCL Aviation Operator Audit criteria;
- b) Be approved by the applicable General Manager (or equivalent) and the TNCL Aviation Manager;
- c) Utilise an Approved Operator covered by a current, successful TNCL aviation audit completed within the previous 24 months (audits renewed bi-annually, with extensions of up to 60 days at the discretion of the Aviation Manager). The only exception is a Crisis emergency flight approved by the TNCL Aviation Manager;

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- d) Where aviation forms part of a project, be directly hired by TNCL whenever reasonably practicable; and
- e) Be preceded by completion of the TNCL Aviation/Helicopter Induction by all participating personnel, in accordance with site procedures.

## 6.2 Aircraft Selection by Flight Category, Plant and Equipment Requirements

**Aircraft selection by flight category.** The aircraft type used shall match the flight category defined in Section 2. This is a critical control and shall not be varied except through the exemption process in Section 5, which cannot override any TCAA requirement.

### Permitted Aircraft by Flight Category

Flight Category	Permitted Aircraft	Conditions
<b>International Flights</b>	Jet and twin-engine turbine aeroplanes permitted	Operated by an Approved Operator; aircraft and route appropriate to the aerodromes used and within TCAA / destination-State requirements.
<b>In-Country (Domestic) Flights</b>	Jet and twin-engine turbine aeroplanes permitted	Operated by an Approved Operator; aircraft suited to the destination aerodrome. Turbine helicopters may be used for rotary-wing tasks.
<b>Flights To The Kabanga Site (Ngara)</b>	<b>Dash 8 Q300 only</b>	The De Havilland Canada Dash 8 Q300 is the ONLY aircraft approved for flights to or from the Kabanga Site (Ngara). Jets are NOT permitted to the Kabanga Site. Any change requires Aviation Manager approval and an FRA, and must remain within TCAA requirements.

**Note:** Jets are permitted for International and In-country flights but are NOT permitted for flights to the Kabanga Site (Ngara), where only the Dash 8 Q300 may be used. Turbine helicopters remain permitted for approved rotary-wing operations in all categories subject to the helicopter requirements of this Standard. The TNCL Aviation Manager (or delegated competent person) shall:

- a) Approve the use of all aircraft and helicopters, and confirm that the aircraft type matches the flight category in the table above before each flight or contract;
- b) Assess all aviation operators through the Formal Risk Assessment process before they are permitted to transport TNCL employees, contractors, visitors, or family members;

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- c) Ensure that no single-engine piston aircraft is used for the transport of personnel. Single-engine piston aircraft may only be used for non-passenger roles such as aerial survey and cargo, and only after a full risk assessment approved by the Aviation Manager;
- d) Limit passenger flights to twin-engine aeroplanes (or jets, for International and In-country flights) or turbine helicopters, noting that flights to the Kabanga Site (Ngara) are restricted to the Dash 8 Q300. Single-engine turbine aeroplanes may be used only with the documented approval of the Aviation Manager following a risk assessment, and never to the Kabanga Site; and
- e) Ensure that aircraft maintenance is carried out by an organisation approved under the Civil Aviation (Airworthiness) and (Approved Maintenance Organisation) Regulations and in line with the manufacturer's instructions.

Aircraft instruments and equipment. Pilots shall ensure that the following equipment is installed and serviceable before departure:

- Seat belts and shoulder harnesses for the pilot seat and the seat beside the pilot; side-facing seats approved for take-off and landing fitted with a shoulder harness as a minimum;
- At least one functioning landing light for all night flights;
- A fully functioning fire suppression system on all multi-engine turbine aircraft;
- Fully functional primary and backup radio communications equipment;
- A fully functional GPS in addition to any required navigation aids;
- An airframe-mounted 406 MHz Emergency Locator Transmitter (ELT) meeting TSO-C126a or higher (with a six-way 'G' switch for helicopters);
- A first aid kit meeting the TNCL First Aid Kit checklist and an aviation survival kit appropriate to the environment of operations;
- Sufficient oxygen and dispensing equipment on board for crew and passengers as required by regulation; and
- Aircraft-type-specific passenger briefing cards with clear instructions and diagrams in English and Kiswahili.

For IFR operations, the additional generator, independent energy source, weather/thunderstorm-detection, and ice-protection requirements of the Civil Aviation Regulations shall be met. EGPWS/TAWS is required on all aircraft above 5,700 kg MTOW or certificated for 10 or more passengers; TCAS and a Cockpit Voice Recorder are required on aircraft engaged on long-term contracts (one year or more) or where required by the regulator; and a Flight Data Recorder is required where prescribed by regulation. The following aircraft types are not approved for use by TNCL: Piper Cheyenne II, 20-Series Lear Jet, Mitsubishi MU-2, and

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military-registered aircraft. In addition, no aircraft type other than the Dash 8 Q300 is approved for flights to or from the Kabanga Site (Ngara).

### 6.3 Procedure Requirements

TNCL-owned aircraft operations and external aviation operators shall:

- a) Be an Approved Operator covered by a current, successful TNCL aviation audit completed within the previous 24 months;
- b) Hold and maintain a valid AOC or equivalent regulatory approval and provide TNCL with current copies, forwarding all renewals and notifying TNCL of any variation;
- c) Be the registered operator of the aircraft and not substitute cross-hired, sub-chartered, or leased aircraft without the prior approval of the Aviation Manager;
- d) Maintain insurance that includes TNCL as an additional insured with not less than 30 days' notice of cancellation, a cross-liability clause, and a waiver of subrogation, providing minimum coverage of US \$1 million (or equivalent) per passenger seat as certified by the manufacturer, with a current certificate of insurance provided to TNCL;
- e) Operate a functional Safety Management System (SMS) addressing safety policy and objectives, safety risk management, safety assurance, and safety promotion;
- f) Maintain a documented Emergency Response Plan (ERP) covering overdue-aircraft procedures and time limits, roles and responsibilities, emergency and regulatory contacts for each base, quarantine procedures, and annual documented exercises and reviews;
- g) Maintain a documented Quality Management System and a Dangerous Goods manual and policy consistent with the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284) and IATA Dangerous Goods Regulations;
- h) Operate a satellite-based flight-following system that can be monitored by both TNCL and the operator, with real-time monitoring, a sampling interval of three minutes or less, daily device checks, and a documented backup plan if internet access is interrupted (non-satellite systems require Aviation Manager approval based on a risk assessment);
- i) Maintain a documented flight plan / manifest system capturing weight and balance, aircraft registration or call sign, departure and destination, aircrew names, and the passenger and cargo manifest, with forms approved by the regulator where required;
- j) Maintain a documented Drug and Alcohol Policy and Management Plan;
- k) Operate at all times in accordance with regulatory requirements and the manufacturer's approved flight manual;
- l) Use a two-pilot crew for all multi-engine aeroplanes, single-engine turbine aeroplanes, and IFR aeroplane operations;

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- m) Ensure all passengers receive a pre-flight briefing before every flight; and
- n) Be subject to independent investigation in the event of an incident or accident when requested by TNCL, without prejudice to the statutory investigation conducted by the TCAA.


#### 6.4 Airstrips and Helipads

- a) Airstrips and helipads shall not be used unless approved by the pilot, who has the final say on their suitability.
- b) All TNCL-managed airstrips and helipads at permanent camps or bases shall be equipped with an Aviation Crash Box stored in a secure, labelled location.
- c) All TNCL-managed airstrips and helipads shall be covered by a documented and approved inspection. Unlicensed sites shall be inspected using the TNCL inspection checklists before flights; for sites not in scheduled use, the inspection interval shall not exceed 30 days. Licensed sites shall be maintained and inspected in compliance with TCAA requirements where these exceed TNCL requirements.
- d) All non-certified airstrips and helipads shall be approved and documented by the operator, recording location, position (latitude/longitude and elevation), orientation, dimensions, approach and departure routes, prevailing wind, available infrastructure (windsock, crash kit, refuelling), and geotechnical approval where the FRA indicates a landslide or instability risk.
- e) Unimproved landing areas used by helicopters on a one-off basis for exploration (e.g. sampling and reconnaissance) shall be selected by the pilot with performance and safety as the priority included in the project or operational risk assessment, and supported by satellite tracking as the only acceptable flight-following method.
- f) The airstrip serving the Kabanga Site (Ngara) shall only be used by the Dash 8 Q300. The suitability of the Kabanga airstrip shall be confirmed for the Dash 8 Q300, and no jet or other aircraft type shall operate to or from the Kabanga Site.

#### 6.5 Landing and Take-off Procedure

A landing and take-off procedure shall be in place covering, as a minimum:

- a) Monitoring and communication of weather data and wind direction;
- b) A windsock in good condition and unobstructed;
- c) Communications established between the pilot and ground crew;
- d) Inspection of the airstrip and surroundings before landing and before take-off;
- e) Adequate firefighting and emergency-response trained staff and equipment available during landing and take-off; and
- f) Accurate weight and load checks that account for prevailing conditions.

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## 6.6 Refueling

A refueling procedure shall be in place covering, as a minimum:

- a. Passengers disembarking before refueling commences, unless a documented hot/rapid-refueling procedure is in place and followed;
- b. Enforcement of no-smoking and no-open-flame rules;
- c. Fuel sampled at scheduled intervals and as required by local legislation and industry best practice, with chain-of-custody maintained;
- d. Only trained and competent staff involved in refueling, with no unauthorised assistance;
- e. An effective bonding/earthing cable placed between the fuel storage facility and the aircraft before refueling commences and maintained for the duration of the activity;
- f. A scheduled maintenance programme for the fuel storage facility and attachments such as hoses and fittings;
- g. Security at the storage facility to prevent accidental or deliberate fuel contamination;
- h. Adequate firefighting equipment and trained personnel present near the refueling activity; and
- i. The flight crew setting the fuel quantity required and confirming the on-board quantity with the ground crew before the fuel hose is removed.

Hot or rapid refueling of helicopters shall not be conducted unless the operator has a documented procedure and training forming part of its Operations Manual, non-essential personnel remain at a safe distance, no passengers are on board, and the helicopter and fuel pump are grounded in accordance with the operator's procedure.

## 6.7 Airstrip Maintenance

An airstrip maintenance procedure shall be in place covering, as a minimum:

- a) A scheduled maintenance programme communicated to all regular operators and to others applying for landing permission during maintenance periods;
- b) Effective "closure" of the runway with closure markings visible from the air;
- c) Equipment used on the airstrip being visible (beacon lights) and never left unattended on the airstrip;
- d) A system to remove equipment and "open" the airstrip in an emergency; and
- e) Effective inspection of the airstrip for loose objects after maintenance.

## 6.8 Night Landing and Emergency Medical Evacuation

A night landing and emergency medical evacuation procedure shall be in place where applicable, covering, as a minimum:

- a) Monitoring and communication of weather data and wind direction;
- b) Communications established between the pilot and ground crew;

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- c) Inspection of the airstrip and surroundings before landing and take-off using effective lighting and ground crew driving the runway perimeter;
- d) Adequate firefighting and emergency-response equipment and trained staff on hand during landing and take-off;
- e) Adequate landing lights on the airstrip and apron, including a lit windsock;
- f) Airport area hazards (e.g. Communications towers, cranes) lit at night as required by regulation;
- g) PAPI lights used for landing only if inspected and aligned to the manufacturer's requirements; pilots must be advised when PAPI lights are unserviceable, and unserviceable lights shall not be switched on until realigned;
- h) Adequate security arrangements to prevent animals or unauthorised persons crossing the airstrip; and
- i) For night use, a current IFR approach approved by the TCAA and flight checked.

### 6.9 Helicopter Operations

- a) All passengers shall hold a current TNCL Helicopter Induction (within the last 24 months) or, for a one-off flight, an in-field induction while escorted by an inducted person.
- b) Pilots shall remain in the helicopter, in their seat at the controls, while the rotors are turning.
- c) No passenger shall be carried when an external load is carried on the hook.
- d) All helicopters shall be equipped with a fuel low-level warning, a dedicated radio link with ground crew, and four-point harnesses with a lockable inertia reel for front crew and passenger seats.
- e) All lifting equipment shall be supplied and maintained by the operator, inspected daily before use, tagged with a unique ID, and recorded on a Lifting Equipment Register.
- f) All sling or external-load work shall be conducted under a documented procedure in the Operations Manual that defines pilot and loadmaster/ground-crew responsibilities and load-release procedures for long lines (≥50'/15 m) and medium/short lines, including weak-link and VNE provisions.
- g) Loadmasters and helicopter ground crew shall be trained and assessed as competent against the TNCL Helicopter Loadmaster Requirements (or operator equivalent) before conducting or taking part in slinging operations and shall wear task-specific PPE including an aviation helmet with integrated radio headset, high-visibility clothing, and flame-retardant or cotton clothing.

### 6.10 Geophysical and Aerial Survey Operations

- a) Survey companies should be members of the International Airborne Geophysics Safety Association (IAGSA), and survey specifications and operations should be determined using an IAGSA-approved risk-analysis methodology.

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- b) Towed-bird or array configurations shall incorporate a weak link certified by the regulatory authority (or, where the authority does not issue certifications, approved by an aerospace engineer).
- c) Survey aircraft shall be equipped with four-point harnesses with a lockable inertia reel and a radar altimeter with a readable/expanded scale and a settable audible or visual warning for operations at or below 500 ft AGL.
- d) Both pilots and equipment/technical crew shall wear flight helmets for flights below 500 ft, and only crew essential to the survey and employed by the survey operator shall be carried during survey operations.
- e) Survey operators shall submit a ground-clearance, airspeed, and drape monitoring plan before the survey starts and daily terrain-clearance maps and drape-monitoring results to the onsite TNCL representative during the survey.

### 6.11 People Requirements

The pilot in command of an aircraft has the ultimate responsibility for the overall conduct of the flight and is responsible for determining the load that can be carried under prevailing conditions, the flight routing, and the suitability of landing sites and weather conditions, as set out in the approved flight manual and operating data for the specific aircraft.

All pilots shall hold a current licence for the category and type of aircraft contracted, validated by the TCAA under the Civil Aviation (Personnel Licensing) Regulations, and shall meet all local regulatory requirements. Current employment with the operator shall exceed one year for a Captain and three months for a First Officer. Pilots shall meet or exceed the TNCL minimum pilot experience requirements, and operators shall supply TNCL with a completed Pilot Experience Requirements form for each pilot proposed or used.

### Minimum Pilot Licence Requirements

Role / Aircraft	Minimum License
Captain – all aircraft up to 12,500 lb / 5,700 kg	Commercial Pilot License
Captain – all aircraft above 12,500 lb / 5,700 kg	Airline Transport Pilot License
Captain – all pressurised multi-engine turbine	Airline Transport Pilot License
Captain – all jet aircraft	Airline Transport Pilot License
First Officer / Co-Pilot – all aircraft	Commercial Pilot License

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### Minimum Pilot Experience Levels

Experience Requirement	Captain	First Officer
Total flight time	2,000 hrs	500 hrs
Total time in command	1,500 hrs	100 hrs*
Time in command, multi-engine	500 hrs.	150 hrs (if applicable)
Time in command, turbine engine	300 hrs	–
Time on contract aircraft type	100 hrs	10 hrs


\*In command or in command under supervision (ICUS) hours are acceptable for First Officers.

**Specialised Roles.** External-load operations require 100 hrs command with 50 hrs in the role on type; aerial survey requires 100 hrs command with 50 hrs in role on type (300 hrs command for low-level), with a low-level proficiency check within the preceding 12 months; remote operations (desert, jungle, arctic, offshore, or mountainous) require 6 months' experience with 3 months in the past 18 months; and instrument flying requires a minimum of 3 instrument renewals in the past 5 years for the PIC and a current instrument rating for the First Officer.

Pilots shall hold current training and currencies including: Helicopter/Aircraft Underwater Escape Training (within three years) where routine flights over water are required; Intermediate First Aid/CPR (Red Cross standard or equivalent); annual Emergency Proficiency Training; Crew Resource Management within the preceding two years for two-pilot operations; annual recurrent training including a proficiency check; and simulator training within the previous 12 months on a Level C/D Full Flight Simulator for pilots on long-term contracts (greater than six months) for multi-engine and/or turbine aeroplane operations.

Pilots shall use oxygen on all flights in an unpressurised aircraft above 10,000 ft ASL. It is recommended that crew wear flight helmets for flights conducted below 500 ft AGL. Flight attendants, where carried, shall be trained in first aid and trained annually in all emergency procedures.

Operators shall schedule pilots and operations so that flight and duty time limits are met. Where TCAA regulatory requirements impose more stringent limitations, the regulatory limits shall be followed.

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### Pilot Flight and Duty Time Limitations


Limitation	Maximum
Flight time in any 365 consecutive days	900 hrs
Flight time in any 30 consecutive days (single pilot)	120 hrs
Flight time in any 30 consecutive days (dual pilot)	125 hrs
Flight time in any 7 consecutive days	30 hrs
Flight time in any one day	8 hrs
Low-level aerial work in any one day (excl. transit above 500' AGL)	5 hrs (8 hrs for two-pilot aeroplane ops)
Helicopter slinging operations in any one day	6 hrs
Tour of duty in any 14 consecutive days	90 hrs
Tour of duty in any one day	11 hrs
Minimum rest period (duty day 10–11 hrs)	11 consecutive hrs
Minimum rest period (duty day less than 10 hrs)	10 consecutive hrs
Rest within any 7-day period	One continuous rest period including 22:00–06:00 local on two consecutive nights

Passengers shall receive a pre-flight briefing covering, as a minimum: identification of the aircraft type, seat-belt operation, stowing of loose items, safe entry and exit zones, emergency exits, first aid and survival kit location, air-sickness protocol, and fire extinguisher location. In aircraft certified for fewer than 10 passengers, the briefing shall also cover emergency radio operation and ELT location and basic operation. Passengers shall dress according to the operational risk, considering fire-resistant or cotton clothing, climatic conditions en route, diurnal temperature variation, appropriate footwear, and biting-insect activity.

## 7. RELATED DOCUMENTS

The following supporting forms and documents are used in conjunction with this Standard:

- Aviation Standard Exemption Form
- Pilot Experience Requirements Form
- First Aid Kit Checklist
- Helicopter Loadmaster Requirements
- Helipad Inspection Form
- Airstrip Inspection Form

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- Aircraft Operator Approval Request Form
- Aviation Crash Box Checklist
- Approved Daily Helicopter Load Sheet
- Flight Request Form
- Unscheduled Flight Authorization Form
- Helipad / Airstrip Approval Forms

**Regulatory and Reference Framework:**

- Tanzania Civil Aviation Act, Cap. 80 (R.E. 2020) and subsidiary Civil Aviation Regulations (including Air Operator Certification and Administration; Personnel Licensing; Airworthiness; Instruments and Equipment; Operation of Aircraft);
- ICAO Annexes and the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284);
- IFC Performance Standards 1, 2, and 4 and the World Bank Group General EHS Guidelines (Occupational Health and Safety); and
- IFC EHS Guidelines for Airlines / Airports.

**8. SYSTEM EVALUATION**

This Standard shall be reviewed at least every two years by members of the OHS department and presented to the Standard Committee for approval, or sooner when organisational changes take place, following an incident or audit finding, or when changes to TCAA regulations or IFC requirements so require. The TNCL Document Controller will monitor compliance with the document control system on an ongoing basis.

Compliance with this Standard shall be verified through the aviation audit programme, routine critical-control verifications, and internal and external audits. The roles and responsibilities for applying this Standard are set out in the table below.

**Roles and Responsibilities**

Role	Responsibility
<b>General Manager / COO</b>	Approve all aviation operations in the accountable area; review and approve exemptions to this Standard.
<b>TNCL Aviation Manager</b>	Authorise exceptions; approve aircraft, operators, single-engine and non-satellite flight-following arrangements, cross-hire/sub-charter arrangements, and alternative forms or systems; assess operators via FRA.

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Role	Responsibility
<b>Aviation Safety / OHS Manager</b>	Organise audits of potential and current operators; maintain the Approved Operators database; support sites in implementation and compliance; process exemption requests.
<b>Project Lead / TNCL Contract Representative</b>	Develop the project scope of work; complete the contractor safety management requirements; conduct the project FRA; coordinate between parties; apply this Standard to the project; approve flights.
<b>Pilot in Command</b>	Ensure the safe operation of the aircraft; conduct pre-flight passenger briefings; inspect fuel before refueling; approve airstrips and helipads.
<b>Loadmaster / Ground Crew</b>	Inspect fuel before refueling; ensure proper marshalling and load hook-up; conduct helipad inspections.
<b>Passenger</b>	Ensure inclusion on the approved load sheet or manifest; receive a pre-flight briefing; dress according to risk.
<b>Document Controller</b>	Maintain version control, distribution, and records of this Standard.

## 9. DISTRIBUTION


List physical locations which require a controlled copy of this document.

Table 2: Distribution

Copy	Controlled Document Folder Location
Master	Controlled Documents Central Filing System
Copy 1	OHS Department – Kabanga
Copy 2	Aviation / Operations – Buzwagi

## 10. CONTRAVENTION

Any breach of this standard shall be regarded as refusal/failure to carry out a lawful instruction and will be dealt with as per the disciplinary procedure.

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## 11. DOCUMENT CHANGE PROCESS

The process of document change starts when the document custodian identifies there is a need to make changes within the document. The document custodian/ owner shall complete the document change request form, sign it off and submit it to the Document Controller.

The Document controller shall issue the controlled word copy of the document to the respective document custodian/owner so that changes may be made. The document custodian/owner shall resubmit the updated document to the document controller so that the document can be controlled and updated within the Filing system ready for use by the end users.

### 11.1 Reason for Change

Table 3: Reason for Change

A	As a result of incidents	F	Change in training requirements
B	As a result of the audit findings	G	Results of risk assessments
C	New / changes in governance documents	H	Change due to spelling or grammatical error
D	Changes in legislation	I	New document format
E	Changes in technology	J	To integrate special instruction into the document control system

### 11.2 History of Change


Table 4: History of Change

Date of Change	Revision No	Revised Item (paragraph Number reference if required)	Reason Code	Name of Reviewer
04 June 2026	00	Full revision; alignment with TCAA regulations and IFC Performance Standards / EHS Guidelines; addition of operator approval, equipment, helicopter, survey, and pilot experience requirements	C, D	Brenda Magai

## 12. RECORD CONTROL

Table 5: Record Control

Document Title:	Document ID:	Responsible for Maintenance:	Responsible for Filling:	Location of Storage:	Retention Period:	Method of Disposal:
Aviation Critical Risk Control Standard	TNCL-OHSS-STD-0001	Document Controller	Document Controller	OHS Department	Hard Copy two Years	Hard copy shared file electronic

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### 13. DECLARATION

I hereby declare that I have taken part in the discussion of this standard, and I understand its contents and do commit that I shall ensure compliance hereto:

	Name and surname	Company Number	Designation / Role	Signature	Date Signed
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