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Civil Aviation Authority
of Fiji

STANDARDS DOCUMENT AIR OPERATOR'S CERTIFICATE OF COMPETENCY

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AIR OPERATOR'S CERTIFICATE OF COMPETENCY

SD - AOC

Civil Aviation Authority of Fiji
Private Mail Bag, NAP 0354
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PREFACE

General

Fiji's National Aviation Law consists of a three-tier regulatory system, comprising Acts, Regulations and Standards Documents; the purpose of which is to ensure, where deemed appropriate, compliance and conformance with ICAO Standards and Recommended Practices (SARPS).

The three-tier regulatory system represents Fiji's Primary Legislation System and Specific Operating Regulations to meet Critical Elements CE1 and CE2 of ICAO's Eight Critical Element of a safety oversight system.

Standards Documents (SD) are issued by the Civil Aviation Authority of Fiji under the provision of Section 14 (3) (b) of the Civil Aviation Authority Act 1979 (CAP 174A)

Where appropriate, the SD also contains technical guidance (Critical Element CE5) on standards, practices, and procedures that are acceptable to the Authority.

Notwithstanding the above, and where specifically indicated in this Standards Document that such a provision is available, consideration may be given to other methods of compliance that may be presented to the Authority provided they have compensating factors that can demonstrate a level of safety equivalent to or better than those prescribed herein. Accordingly, the Authority will consider each case based on its own merits holistically in the context of and relevancy of the alternative methods to the individual applicant.

When new standards, practices, or procedures are determined to be acceptable, they will be added to this document.

Purpose

This Standards Document – Air Operator's Certificate of Competency is issued by the Civil Aviation Authority of Fiji pursuant to Section 14 (3) (b) of the Civil Aviation Authority Act 1979 (CAP 174A). This Document is intended for use by CAAF, applicants for, and holders of, an Air Operator Certificate and for their staff.

Change Notice

This Standards Document has been developed pursuant to the Authority's obligation to provide oversight on operators and their personnel, as well as the operator's obligation to comply with standards notified by the Authority and is the means by which such notification is given.

THERESA LEVESTAM
ACTING CHIEF EXECUTIVE

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DEFINITIONS.

When the following terms are used for operation of aircraft in commercial air transport, they have the following meanings:

Accident means an occurrence that is associated with the operation of an aircraft and takes place between the time any person boards the aircraft with the intention of flight and such time as the engine or any propellers or rotors have come to rest and all such persons have disembarked, being an occurrence in which—

(a) a person is fatally or seriously injured as a result of—

(i.) being in the aircraft; or

(ii.) direct contact with any part of the aircraft, including any part that has become detached from the aircraft; or

(iii.) direct exposure to jet blast— *except* when the injuries are self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to passengers and crew; or (b) the aircraft sustains damage or structural failure which—

(iv.) adversely affects the structural strength, performance, or flight characteristics of the aircraft; and

(v.) would normally require major repair or replacement of the affected component, *except* engine failure or damage, when the damage is limited to the engine, its cowlings, or accessories; or for damage limited to propellers, wing tips, rotors, antennas, tires, brakes, fairings, small dents, or puncture holes in the aircraft skin; or (c) the aircraft is missing or is completely inaccessible.

Aerial work means an aircraft operation in which an aircraft is used for specialized services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue or aerial advertisement;

Aerial work aircraft means an aircraft (other than a public transport aircraft) flying, or intended by the operator to fly, for the purpose of aerial work;

Aerial work undertaking means an undertaking whose business is the performance of aerial work;

A**erobatic flight** means manoeuvres intentionally performed by an aircraft involving an abrupt change in its attitude, an abnormal attitude, or an abnormal variation in speed;

Aerodrome means a defined area on land or water (including any building, installation or equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft, and **airport** has a corresponding meaning therefore in this SD, any reference to **airport** includes **aerodrome**.

Aerodrome certificate means a certificate to operate an aerodrome issued by the Authority under any law relating to the certification of aerodromes subsequent to the acceptance and approval of the aerodrome manual;

A**erodrome operating minima** means the limits of usability of an aerodrome for:

(a) take-off, expressed in terms of Runway Visual Range (RVR) or visibility and, if necessary, cloud conditions;

(b) landing in precision approach and landing operations, expressed in terms of visibility or Runway Visual Range (RVR) and decision altitude or height (DA/H) as appropriate to the category of the operation;

(c) landing in approach and landing operations with vertical guidance, expressed in terms of visibility or Runway Visual Range (RVR) and decision altitude or height (DA/H); and

(d) landing in non-precision approach and landing operations, expressed in terms of visibility or runway visual range, minimum descent altitude or height (MDA/H) and, if necessary, cloud conditions;

Aerodrome operator means a person that holds an aerodrome certificate authorising the person to operate an aerodrome;

Aerodrome reference point means the designated geographical location of the aerodrome;

Aerodrome registration approval means a form of approval given to an aerodrome either, for a land aerodrome for aeroplanes, by the Authority, for a water aerodrome by its inclusion in an aircraft operator‘s operations manual or for a heliport by its inclusion in the helicopter operator‘s operations manual;

Aerodrome traffic means all traffic on the manoeuvring area of an aerodrome and all aircraft flying in, or entering or leaving an aerodrome traffic circuit;

Aerodrome traffic zone means the airspace around an aerodrome for the protection of aerodrome traffic and, unless otherwise specified, includes the airspace within a horizontal radius of 8 kilometers from the aerodrome reference point and extending from the surface to 3,000 feet above the elevation of the aerodrome;

Aeronautical Information Publication (AIP) means a publication issued by Airports Fiji and containing aeronautical information of a lasting character essential to air navigation;

Aeronautical information service means a service established within a defined area of coverage responsible for the provision of aeronautical information and data necessary for the safety, regularity and efficiency of air navigation;

Aeronautical ground light means any light specifically provided as an aid to air navigation, other than a light displayed on an aircraft;

Aeronautical mobile service means, unless the context otherwise requires, a mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radio-beacon stations may also participate in this service on designated distress and emergency frequencies or a mobile service reserved for communications relating to safety and regularity of flight, primarily along national or international civil air routes;

Aeronautical station means a land station in the aeronautical mobile service established for the purpose of assisting aircraft, or a radio station placed on board a ship or on an earth satellite;

Aeroplane means a power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight;

Aircraft means any machine that can derive support in the atmosphere from reactions in the air other than the reactions of the air against the earth‘s surface, aircraft includes an aircraft set out in column 3 of the following table-

Column 1	Column 2	Column 3
Lighter than air aircraft	**Power Driven**	**Airship**
	Non Power Driven	**Free Balloon** **Captive Balloon** **Kite**
Heavier than air aircraft	**Non Power Driven**	**Glider (Fixed lifting surfaces)** **Glider (Non-fixed lifting surfaces)**
	Power Driven	**Aeroplane (Landplane)** **Aeroplane (Amphibian)** **Aeroplane (Seaplane)** **Aeroplane (Self Launching Motor)**
	Power Driven **(flying machines)**	**Powered Lift (Tilt Rotor)** **Rotorcraft (Helicopter)** **Rotorcraft (Gyroplane)**

Air navigation services include air traffic services, aeronautical telecommunication service, meteorological service for air navigation, search and rescue and aeronautical information service;

Airport includes —**aerodrome**.

Airports Fiji means Airports Fiji Limited, as that company exists from time to time (even if the name is later changed);

Airship means a power driven lighter-than-air aircraft;

Air traffic means all aircraft in flight or operating on the manoeuvring area of an aerodrome;

Air traffic control clearance (clearance) means authorization by an air traffic control unit for an aircraft to proceed under conditions specified by that unit, and —clearance prefixed by the words —taxi, —take off, —en-route, —approach or —landing shall be construed accordingly;

Air traffic control service means a service provided for the purpose of -

(a) preventing collisions –

  (i) between aircraft; or

  (ii) on the manoeuvring area between aircraft and obstructions; and

(b) expediting and maintaining an orderly flow of air traffic;

Air traffic control unit (ATC unit) means an area control centre, approach control unit or aerodrome control tower;

Air traffic service route (ATS route) means a route for channeling the flow of traffic as necessary for the provision of air traffic services;

Air traffic services is a generic term meaning flight information services, alerting services, air traffic advisory services, air traffic control services (area control services, approach control services or aerodrome control services);

Air traffic services reporting office means a unit established for the purpose of receiving reports concerning air traffic services and flight plans submitted before departure;

Air traffic services unit (ATS Unit) is a generic term meaning air traffic control unit, flight information centre or air traffic services reporting office;

Air transport undertaking means an undertaking involving the transport by air of passengers, cargo or mail for remuneration or hire;

Airway means a control area or portion thereof established in the form of a corridor;

Airworthy means the status of an aircraft, engine, propeller or part when it conforms to its approved design and is in a condition for safe operation.

Alerting service means a service provided to notify appropriate organisations regarding aircraft in need of search and rescue aid and assist such organizations as required;

Alternate aerodrome means an aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to proceed to or land at the aerodrome of intended landing, and includes the following corresponding definitions –

(a) **take-off alternate** means an alternate aerodrome at which an aircraft can land should this become necessary shortly after take-off and it is not possible to use the aerodrome of departure;

(b) **en-route alternate** means an aerodrome at which an aircraft would be able to land after experiencing an abnormal or emergency condition while en route;

(c) **destination alternate** means an alternate aerodrome to which an aircraft may proceed should it become either impossible or inadvisable to land at the aerodrome of intended landing;

(d) **ETOPS en-route alternate** means a suitable and appropriate alternate aerodrome, including arrival and departure aerodromes, at which an aeroplane would be able to land after experiencing an engine shut down or other abnormal or emergency condition while en-route in an ETOPS operation;

Altitude means the vertical distance of a level, a point or an object considered as a point, measured from mean sea level;

Amphibian means an aircraft that is capable of taking off and landing on land and on water;

Approach control unit means a unit established to provide air traffic control service to controlled flights arriving at, or departing from, one or more aerodromes;

Approach control service means air traffic control service for arriving or departing controlled flights;

Apron means a defined area on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance;

Approved in relation to endorsement by the Authority, means acceptable to the Authority;

Area control centre (ACC) means a unit which provides air traffic control service to controlled flights in control areas under its jurisdiction;

Area control service means air traffic control service for controlled flights in control areas;

Authorized person means any suitably qualified person authorized in writing by the Authority to exercise any of the functions of an authorized person under the Act and its regulations;

Authority means the Civil Aviation Authority of the Fiji Islands established under the *Civil Aviation Authority of Fiji Act Cap. 174A*;

Aviation document means any licence, certificate, permit, approval, ratings and privileges issued or granted by the Authority under these Regulations;

B**alloon** means a non-power driven lighter-than-air aircraft;

Cabin crew member. A crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member.

Category A with respect to helicopters' means a multi-engined helicopter designed with engine and system isolation features specified in the applicable airworthiness codes and capable of operations using take-off and landing data scheduled under a critical engine failure concept that assures adequate designated surface area and adequate performance capability for continued safe flight or safe rejected take-off in the event of engine failure.

Category B with respect to helicopters' means a single-engined or multi-engined helicopter that does not meet Category A standards. Category B helicopters have no guaranteed capability to continue safe flight in the event of an engine failure, and unscheduled landing is assumed.

Cape Town Convention means the Convention on International Interests in Mobile Equipment 2001 and its Protocol and any amendment of that Convention and its Protocol made in accordance with that Convention;

Cargo means any property carried in an aircraft other than mail, stores and accompanied or mishandled baggage;

Ceiling in relation to weather, means the height above the ground or water of the base of the lowest layer of cloud below 6000 metres (20,000 feet) covering more than half the sky;

Certificate of registration means a certificate of registration issued by the Authority pursuant to regulation 4;

Certified aerodrome means an aerodrome appropriately issued with an aerodrome certificate authorizing the aerodrome operator to use the aerodrome for the purposes specified in the aerodrome certificate;

Change-over point means the point at which an aircraft navigating on an ATS route segment defined by reference to very high frequency omni directional radio ranges is expected to transfer its primary navigational reference from the facility behind the aircraft to the next facility ahead of the aircraft, being the point which provides the optimum balance in respect of signal strength and quality between facilities at all levels to be used and to ensure a common source of azimuth guidance for all aircraft operating along the same portion of a route segment;

Charter flight means a flight, operated on an ‗as and when required' basis, where the entire aircraft capacity is hired or purchased privately by one or more entities, which may re-sell to the public, for carriage from one place to another or returning to the place of departure;

Clearance see definition of —*Air traffic control clearance*;

Clearance limit means the point to which an aircraft is granted an air traffic control clearance;

Commercial air transportation see definition of —*commercial air transport operation*;

Commercial air transport operation means an aircraft operation involving the transport of passengers, cargo or mail for remuneration or hire;

Congested area in relation to a city, town or settlement, means any area which is substantially used for residential, industrial, commercial or recreational purposes;

Contracting State means any State (including Fiji) which is a party to the Convention on International Civil Aviation concluded at Chicago on 7 December 1944;

Control area means a controlled airspace extending upwards from a specified limit above the earth;

Controlled aerodrome means an aerodrome at which air traffic control service is provided to aerodrome traffic;

Controlled airspace means an airspace of defined dimensions within which air traffic control service is provided in accordance with the air space classification;

Controlled flight means any flight which is subject to an air traffic control clearance;

Controlled VFR flight means a controlled flight conducted in accordance with the Visual Flight Rules;

Control zone means the controlled airspace extending upwards from the surface of the earth to a specified upper limit;

Co-pilot means a licensed pilot serving in any other capacity (other than as pilot-in-command) but does not include a pilot who is on board the aircraft for the sole purpose of receiving flight instruction;

Crew member means a person assigned by the aircraft operator for duty on an aircraft during a flight duty period;

Critical engine. Critical engine means the engine whose failure would most adversely affect the performance or handling qualities of an aircraft.

Critical engine. On a multi-engine, helicopter is the one whose failure would result in the most adverse effects on the aircraft's handling and performance. A helicopter with an engine failure, One Engine Inoperative (OEI), shall be capable of maintaining 1000 feet terrain clearance to a location suitable for an OEI landing. Therefore, the helicopter shall be capable of maintaining a 1% gradient of climb as a minimum, to the minimum required altitude to reach the destination or a suitable OEI landing area.

Cruise climb means an aeroplane cruising technique resulting in a net increase in altitude as the aeroplane mass decreases;

Cruising level means a level maintained by an aircraft during a significant portion of a flight;

Current flight plan means the flight plan, including changes, if any, brought about by subsequent clearances;

Danger area means the airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times;

Dangerous goods are defined as articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions.

Decision altitude (DA) *is referenced to mean sea level* or decision height (DH) *is referenced to the threshold elevation* means a minimum altitude or height in a precision approach at which a missed approach must be initiated if the required visual reference to continue the approach has not been established;

Design take-off mass means the maximum mass at which the aircraft, for structural design purposes, is assumed to be planned to be at the start of the take-off run;

Designated area means any part of an aerodrome or any building on an aerodrome designated, by a notice signed by an aerodrome operator and posted on or near the entry points to such part of the aerodrome or building to which it is applicable, so as to be readily seen and read by members of the public, as an area restricted to any person or class of persons;

Duty in relation to any aircraft crew member means the undertaking on behalf of the operator of the aircraft, of any flight (whether as passenger or crew) or of any function (whether or not in flight) on or in connection therewith;

Duty period the time during which a flight crew member carries out any duty at the behest of the flight crew member's employer;

EDTO critical fuel. The fuel quantity necessary to fly to an en-route alternate aerodrome considering, at the most critical point on the route, the most limiting system failure.

EDTO significant system. An aeroplane system whose failure or degradation could adversely affect the safety particular to an EDTO flight, or whose continued functioning is specifically important to the safe flight and landing of an aeroplane during an EDTO diversion.

Electronic flight bag (EFB). An electronic information system, comprised of equipment and applications for flight crew, which allows for the storing, updating, displaying and processing of EFB functions to support flight operations or duties.

Elevation means the vertical distance of a point or a level, on or affixed to the surface of the earth measured from mean sea level;

Emergency locator transmitter (ELT). A generic term describing equipment which broadcast distinctive signals on designated frequencies and, depending on application, may be automatically activated by impact or be manually activated. An ELT may be any of the following:

(i.) Automatic fixed ELT (ELT(AF)). An automatically activated ELT which is permanently attached to an aircraft.

(ii.) Automatic portable ELT (ELT(AP)). An automatically activated ELT which is rigidly attached to an aircraft but readily removable from the aircraft.

(iii.) Automatic deployable ELT (ELT(AD)). An ELT which is rigidly attached to an aircraft and which is automatically deployed and activated by impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided.

(iv.) Survival ELT (ELT(S)). An ELT which is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by survivors.

E**mergency distance available** means the distance from the point on the surface of the aerodrome at which the aircraft can commence its take-off run to the nearest point in the direction of take-off at which the aircraft cannot roll over the surface of the aerodrome and be brought to rest in an emergency without the risk of accident;

Engine. A unit used or intended to be used for aircraft propulsion. It consists of at least those components and equipment necessary for functioning and control, but excludes the propeller/rotors (if applicable).

Extended diversion time operations (EDTO). Any operation by an aeroplane with two or more turbine engines where the diversion time to an en-route alternate aerodrome is greater than the threshold time established by the State of the Operator.

ETOPS means extended twin-engine operations;

E**xpected approach time**, in relation to any arriving aircraft, means the time at which ATC expects that an arriving aircraft, following a delay, will leave the holding point to complete its approach for a landing;

Fatigue. A physiological state of reduced mental or physical performance capability resulting from sleep loss, extended wakefulness, circadian phase, and/or workload (mental and/or physical activity) that can impair a person's alertness and ability to perform safety-related operational duties.

Fatigue Risk Management System (FRMS). A data-driven means of continuously monitoring and managing fatigue-related safety risks, based upon scientific principles and knowledge as well as operational experience that aims to ensure relevant personnel are performing at adequate levels of alertness.

Filed flight plan means the flight plan as filed with an ATS unit by the pilot of an aircraft or his designated representative, without any subsequent changes;

Flight means that an aircraft shall be deemed to be in flight -

(a) in the case of an airship or free balloon, from the moment when it first becomes detached from the surface until the moment then it next becomes attached thereto or comes to rest thereon;

(b) in the case of any other aircraft, from the moment the aircraft first moves for the purpose of taking off until the moment it comes to rest at the end of the flight; and —to fly has a corresponding meaning;

Flight crew member means a licensed crew member charged with duties essential to the operation of the aircraft during a flight duty period;

Flight duty period means the total time from the moment a flight crew member commences duty, immediately subsequent to a rest period and with the intention of making a flight or series of flights, to the moment the flight crew member is relieved of all duties;

Flight safety documents system. A set of interrelated documentation established by the operator, compiling and organizing information necessary for flight and ground operations, and comprising, as a minimum, the operations manual and the operator's maintenance control manual.

Flight information centre means a unit established to provide flight information service and alerting service;

Flight Information Region (FIR) means an airspace of defined dimensions within which flight information service and alerting service are provided;

Flight information service means a service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights;

Flight level (FL) means a surface of constant atmospheric pressure which is related to a specific pressure datum, 1013.2 hectopascals (hPa), and is separated from other such surfaces by specific pressure intervals;

Flight plan means specified information communicated to air traffic services units, relative to an intended flight or portion of an intended flight of an aircraft;

Flight simulation training device means any one of the following apparatus in which flight conditions are simulated on the ground –

(a) a flight simulator, which provides an accurate representation of the flight deck of a particular aircraft to the extent that mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of the flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated;

(b) a flight procedures trainer, which provides a realistic flight deck environment, and which simulates instrument responses, simple control functions of that mechanical, electrical electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class;

(c) a basic instrument flight trainer, which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions;

Flight time — aeroplanes. The total time from the moment an aeroplane first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight.

Note.— Flight time as here defined is synonymous with the term "block to block" time or "chock to chock" time in general usage which is measured from the time an aeroplane first moves for the purpose of taking off until it finally stops at the end of the flight.

Flight time — helicopters. The total time from the moment a helicopter's rotor blades start turning until the moment the helicopter finally comes to rest at the end of the flight, and the rotor blades are stopped.

Flight visibility means the visibility forward from the cockpit of an aircraft in flight;

(to) fly See definition of —*flight*;

Glider means a non-power-driven heavier-than-air aircraft which derives its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight;

Ground visibility means the visibility at an aerodrome, as reported by an accredited observer;

Gyroplane means a heavier-than-air aircraft supported in flight by the reactions of the air on one or more rotors which rotate freely on substantially vertical axes;

Heavier than air aircraft means an aircraft deriving its lift in flight chiefly from aerodynamic forces;

Height means the vertical distance of a level, a point, or an object considered as a point, measured from a specified datum; when referring to an aircraft, the height will be measured from the lowest part of the aircraft;

Helicopter means a heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power driven rotors on substantially vertical axes;

Heading means the direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (true, magnetic, compass, or grid);

IFR flight means a flight conducted in accordance with the Instrument Flight Rules;

Incident means an occurrence other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation;

In-flight relief means the period of time during which a flight crew member is relieved in flight of his or her duties at the controls by another suitably qualified flight crew member;

Instrument Flight Rules means a set of rules governing the conduct of flight under instrument meteorological conditions;

Instrument approach procedure means a series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or enroute obstacle clearance criteria apply;

Instrument Meteorological Conditions (IMC) means the meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling, less than the minima specified for Visual Meteorological Conditions;

(to) land, in relation to aircraft, includes alighting on the water;

Landing area means that part of a movement area intended for the landing or take-off of aircraft;

Landing distance available means the distance from the point on the surface of the aerodrome above which the aircraft can commence its landing, having regard to the obstructions in its approach path, to the nearest point in the direction of landing at which the surface of the aerodrome is incapable of bearing the weight of the aircraft under normal operating conditions or at which there is an obstacle capable of affecting the safety of the aircraft;

Level refers generally to the vertical position of an aircraft in flight and meaning variously, height, altitude or flight level;

Life jacket means any device designed to support a person individually in or on the water;

Lighter-than-air aircraft means any aircraft supported chiefly by its buoyancy in the air;

Low Visibility Procedures (LVP) means the procedures applied at an aerodrome for the purpose of ensuring safe operations during Category II and III approaches and Low Visibility Take-offs;

Maintenance. The performance of tasks on an aircraft, engine, propeller or associated part required to ensure the continuing airworthiness of an aircraft, engine, propeller or associated part including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.

Maintenance organization's procedures manual. A document endorsed by the head of the maintenance organization which details the maintenance organization's structure and management responsibilities, scope of work, description of facilities, maintenance procedures and quality assurance or inspection systems.

Maintenance programme. A document which describes the specific scheduled maintenance tasks and their frequency of completion and related procedures, such as a reliability programme, necessary for the safe operation of those aircraft to which it applies.

Maintenance release. A document which contains a certification confirming that the maintenance work to which it relates has been completed in a satisfactory manner in accordance with appropriate airworthiness requirements.

Master minimum equipment list (MMEL). A list established for a particular aircraft type by the organization responsible for the type design with the approval of the State of Design containing items, one or more of which is permitted to be unserviceable at the commencement of a flight. The MMEL may be associated with special operating conditions, limitations or procedures.

Maximum diversion time. Maximum allowable range, expressed in time, from a point on a route to an en-route alternate aerodrome.

Maximum mass. Maximum certificated take-off mass.

Manoeuvring area means that part of an aerodrome to be used for the take-off and landing of aircraft and for the surface movement of aircraft associated with take-off and landing, excluding any apron;

Maximum certificated take-off mass means the maximum permissible take-off mass of the aircraft according to the certificate of airworthiness, the flight manual or other official document;

M**aximum total weight authorized** means the maximum total weight of the aircraft and its contents at which the aircraft may take off, in the most favourable circumstances in accordance with the certificate of airworthiness in force in respect of the aircraft;

M**ercy flight** means a flight for the sole purposes of saving a person in a life threatening situation;

Minimum descent altitude (MDA) or **minimum descent height (MDH).** A specified altitude or height in a 2D instrument approach operation or circling approach operation below which descent must not be made without the required visual reference.

Note 1.— Minimum descent altitude (MDA) is referenced to mean sea level and minimum descent height (MDH) is referenced to the aerodrome elevation or to the threshold elevation if that is more than 2 m (7 ft) below the aerodrome elevation. A minimum descent height for a circling approach is referenced to the aerodrome elevation.

Note 2.— The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path. In the case of a circling approach the required visual reference is the runway environment.

Note 3.— For convenience when both expressions are used they may be written in the form “minimum descent altitude/ height” and abbreviated “MDA/H”.

Minimum equipment list (MEL). A list which provides for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the MMEL established for the aircraft type.

M**obile equipment** means an aircraft object of a category to which Article 2 of the Cape Town Convention applies;

Movement area means that part of an aerodrome to be used for take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron;

Nautical mile means the length equal to 1852 metres;

Night means the time between 15 minutes after sunset and 15 minutes before sunrise, sunset and sunrise being determined at the surface;

Notified means shown in any of the following publications issued by or on behalf of the Authority, whether before or after the coming into force of these Regulations, that is to say, **NOTAMs’ (Notices to Airmen), Information Circulars, Aeronautical Information Publications** or any other official publication issued for the purpose of enabling any of the provisions of these Regulations to be complied with;

Occurrence means an accident or an incident;

Obstacle clearance altitude (OCA) or **obstacle clearance height (OCH).** The lowest altitude or the lowest height above the elevation of the relevant runway threshold or the aerodrome elevation as applicable, used in establishing compliance with appropriate obstacle clearance criteria.

Note 1.— Obstacle clearance altitude is referenced to mean sea level and obstacle clearance height is referenced to the threshold elevation or in the case of non-precision approach procedures to the aerodrome elevation or the threshold elevation if that is more than 2 m (7 ft) below the aerodrome elevation. An obstacle clearance height for a circling approach procedure is referenced to the aerodrome elevation.

Note 2.— For convenience when both expressions are used they may be written in the form “obstacle clearance altitude/ height” and abbreviated “OCA/H”.

Operational control. The exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight.

Operational flight plan. The operator’s plan for the safe conduct of the flight based on considerations of aeroplane performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes concerned.

Operations manual. A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.

Operations specifications. The authorizations, conditions and limitations associated with the air operator certificate and subject to the conditions in the operations manual.

Operator. The operator of an aircraft is the person who exercises operational control over an aircraft.

Operator's maintenance control manual. A document which describes the operator's procedures necessary to ensure that all scheduled and unscheduled maintenance is performed on the operator's aircraft on time and in a controlled and satisfactory manner.

Operational control means the exercise, by an individual or an organisation, of authority over the initiation, continuation, diversion, termination or cancellation of a flight or series of flights in the interest of the safety of the aircraft and the regularity and efficiency of the flight;

Operations manual means a manual containing procedures, instructions and guidance for use by operational personnel in the performance of their duties;

Pilot in command means the pilot designated by the operator or owner, as being in command and charged with the safe conduct of a flight;

Pressurised aircraft means an aircraft provided with means of maintaining in any compartment a pressure greater than that of the surrounding atmosphere;

Private flight means any flight operation that does not involve payment or remuneration in exchange for the flight operation;

Prohibited area means the airspace of specified dimensions, above the land areas or territorial waters of the Fiji Islands within which the flight of aircraft is prohibited;

Protocol means the Aircraft Protocol to the Cape Town Convention;

Public transport has the meaning assigned to it in regulation 2(6);

Public transport aircraft an aircraft flying, or intended by the operator of the aircraft to fly, for the purpose of public transport;

For the purposes of the definition of —**public transport**, an aircraft shall be deemed to fly for the purpose of public transport -

(a) if it is for hire or reward is given or promised, for the carriage of passengers or cargo in the aircraft on that flight; or

(b) if any passenger or cargo is carried gratuitously in the aircraft on that flight by an air transport undertaking, not being persons in the employment of the undertaking (including in the case of a body corporate its directors), persons with the permission of the Authority either making any inspection or witnessing any training, practice or test for the purpose of these Regulations, or cargo intended to be used by any such passengers as aforesaid, or by the undertaking; or

(c) if it is for hire or reward is given or promised, for the right to fly the aircraft on that flight, otherwise than under a hire-purchase agreement, and the expression —**public transport of passengers** shall be construed accordingly, provided that, notwithstanding that an aircraft may be flying for the purpose of public transport by reason of this paragraph, it shall not be deemed to be flying for the purpose of the public transport of passengers unless hire or reward is given for the carriage of those passengers.

Where, under a transaction effected by or on behalf of a member of an association of persons on the one hand and the association of persons or any member thereof on the other hand, a person is carried in, or is given the right to fly, an aircraft in such circumstances that hire or reward would be deemed to be given or promised if the transaction were effected otherwise than as aforesaid, hire or reward shall, for the purpose of this SD, be deemed to be given or promised.

Psychoactive substances. Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.

Rating means an authorisation entered on or associated with a licence and forming part thereof, stating special conditions, privileges or limitations pertaining to such licence;

Recreational flight means a flight operation for leisure that may involve the payment or remuneration in exchange for the flight operation but excludes any scheduled flight, charter flight and training flight;

Register means the aircraft register referred to in regulation 6;

Registered owner means the person in whose name an aircraft is registered under regulation 4, or in the case of an aircraft registered in another country, under the law of that country;

Replacement in relation to any part of an aircraft or its equipment includes the removal and replacement of that part whether or not by the same part, and whether or not any work is done on it, but does not include the removal and replacement of a part which is designed to be removable solely for the purpose of enabling another part to be inspected, repaired, removed or replaced or cargo to be loaded or unloaded;

Reporting point means the specified geographical location in relation to which the position of an aircraft can be reported;

Required navigation performance (RNP) means a statement of the navigation performance necessary for operation within a defined airspace;

Rest period means any period of time on the ground during which a flight crew member is relieved of all duties by the operator;

Restricted area means the airspace of specified dimensions, above the land areas or territorial waters of Fiji, within which the flight of aircraft is restricted in accordance with certain specified conditions so notified;

Rotorcraft means a power driven heavier-than-air aircraft supported in flight by the reactions of the air on one or more rotors;

Rules of the Air means the Rules contained in ANR Part VI;

Runway means a defined and prepared area at a land aerodrome provided for the landing and take-off of aircraft;

Runway visual range (RVR) means the range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line;

Safe forced landing. Unavoidable landing or ditching with a reasonable expectancy of no injuries to persons in the aircraft or on the surface.

Safety management system (SMS). A systematic approach to managing safety, including the necessary organizational structures, accountability, responsibilities, policies and procedures.

Shoreline. An area of the land adjacent to the water of an ocean, sea, lake, pond, river or tidal basin that is above the high-water mark and excludes land areas unsuitable for landing such as vertical cliffs or land intermittently under water during the particular flight.

Small aeroplane. An aeroplane of a maximum certificated take-off mass of 5,700 kg or less.

Seaplane means an aeroplane equipped with floats or other devices enabling it to land and take-off from the surface of water;

Special VFR flight means a VFR flight cleared by air traffic control to operate within a control zone in meteorological conditions below VMC;

Specified, in relation to an aircraft, means specified in, or ascertainable by reference to -

(a) the certificate of airworthiness in force in respect of that aircraft; or

(b) the flight or operations manual or performance schedule included in that certificate, or other document, whatever its title, incorporated by reference in that certificate;

T**ake-off distance available** means either the distance from the point on the surface of the aerodrome at which the aircraft can commence its take-off run to the nearest obstacle in the direction of take-off projecting above the surface of the aerodrome and capable of affecting the safety of the aircraft or one and one half times the take-off run available, whichever is the lesser;

T**ake-off run available** means the distance from the point on the surface of the aerodrome at which the aircraft can commence its take-off run to the nearest point in the' direction of take-off at which the surface at the aerodrome is incapable of bearing the weight of the aircraft under normal operating conditions;

T**axiway** means a defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another including –

(a) aircraft standby taxilane, which is a portion of an apron designated as a taxiway and intended to provide access to aircraft stands only;

(b) apron taxiway, which is a portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron;

(c) rapid exit taxiway, which is a taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times;

Terminal control area means a control area established at the confluence of ATS routes in the vicinity of one or more major aerodromes;

Track means the projection on the earth's surface of the path of an aircraft, the direction of which path at any given point is usually expressed in degrees measured from North (true, magnetic or grid); **19**

Transfer of control point means a notified defined point located along the flight path of an aircraft, at which the responsibility for providing air traffic control service to the aircraft is transferred from one air traffic control unit or control position to the next;

Transition altitude means the altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes;

VFR flight means a flight conducted in accordance with the Visual Flight Rules;

Visibility means the ability, as determined by atmospheric conditions and expressed in units of distance, to see and identify prominent unlighted objects by day and prominent lighted objects by night;

Visual approach means an approach by an IFR flight when either part or all of an instrument approach procedure is not completed and the approach is executed in visual reference to terrain;

Visual Flight Rules means the requirements for visual flight contained in Part VI;

Visual Meteorological Conditions (VMC) means meteorological conditions expressed in terms of visibility, distance from cloud and ceiling, equal to or better than the specified minima.

Words and expressions defined in this Standards Document shall have the respective meanings herein assigned to them when used in any order, direction, instruction, rule or other requirement, or any notice, notification, certificate, licence, approval, permission, exemption, authorization, log book, record or other document issued under or pursuant to the provisions of this Standards Document, unless the context otherwise requires.

SECTION 1

CHAPTER 1 - COMPLIANCE WITH LAWS, REGULATIONS AND PROCEDURES

1.0 In order to discharge its responsibility, Fiji has enacted the Civil Aviation Act 1976 (as amended) that provides for the development and promulgation of Air Navigation Regulations1981 (as amended) consistent with ICAO Annexes. The Authority's regulatory system enables Fiji to maintain continuing regulation and oversight of the activities of air operators without unduly inhibiting the operator's effective direction and control of the organisation. While ICAO Annex 6 — *Operation of Aircraft* Vol I requirements are applicable to international commercial air transport, in the interest of consistency and to ensure an equivalent level of safety for all air transport operations, the Air Navigation Regulations1981 (as amended) and these policies and procedures are applicable as well for domestic commercial air transport operations.

1.1 The operator shall ensure that all employees when abroad know that they must comply with the laws, regulations and procedures of those States in which operations are conducted.

1.2 The operator shall ensure that all pilots are familiar with the laws, regulations and procedures, pertinent to the performance of their duties, prescribed for the areas to be traversed, the aerodromes to be used and the air navigation facilities relating thereto. The operator shall ensure that other members of the flight crew are familiar with such of these laws, regulations and procedures as are pertinent to the performance of their respective duties in the operation of the aircraft.

Note.— Information for pilots and flight operations personnel on flight procedure parameters and operational procedures is contained in PANS-OPS (Doc 8168), Volume I. Criteria for the construction of visual and instrument flight procedures are contained in PANS-OPS (Doc 8168), Volume II. Obstacle clearance criteria and procedures used in certain States may differ from PANS-OPS, and knowledge of these differences is important for safety reasons.

1.3 The operator or a designated representative shall have responsibility for operational control.

Note.— The rights and obligations of a State in respect to the operation of aircraft registered in that State are not affected by this provision.

1.4 Responsibility for operational control shall be delegated only to the pilot-in-command and to a flight operations officer/flight dispatcher if the operator's approved method of control and supervision of flight operations requires the use of flight operations officer/flight dispatcher personnel.

Note.— Guidance on the operational control organization and the role of the flight operations officer/flight dispatcher is contained in the Manual of Procedures for Operations Inspection, Certification and Continued Surveillance *(Doc 8335). Detailed guidance on the authorization, duties and responsibilities of the flight operations officer/flight dispatcher is contained in the* Preparation of an Operations Manual *(Doc 9376). The requirements for age, skill, knowledge and experience for licensed flight operations officers/flight dispatchers are contained in Annex 1*.

1.5 If an emergency situation which endangers the safety of the aircraft or persons becomes known first to the flight operations officer/flight dispatcher, action by that person shall include, where necessary, notification to the appropriate authorities of the nature of the situation without delay, and requests for assistance if required.

1.6 If an emergency situation which endangers the safety of the aircraft or persons necessitates the taking of action which involves a violation of local regulations or procedures, the pilot-in-command shall notify the appropriate local authority without delay. If required by the State in which the incident occurs, the pilot-in-command shall submit a report on any such violation to the appropriate authority of such State; in that event, the pilot-in-command shall also submit a copy of it to the Authority. Such reports shall be submitted as soon as possible and normally within ten days.

1.7 Operators shall ensure that pilots-in-command have available on board the aircraft all the essential information concerning the search and rescue services in the area over which the aircraft will be flown.

Note.— This information may be made available to the pilot by means of the operations manual or such other means as is considered appropriate.

1.8 Operators shall ensure that flight crew members demonstrate the ability to speak and understand the language used for radiotelephony communications as specified in Annex 1.

1.9 To meet the language proficiency requirements contained in AIC 02/10 ADM and Annex 1 Chapter 1, Section 1.2.9, an applicant for a licence or a licence holder shall demonstrate, in a manner acceptable to the Licensing Authority, compliance with the holistic descriptors at Section 2 and with the ICAO Operational Level (Level 4) of the ICAO Language Proficiency Rating Scale.

Holistic descriptors

1.10 Proficient speakers shall;

a) communicate effectively in voice-only (telephone/radiotelephone) and in face-to-face situations;

b) communicate on common, concrete and work-related topics with accuracy and clarity;

c) use appropriate communicative strategies to exchange messages and to recognize and resolve misunderstandings (e.g. to check, confirm or clarify information) in a general or work-related context;

d) handle successfully and with relative ease the linguistic challenges presented by a complication or unexpected turn of events that occurs within the context of a routine work situation or communicative task with which they are otherwise familiar; and

e) use a dialect or accent which is intelligible to the aeronautical community.

Compliance by a foreign operator with laws, regulations and procedures of a state

1.11 When a State identifies a case of non-compliance or suspected non-compliance by a foreign operator with laws, regulations and procedures applicable within that State's territory, or a similar serious safety issue with that operator, that State shall immediately notify the operator and, if the issue warrants it, the State Of The Operator. Where the State of the Operator and the State of Registry are different, such notification shall also be made to the State of Registry, if the issue falls within the responsibilities of that State and warrants a notification.

1.12 In the case of notification to States as specified in 1.11, if the issue and its resolution warrant it, the State in which the operation is conducted shall engage in consultations with the State of the Operator and the State of Registry, as applicable, concerning the safety standards maintained by the operator.

Note.— The Manual of Procedures for Operations Inspection, Certification and Continued Surveillance *(Doc 8335) provides guidance on the surveillance of operations by foreign operators. The manual also contains guidance on the consultations and related activities, as specified in 1.12, including the ICAO model clause on aviation safety, which, if included in a bilateral or multilateral agreement, provides for consultations among States, when safety issues are identified by any of the parties to a bilateral or multilateral agreement on air services.*

HELICOPTER FLOTATION REQUIREMENTS. ANR 98

1.2.1. Helicopters used for Commercial Air Transport, and Aerial work over water beyond the shoreline must be equipped with fixed floats or an inflatable flotation system adequate to accomplish a safe emergency ditching, if:

a) It is a single-engine helicopter; or

b) It is a multi-engine helicopter that cannot be operated with the critical engine inoperative at a weight that will allow it to climb, at least 50 feet a minute, at an altitude of 1,000 feet above the surface, as provided in the Rotorcraft Flight Manual (RFM).

1.2.2. Each helicopter that is required to be equipped with an inflatable flotation system must have:

a) The activation switch for the flotation system on one of the primary flight controls (Cyclic pitch control lever or the collective control lever) **or in accordance with the relevant RFM STC**, and

b) The flotation system armed when the helicopter is over water and is flying at a speed that does not exceed the maximum speed prescribed in the Rotorcraft Flight Manual for flying with the flotation system armed.

1.2.3. Fixed floats or an inflatable flotation system is not required for a helicopter if:

a) The helicopter is over water only during the take-off or landing portion of the flight, or

b) The helicopter is operated within Autorotative distance to the Safe Force Landing Area for the duration of the flight and each occupant is wearing a life jacket from before take-off until the aircraft is no longer over water.

AERIAL WORK OPERATIONS

1.3.1. An AOC is required for any or all combination of aerial work activities, regardless of the associated risk(s) and degree of operational complexity. Aerial work operations are by their very nature very diverse, at times having characteristics of air transport operations or general aviation / private operations and at other times requiring an overlay of unique operational criteria. Flight Time Limitations ANR 48, SD-AFA, applies in relation to any aircraft operated by an operator which is engaged in a flight for the purposes of aerial work.

1.3.2. Common to all these activities are airworthiness, aircraft performance, economics and safety including crew training and qualification.

1.3.3. Airworthiness and performance requirements of aircraft restricted to aerial work may be quite distinct from that applicable to public transport operations. Usually only small aircraft are used in aerial work operations. Certain Airworthiness and maintenance checks may be permitted in the field rather than at a fixed, well-equipped base/hangar. Performance required of such aircraft would indicate the need for low speed but with good take-off and landing ability and good all round visibility for the pilot.

1.3.4. In the economic area, the most noteworthy characteristics are the low utilization and seasonal nature of the work. Aerial work operations are usually influenced by the weather and such conditions as a clear sky (aerial photography) or light winds (aerial application) are often necessary.

1.3.5. With respect to safety, the risk factor in aerial work is often one of the highest. Aerial work usually involves manoeuvres very close to the surface and a high ratio or take-off and landings due to the need to make a large number of short trips. To these may be added the risk of poisoning from any toxic chemicals being applied. Many of the activities listed under aerial work would also require special training of both flight crew and ground personnel involved in the operation

1.3.6. ANR 2 (6) of the Air Navigation Regulation 1981 states that an aircraft shall be deemed to fly for the purpose of public transport if hire or reward is given or promised for the carriage of passengers or cargo on that flight. The carriage of cargo gratuitously is also deemed to be a public transports operation except when the cargo is intended for use by the undertaking or its employees (including its directors). The Regulations define an “air transport undertaking” as one whose business includes the carriage by air of passengers or cargo for hire or reward. Operators should note that the reference to employees/directors or cargo in relation to gratuitous carriage applies only to those directly employed by or are directors of, the company holding the AOC. The carriage of other passengers whether or not gratuitously, will be considered as public transport of passengers. Air transport undertakings, which have aircraft available for hire on a self-fly basis, are required to have such aircraft maintained to the standards applicable to Transport Category (Passengers) and have a valid Certificate of Airworthiness in this category. Unless otherwise permitted by the Authority, flying club aircraft are similarly affected. Crew qualifications, training and familiarization, and flight time limitations remain extant as per Air Navigation Regulations and associated SD’s.

1.3.7. Aerial Work by definition, means an aircraft operation in which an aircraft is used for specialized services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue or aerial advertisement, other than the transport of passengers or cargo for hire and reward. **Medical transfers from hospitals and or nursing stations are considered to be Public Transport.**

1.3.8. By consolidating and simplifying the classification of aerial work into 3 general categories applicable to both aeroplanes and rotorcraft activities ensures an appropriate organisational model for all operators in Fiji. This facilitates the identification of operations and aircraft that would be allowed to carry aerial work specialists and some aerial work passengers under specific risk-assessed criteria.

Classification of aerial work activities

1.3.9. The consolidated and simplified classification of aerial work activities required grouping some activities for the purposes of recognizing common risks and applying common risk treatment strategies. The revised risk based definition groups allow for a simplified categorisation of aerial work purposes into:

1.3.10. External load operations including but not limited to:

a) the towing of objects (including towing of banners and targets);

b) rotorcraft sling load operations; and

c) winching, rappelling, fast roping and suspended extraction operations from rotorcraft.

1.3.11. Dispensing operations including but not limited to:

a) discharge of projectiles;

b) discharge of objects; and

c) discharge of material from a rotorcraft that is not an aerial application operation:

d) food relief; and

e) lifesaving equipment;

1.3.12. A task specialist operation means carrying out a specialized activity using an aircraft in flight and includes (but is not limited to) the following:

a) flights that require the carriage of task specialists;

b) flights requiring the use of specialized equipment;

c) flights requiring close proximity operations;

d) aerial Survey;

e) surveillance for the purposes of saving and protection of life and property or the enforcement of Fijian Laws.

1.3.13. The following classifications adopt the concept of 'emergency service operations', which are operations conducted at the request of, or tasking by, specified Government agencies and organizations, that fall into one or more of the above 3 aerial work classifications. Emergency service operations would cover flights in association with an emergency service operation when requested by a Government body, or tasked by an operator who supplies services to a Government body, for the purposes of saving and protecting life and property or the enforcement of Fijian Laws. These operations would include any combination of:

a) police operations;

b) emergency medical service operations;

c) customs and border protection operations;

d) search and rescue operations; and

e) training flights for the above operations.

Carriage of specialists and passengers

1.3.14. The following provides guidance on the carriage of passengers or persons essential to the successful completion of an aerial work operation. The three classifications of passengers below establish the requirements related to carriage of these persons by defining them as 'aerial work specialists' 'aerial work passengers' and 'AOC holder's members of staff'. Moreover, prescribing those situations in which an aerial work specialist and / or an aerial work passenger may be carried for the purposes of an aerial work operation.

Aerial work specialist.

1.3.15. Aerial work specialists would be defined as crew (but not a flight crew member or air crew member) required to be carried on an aircraft by an operator, and who has in-flight duties related to a specialised use of the aircraft, and who is informed of, understands and accepts the associated safety risks. Examples of aerial work specialists include:

a) crew operating specialised equipment essential to the aerial work operation i.e. cameras, or

b) other crew members who have assigned in-flight duties related to the specialised use of the aircraft i.e. rappelling and fast roping.

The intent is to clearly define these persons as part of the crew to avoid the potential for confusion in their role in the aircraft.

Aerial work passengers.

1.3.16. Aerial work passengers would be defined as follows:

a) a person who has been rescued as part of a search and rescue operation; or

b) emergency service operation personnel; or

c) a restricted person; or

An 'aerial work passenger', would be a passenger other than those who use commercial or other publicly available air transport services, and who may be carried on an aerial work operational flight, and who is either:

d) informed of, understands and accepts the safety risks associated with the particular flight that they intend to take; or

e) is not able to be informed of, or understand and accept the safety risks associated with the particular flight that they intend to take, but whose carriage is required to save a human life, reduce harm to persons or the public, or to facilitate the rescue and recovery of a sick or injured person(s)

AOC holder's members of staff

1.3.17. An 'AOC holder's members of staff', would be a passenger under the permanent employment of the AOC holder, and who may be carried on an aerial work operational flight.

CHAPTER 2 - THE AIR OPERATOR'S CERTIFICATE

2.0 REQUIREMENT TO HOLD A CERTIFICATE

2.1 An aircraft registered in Fiji, and a foreign registered aircraft on lease, charter, cross-hire or otherwise under the operational control of an operator, shall not engage in public air transport operations unless in possession of a valid Air Operator Certificate in accordance with the terms of the Civil Aviation Act 1976 (as amended) which implement the provisions of Annex 6 and the Air Operator's Certificate of Competency granted to the operator by the Chief Executive of the Authority.

2.2 The Air Operator Certificate shall authorize the operator to conduct public air transport operations in accordance with the operations specifications and Aerial Work.

2.3 The term 'public transport' is defined in the ANR and to anyone in doubt as to whether particular flights may be made without the operator being the holder of a Certificate should seek advice from the Authority. In relation to Air Operator's Certificates, 'operator' is defined as the person for the time being having operational control of the aircraft.

2.4 The issue of an air operator certificate by the Authority shall be dependent upon the operator demonstrating and maintaining adequate, insurance cover (see addendum), for guidelines organization, control, supervision of flight operations, training programmes as well as ground handling and maintenance arrangements consistent with the nature and extent of the operations specified. Operators shall provide any training for the Authority's Inspectors that may be necessary from time to time, when a new aircraft (first of type in Fiji) is introduced and the arrangements in this regard will be taken into account when considering an application.

2.5 The operator shall develop policies and procedures for third parties that perform work on its behalf.

2.6 The continued validity of an air operator certificate shall depend upon the operator maintaining the requirements of 2.4 under the supervision of the Authority. The holder of a Certificate shall notify the authority within 48 hours if they are unable to carry out the privileges of an AOC due to loss of, but not limited to, Nominated Persons, pilots, aircraft and maintenance.

2.7 The air operator certificate shall contain at least the following information and shall follow the layout of Appendix A:

a) the State of the Operator and the issuing authority;

b) the Air Operator Certificate number and its expiration date;

c) the operator name, trading name (if different) and address of the principal place of business;

d) the date of issue and the name, signature and title of the Authority representative; and

e) the location, in a controlled document carried on board, where the contact details of operational management can be found.

2.8 The operations specifications associated with the Air Operator Certificate shall contain at least the information listed below, and shall follow the layout of Appendix A.

Note.— Annex 6, requires a copy of the operations specifications to be carried aboard each aircraft.

2.9 For each aircraft model in the operator's fleet, identified by aircraft make, model and series, the following list of authorizations, conditions and limitations shall be included: issuing authority contact details, operator name and AOC number, date of issue and signature of the authority representative, aircraft model, types and area of operations, special limitations and authorizations.

Note.— If authorizations and limitations are identical for two or more models, these models may be grouped in a single list.

a) Telephone and fax contact details of the authority, including the country code. Email to be provided if available.

b) Associated AOC number.

c) *Operator's registered name and the operator's trading name, if different. Insert "dba" before the trading name (for "doing business as").*

d) Issuance date of the operations specifications (dd-mm-yyyy) and signature of the authority representative.

e) The Commercial Aviation Safety Team (CAST)/ICAO designation of the aircraft make, model and series, or master series, if a series has been designated (e.g. Boeing-737-3K2 or Boeing-777-232).

f) Other type of transportation to be specified (e.g. emergency medical service).

g) The geographical area(s) of authorized operation (by geographical coordinates or specific routes, flight information region or national or regional boundaries).

h) The applicable special limitations (e.g. VFR only, day only).

i) A list of the most permissive criteria for each approval or the approval type (with appropriate criteria).

j) The applicable precision approach category (CAT II, IIIA, IIIB or IIIC). The minimum RVR in metres and decision height in feet. One line is used per listed approach category.

k) The approved minimum take-off RVR in metres. One line per approval may be used if different approvals are granted.

l) The airborne capabilities (i.e. automatic landing, HUD, EVS, SVS, CVS) and associated operational credit(s) granted.

m) "Not applicable (N/A)" box for RVSM may be checked only if the aircraft maximum ceiling is below FL 290.

n) If extended diversion time operations (EDTO) approval does not apply based on the provisions in Annex 6 Part 1, Chapter 4, 4.7, select "N/A". Otherwise a threshold time and maximum diversion time must be specified.

o) The threshold time and maximum diversion time may also be listed in distance (NM), as well as the engine type.

p) Performance-based navigation (PBN): one line is used for each PBN AR navigation specification approval (e.g. RNP AR APCH), with appropriate limitations listed in the "Description" column.

q) Insert the name of the person/organization responsible for ensuring that the continuing airworthiness of the aircraft is maintained and the regulation that requires the work, i.e. within the AOC regulation or a specific approval (e.g. EC2042/2003, Part M, Subpart G).

r) A list of the EFB functions with any applicable limitations.

s) Other authorizations or data, using one line (or one multi-line block) per authorization (e.g. special approach authorization, MNPS, approved navigation performance).

2.10 The operations specifications layout referred to in Appendix A shall be followed:

2.11 Air operator certificates and their associated operations specifications first issued from 20 November 2008 shall follow the layouts of Appendix A.

Application for a certificate

2.2.0 In accordance with 2.2.2, the issuance of an Air Operator Certificate (AOC) is "dependent upon the operator demonstrating" to the Authority that its organization, training policy and programmes, flight operations, ground handling and maintenance arrangements are adequate considering the nature and extent of the operations to be conducted. The certification process involves the Authority's evaluation of each operator and a determination that the operator is capable of conducting safe operations before initial issuance of an AOC or the addition of any subsequent authorizations to an AOC.

Processing time

2.2.1 As the application for, and grant of, an AOC is a complex process; the application must be made at least six months before the anticipated start of operations. The processing time is dependent on your ability to comply with our regulatory requirements, which include:

a) Demonstration of an appropriate organisational structure;

b) Method of operational control;

c) Supervision of flight operations;

d) Training programme; and

e) Maintenance arrangements.

AOC APPLICATION PROCESS

The five-phase process:

2.2.2 The procedure for the application and granting of an AOC is best organised in a Five-Phase Process. This process is required by international standards to check that an operator has 'an adequate organisation, method of control and supervision of flight operations, training programme as well as ground handling and maintenance arrangements' before granting an AOC. Checking these requirements is the purpose of the AOC application process. The five-phase processes described in the ICAO guidance are as follows:

a) Pre-application;

b) Formal application;

c) Document evaluation;

d) Demonstration and inspection;

e) Certification

PHASE 1

Pre-application

2.2.3 Before making a formal application there will usually be a meeting between the applicant and CAAF to discuss the proposed business model and operations.

This 'pre-application' phase is an opportunity for the applicant to understand the formal application process. Following this phase, CAAF will then notify the applicant on their suitability to apply for an AOC and the general certification requirements.

Pops

2.2.4 In order to prepare for the pre-application phase, the applicant may be asked to complete a '*prospective operator's pre-application statement*' (POPS) known as the **CAAF Form OP123Z – Prospective Operator's Pre-Assessment Checklist**. CAAF will ask for a detailed document and

a form to be completed. In any case the POPS provides an opportunity to explain the applicant's proposal. The POPS should contain at least:

a) Information about the entity applying for approval (i.e. company name, business address etc.);

b) The intended type of operations such as passenger or cargo flights, scheduled or charter;

c) The number and type of aircraft to be used

d) The intended routes or areas of operation (e.g. domestic, regional, worldwide);

e) The proposed airworthiness arrangements for the aircraft (i.e. in-house or sub-contracted maintenance);

f) Information about the organisation's management including names of key management personnel;

g) Proposed arrangements for crew training (e.g. use of aircraft or flight simulators with in-house or contracted instructors).

Authority actions

2.2.5 CAAF Inspectors will review the POPs either before or during the pre-application meeting. The following are essential:

a) Does the application contain the necessary information?

b) Is there anything in the proposal that is clearly incompatible with the regulations, for example if the applicant is proposing; long over-water flights in a single-engine aircraft or using an aircraft that doesn't have a Type Certificate?

If the information provided is incomplete, then this may be an indication that the applicant does not fully understand the regulatory requirements or has not prepared a viable business plan. In this case CAAF may need the applicant to develop the proposal further before submitting a formal application. If some of the details are missing at this stage, for example the applicant has not finalised the selection of all management personnel, then the application may still be allowed to proceed.

If the proposal is clearly incompatible with the regulations, then this can be explained to the applicant and a lot of time and effort is saved by not proceeding to the formal application phase.

Preparing for the pre – application meeting

2.2.6 Although the pre-application meeting precedes the formal application it should not be considered an 'informal' meeting. CAAF Inspectors will be meeting the proposed management personnel for the first time and will form an opinion about the competence of the organisation based on this meeting. The application may not be allowed to proceed to a formal application if some of the required information is not available. The application will proceed further once CAAF has the confidence that the applicant has a skilled, experienced management team who understand the regulations governing the AOC and its safe operations.

The pre-application meeting

2.2.7 At the pre-application meeting the applicants will have the opportunity to present their proposal and CAAF representatives will explain the AOC application process. The meeting is an opportunity to align expectations between the applicant and CAAF:

a) Particularly in respect of how much time will be required for each phase of the application;

b) How feedback will be provided and how the inspectors and applicant personnel will communicate.

Provided that there are no 'show-stoppers', the applicant will be provided with everything needed to make the AOC application (forms, guidance etc.) and a date may be agreed for a formal application meeting.

Sometimes applicant personnel will ask questions about the regulations at the pre-application meeting. This should not be necessary as the applicant needs to demonstrate, throughout the application process, that personnel understand the regulations and will be able to comply; also, that there will be an effective internal compliance monitoring (or 'quality') programmes that will verify compliance with the regulations.

Air Transport Licensing Board (ATLB)

2.2.8 There will usually be a parallel process of applying for an Air Service Licence (ASL) as well as the Air Operator's Certificate. Before providing any air service for hire or reward, operators must ensure that they comply with the Air Transport Licensing Board requirements and Special Conditions as stated in their ASL.

CAAF does not have qualified personnel or staff to carry out the financial, economic and legal assessment of the applicant and the proposed operation. Fiji Revenue & Customs Service (FRCS) has been assigned the responsibility to provide an assessment related to economic aspects of the proposed operation. The Authority or the government may need to decide if the proposed operation is 'in the public interest'.

PHASE 2

Formal application

2.2.9 In the formal application phase, the applicant submits all the required information to the CAAF. This information will include everything needed for the pre-application together with Resumes (CV) for key management personnel, details of the aircraft to be used and applications for any 'specific approvals' required (e.g. RVSM, NAT-HLA, CAT II/III etc.). The full suite of operations manuals will also be submitted with the formal application, but it may be possible to agree a schedule for submission of the different volumes over the following weeks or months.

Schedule of events

2.2.10 As part of the formal application package, the applicant will also be asked to submit a 'schedule of events' for the AOC application. The subsequent phases of the application will take several weeks or months and there will need to be liaison between the applicant and CAAF Inspectorate. The schedule of events should include details such as:

a) When each part of the operations manual will be submitted for review (if not submitted at the time of the formal application);

b) When the applicant's facilities will be available for inspection (e.g. offices, operations control centre, maintenance facilities);

c) When all management personnel will be available for interview;

d) When aircraft will be available for inspection;

e) When crew training will take place;

f) When demonstration flights can be carried out.

It will not be possible to predict the exact timeline at this stage but the schedule of events should include some contingency, to allow for the fact that manuals may not be fully compliant at first submission and that the Authority's inspections may result in a need for the applicant to take corrective actions.

Statements of compliance (FORM OP 109E)

2.2.12 The applicant will be asked to provide various 'statements of compliance' with the formal application. The initial statement of compliance shall be a complete list of all Fijian regulations applicable to the proposed operation. Each regulation or sub-part shall be accompanied by a brief description or a reference to a manual or other document. The description or reference shall describe the method of compliance in each case. The method of compliance may not be finalised at the time of the formal application, in which case a date shall be given by which the final information will be provided. The purpose of the statement of compliance is to ensure that the applicant has addressed all regulatory requirements. It aids the Authority's certification team to assess where the regulatory requirements have been addressed in the applicant's manuals, programmes and procedures. Examples include a list of the instruments and equipment on the aircraft and the contents of the operations manuals.

An applicant should use these statements of compliance as an opportunity for a quality check. If the operations manual (for example) has been provided by an external consultant, then the managers responsible for the various parts should check that the proposed manual is fully compliant before it is submitted to the Authority.

Formal application meeting

2.2.13 By the time of the formal application meeting, CAAF should have selected the Inspectors who will facilitate the application process and one Inspector will lead the application and act as project manager. The formal application meeting will be an opportunity;

a) For applicant personnel to meet the inspectors;

b) Resolve any ambiguities or missing information;

c) And agree on the schedule of events.

The qualifications and suitability of the applicant's management personnel may also be discussed so all the key personnel should be present at the meeting and understand their responsibilities within the organisation.

PHASE 3

Document evaluation

2.2.14 The documentation that has to be reviewed by the Authority will include:

a) Operations manuals Parts A, B, C, D; Form OP123L

b) Continuing Airworthiness Management Exposition (or equivalent);

c) Aircraft maintenance programme(s);

d) Safety Management System Manual (if not included in OM-A);

e) Compliance Monitoring Manual (if not included in OM-A);

f) Minimum Equipment List.

g) Insurance for liability to, third parties for injury or damage within Fijian territory, passengers and cargo, and also against any claims which may potentially arise from the operation of its aircraft. **In accordance with the ASL Special Conditions, see 2.2.8**. **NOTE**: For Insurance see Appendix A to this section.

Some parts of the documentation will be checked more thoroughly than others. Any item requiring an 'approval' by CAAF will be checked in detail, while other parts may be given a more cursory review. An applicant should never rely on the Authority as a quality check of the documentation. If something in the manual is not compliant then the operator will remain responsible for any breach of the regulation.

In practice, the document evaluation phase will be the most time-consuming part of the application process. Checking each of these manuals will take many hours. The Inspector will compile a report listing any non-conformity to be corrected.

If an Inspector finds a major issue with a manual, then it may be returned with an instruction to review and rewrite the manual without a detailed list. When a manual is returned to the applicant for amendment, then this process may take some days or weeks depending on the extent of the changes required and the availability of personnel.

The number of changes required will depend on the quality of the original submission, so it is in the applicant's interest to develop good documentation and ensure quality checks are carried out before submission.

An applicant will not be able to finalise operating procedures, maintenance arrangements, management processes or crew training programmes until the applicable documentation has been reviewed and (if necessary) approved.

PHASE 4

Inspection and demonstration phase

2.2.15 During the inspection and demonstration phase, CAAF Inspectors will verify that the applicant organisation will operate in the way that is described in the documentation. This will be achieved by conducting inspections and audits: Visiting facilities, observing activities and reviewing records and making systematic evaluations of particular processes.

Interviews

2.2.16 The Inspectors will interview all of the key management personnel, especially the 'Nominated Persons', the Safety Manager and the Compliance Monitoring Manager. The interviewees will need to show that they understand the relevant parts of the regulations, the contents of the operations manual and their specific roles within the organisation. All interviewees will need show an understanding of safety management and compliance monitoring and how these will be relevant to the organisation.

Audits

2.2.17 At the inspection and demonstration phase, not all of the management processes will be fully up and running. A full roster for crew may not have been planned and the aircraft may not have had ad-hoc maintenance or repairs; nevertheless, the applicant should be able to explain how these processes will be managed. Some records should already be in place, for example there should be complete records of crew qualification and training.

2.2.18 In order to assess the competence of an air operator to provide a safe and regular service, the Authority will investigate the proposed operation, covering at least the organisation, staffing, equipment, proposed routes, level and type of service and finances. The issuance of an AOC by the Authority will be dependent upon the operator demonstrating an adequate organisation, method of control and supervision of flight operations, training programme, as well as ground handling, maintenance management and maintenance arrangements, consistent with the nature and extent of the operations specified. If the operator is found competent, an AOC will be issued, together with operations specifications, detailing the commercial air transport operations authorised. Subsequent to the issuance of an AOC, the Authority will continue to monitor the operation through a systematic programme of safety oversight inspections.

Inspections

2.2.19 The Inspectors will check the airworthiness records for the aircraft as well as visiting the aircraft to verify that all of the required equipment is installed. The inspectors may also observe activities such as aircraft maintenance or crew training to verify that the applicant is conducting everything according to the documentation that was reviewed at the previous phase of the application.

Demonstration flights

2.2.20 When all of the audits have been completed and any non-compliances rectified there will normally be a requirement for some demonstration flights. A demonstration flight is the opportunity for the applicant to show that all of the documentation and management processes, work together to deliver a flight to commercial air transport standards.

The Inspectors will observe every aspect of flight preparation and operation, not just how the pilots fly the aircraft. The inspectors will need to see all the different elements of the operation working together including maintenance, dispatch, ground handling, flight crew and cabin crew.

As before, if the Inspectors find any non-compliance with regulation then this will need to be corrected before the application can proceed. Depending on how serious non-compliance is, it might be necessary to complete further demonstration flights, or CAAF may be satisfied with written evidence that a particular issue has been addressed.

PHASE 5

Certification

2.2.21 Once all of the inspections and audits have been completed and any identified non-compliances have been addressed, the application can then proceed to the certification phase. This phase is internal to the Authority.

The Inspectors who conducted the various audits and inspections will report to the 'project manager' for the AOC application. Once the 'project manager' is satisfied that everything has been completed as required then he/she will make a report recommending the issue of an Air Operator's Certificate.

This recommendation will be reviewed internally, perhaps by more than one level of management. It is possible that this internal review will reveal something that has been missed or a report that was not completed properly. In such cases, it may be necessary for the Inspectors to go back to the

applicant for more information. The Authority will verify that any requirements for an Operator's Licence have also been fulfilled.

When the project manager's recommendation has been accepted then the Air Operator's Certificate and associated Operations Specification can be issued and this is the point at which the applicant can commence Air Transport Operations.

Timescale

2.2.22 The total time taken for an AOC application depends on a large number of variables. The most important variables are how well the application has been prepared and the availability of Inspectors to deal with an application. The Authority does not have sufficient resources to dedicate inspectors full-time to one task so an applicant will have to wait for a response to a submission or a date for an audit.

In order to avoid delays and cost overruns the application should be prepared carefully and there should be a conservative project plan allowing plenty of time for correction of non-compliances and other contingencies.

CHAPTER 3

Coordination of operations and airworthiness evaluations

3.0. Flight operations inspectors shall evaluate the operational procedures, training and qualifications. Airworthiness inspectors shall evaluate the aircraft, equipment reliability and maintenance procedures. These evaluations may be accomplished separately, but should be coordinated to ensure that all aspects necessary for safety have been addressed before any approval is issued.

3.1. The following provisions require approval by the Authority. The approval of the Authority is required in all of the certification actions listed below that are **not** preceded by one or more asterisks. Certification actions listed below that are preceded by one or more asterisks require approval by the State of Registry (single asterisk or "*"), or by the State of Design (double asterisk or "**"). However, the Authority shall take the necessary steps to ensure that operators for which it is responsible comply with any applicable approvals issued by the State of Registry and/or State of Design, in addition to its own requirements.

a) **Configuration deviation list (CDL);

b) **Master minimum equipment list (MMEL);

c) The method for establishing minimum flight altitudes;

d) The method of determining aerodrome operating minima;

e) Additional requirements for single pilot operations under the instrument flight rules (IFR) at night;

f) Flight time, flight duty periods and rest periods;

g) Specific extended range operations;

h) Additional requirements for operations of single-engine turbine-powered aeroplanes at night and/or in instrument meteorological conditions (IMC);

i) Aircraft-specific minimum equipment list (MEL);

j) Performance-based navigation operations;

k) MNPS operations;

l) RVSM operations;

m) Procedures for electronic navigation data management;

n) *Aircraft-specific maintenance programme;

o) *Approved maintenance organization; *[applicable until 4 November 2020]*

p) *Approved maintenance organization; *[applicable as of 5 November 2020]*

q) *Maintenance quality assurance methodology; *[applicable until 4 November 2020]*

r) *Maintenance quality assurance methodology; *[applicable as of 5 November 2020]*

s) Flight crew training programmes;

t) Training in the transport of dangerous goods;

u) Aerodrome additional safety margin;

v) Pilot-in-command area, route and aerodrome qualifications;

w) Use of flight simulation training devices;

x) Method of control and supervision of flight operations;

y) **Mandatory maintenance tasks and intervals;

z) Cabin crew training programmes

Provisions that require a technical evaluation by the authority.

3.2. While not necessarily requiring an approval by the Authority, these Standards do require the Authority to accept the matter at issue after it conducts a specific review or evaluation. These provisions are:

a) The operator shall provide operations staff and flight crew with an aircraft operating manual, for each aircraft type operated, containing the normal, abnormal and emergency procedures relating to the operation of the aircraft.;

b) The manual shall include details of the aircraft systems and of the checklists to be used;

c) The mandatory material for the operations manual (See OP 109E);

d) All single-engine turbine-powered aircraft operated at night and/or in IMC shall have an engine trend monitoring system, and those aircraft for which the individual certificate of airworthiness is first issued on or after January 2005 shall have an automatic trend monitoring system

e) equipment for aircraft operated by a single pilot under the instrument flight rules or at night;

f) requirements for approval to operate in RVSM airspace;

g) monitoring of height-keeping performance of aeroplanes approved to operate in RVSM airspace;

h) procedures for distribution and insertion of electronic navigation data in aircraft;

i) *operator's aircraft-specific maintenance responsibilities;

j) *method of maintenance and release;

k) *maintenance control manual;

l) *mandatory material for the maintenance control manual;

m) *reporting of maintenance experience information;

n) *implementing necessary maintenance corrective actions;

o) *modification and repair requirement;

p) *minimum competence level of maintenance personnel; *[applicable until 4 November 2020]*

q) *minimum competence level of maintenance personnel (Annex 8, Part II, Chapter 6, 6.6.4); *[applicable as of 5 November 2020]*

r) requirement for flight navigator;

s) training facilities;

t) qualifications of instructors;

u) need for recurrent training;

v) use of correspondence courses and written examinations;

w) use of flight simulation training devices;

x) flight crew qualification records;

y) designated representative of the State of the Operator;

z) pilot experience, recency and training requirements for single pilot operations under the instrument flight rules (IFR) or at night;

aa) *flight manual changes;

bb) minimum number of flight attendants assigned to a specific aircraft;

cc) altimetry system performance requirements for operations in RVSM airspace;

Single-engine operations

dd) turbine engine reliability for approved operations by single-engine turbine-powered aircraft at night and/or in instrument meteorological conditions (IMC);

ee) systems and equipment;

ff) minimum equipment list;

gg) flight manual information;

hh) event reporting;

ii) operator planning;

jj) flight crew experience, training and checking;

kk) route limitations over water; and

ll) operator certification or validation.

3.3. The responsibility for initial certification, issuance of the AOC, and ongoing surveillance of an air operator rests with the Authority. Annex 6, Part I, also requires the Authority to consider or act in accordance with various approvals and acceptances by the State of Registry. Under these provisions, the Authority shall ensure that its actions are consistent with the approvals and acceptances of the State of Registry and that the air operator is in compliance with State of Registry requirements.

3.4. It is essential that the Authority be satisfied with the arrangements by which its air operators use aircraft on the register of another State, particularly for maintenance and crew training. The Authority shall review such arrangements in coordination with the State of Registry. Where appropriate, an agreement transferring oversight responsibilities from the State of Registry to the Authority pursuant to Article 83 *bis* to the Convention on International Civil Aviation shall be arranged to preclude any misunderstandings regarding which State is responsible for specific oversight responsibilities.

CHAPTER 4

Form of certificate

4.1. Certificates are normally granted for a period of one year. The type(s) of aircraft that may be flown and the region in which operations may be conducted will be specified in the Certificate. Included in the Certificate will be General Conditions applicable to the holder and Operations Specifications relevant to and to be observed by the applicant.

4.2. It is important that the certification, approval and acceptance actions of the Authority are adequately documented. The Authority shall issue a written instrument, such as a letter or formal document, as an official record of the action. These written instruments shall be retained as long as the operator continues to exercise the authorizations for which the approval or acceptance action was issued. These instruments are unambiguous evidence of the authorizations held by the operator and provide proof in the event that the Authority and the operator disagree on the operations that the operator is authorized to conduct.

4.3. Operators shall ensure that the General and Special Conditions of their AOC are displayed and brought to the attention of their managerial and all operating staff.

Application for second or subsequent certificates

4.4. Holders requiring renewal of a Certificate should apply to the Authority not more than 60 working days prior to the expiry date. To ensure continuity of operations, any renewal application must be submitted at least 30 working days in advance of the expiry date.

Variation of a certificate

4.5. Any change affecting:

a) the scope of the certificate or the operations specifications of an operator; or

b) any of the elements of the operator's management system shall require prior approval by the Authority.

4.6. For any changes, the operator shall apply for and obtain an approval issued by the Authority. The application, using form OP 109B, shall be submitted before any such change takes place, in order to enable the Authority to determine continued compliance with Regulations and to amend, if necessary, the operator certificate and related terms of approval attached to it. The operator shall provide the Authority with a completed OP 109E form and any other relevant documentation. The change shall only be implemented upon receipt of formal approval by the Authority. The operator shall operate under the conditions prescribed by the Authority during such changes, as applicable.

4.7. Application for the variation of a Certificate (e.g. inclusion of an additional aircraft type or extension of region) should be made a minimum of 30 working days before the proposed introduction of the change. In the case of a planned change of a nominated person, the operator should inform the Authority at least 10 days before the date of the proposed change.

4.8. Unforeseen changes should be notified at the earliest opportunity, in order to enable the Authority to determine continued compliance with the applicable requirements and to amend, if necessary, the operator certificate and related terms of approval.

4.9. If the application is for the inclusion of an additional type of aircraft, the completed training and operations manuals (or additions to existing manuals) for the type shall accompany the application. Detailed information will be required on arrangements for the maintenance of the aircraft, and for any necessary training and checking of crews.

4.10. On receipt of an application for variation, the inspection staff member assigned to the operator will normally be directed to make a special investigation that may include the requirement to observe a proving flight without revenue passengers on board. The flight destination must be acceptable to the operator's assigned inspection staff member.

Refusal, revocation etc. Of a certificate

4.11. Where an application for the grant or variation of an Air Operator's Certificate is refused, or is granted in terms other than those requested by the applicant, a notice will be served stating the reasons for the decision, and the applicant may request that the Authority review the case.

4.12. Where it is proposed to vary, suspend, or revoke a Certificate, other than on the application of the holder, notice of the proposal, together with the reason for it, will normally be served on the person concerned who may request that the case be reviewed by the Authority. A Certificate may be suspended without notice, where safety may be compromised, pending an inquiry into the case.

4.13. If an operator ceases the operation(s) for which the Certificate was issued, or if the Authority suspends or revokes the Certificate, it must be returned immediately to the Authority.

Continued validity

4.14. The operator's certificate shall remain valid subject to:

a) the operator remaining in compliance with the relevant requirements of the Regulations, taking into account the provisions related to the handling of any findings;

b) the Authority being granted access to the operator to determine continued compliance with the relevant requirements of the Regulations; and

c) the certificate not being surrendered or revoked.

d) Upon revocation or surrender the certificate shall be returned to the Authority without delay.

Access

4.15. For the purpose of determining compliance with the relevant requirements of the Regulations, the operator shall grant access at any time to any facility, aircraft, document, records, data, procedures or any other material relevant to its activity subject to certification, whether it is contracted or not, to any person authorised by the Authority:

4.16. Access to the aircraft mentioned above shall include the possibility to enter and remain in the aircraft during flight operations unless otherwise decided by the Pilot in Command for the flight crew compartment in the interest of safety.

Procedures for oversight of operations

4.17. Each organisation to which a certificate has been issued should have an inspector specifically assigned to it. Several inspectors shall be required for the larger companies with widespread or varied types of operation. This does not prevent a single inspector being assigned to several companies. Where more than one inspector is assigned to an organisation, one of them should be nominated as having overall responsibility for supervision of, and liaison with, the organisation's management, and be responsible for reporting on compliance with the requirements for its operations as a whole.

a) Audits and inspections, on a scale and frequency appropriate to the operation, shall cover at least:

i) infrastructure,

ii) manuals,

iii) training,

iv) crew records,

v) equipment,

vi) release of flight/dispatch,

vii) dangerous goods,

viii) organisation's management system.

b) The following types of inspections should be conducted, as part of the oversight programme:

i) flight inspection,

ii) ground inspection (documents and records),

iii) ramp inspection.

4.19. The inspection shall be a 'deep cut' through the items selected and all findings shall be recorded. Inspectors will review the root cause(s) identified by the organisation for each confirmed finding. Inspectors shall be satisfied that the root cause(s) identified and the corrective actions taken are adequate to correct the non-compliance and to prevent re-occurrence. Audits and inspections may be conducted separately or in combination. Audits and inspections may, at the discretion of the Authority, be conducted with or without prior notice to the organisation.

4.20. Where it is apparent to an inspector that an organisation has permitted a breach of the applicable requirements, with the result that air safety has, or might have, been compromised, the inspector will ensure that the responsible person within the Authority is informed without delay.

4.21. Approval documentation for issue and or renewal shall only be recommended and issued for the relevant period once all level 1 & 2 findings have been addressed and closed..

a) **Level 1** findings are those, which could have a direct safety implication or lead to a serious breach of legislation.

b) **Level 2** findings are those, which have a moderate risk and can be allowed a bit more time to action than Level 1.

c) **Level 3** findings are generally isolated events of non-compliance, which have no direct safety effect.

The maximum permissible time for implementation of corrective actions for each level is as follows:

a) Level 1 (Extreme and High Risk) – Action to be completed within 7 Days

b) Level 2 (Moderate Risk) - Action to be completed within 1 month

c) Level 3 (Low Risk) - Action to be completed within 3 months

4.22. Any repeat findings from the previous year's AOC Renewal Audit will automatically be designated to a higher level e.g. a previous level 2 finding if repeated will automatically become a level 1 finding with actions to be resolved within 7 days maximum, or less depending on severity.

4.23. In the first few months of a new operation, inspectors should be particularly alert to any irregular procedures, evidence of inadequate facilities or equipment, or indications that management control of the operation may be ineffective. They will also carefully examine any conditions that may indicate a significant deterioration in the organisation's financial management. When any financial difficulties are identified, inspectors shall increase technical surveillance of the operation with particular emphasis on the upholding of safety standards.

4.24. The number or the magnitude of the non-compliances identified by the Authority will serve to support the Authority's continuing confidence in the organisation's competence or, alternatively, may lead to an erosion of that confidence. In the latter case the Authority will review any identifiable shortcomings of the management system.

Financial management

4.25. Examples of trends that may indicate problems in a new organisation's financial management are:

a) significant lay-off s or turnover of personnel;

b) delays in meeting payroll;

c) reduction of safe operating standards;

d) decreasing standards of training;

e) withdrawal of credit by suppliers;

f) inadequate maintenance of aircraft;

g) shortage of supplies and spare parts;

h) curtailment or reduced frequency of revenue flights; and

i) sale or repossession of aircraft or other major equipment items.

Operator responsibilities

4.25. The operator is responsible for the operation of the aircraft in accordance with the relevant requirements of this Standards Documents and its certificate.

4.26. Every flight shall be conducted in accordance with the provisions of the operations manual.

4.27. The operator shall establish and maintain a system for exercising operational control over any light operated under the terms of its certificate.

4.28. The operator shall ensure that its aircraft are equipped and its crews are qualified as required for the area and type of operation.

4.29. The operator shall ensure that all personnel assigned to, or directly involved in, ground and flight operations are properly instructed, have demonstrated their abilities in their particular duties and are aware of their responsibilities and the relationship of such duties to the operation as a whole.

4.30. The operator shall establish procedures and instructions for the safe operation of each aircraft type, containing ground staff and crew member duties and responsibilities for all types of operation on the ground and in flight. These procedures shall not require crew members to perform any activities during critical phases of flight other than those required for the safe operation of the aircraft.

4.31. The operator shall ensure that all personnel are made aware that they shall comply with the laws, regulations and procedures of those States in which operations are conducted and that are pertinent to the performance of their duties.

4.32. The operator shall establish a checklist system for each aircraft type to be used by crew members in all phases of flight under normal, abnormal and emergency conditions to ensure that the operating procedures in the operations manual are followed. The design and utilisation of checklists shall observe human factors principles and take into account the latest relevant documentation from the aircraft manufacturer.

4.33. The operator shall specify flight planning procedures to provide for the safe conduct of the flight based on considerations of aircraft performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes or operating sites concerned. These procedures shall be included in the operations manual.

4.34. The operator shall establish and maintain dangerous goods training programmes for personnel as required by the Technical Instructions which shall be subject to review and approval by the Authority. Training programmes shall be commensurate with the responsibilities of personnel.

Operational control

4.35. The organisation and methods established to exercise operational control shall be included in the operations manual and shall cover at least a description of responsibilities concerning the initiation, continuation and termination or diversion of each flight. If the operator employs flight operations officers in conjunction with a method of operational control, training for these personnel should be based on relevant parts of ICAO Doc 7192 Training Manual, Part D-3. This training should be described in Part D of the operations manual.

Addendum: Guidance on Insurance requirements.

Operators shall carry adequate insurance for liability to third parties for injury or damage within Fijian territory and to passengers and cargo and also against any claims which may potentially arise from the operation of its aircraft.

1 **Public Liability Insurance Mandatory**

Public liability insurance is required for aircraft owners, private and commercial. This insurance covers damages to external property or people.

2 **Passenger & Cargo Liability Insurance Mandatory**

Passenger liability insurance covers any harm that may come to Passengers and Cargo.

a. Commercial operators require $250,000 USD per passenger SDRs (Special Drawing Right as defined by the International Monetary Fund[1]) or $378,425 USD per passenger on aircraft weighing 2,700 kg (5,954 lb) or more.

b. Non-commercial operators may apply a reduced insurance minimum of $151,370 USD SDRs per passenger for by aircraft weighing less than 2,700 kg (5,954 lb).

c. The resulting Cargo liability is approximately $30 USD per kilogram.

3 ***Combined Single Limit (CSI)***

Combined single limit insurance is a combination of public liability and passenger liability insurance.

4 **In-Flight Insurance Mandatory**

In-flight insurance covers any damage to the Aircraft that is the result of an accident or other events that occur while the Aircraft is in motion, generally while it is in the air.

5 **A Guide to Third Party Liability Per Aircraft:**

	MTOW (KG)	MTOW (LB)	SDRS	U.S. DOLLARS*
UP TO	500	1,103	750,000	$1,135,275
	1,000	2,205	1,500,000	$2,270,550
	2,700	5,953	3,000,000	$4,541,100
	6,000	13,228	7,000,000	$10,595,900
	12,000	26,456	18,000,000	$27,246,600
	25,000	55,116	80,000,000	$121,096,000
	50,000	110,232	150,000,000	$227,055,000
	200,000	440,925	300,000,000	$454,110,000
	500,000	1,102,312	500,000,000	$756,850,000
	Over 500K	See Above	700,000,000	$1,059,590,000
MTOW = Maximum take-off weight				

6 **Aircraft Hull Insurance (Optional for Domestic Operators)**

Aircraft hull insurance covers any physical damage to the Aircraft itself while it is on the ground. This can come in two different types – motion and non-motion.

7 **Non-motion coverage insures against:** Damage as a result of vandalism, accidents with uninsured vehicles, and or damage from weather events.

8 **Motion hull insurance covers:** Damage sustained during take-off, and damage sustained during landing.

[1] Special Drawing Rights as defined by the International Monetary Fund. The currency value of the SDR is determined by summing the values in U.S. dollars, based on market exchange rates, of a basket of major currencies (the U.S. dollar, Euro, Japanese yen, pound sterling and the Chinese renminbi), and current stands at $1.44USD per SDR.

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SECTION 2 - OPERATIONAL REQUIREMENTS

Organization of the Operations Manual

1.0 The operations manual shall have a master subject index, placed in the policy and administration manual. In addition, each part shall have its own subject index. There shall be a table of contents at the beginning of each volume and for each section or chapter. Each page shall be numbered and have a date of original issue. Each volume shall have a checklist of pages identifying page numbers and dates of issue to ensure the validity of the contents. The entry of each amendment and/or additional page shall be recorded on a page specially provided in each volume for that purpose and signed for by the person making the amendment or addition.

1.1 The nominated person charged with the responsibility for the control of the contents of the operations manual shall also be responsible for the issuance of individual volumes and for ensuring that appropriate amendments are dispatched to the holders of the volumes. It is the responsibility of the operator to ensure that the Authority's copies, both electronic and hard copies, are up to date, this task shall be performed by the operator. This task may obviously be delegated to another individual or unit reporting to the nominated person. To ensure adequate control of the volumes and their amendments, it is necessary to number each volume individually. Complete records must be kept of the disposition of each volume of the operations manual in aircraft libraries, in operations offices, etc. Records must also be kept of individuals who are holders of all, or part, of the operations manual. Certain parts of the operations manual, such as the emergency evacuation procedures manual, are usually issued to all crew members. Other parts of the operations manual shall be available in sufficient quantities to allow copies to be issued to individuals or briefing facilities for study and reference purposes.

1.2 Amendments, revisions and additions to the operations manual must be approved by the nominated person responsible for the manual. In some cases this will consist of ensuring that such changes issued by the originator of a particular volume are correct and appropriate to the operations manual. This would be the case with amendments issued by the aircraft manufacturer for the aircraft operating manuals, or with amendments issued for the route guide, when the route guide is purchased from a commercial agency. However, in the case of amendments or additions which originate within the organization, the nominated person responsible must ascertain that the proposed change is necessary and determine how it is to be promulgated. In most cases the amendment will be issued through normal channels to all holders of the operations manual. In other cases, because of the urgency of the information contained in the amendment it will be necessary to issue a notice to the flight crew and to other concerned operational personnel. This notice shall be replaced by an amendment to the manual as soon as possible. In revising or altering the contents of the operations manual, operators must bear in mind that the Authority is required to approve the contents of the operations manual and that certain parts of the manual include material which is considered mandatory. It is therefore necessary that the amendments be approved by the Authority.

1.3 Amendments to the operations manual must be produced as new or replacement pages. Handwritten amendments to an operations manual are not acceptable. The new or replacement pages must include a page identification number and a date of issue. A letter or covering sheet must identify the reason for the amendment and provide a checklist of the amendment to be made. This is particularly necessary when an amendment is made to any safety-related information. Instructions shall be included for inserting the amendment in the appropriate volume and for recording insertion of the amendment. The signature of the nominated person approving the amendment must also appear. A revision to the list of effective pages must be included with any amendment to the operations manual.

1.4 The format for the operations manual, shall ensure that the manual be easily used and understood. The volume size shall make the manual easy to handle on the flight deck, at least for those volumes that are part of the aircraft library. The quality of the paper and of the printing and reproduction of the text and illustrations shall be such that the material is readable under all operational conditions. The manuals shall be in a format which is easily amendable.

1.5 The operations manual, shall be broken down into 4 Parts, as follows:

a) Part A: General Basic

b) Part B: Aircraft Specific

c) Part C: Aerodromes and Route Guide

d) Part D: Training

1.6 It is common practice to differentiate the Parts of the operations manual that are specific to a particular aircraft type and to identify those parts that are general in their application. An operator who has a number of different aircraft types, shall number them in Part B as follows Part B 1 (737 400) and Part B2 for the ATR 72 for example.

1.7 Users of operations manuals shall be encouraged to make comments on their contents. In particular, when errors in operational information are discovered, reports shall be made immediately to the nominated person charged with control of the operations manual. Users also shall be encouraged to comment on the general presentation of information in the manual and to suggest other subjects that should be addressed.

CHAPTER 1 - AOC OPERATIONS MANUAL

PART A. General/Basic

0. ADMINISTRATION AND CONTROL OF OPERATIONS MANUAL

0.1. Introduction:

0.1.1 A statement that the manual complies with all applicable regulations and with the terms and conditions of the applicable air operator certificate (AOC).

0.1.2 A statement that the manual contains operational instructions that is to be complied with by the relevant personnel.

0.1.3 A list and brief description of the various parts, their contents, applicability and use.

0.1.4 Explanations and definitions of terms and words needed for the use of the manual.

0.2. System of amendment and revision:

0.2.1 Details of the person(s) responsible for the issuance and insertion of amendments and revisions.

0.2.2 A record of amendments and revisions with insertion dates and effective dates.

0.2.3 A statement that handwritten amendments and revisions are not permitted, except in situations requiring immediate amendment or revision in the interest of safety.

0.2.4 A description of the system for the annotation of pages or paragraphs and their effective dates.

0.2.5 A list of effective pages or paragraphs.

0.2.6 Annotation of changes (in the text and, as far as practicable, on charts and diagrams).

0.2.7 Temporary revisions.

0.2.8 A description of the distribution system for the manuals, amendments and revisions.

Organisation and responsibilities

References: ICAO Annex 6 Part 1, 2, & 3, ANR 43, AIC 02/19 Effective 28 MAR 2019.

1.0 Organisational structure. A description of the organisational structure, including the general organogram and operations departments' organograms. The organogram should depict the relationship between the operations departments and the other departments of the operator. In particular, the subordination and reporting lines of all divisions, departments etc, which pertain to the safety of flight operations, should be shown.

1.1 Nominated persons. The name of each nominated person responsible for flight operations, crew training and ground operations. The person may hold more than one of the nominated posts if such an arrangement is considered suitable and properly matched to the scale and scope of the operation. Nominated persons shall undergo the fit and proper person (FPP) test. Anyone holding or applying for an aviation document, or anyone who has control over the exercise of the privileges of an aviation document, must satisfy the Authority that they are a FPP to do so. Aviation documents include, for example, a licence, a rating, an air operator certificate of competency or an air traffic service provider certificate.

The criteria by which CAAF assesses whether a person is fit and proper, takes into consideration the person's degree and nature of involvement in the aviation system:

a) the person's compliance history with transport safety regulatory requirements:

b) the person's related experience (if any) within the transport industry:

c) the person's knowledge of the applicable civil aviation system regulatory requirements:

d) any history of physical or mental health or serious behavioural problems:

e) any conviction for any transport safety offence, whether or not—

f) the conviction was in a Fiji court; or

g) the offence was committed before the commencement of this Act:

h) any evidence that the person has committed a transport safety offence or has contravened or failed to comply with any rule made under the Act, ANR or SD:

i) in the case where a Fiji Aviation Document, the person's compliance with the conditions specified in the document

The Authority shall not be confined to consideration of the matters specified above and may take into account such other matters and evidence as may be relevant.

1.1.1. ACCOUNTABLE MANAGER. This person shall have the authority and responsibility within the applicant's organisation of ensuring that all activities authorised under the AOC/ANR145 and undertaken by the organisation shall be financed, properly resourced and carried out in accordance with the requirements and standards prescribed under the Air Navigation Regulations and Standards Documents. The person shall also ensure that the activities undertaken by the organisation are carried out in accordance with the requirements of the organisation's own documents.

1.1.2. DEFINITION; The term 'Accountable Manager' is an essential part of the AOC/ANR145 holder's management organisation and is used to describe the single individual who by virtue of his/her position has overall responsibility for ensuring that all operational activities can be financed and carried out to the standard required by the authority.

1.1.3. ELIGIBILITY; An Accountable Manager must be the person with overall executive responsibility for the operation of the regulated organisation. In many cases, this will mean a person who also sits on the Board of the Company the Chief Executive / Executive Chairman / Managing Director / Director General / General Manager, etc or on the equivalent non corporate body. In the case of a very large organisation embracing more than one individually regulated unit, it may be that the internal line of accountability to the Company Board or equivalent is through a more senior member of such a body. In this case, a separately-designated Accountable Manager will be required for each separately-regulated operating entity.

1.1.4. RESPONSIBILITY; An Accountable Manager will rely heavily upon a small number of senior managers with subordinate executive responsibility for each area of regulated technical specialism in their organisation. These people will report directly to the Accountable Manager and may themselves have to be designated and approved by the Authority as specific Nominated Post Holders.

Person responsible for day-to-day flight operations.

1.2. This Flight operations manager and/or chief pilot and/or training manager. The nominated post holder or his/her deputy **should** hold a valid flight crew licence appropriate to the type of operation conducted under the AOC, hold a current type rating on a type operated under the AOC The training manager/captain should have experience as CAAF authorised examiner or a qualified training captain in accordance with the following:-

a) If the AOC includes aircraft certificated for a minimum crew of two (2) pilots - An Airline Transport Pilot's Licence issued or validated by the Authority;

b) If the AOC is limited to aeroplanes certificated for a minimum crew of one (1) pilot – A Commercial Pilot's Licence, and if appropriate to the operation, an Instrument Rating issued or validated by the Authority;

c) The Nominated Post Holder should have a thorough knowledge of the AOC holder's crew training concept for Flight Crew and Cabin Crew when relevant;

d) The overall conformity of flight operations and flying training programmes to the standards required by legal and Company regulations, particularly with reference to safety criteria and to the competence of flying staff;

e) Compliance with legal and Company requirements for the various aspects of crewing and route planning;

f) Ensuring that the provision of flying staff is sufficient to meet anticipated requirements with maximum efficiency, having regard to mandatory limitations where applicable and to the maintenance of good internal standards and practice;

g) Ensuring that operational reports and records are actioned as necessary, to enable the Company Quality Control Procedures to be effectively implemented, are preserved for the prescribed periods, and made available to the authorities concerned if required;

h) Delegating his responsibilities as required, in accordance with the responsibilities detailed within the Operations Manual, and ensuring that areas of delegated responsibility are efficiently executed;

i) The supervision of production and distribution of all Parts of the Company Operations Manual and its amendments. Ensuring that the Operations Manuals, Flight Guides, AIP's and other such pertinent material are kept amended and fully up to date;

j) The overall safety of all flying operations and following the requirements of the Safety Management System;

k) Working in conjunction with the Safety Manager and Quality Assurance, to ensure the control and co-ordination of Company actions in the event of aircraft accidents or incidents in accordance with the procedures laid down in the Operations Manual. Additionally, to ensure that Hazard and Incident/Accident Reports are actioned accordingly and being involved in the investigation and review of these reports;

l) The overall organisation, administration and discipline of all Operations staff both flying and non-flying, with recommendations to the Accountable Manager for matters of staff recruitment, discipline, and dismissal;

m) Liaison with outside authorities and organisations on the Company's behalf as required;

n) Maintaining aircrew confidence, discipline, control and supervision;

o) Ensuring that the SD-AFA Flight Time Limitations requirements are met;

p) Conducting and/or supervising flight training and checking and ground training and checking of all flying staff;

q) The approval and assessment of the suitability of all maps, charts and Flight Guides; and

r) Checking of return Flight documentation and its compliance with current regulations and legislation.

Person responsible for the training & checking.

1.3. This person shall be responsible for competency and qualifications of crew members:-

a) Preparation of training plans that will ensure that the operator has sufficient crews to carry out the activities authorised by their Air Operator Certificate;

b) Overseeing the arrangements made with outside organisations for the provision of training and checking activities, including the monitoring of the outside organisation's continued approval by their regulatory authority;

c) Ensuring that the operator is able to meet the training and checking requirements of ICAO's Annex 6 at paragraph 9.3.1 which is documented in this Standards Document at Section 2 Chapter 2;

d) Ensuring that all crew members have received appropriate training and are familiar with and competent in such operational aspects as Crew Resource Management (CRM), Human Factors (HF) and Threat and Error Management (TEM);

e) Monitoring operational standards, maintaining training records and supervising the training and checking of flight crew.

f) Ensuring that the competency checks required by Regulation 45 are carried out.

g) Ensuring crew receive and are current in dangerous goods training that is commensurate with their duties.

Flight Operations Officer/Flight Dispatcher:

1.4. Persons employed by an air operator in conjunction with an approved method of control and supervision and who carries out the functions of flight operations officer/flight dispatcher must be qualified.

1.4.1. In accepting proof of qualifications other than the option of holding of a flight operations officer/flight dispatcher licence, the Authority, in accordance with the approved method of control and supervision of flight operations, shall require that, as a minimum, such persons meet the requirements specified in Annex 1 for the flight operations officer/flight dispatcher licence.

1.4.2. A flight operations officer/flight dispatcher shall not be assigned to duty unless that person has:

1.4.3. Satisfactorily completed an operator-specific training course that addresses all the specific components of its approved method of control and supervision of flight operations specified in Part D.

1.4.4. Made, within the preceding 12 months, at least a one-way qualification flight in the flight crew compartment of an aeroplane over any area for which that individual is authorized to exercise flight supervision. The flight should include landings at as many aerodromes as practicable;

Note.— For the purpose of the qualification flight, the flight operations officer/flight dispatcher must be able to monitor the flight crew intercommunication system and radio communications, and be able to observe the actions of the flight crew.

1.4.5. Demonstrated to the operator a knowledge of:

a) the contents of the operations manual Parts A - D.

b) the radio equipment in the aircraft used; and

c) the navigation equipment in the aircraft used;

1.4.6. Demonstrated to the operator a knowledge of the following details concerning operations for which the officer is responsible and areas in which that individual is authorized to exercise flight supervision:

a) the seasonal meteorological conditions and the sources of meteorological information;

b) the effects of meteorological conditions on radio reception in the aircraft used;

c) the peculiarities and limitations of each navigation system which is used by the operation; and

d) the aircraft loading instructions;

1.4.7. Demonstrated to the operator knowledge and skills related to human performance relevant to dispatch duties; and

1.4.8. Demonstrated to the operator the ability to perform the duties specified as follows.

a) assist the pilot-in-command in flight preparation and provide the relevant information;

b) assist the pilot-in-command in preparing the operational and ATS flight plans, sign when applicable and file the ATS flight plan with the appropriate ATS unit; and

c) furnish the pilot-in-command while in flight, by appropriate means, with information which may be necessary for the safe conduct of the flight.

In the event of an emergency, a flight operations officer/flight dispatcher shall:

d) initiate such procedures as outlined in the operations manual while avoiding taking any action that would conflict with ATC procedures; and

e) convey safety-related information to the pilot-in-command that may be necessary for the safe conduct of the flight, including information related to any amendments to the flight plan that become necessary in the course of the flight.

Note.— It is equally important that the pilot-in-command also convey similar information to the flight operations officer/flight dispatcher during the course of the flight, particularly in the context of emergency situations.

1.4.9. A flight operations officer/flight dispatcher assigned to duty should maintain complete familiarization with all features of the operation which are pertinent to such duties, including knowledge and skills related to human performance.

1.4.10. A flight operations officer/flight dispatcher should not be assigned to duty after 12 consecutive months of absence from such duty, unless the provisions of 1.4.2 - 1.4.8 are met.

Person responsible for the operator's Safety Management System.

1.5. This person, or persons, the SMS Manager and or the Quality Assurance Manager (QAM), shall have the responsibility for the conduct, in relation to the flight operations and maintenance oversight responsibility of the operator, of the operator's management systems. This shall include but not necessarily be limited to quality assurance, safety management, risk management, and where required, the operator's flight data or flight operations quality assurance programme. All SMS managers, QAM's and lead auditors shall undertake fresher training every 4 years.

a) Managing the SMS implementation plan on behalf of the accountable manager;

b) Performing/facilitating hazard identification and safety risk analysis;

c) Monitoring corrective actions and evaluating their results;

d) The monitoring of the implementation of actions taken to mitigate risks as listed in the safety action plan;

e) The provision of periodic reports on safety performance;

f) Ensuring maintenance of safety management documentation;

g) Ensuring that there is safety management training available and that it meets acceptable standards;

h) Providing advice on safety matters;

i) Ensuring initiation and follow-up of internal occurrence/accident investigations;

j) Ensuring that incidents and accidents are reported as required by legislation either through the CAAF Mandatory Occurrence Reporting (MOR) scheme or the company SMS;

k) Being an active member of both the Safety Review Board and Safety Action Group; and

l) Convening and chairing Safety Action Group Meeting.

Person responsible for the maintenance, airworthiness and serviceability of the operator's aircraft.

1.6. This person shall have the responsibility for ensuring that all relevant maintenance is carried out at the appropriate time by an organisation or personnel with appropriate qualifications and approvals. It shall include responsibility for the accomplishment of relevant Airworthiness Directives or other similar instructions, including all matters relevant to the registration, certification and operation of any aircraft used to conduct an operation authorised by the organisation's Air Operator's Certificate. It shall also include responsibility for allocating aircraft appropriate to the planned operations, tasks or schedules. The person should have:

a) Proven competency in civil aviation;

b) Appropriate technical qualifications;

1.6.1. Appropriate managerial experience including a working knowledge of aviation safety standards and the ability to manage in such an environment;

1.6.2. A working knowledge of the Maintenance Management Exposition and the relevant Standards Documents, as appropriate:-

a) Standards Document-Air Operator Certification;

b) Standards Document-Airworthiness of Aircraft;

c) Standards Document-Licensing of Aircraft Maintenance Engineers;

d) Standards Document-Aircraft Maintenance Organisations; and

e) Standards Document- Aviation Training Institutions

f) Familiarity with the Organisation's Quality System;

1.6.3. An understanding of the Organisation's contracted and sub-contracted Maintenance and Technical/Engineering Services arrangements (contract content); and

1.6.4. Appropriate technical knowledge and maintenance specifications or schedules of the type(s) operated.

Focal point for industry consultation.

1.7. This is not a mandatory position but if the organisation wishes to participate in the industry consultation process run by the Authority, they should nominate a focal point within their organisation for such consultation. They can, if they wish, nominate more than one focal point and make them individually responsible for specific areas of consultation. The person or persons nominated should have a technical background or experience so that they can ensure that any consultation material is directed to those in the organisation who are specialists in the matters under consultation.

The Pilot-in-Command

1.8. A statement defining the authority, duties and responsibilities of the Pilot-in-Command.

1.8.1 The pilot-in-command shall be responsible for the safety of all crew members, passengers and cargo on board when the doors are closed. The pilot-in-command shall also be responsible for the operation and safety of the aircraft from the moment the aircraft is ready to move for the purpose of taking off until the moment it finally comes to rest at the end of the flight and the engine(s) used as primary propulsion units are shut down.

1.8.2 The pilot-in-command shall ensure that the checklists specified in the AFM and Part B Operations Manual are complied with.

1.8.3 The pilot-in-command shall be responsible for notifying the nearest appropriate authority by the quickest available means of any accident involving the aircraft, resulting in serious injury or death of any person or substantial damage to the aeroplane or property.

1.8.4 The pilot-in-command shall;

a) be responsible for the journey log book or the general declaration.

i) The aircraft journey log book should contain the following items and the corresponding roman numerals:

I — Aeroplane nationality and registration.

II — Date.

III — Names of crew members.

IV — Duty assignments of crew members.

V — Place of departure.

VI — Place of arrival.

VII — Time of departure.

VIII — Time of arrival.

IX — Hours of flight.

X — Nature of flight (private, aerial work, scheduled or non-scheduled).

XI — Incidents, observations, if any.

XII — Signature of person in charge.

ii) Entries in the journey log book should be made currently and in ink or indelible pencil. Completed journey log book shall be retained to provide a continuous record of the last six months' operations.

b) have authority to give all commands and take any appropriate actions for the purpose of securing the safety of the aircraft and of persons and/or property carried therein and have authority to disembark any person, or any part of the cargo, that may represent a potential hazard to the safety of the aircraft or its occupants;

c) not allow a person to be carried in the aircraft who appears to be under the influence of alcohol or drugs to the extent that the safety of the aircraft or its occupants is likely to be endangered;

d) have the right to refuse transportation of inadmissible passengers, deportees or persons in custody if their carriage increases the risk to the safety of the aircraft or its occupants;

e) ensure that all passengers are briefed on the location of emergency exits and the location and use of relevant safety and emergency equipment;

f) ensure that all operational procedures and checklists are complied with in accordance with the operations manual;

g) not permit any crew member to perform any activity during critical phases of flight, except duties required for the safe operation of the aircraft;

h) ensure that flight recorders:

i) are not disabled or switched off during flight; and

ii) in the event of an accident or an incident that is subject to mandatory reporting:

1) are not intentionally erased;

2) are deactivated immediately after the flight is completed; and

3) are reactivated only with the agreement of the investigating authority;

i) decide on acceptance of the aircraft with unserviceabilities in accordance with the configuration deviation list (CDL) or the minimum equipment list (MEL);

j) ensure that the pre-flight inspection has been carried out in accordance with the Part 145 Maintenance Manual;

k) be satisfied that relevant emergency equipment remains easily accessible for immediate use.

1.8.5 The pilot-in-command, or the pilot to whom conduct of the flight has been delegated, shall, in an emergency situation that requires immediate decision and action, take any action he/she considers necessary under the circumstances. In such cases he/she may deviate from rules, operational procedures and methods in the interest of safety.

1.8.6 Whenever an aircraft in flight has manoeuvred in response to an airborne collision avoidance system (ACAS) resolution advisory (RA), the pilot-in-command shall submit an ACAS report to the authority.

1.8.7 Bird hazards and strikes:

a) Whenever a potential bird hazard is observed, the pilot in Command shall inform the air traffic service (ATS) unit as soon as flight crew workload allows.

b) Whenever an aircraft for which the pilot-in-command is responsible suffers a bird strike that results in significant damage to the aircraft or the loss or malfunction of any essential service, the pilot in Command shall submit a written bird strike report after landing to the Authority.

1.8.8 The pilot-in-command shall be responsible for the journey log book or the general declaration.

Duties and responsibilities of crew members other than the pilot-in-command.

1.9 Arrangements must be made for the supervision of all flying staff by persons having the experience and qualities necessary to ensure the maintenance of high professional standards. This may necessitate additional appointments such as Flight or Fleet Captains, Check and Training Captains, Training Captains and even Training First Officers. The duties and responsibilities of these officers should be carefully defined, and their line flying commitments suitably restricted in order that they may have sufficient time for their administrative functions. The Authority will need to be satisfied that arrangements for the supervision of crew members are properly related to the size and nature of the operator's Organisation.

Cabin crew: ANR 30(12) (13).

1.10 The operator shall establish, to the satisfaction of the Authority, the minimum number of cabin crew required for each type of aeroplane, based on seating capacity or the number of passengers carried, in order to effect a safe and expeditious evacuation of the aeroplane, and the necessary functions to be performed in an emergency or a situation requiring emergency evacuation.

Ground staff:

1.11 The number of staff needed will depend primarily upon the nature and the scale of flight operations, and the Authority will take full account of the operator's particular circumstances. The operations and traffic departments, in particular, should be adequately staffed with trained personnel who have a complete understanding of the nature of their duties and responsibilities. Operators will be expected to provide any further training that may be necessary from time to time (e.g. when new types of aircraft are acquired) and the arrangements in this regard will be taken into account when considering an application for a variation to a Certificate. An operator may elect to contract out some or all of the services known as traffic handling, which includes such functions as passenger check-in, baggage handling, boarding and disembarkation supervision and related duties. Nevertheless the operator retains the responsibility of ensuring that these activities are conducted in a safe and effective manner.

Combination of nominated persons responsibilities

1.12 The acceptability of a single person holding several posts, possibly in combination with being the accountable manager, shall depend upon the nature and scale of the operation but, in order to avoid any conflict of interest, the person responsible for the maintenance, airworthiness and serviceability of the operator’s aircraft cannot also have responsibility for the management systems. The two main areas of concern should be competence and an individual’s capacity to meet his/her responsibilities.

1.13 The Authority expects that persons for nomination to these positions should have certain minimum qualifications, experience, licences, ratings or other form of evidence of competence. AIC 02/19 gives details of the expected minimum requirements for each nominated position. In exceptional circumstances and for a limited period of time, the Authority may exercise its discretion and consider a nominee who does not meet the requirements listed, provided that they have comparable experience and are assessed as being able to effectively perform the functions associated with the position. As regards competence in different areas of responsibility, there should not be any difference from the requirements applicable to persons holding only one post.

1.14 The capacity of an individual to meet his/her responsibilities should primarily be dependent upon the scale of the operation. However the complexity of the organisation or of the operation may prevent, or limit, combinations of posts which may be acceptable in other circumstances.

1.15 In most circumstances, the responsibilities of a nominated person should rest with a single individual. However, in the area of ground operations, it may be acceptable for responsibilities to be split, provided that the responsibilities of each individual concerned are clearly defined.

1.16 A description of their function and responsibilities shall be included.

1.17 The holder of an AOC shall make arrangements to ensure continuity of supervision in the absence of nominated persons. Post holders should be available at the Operator’s nominated headquarters during normal working hours unless on normal rostered duty. Any absence longer than 7 days shall be notified to the Authority, and an acting appointment made which is acceptable to the Authority.

1.18 The person nominated by the holder of an AOC shall not be nominated by another holder of an AOC, unless agreed with the authorities concerned.

1.19 Persons nominated should be contracted to work sufficient hours to fulfil the management functions associated with the scale and scope of the operation

Support services.

1.20 The nature and scale of office services required - clerical staff, typists, photocopying, duplicating and printing machinery etc. - should-be related to the numbers of executive, administrative and other staff employed. It is particularly important that office services are sufficient to ensure that operational instructions and information of all kinds are produced and circulated to all concerned without delay.

1.21 In cases where the provision of printing facilities for manuals, manual amendments and other necessary documentation is not warranted by the size of the company, the operator must show that he has efficient alternative arrangements.

Accommodation.

1.22 Office space at each operating base must be sufficient to provide a suitable working environment for the operating staff employed there. Adequate provision must be made for the traffic staff, for operational planning, for the storage and display of essential records, and for flight planning facilities for flight and cabin crews. If suitable flight planning facilities for flight crews are provided by the airport authority, the space provided by the operator can normally be reduced, but it is essential that reasonable accommodation should be made available for crews to use before and between flights.

CHAPTER 2 - OPERATIONAL CONTROL AND SUPERVISION

References: ICAO Annex 6 Part 1, 2, & 3, ANR 25, 30, 34, 43, 53 - 66, SD - Air Operator's Certificate

2.0 The operator shall ensure that a flight will not be commenced unless it has been ascertained by every reasonable means available that the ground and/or water facilities available and directly required on such flight, for the safe operation of the aircraft and the protection of the passengers, are adequate for the type of operation under which the flight is to be conducted and are adequately operated for this purpose.

2.1 The operator shall ensure that any inadequacy of facilities observed in the course of operations is reported to the authority responsible for them, without undue delay.

2.2 Subject to their published conditions of use, aerodromes and their facilities shall be kept continuously available for flight operations during their published hours of operations, irrespective of weather conditions.

2.3 The operator shall, as part of its safety management system, assess the level of rescue and fire fighting service (RFFS) protection available at any aerodrome intended to be specified in the operational flight plan in order to ensure that an acceptable level of protection is available for the aircraft intended to be used.

Note.— Annex 19 includes safety management provisions for air operators. Further guidance is contained in the Safety Management Manual (SMM) *(Doc 9859).*

2.4 Information related to the level of RFFS protection that is deemed acceptable by the operator shall be contained in the operations manual.

2.5 Supervision of the operation by the operator. A description of the system for supervision of the operation by the operator (The operator shall establish and maintain a system for exercising operational control over any flight operated under the terms of its certificates.). This should show how the safety of flight operations and the qualifications of personnel are supervised. In particular, the procedures related to the following items should be described:

a) licence and qualification validity,

b) competence of operations personnel,

c) control, analysis and storage of the required records.

2.6 The operator shall ensure that all operations personnel are properly instructed in their particular duties and responsibilities and the relationship of such duties to the operation as a whole.

2.7 An aircraft shall not be taxied on the movement area of an aerodrome unless the person at the controls:

a) has been duly authorized by the operator or a designated agent;

b) is fully competent to taxi the aircraft;

c) is qualified to use the radiotelephone; and

d) has received instruction from a competent person in respect of aerodrome layout, routes, signs, marking, lights, air traffic control (ATC) signals and instructions, phraseology and procedures, and is able to conform to the operational standards required for safe aircraft movement at the aerodrome.

Aircraft tracking

2.8 The operator shall establish an aircraft tracking capability to track aircraft throughout its area of operations.

2.9 The operator should track the position of an aeroplane through automated reporting at least every 15 minutes for the portion(s) of the in-flight operation(s) under the following conditions:

a) the aeroplane has a maximum certificated take-off mass of over 27,000 kg and a seating capacity greater than 19; and

b) where an ATS unit obtains aeroplane position information at greater than 15-minute intervals.

Note.— See Annex 11, Chapter 2, for coordination between the operator and air traffic services providers regarding position report messages.

2.10 The operator shall track the position of an aeroplane through automated reporting at least every 15 minutes for the portion(s) of the in-flight operation(s) that is planned in an oceanic area(s) under the following conditions:

a) the aeroplane has a maximum certificated take-off mass of over 45,500 kg and a seating capacity greater than 19; and

b) where an ATS unit obtains aeroplane position information at greater than 15-minute intervals.

2.11 Notwithstanding the provisions in 2.7 and 2.8, the Authority may, based on the results of an approved risk assessment process implemented by the operator, allow for variations to automated reporting intervals. The process shall demonstrate how risks to the operation, resulting from such variations, can be managed and shall include at least the following:

a) capability of the operator's operational control systems and processes, including those for contacting ATS units;

b) overall capability of the aeroplane and its systems;

c) available means to determine the position of, and communicate with, the aeroplane;

d) frequency and duration of gaps in automated reporting;

e) human factors consequences resulting from changes to flight crew procedures; and

f) specific mitigation measures and contingency procedures.

2.12 The operator shall establish procedures, approved by the Authority, for the retention of aircraft tracking data to assist SAR in determining the last known position of the aircraft.

Flying staff records

2.13 Control, analysis and storage of the required records.

2.14 Records must be kept for each member of the flight, and cabin crew showing the dates on which tests, ratings, medical certificates, licences, etc., are due for renewal. There must also be an effective system to guard against flight, and cabin crew being rostered for duty when checks etc., are overdue, and for verifying that licences have been renewed at the appropriate time.

2.15 Operators are legally obliged to keep records of all training and tests and to make them available as necessary to the Authority's inspection staff. They may also be asked to make some of these records available to other operators if the flight crew member moves to another employer. Records should incorporate certifications indicating the competence of examinees to perform the duties in respect of which they have been tested. The form of record and certifications to be maintained must be agreed by the Authority.

2.16 Training records must show a trainee's progress through each phase of their training. They should include information about the results of tests, and when applicable, indicate the number of times each exercise in base and line training was covered or had to be repeated.

2.17 Records must be kept of the duty and rest periods of all flight crew. These records shall include the following.

a. For each crew member:

1) Duration of each flying duty period, and function performed during the period;

2) Duration of each duty period whether or not it includes a flying duty period;

3) Duration of each rest period prior to a flying duty or standby duty period;

4) Dates of days off;

5) Weekly totals of duty.

b. For each flight and cabin crew member:

1) Daily, weekly, 28 daily, and annual (365 days) flying hours.

2) Flight crew records shall be preserved for at least 1 year from the date of the last relevant entry.

3) In addition operators shall retain all aircraft "pilot-in-command" discretion reports or extended flight duty periods and reduced rest periods for a period of at least twelve months.

Instructions to flying staff:

2.18 A system and responsibility for promulgation of additional operational instructions and information. Operations manuals and other standing instructions must be supplemented by a systematic procedure for bringing urgent or purely temporary information to the notice of crew members. This should be achieved by a numbered series of flight crew and/or cabin crew instructions or notices issued by or under the direct authority of a senior operations officer. When the issue entails amendment of a standing instruction, the amendment should be made without undue delay and periodical checklists should be issued to show which temporary instructions are current. Temporary instructions should be self-cancelling. Full use should be made of these instructions to bring significant Information Circulars, NOTAMs, etc. to the attention of crew members. Such notices/instructions to flight crew are to be considered as part of the operator's Operations Manual. The applicability of this information and the responsibilities for its promulgation should be included.

Flight safety function.

2.19 A description of the procedures and responsibilities necessary to exercise operational control with respect to flight safety. Operators should establish a Flight Safety function within the company. Whether this takes the form of a single person or a committee will depend to a large degree upon the nature and scale of the operation. It should be part of the Safety and Risk Management Systems and also the Accident Prevention and Flight Safety Programme.

2.20 It is important that operators should have systematic procedures for encouraging and processing pilot-in-commands' and other reports on matters having a potential effect on the safety of operations. These reports should be reviewed no later than the next working day after the completion of the flight.

POWERS OF THE AUTHORITY.

Routine liaison and inspection.

2.21 A description of the powers of the authority and guidance to staff on how to facilitate inspections by authority personnel.

2.22 During the currency of a Certificate, the Authority will require periodic reports on the continued competence of the holder. In order to achieve this, frequent liaison and inspection visits to each operating base and to the operator's outstations will be made by the Authority's inspection staff members. Inspection staff will normally also wish to visit handling agents appointed by the operator, both in Fiji and overseas. This will be in addition to the operator's own internal audits and/or inspections of their agents. Inspection staff will require the operator to provide evidence of the operator's oversight of their agents and these reports may be sufficient evidence of an agent's satisfactory performance. These checks are conducted to assess the suitability of an operator's organisation, base facilities, overall standard of operation and level of compliance with statutory and Operations Manual requirements.

2.23 Flight inspections, ramp, facility, and DG facility inspections will also be carried out during the currency of a Certificate. The purpose of these audits/inspections is to assess the adequacy of the procedures established by the operator and the facilities provided by him, to enable the crew to perform their duties both in the air and at aerodromes away from base; to examine the standard of flight deck management, cabin safety and operation by the crew; and to assess the level of compliance with statutory and Operations Manual requirements. When required by the Inspection staff, the operator will provide a seat on the flight deck from which the officer can closely monitor the operation. (See Appendix A). Arrangements for such inspections will normally be made at least seven days in advance but the right is reserved for inspection staff to require an appropriate seat on an aircraft without prior notice.

2.24 The conduct of tests by the Authority's Authorised Examiners, and of crew training generally, will also be observed by inspection staff during the currency of a Certificate. The purpose of these inspections is to ensure that training and testing is in compliance with the operators training manual and within the terms and conditions of the appointment of Authority Authorised Examiners.

2.25 All Inspection staff are 'authorised persons' for the purposes of the ANR, and are also authorised for the purposes specified in General Conditions Al, A2 and A3 of each Air Operators Certificate (see Appendix A). Inspection staffs carry an Authorisation Card that will be produced on request.

2.26 Operators are to ensure that all their operating staff are fully informed of the foregoing.

a) No fee or fare will be paid in respect of the carriage of an inspection staff member carrying out such a duty, but operators will be expected to provide a passenger ticket and a seat on the aircraft. The notice to be given requiring such a seat will normally be at least seven days, but the circumstances may warrant a shorter notice.

b) To keep the Authority informed on the adequacy of aircraft maintenance arrangements, Airworthiness inspection staff will make periodic audits of the operator's facilities and records.

Surveillance of operations by a foreign operator

2.27 Contracting States shall recognize as valid an air operator certificate issued by another Contracting State, provided that the requirements under which the certificate was issued are at least equal to the applicable Standards specified in this SD and in Annex 19.

2.28 States shall establish a programme with procedures for the surveillance of operations in their territory by a foreign operator and for taking appropriate action when necessary to preserve safety.

2.29 Operators shall meet and maintain the requirements established by the States in which the operations are conducted.

CHAPTER 3 - MANAGEMENT SYSTEM

References: ICAO Annex 6 Part 1, 2, & 3, ICAO Annex 19, ANR 43, SD - Safety Management Systems

3.0. A description of the management system, how the operator meets its compliance with the Safety Management System. The organisational structure, procedures and processes needed to ensure that all operations are conducted in accordance with all applicable requirements, standards and operational procedures in order that they can be carried out in the safest manner achievable with all associated risks being **A**s **L**ow **A**s **R**easonably **P**racticable (ALARP). The Management System brings the areas of Safety Management as well as Compliance Monitoring together into one managed system. It also defines the management duties, responsibilities and accountabilities throughout the organisation and outlines the documentation of all key management system processes:

a) The operator shall establish, implement and maintain a management system that includes:

1) clearly defined lines of responsibility and accountability throughout the operator, including a direct safety accountability of the accountable manager;

2) a description of the overall philosophies and principles of the operator with regard to safety, referred to as the safety policy;

3) the identification of aviation safety hazards entailed by the activities of the operator, their evaluation and the management of associated risks, including taking actions to mitigate the risk and verify their effectiveness;

4) maintaining personnel trained and competent to perform their tasks;

5) documentation of all management system key processes, including a process for making personnel aware of their responsibilities and the procedure for amending this documentation;

6) a function to monitor compliance of the operator with the relevant requirements. Compliance monitoring shall include a feedback system of findings to the accountable manager to ensure effective implementation of corrective actions as necessary; and

7) any additional requirements that are prescribed in the relevant subparts of this Annex or other applicable Annexes.

(b) The management system shall correspond to the size of the operator and the nature and complexity of its activities, taking into account the hazards and associated risks inherent in these activities.

3.1 The management system of an operator shall encompass safety by including a safety manager, a safety action group and a safety review board in the organisational structure.

a) Safety manager

1) The safety manager shall act as the focal point and be responsible for the development, administration and maintenance of an effective safety management system. Depending on the size of the operator and the nature and complexity of its activities, the safety manager may be assisted by additional safety personnel for the performance of all safety management related tasks. Regardless of the organisational set-up it is important that the safety manager remains the unique focal point of the operator's safety management system.

2) The functions of the safety manager should be to:

i) facilitate hazard identification, risk analysis and management;

ii) monitor the implementation of actions taken to mitigate risks, as listed in the safety action plan;

iii) provide periodic reports on safety performance;

iv) ensure maintenance of safety management documentation;

v) ensure that there is safety management training available and that it meets acceptable standards;

vi) provide advice on safety matters; and

vii) ensure initiation and follow-up of internal occurrence / accident investigations.

b) The safety action group

1) A safety action group may be established as a standing group or as an ad-hoc group to assist or act on behalf of the safety review board.

2) More than one safety action group may be established depending on the scope of the task and specific expertise required.

3) The safety action group should report to and take strategic direction from the safety review board and should be comprised of managers, supervisors and personnel from operational areas.

4) The safety action group shall:

i) monitor operational safety;

ii) resolve identified risks;

iii) assess the impact on safety of operational changes; and

iv) ensure that safety actions are implemented within agreed timescales.

The safety action group should review the effectiveness of previous safety recommendations and safety promotion.

c) Safety review board

1) The Safety review board shall be a high level committee that considers matters of strategic safety in support of the accountable manager's safety accountability.

2) The board shall be chaired by the accountable manager and be composed of heads of functional areas.

3) The safety review board shall monitor:

i) safety performance against the safety policy and objectives;

ii) that any safety action is taken in a timely manner; and

iii) the effectiveness of the operator's safety management processes.

4) The safety review board will ensure that appropriate resources are allocated to achieve the established safety performance.

5) The safety manager or any other relevant person may attend, as appropriate, safety review board meetings. He/she may communicate to the accountable manager all information, as necessary, to allow decision making based on safety data.

Safety policy

3.2. The safety policy is the means whereby the operator states its intention to maintain and, where practicable, improve safety levels in all its activities and to minimise its contribution to the risk of an aircraft accident as far as is reasonably practicable.

3.3. The safety policy should state that the purpose of safety reporting and internal investigations is to improve safety, not to apportion blame to individuals.

a) The safety policy shall:

1) be endorsed by the accountable manager;

2) reflect organisational commitments regarding safety and its proactive and systematic management;

3) be communicated, with visible endorsement, throughout the operator; and

4) include safety reporting principles.

b) The safety policy shall include a commitment:

1) to improve towards the highest safety standards;

2) to comply with all applicable legislation, meet all applicable standards and consider best practices;

3) to provide appropriate resources;

4) to enforce safety as one primary responsibility of all managers; and

5) not to blame someone for reporting something which would not have been otherwise detected.

c) Senior management should:

1) continually promote the safety policy to all personnel and demonstrate their commitment to it;

2) provide necessary human and financial resources for its implementation; and

3) establish safety objectives and performance standards.

Safety risk management

3.4. The overall purpose of the scheme is to use reported information to improve the level of safety performance of the operator and not to attribute blame.

3.5. The objectives of the scheme are to:

a) enable an assessment to be made of the safety implications of each relevant incident and accident, including previous similar occurrences, so that any necessary action can be initiated; and

b) ensure that knowledge of relevant incidents and accidents is disseminated, so that other persons and operators may learn from them.

3.6. The scheme is an essential part of the overall monitoring function and it is complementary to the normal day-to-day procedures and 'control' systems and is not intended to duplicate or supersede any of them.

3.7. The scheme is a tool to identify those instances where routine procedures have failed.

3.8. All occurrence reports judged reportable by the person submitting the report should be retained as the significance of such reports may only become obvious at a later date.

a) Hazard identification processes

1) Reactive and proactive schemes for hazard identification should be the formal means of collecting, recording, analysing, acting on and generating feedback about hazards and the associated risks that affect the safety of the operational activities of the operator.

2) All reporting systems, including confidential reporting schemes, should include an effective feedback process.

b) Risk assessment and mitigation processes

1) A formal risk management process should be developed and maintained that ensures analysis (in terms of likelihood and severity of occurrence), assessment (in terms of tolerability) and control (in terms of mitigation) of risks to an acceptable level.

2) The levels of management who have the authority to make decisions regarding the tolerability of safety risks, in accordance with (b)(1), should be specified.

c) Internal safety investigation

1) The scope of internal safety investigations should extend beyond the scope of occurrences required to be reported to the Authority.

d) Safety performance monitoring and measurement

1) Safety performance monitoring and measurement should be the process by which the safety performance of the operator is verified in comparison to the safety policy and objectives.

2) This process should include:

i) safety reporting, addressing also the status of compliance with the applicable requirements;

ii) safety studies, that is, rather large analyses encompassing broad safety concerns;

iii) safety reviews including trends reviews, which would be conducted during introduction and deployment of new technologies, change or implementation of procedures, or in situations of structural change in operations;

iv) safety audits focussing on the integrity of the operator's management system, and periodically assessing the status of safety risk controls; and

v) safety surveys, examining particular elements or procedures of a specific operation, such as problem areas or bottlenecks in daily operations, perceptions and opinions of operational personnel and areas of dissent or confusion.

e) The management of change

The operator shall manage safety risks related to a change. The management of change should be a documented process to identify external and internal change that may have an adverse effect on safety. It should make use of the operator's existing hazard identification, risk assessment and mitigation processes.

f) Continuous improvement

The operator shall continuously seek to improve its safety performance. Continuous improvement should be achieved through:

1) proactive and reactive evaluations of facilities, equipment, documentation and procedures through safety audits and surveys;

2) proactive evaluation of individuals' performance to verify the fulfilment of their safety responsibilities; and 3) reactive evaluations in order to verify the effectiveness of the system for control and mitigation of risk.

g) The emergency response plan (ERP)

1) An ERP shall be established that provides the actions to be taken by the operator or specified individuals in an emergency. The ERP should reflect the size, nature and complexity of the activities performed by the operator.

2) The ERP shall ensure:

i) an orderly and safe transition from normal to emergency operations;

ii) safe continuation of operations or return to normal operations as soon as practicable; and

iii) coordination with the emergency response plans of other organisations, where appropriate.

3) Operators shall conduct a live ERP exercise biennially, and conduct a table top exercise in the intervening years

Training and communication on safety

3.9. The safety training programme may consist of self-instruction via the media (newsletters, flight safety magazines), class-room training, e-learning or similar training provided by training service providers.

(a) Training

(1) All personnel should receive safety training as appropriate for their safety responsibilities.

(2) Adequate records of all safety training provided should be kept.

(b) Communication

(1) The operator should establish communication about safety matters that:

(i) ensures that all personnel are aware of the safety management activities as appropriate for their safety responsibilities;

(ii) conveys safety critical information, especially relating to assessed risks and analysed hazards;

(iii) explains why particular actions are taken; and

(iv) explains why safety procedures are introduced or changed.

(2) Regular meetings with personnel where information, actions and procedures are discussed may be used to communicate safety matters.

The SMS manual shall be a standalone manual, the operator shall reference the document in this chapter.

Compliance monitoring – general

3.10. The organisational set-up of the compliance monitoring function should reflect the size of the operator and the nature and complexity of its activities. The compliance monitoring Safety manager may perform all audits and inspections himself/herself or appoint one or more auditors by choosing personnel having the related competence, either from within or outside the operator.

a) Regardless of the option chosen it must be ensured that the independence of the audit function is not affected, in particular in cases where those performing the audit or inspection are also responsible for other functions for the operator.

b) In case external personnel are used to perform compliance audits or inspections:

1) any such audits or inspections are performed under the responsibility of the compliance monitoring manager; and

2) the operator remains responsible to ensure that the external personnel has relevant knowledge, background and experience as appropriate to the activities being audited or inspected; including knowledge and experience in compliance monitoring.

c) The operator retains the ultimate responsibility for the effectiveness of the compliance monitoring function in particular for the effective implementation and follow-up of all corrective actions.

Compliance monitoring programme

3.11. Typical subject areas for compliance monitoring audits and inspections for operators should be, as applicable:

a) actual flight operations;

b) ground de-icing/anti-icing;

c) flight support services;

d) load control;

e) technical standards.

3.12. Operators shall monitor compliance with the operational procedures they have designed to ensure safe operations, airworthy aircraft and the serviceability of both operational and safety equipment. In doing so, they should, where appropriate, additionally monitor the following:

a) operational procedures;

b) flight safety procedures;

c) operational control and supervision;

d) aircraft performance;

e) all weather operations;

f) communications and navigational equipment and practices;

g) mass, balance and aircraft loading;

h) instruments and safety equipment;

i) ground operations;

j) flight and duty time limitations, rest requirements, and scheduling;

k) aircraft maintenance/operations interface;

l) use of the MEL;

m) flight crew;

n) cabin crew;

o) dangerous goods;

p) security.

Audit and inspection

3.13. 'Audit' means a systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which requirements are complied with.

3.14. 'Inspection' means an independent documented conformity evaluation by observation and judgement accompanied as appropriate by measurement, testing or gauging, in order to verify compliance with applicable requirements.

Size, nature and complexity of the activity

3.15. An operator should be considered as complex when it has a workforce of more than 20 full time staff.

3.16. Operators with up to 20 full time staff involved in the activity may also be considered complex based on an assessment of the following factors:

1) in terms of complexity, the extent and scope of contracted activities subject to the approval;

2) in terms of risk criteria, whether any of the following are present:

i) operations requiring the following specific approvals: performance-based navigation (PBN), low visibility operation (LVO), extended range operations with two-engine aeroplanes (ETOPS), helicopter hoist operation (HHO), helicopter emergency medical service (HEMS), and dangerous goods (DG);

ii) different types of aircraft used;

iii) the environment (off shore, mountainous area etc.).

Contracted activities

3.17. Contracted activities include all activities within the operator's scope of approval that are performed by another organisation either itself certified to carry out such activity or if not certified, working under the operator's approval. The operator shall ensure that when contracting or purchasing any part of its activity, the contracted or purchased service or product conforms to the applicable requirements.

3.18. When the certified operator contracts any part of its activity to an organisation that is not itself certified to carry out such activity, the contracted organisation shall work under the approval of the operator. The contracting organisation shall ensure that the Authority is given access to the contracted organisation, to determine continued compliance with the applicable requirements.

Contracting – general

3.19. Operators may decide to contract certain activities to external organisations for the provision of services related to areas such as:

a) ground de-icing/anti-icing;

b) ground handling;

c) flight support (including performance calculations, flight planning, navigation database and dispatch);

d) training; and

e) manual preparation.

3.20. The ultimate responsibility for the product or service provided by external organisations should always remain with the operator.

Responsibility when contracting activities

3.21. Regardless of the approval status of the contracted organisation, the contracting operator is responsible to ensure that all contracted activities are subject to hazard identification and risk management and to compliance monitoring.

3.22. When the contracted organisation is itself certified to carry out the contracted activities, the operator's compliance monitoring should at least check that the approval effectively covers the contracted activities and that it is still valid.

Chapter 4 CREW COMPOSITION

References: ICAO Annex 6 Parts 1, 2 & 3, ANRs 30, 31, 35, 43, 46.

Crew composition.

4.0. The operator shall establish, to the satisfaction of the Authority, the minimum number of cabin crew required for each type of aircraft, based on seating capacity or the number of passengers carried, in order to effect a safe and expeditious evacuation of the aeroplane, and the necessary functions to be performed in an emergency or a situation requiring emergency evacuation. The operator shall assign these functions for each type of aeroplane. An explanation of the method for determining crew compositions, taking account of the following:

a) the type of aircraft being used;

b) the area and type of operation being undertaken;

c) the phase of the flight;

d) the minimum crew requirement and flight duty period planned;

e) experience (total and on type), recency and qualification of the crew members;

f) the designation of the pilot-in-command/commander and, if necessitated by the duration of the flight, the procedures for the relief of the pilot-in-command/commander or other members of the flight crew.

g) the designation of the senior cabin crew member and, if necessitated by the duration of the flight, the procedures for the relief of the senior cabin crew member and any other member of the cabin crew.

4.1. Pilot-in-command. For each flight, the operator shall designate one pilot to act as pilot-in-command, and, if necessitated by the duration of the flight, the procedures for the relief of the pilot-in-command or other members of the flight crew. The designation of the senior cabin crew member and, if necessitated by the duration of the flight, the procedures for the relief of the senior cabin crew member and any other member of the cabin crew.

4.2. Flight crew incapacitation. Instructions on the succession of command in the event of flight crew incapacitation.

4.3. Operation on more than one type. A statement indicating which aircraft are considered as one type for the purpose of:

a. flight crew licences

b. flight crew scheduling; and

c. cabin crew scheduling.

Chapter 5 QUALIFICATION REQUIREMENTS

References: ICAO Annex 1, 6 Parts 1, 2 & 3, ANRs 30, 30A, 31, 35, 43, 46, 53 – 66, SD - Air Operator's Certificate

Licence Requirements

5.0 A description of the required licence, rating(s), qualification/competency (e.g. for routes and aerodromes), experience, training, checking and recency for operations personnel to conduct their duties. Consideration should be given to the aircraft type, kind of operation and composition of the crew.

Pilot-in-Command and Co-pilot

5.1 The operator shall not assign a pilot-in-command or a co-pilot to operate at the flight controls of a type or variant of a type of aeroplane during take-off and landing unless that pilot has operated the flight controls during at least three take-offs and landings within the preceding 90 days on the same type of aeroplane or in a flight simulator approved for the purpose.

5.2 When a pilot-in-command or a co-pilot is flying several variants of the same type of aircraft or different types of aircraft with similar characteristics in terms of operating procedures, systems and handling, the Authority shall decide under which conditions the requirements of 5.1 for each variant or each type of aeroplane can be combined.

Cruise Relief Pilot

5.3 The operator shall not assign a pilot to act in the capacity of cruise relief pilot in a type or variant of a type of aeroplane unless, within the preceding 90 days that pilot has either:

a) operated as a pilot-in-command, co-pilot or cruise relief pilot on the same type of aeroplane; or

b) carried out flying skill refresher training including normal, abnormal and emergency procedures specific to cruise flight on the same type of aeroplane or in a flight simulator approved for the purpose, and has practised approach and landing procedures, where the approach and landing procedure practice may be performed as the pilot who is not flying the aeroplane.

5.4 When a cruise relief pilot is flying several variants of the same type of aeroplane or different types of aeroplanes with similar characteristics in terms of operating procedures, systems and handling, the Authority shall decide under which conditions the requirements of 5.3 for each variant or each type of aeroplane can be combined.

5.5 The operator shall not utilize a pilot as pilot-in-command of an aeroplane on a route or route segment for which that pilot is not currently qualified until such pilot has complied with 5.6 and 5.7.

5.6 Each such pilot shall demonstrate to the operator an adequate knowledge of:

a) the route to be flown, and the aerodromes which are to be used. This shall include knowledge of:

1) the terrain and minimum safe altitudes;

2) the seasonal meteorological conditions;

3) the meteorological, communication and air traffic facilities, services and procedures;

4) the search and rescue procedures; and

5) the navigational facilities and procedures, including any long-range navigation procedures, associated with the route along which the flight is to take place; and

b) procedures applicable to flight paths over heavily populated areas and areas of high air traffic density, obstructions, physical layout, lighting, approach aids and arrival, departure, holding and instrument approach procedures, and applicable operating minima.

5.7 A pilot-in-command shall have made an actual approach into each aerodrome of landing on the route, accompanied by a pilot who is qualified for the aerodrome, as a member of the flight crew or as an observer on the flight deck, unless:

a) the approach to the aerodrome is not over difficult terrain and the instrument approach procedures and aids available are similar to those with which the pilot is familiar, and a margin to be approved by the Authority is added to the normal operating minima, or there is reasonable certainty that approach and landing can be made in visual meteorological conditions; or

b) the descent from the initial approach altitude can be made by day in visual meteorological conditions; or

c) the operator qualifies the pilot-in-command to land at the aerodrome concerned by means of an adequate pictorial presentation; or

d) the aerodrome concerned is adjacent to another aerodrome at which the pilot-in-command is currently qualified to land.

5.8 The operator shall maintain a record, sufficient to satisfy the Authority of the qualification of the pilot and of the manner in which such qualification has been achieved.

5.9 The operator shall not continue to utilize a pilot as a pilot-in-command on a route or within an area specified by the operator and approved by the Authority unless, within the preceding 12 months, that pilot has made at least one trip as a pilot member of the flight crew, or as a check pilot, or as an observer in the flight crew compartment:

a) within that specified area; and

b) if appropriate, on any route where procedures associated with that route or with any aerodromes intended to be used for take-off or landing require the application of special skills or knowledge.

5.10 In the event that more than 12 months elapse in which a pilot-in-command has not made such a trip on a route in close proximity and over similar terrain, within such a specified area, route or aerodrome, and has not practised such procedures in a training device which is adequate for this purpose, prior to again serving as a pilot-in-command within that area or on that route, that pilot must requalify in accordance with 5.6 and 5.7.

Pilot Proficiency - Base Checks

5.11 The operator shall ensure that piloting technique and the ability to execute emergency procedures is checked in such a way as to demonstrate the pilot's competence on each type or variant of a type of aircraft. Where the operation may be conducted under instrument flight rules, the operator shall ensure that the pilot's competence to comply with such rules is demonstrated to either a check pilot of the operator or to a representative of the Authority. Such checks shall be performed twice within any period of one year. Any two such checks which are similar and which occur within a period of four consecutive months shall not alone satisfy this requirement.

5.12 When the operator schedules flight crew on several variants of the same type of aircraft or different types of aircraft with similar characteristics in terms of operating procedures, systems and handling, the Authority shall decide under which conditions the requirements of 5.11 for each variant or each type of aircraft can be combined.

Single pilot operations under the instrument flight rules (IFR) or at night

5.13 The pilot-in-command shall for the requirements of experience, recency and training applicable to single pilot operations intended to be carried out under IFR or at night have as follows.

a) for operations under IFR or at night, have accumulated at least 50 hours flight time on the class of aeroplane, of which at least 10 hours shall be as pilot-in-command;

b) for operations under IFR, have accumulated at least 25 hours flight time under IFR on the class of aeroplane, which may form part of the 50 hours flight time in sub-paragraph a);

c) for operations at night, have accumulated at least 15 hours flight time at night, which may form part of the 50 hours flight time in sub-paragraph a);

d) for operations under IFR, have acquired recent experience as a pilot engaged in a single pilot operation under IFR of:

1) at least five IFR flights, including three instrument approaches carried out during the preceding 90 days on the class of aeroplane in the single pilot role; or

2) an IFR instrument approach check carried out on such an aeroplane during the preceding 90 days;

e) for operations at night, have made at least three take-offs and landings at night on the class of aeroplane in the single pilot role in the preceding 90 days; and

f) have successfully completed training programmes that include, in addition to the requirements of Part D, passenger briefing with respect to emergency evacuation, autopilot management, and the use of simplified in-flight documentation.

5.14 The initial and recurrent flight training and proficiency checks indicated in Part D shall be performed by the pilot-in-command in the single pilot role on the class of aeroplane in an environment representative of the operation.

5.15 Additional requirements for single pilot operations under the instrument flight rules (IFR) or at night.

5.16 An aircraft shall not be operated under the IFR or at night by a single pilot unless approved by the Authority.

An aircraft shall not be operated under the IFR or at night by a single pilot unless:

a) the flight manual does not require a flight crew of more than one;

b) the aeroplane is propeller-driven;

c) the maximum approved passenger seating configuration is not more than nine;

d) the maximum certificated take-off mass does not exceed 5,700 kg;

e) the aeroplane is equipped as described with; and

i) a serviceable autopilot that has at least altitude hold and heading select modes;

ii) a headset with a boom microphone or equivalent; and

iii) means of displaying charts that enables them to be readable in all ambient light conditions.

f) the pilot-in-command has satisfied requirements of experience, training, checking and recency described in 5.13:

Flight crew:

5.17 A description of the qualification/competency (e.g. for routes and aerodromes), experience, training, checking and recency for operations personnel to conduct their duties.

a) Pilot relieving the co-pilot,

b) Pilot under supervision,

c) System panel operator,

d) Operation on more than one type or variant.

Cabin crew:

5.18 A description of the qualification/competency (e.g. for routes and aerodromes), experience, training, checking and recency for operations personnel to conduct their duties.

a) Senior cabin crew member,

b) Cabin crew member:

i) Required cabin crew member,

ii) Additional cabin crew member and cabin crew member during familiarisation flights,

c) Flight Operations Officer/Flight Dispatcher

Training, checking and supervision personnel:

5.19 A description of the qualification/competency (e.g. for routes and aerodromes), experience, training, checking and recency for operations personnel to conduct their duties.

a) for flight crew; and

b) for cabin crew.

Other operations personnel (including technical crew and crew members other than flight, cabin and technical crew).

Chapter 6. CREW HEALTH PRECAUTIONS PART VI-RULES OF THE AIR

References: ICAO Annex 6 Parts 1, 2 & 3. ANRs 43, 56, 57, 72. SD - Air Operator's Certificate

Use of Alcohol, Drugs, Yaqona (Kava)

6.0 Alcohol impairs performance at any level and the impairment increases exponentially with the amount taken. Many medicines, whether prescribed by a doctor or obtained 'over the counter' or by other means (e.g. over the internet) and illicit drugs also impair performance. In the short term (minutes to hours) judgement and decision-making will be affected, there will be an increase in errors and risk-taking behaviour, mood changes, poor co-ordination, tracking and concentration and slow reaction times. Some effects can persist for several days, particularly poor balance and slow cognition. High or persistent intake over a prolonged period can result in a wide range of chronic and debilitating illness. It is important to note that the effects of alcohol or drugs may be very difficult to recognise, even in close colleagues or friends.

a) Operators shall ensure that Crew Members do not consume alcohol for a minimum period of 12 hours before standby or reporting for duty. On occasions, 12 hours will be insufficient, particularly if the drinking has been heavy or prolonged.

b) Crew Members shall not consume alcohol while on standby or during the flight duty period.

c) Crew Members shall not commence a flight duty period if they have any reason to suspect, however remote, with a blood alcohol level in excess of 0.2. m.g. per ml (milligrams per millilitre).

d) A crew member must not perform allocated duties on board an aircraft when under the influence of psychoactive substances or alcohol or when unfit due to injury, fatigue, medication, sickness or other similar causes.

Narcotics

6.1 The use of narcotics and/or drugs which have not been prescribed by a medical practitioner is expressly forbidden at any time. The above guidance also applies to sleep inducing drugs.

Drugs (Medicines)

6.2 Many medications may have adverse effects on the nervous system, which may be more marked in flight than on the ground. As a general rule, if a crew member finds it necessary to take, or has been prescribed some form of medication, his fitness to fly must be suspect, and he shall seek aero-medical advice before commencing or continuing with flying duties.

Sleeping Tablets

6.3 The use of narcotics, sleep-inducing drugs and substances which have not been prescribed by a registered medical practitioner and approved by an aviation medicine specialist is expressly forbidden at any time. This prohibition applies also to sleep-inducing drugs.

Anti-Depressants

6.4 Crew Members shall always seek aero-medical advice if they are diagnosed with depression or are prescribed anti-depressants and shall not fly until released to do so by the CAAF.

Pharmaceutical Preparations

General

6.5 Many pharmaceutical products, including those that are available without prescription, may have adverse effects on the nervous system. These effects may be more marked in flight than on the ground. If a crewmember finds it necessary to take, or has been prescribed some form of medication, he is to question his fitness to fly and must seek advice from an aviation medicine specialist before commencing or continuing with flying duties. Advice from a general, non-aviation qualified medical practitioner is not suitable.

Side Effects

6.6 A 'side effect' of a drug is one which is an effect other than that which was desired. Some individuals are affected more than others. Some say they experience no effect, others a marked change. However, even when individuals report no effect, when tested scientifically an adverse change in variables such as reaction time and judgement can often be found.

Non-prescription Pharmaceutical Products ('Over-the-counter' Drugs)

6.7 Over-the-counter drugs are available for a wide range of conditions such as pain relief, coughs and colds/influenza and diarrhoea. Many have undesirable effects in flight crew members.

Herbal medications

6.8 Extra care should be taken with herbal medications since the active ingredients may not be documented (or even known).

Immunisation

6.9 Medical advice is to be sought concerning the period to be observed before returning to flying duties following immunisation. Operators shall ensure that Crew Members are suitably inoculated for their geographical area of operations outside of Fiji.

Sports and Deep Sea Diving

6.10 A crew member shall not perform duties on an aircraft until a reasonable time period has elapsed after participating in recreational (sport) diving. Twenty four (24) hours is a suitable minimum length of time to allow after normal recreational (sport) diving before returning to flying duties Operators shall adopt this minimum length of time when determining a reasonable time period for the guidance of crew members.

Crew members whose sporting activities include deep sea diving to a depth exceeding 10 metres shall not fly within 48 hours of completing such diving activity.

Blood / Bone Marrow Donation

6.11 Crew members should not normally act as blood donors. If, for any reason, they have done so, they are to advise the operator immediately prior each donation, and shall not undertake flying duties for at least 24 hours after they have given blood.

6.12 Crew members shall inform the operator if they are to donate Bone Marrow and shall obtain advice from medical specialists as per surgical operations detailed in paragraph 6.17.

Meal Precautions Prior to and During Flight

6.13 Sensible precautions should be taken to avoid the risk of food poisoning to reduce the possibility of becoming incapacitated.

6.14 In the interest of safety, crew members are urged not to partake between 3 hours prior to the start of a flight duty until the termination of their flight of identical dishes prepared by the same caterer, restaurant or person.

Sleep and Rest

6.15 Although the controls on flight and duty periods are intended to ensure that adequate opportunities are provided for crew members to obtain rest and sleep, individuals should ensure that proper advantage is taken of such opportunities.

6.16 A crew member shall not perform flying duties if he knows or suspects that he is suffering from fatigue, or feels unfit to the extent that the flight may be endangered.

Surgical Operations

6.17 Aero-medical advice should be sought prior to returning to flying duties following any surgical procedure. This will generally consist of collaboration between the consultant doctor concerned and the CAAF approved medical examiner responsible for issuing the individuals medical certificate. In any event the advice of the CAAF approved medical examiner must be sought before returning to flying duties.

Fitness

6.18 No individual shall act as a member of the crew of an aircraft if, for any reason, his physical or mental condition is such that it could endanger the safety of the aircraft or its occupants.

General and Local Anesthetic

6.19 If a Crew member is subject to a general or local anaesthetic for any reason e.g. dental work, he shall not undertake flying duties for at least 24 hours for a local anaesthetic, and must receive medical advice for any general anaesthetic.

Minor Accidents involving Potential Concussion or Shock

6.20 If a crew member is involved in any incident or accident at any time which could suggest that he has suffered, even mild, concussion or shock, he will not resume flying duties until declared fit by a medical examiner.

General Precautions to be taken when operating in Hot Climates

Malaria

6.21 Malaria is always a serious complaint, and in its severe forms, it can kill. One or another of its four varieties is endemic in many tropical and sub-tropical areas of the world.

Dengue

6.22 The symptoms of dengue fever, which typically begin 5-7 days after being infected by a dengue virus carrying mosquito, include: sudden onset of high fever with severe headache, pain behind the eyes/eye socket, joint pains, muscle pains, tiredness, nausea, vomiting, or skin rash.

Illness after Return to Fiji

6.23 Any person taken ill within a month or so of returning to Fiji from abroad should consult their doctor however insignificant their symptoms may be.

Notification of Unfitness to the Authority

6.24 The holder of a medical certificate for an aircrew licence is required to inform the Authority in writing of any injury, illness or pregnancy as follows:

a) If he, or she, suffers any personal injury involving incapacity to undertake his function as a member of the flight crew;

b) If he or she, suffers any illness involving incapacity to undertake his functions throughout a period of 20 days or more;

c) In the case of a woman, if she has reason to believe she is pregnant.

6.25 It also notes that a person shall not be entitled to act as a member of the flight crew of an aircraft registered in Fiji if he knows or suspects that his physical or mental condition renders him temporarily or permanently unfit to perform such functions or to act in such capacity.

Notification to the Operator of Unfitness for any Reason

6.26 Flying staff shall not be assigned to flight duty, nor undertake such duty, following the consumption of stimulants or drugs, without being cleared to do so by a qualified medical practitioner.

6.27 In such circumstances, a written explanation of the circumstances if crew members are forbidden to fly, and a written clearance to resume flying, must be obtained from a aeromedical practitioner by the crew member concerned, and forwarded to the authority.

Chapter 7 FLIGHT TIME LIMITATIONS - ANR PART IV

References: ICAO Annex 6 Parts 1, 2 & 3. ANRs 43, 48-52. SD– Avoidance of Fatigue in Aircrew, Part 1 Domestic Operations. SD-AFA-Part 2 International Operations

7.0 There are detailed statutory provisions in this connection and operators must be familiar with the relevant part of the Air Navigation Regulations, with the requirements of *Standards Document – Avoidance of Fatigue in Aircrew* (SD – AFA (Part 1 & 2 as applicable)) and with the requirements published in this document.

7.1 Fatigue Management Schemes should aim to take a broader approach to the consideration of fatigue as an operational factor, addressing all possible causes of fatigue. Implicit in this approach is the recognition that factors outside the workplace that can make an important contribution to fatigue, and that fatigue management is a shared responsibility of the company and pilots.

7.1.1. The operator must not cause or permit any person to fly in the aircraft as a crew member if the company knows or has reason to believe that the person is suffering from, or, having regard to the circumstances of the flight to be undertaken, is likely to suffer from, such fatigue while the person is flying as may endanger the safety of the aircraft or its occupants.

7.1.2. A scheme for the management of fatigue should be based on policies and systems. These policies and systems should include, but are not limited to:

7.1.2.1. Identification and assignment of responsibilities;

7.1.2.2. Ongoing education of management and staff;

7.1.2.3. A fatigue and incident/accident reporting and investigation system;

7.1.2.4. Workload monitoring;

7.1.2.5. Identification and management of fatigued personnel;

7.1.2.6. System review.

7.2 In accordance with the statutory provisions, an operator's scheme for the prevention of fatigue of all crew must be approved by the Authority and incorporated in the operations manuals. Any amendment to the operations manual in this connection must be submitted to the Authority for approval in advance. Applications for approval of schemes and for amendments should be addressed to the Authority. The Authority may approve, **in exceptional circumstances**, variations to these regulations on the basis of a risk assessment provided by the operator. Approved variations shall provide a level of safety equivalent to, or better than that achieved through the prescriptive fatigue management regulations. Factors to be taken into account in producing the scheme and the nature of the limitations to be specified are shown in SD-AFA. It is recognised, however, that certain operations may present special features warranting some variation of the limitations detailed in SD-AFA and the Authority is prepared to consider individual cases on their merits.

7.3 Operators shall state in their scheme the minimum times allocated to pre-flight preparation and immediate post-flight activity. The allowances for pre-flight and post-flight activity must be acceptable to the Authority.

7.4 Provision is made for aircraft pilots-in-command to exercise their discretion to extend the flying duty period beyond the maximum that may normally be scheduled. The extent to which a pilot-in-command is authorised by his operator's scheme, to exceed the established limits of flying duty of any crew member, must be clearly and concisely defined in the operations manual. The instructions should be such that a pilot-in-command can readily determine the limits of his power.

7.5 Provision is also made for a pilot-in-command to exercise his discretion to reduce rest periods. The extent to which a pilot-in-command is authorised by his operator's scheme to do this must be clearly and concisely stated in the operations manual. It must be brought to the attention of pilots-in-command that use of their discretion is limited to the reduction of 'rest periods' as defined and does not extend to periods of rest contained within a split duty.

7.6 The Air Navigation Regulations require operators to include in their schemes provisions to prevent fatigue of any crew members carried in addition to flight or cabin crew. Should their duties have a direct bearing on flight safety, e.g. if the operator or pilot-in-command assign duties in the interests of passenger safety, similar provisions to those applied to cabin staff shall be included.

7.7 Operators may from time to time request variations from the requirements of their approved scheme. Such variations may be either for a 'one-off' flight or for a series of flights. Any such application must include a detailed justification for the variation, risk assessment, and all relevant supporting documents should be attached.

7.8 Approved variations must be published in the company operations manual and indicate expiry dates if applicable. Those of very limited duration may be published as crew notices or in a pilot-in-command's brief.

7.9 Operators shall note that their flight and duty time limitations for cabin attendants specified in their Operations Manual shall be applicable to all cabin crew carried as crew members. They are not intended to apply only to those carried to meet the provisions of the Air Navigation Regulations.

7.10 Instructions to crews as to their personal responsibilities for the avoidance of fatigue should include clear guidance on abstention from alcoholic drinks or kava for a suitable period prior to flight. The minimum acceptable period is twelve hours. Crews should also be advised of the precautions to be taken if they are taking medication. Information circulars issued from time to time on the subject form a useful basis for instructions in manuals. Operators encountering any special difficulty in framing their instructions may call on the Authority for advice.

7.11 Operators should remind all crew members that it is their personal responsibility to make optimum use of the facilities for rest provided by the operator at outstations and to plan their rest periods so as to minimise the risk of sleep deficit and cumulative fatigue.

7.12 It must be further brought to their attention that, in accordance with the provisions of the Air Navigation Regulations, it is the responsibility of each crew member not to fly if he is suffering or is likely during flight to suffer from such fatigue as may endanger the safety of the aircraft or its occupants. The provisions of this regulation in the Air Navigation Regulations are not, however, intended to cover instances where normal tiredness resulting from the physical and mental effort of a flight are likely and this should be made clear.

7.13 Operators should draw to the attention of flight crew that in accordance with the provisions of the Air Navigation Regulations it is the responsibility of each flight crew member to notify anyone who employs his services as a flight crew member of all flying he has undertaken within the previous 28 days.

7.14 Responsibility within an organisation for issuing instructions and making decisions on questions of flight duty and rest periods and for processing discretion reports should be clearly defined and assigned to a member of the executive staff. The name of the person concerned, or the title of the office that the person occupies, should be included in the operations manual.

Roster Schemes

7.15 Operator roster schemes shall fulfil the above fatigue management scheme and be approved by the authority, rosters shall be designed to ensure that crew keep within the maximum duty hours stated in the ANRs and the SD-AFA. The operator shall ensure that these limits are not broken. Roster schemes shall be published in the Operations manual. Roster schemes shall not be mixed and authorisation must be sought from the Authority, with an impact statement, when requesting approval change from one scheme to another.

7.16 The operator’s scheme shall addresses at least the following factors as appropriate to the operator’s type of operation:

a) rest periods before flight;

b) acclimatisation if applicable;

c) time zones if applicable;

d) night operations; Operators shall take into consideration of the effects of night operations and its effect on performance. Night operations will have the greatest effect on an individual's alertness and ability to perform complex tasks due to disruption sleep patterns

e) maximum number of sectors;

f) single pilot operations; Additional consideration should be given to single pilot IFR operations that may increase workload; this may include night operations.

g) two pilot operations;

h) flight crew members' qualifications;

i) mixed duties; (Ground Duty/Flight Duty.) When a crew member is required to report for duty in advance of the stipulated report time for a scheduled flight, to carry out any task at the behest of the operator, then the time spent on that task shall be part of the subsequent FDP.

j) reserve or standby period;

k) flight duty and duty periods;

l) type of operation;

m) cumulative duty time;

n) cumulative flight time;

o) cumulative fatigue;

p) discretionary increases in flight time limitations or flight duty limitations or both;

q) circadian rhythm;

r) days off; and

7.17 Operators are required to maintain and provide readily interpreted records for each crew member. It follows that there must be suitable arrangements for collecting the information necessary to compile the records. Accurate records are essential to persons responsible for the rostering of crews. These records should meet the requirements of record keeping required by SD – AFA and retain these records for a period of 12 months from the date of the flights referred to therein. The flight and duty time records shall consist of:

a) Duration of each duty period and function performed during the period;

b) Duration of each duty period whether or not it included a flight duty period;

c) Duration of each rest period prior to a duty or standby duty period;

d) Cumulative duty times.

Chapter 8 OPERATING PROCEDURES

References: ICAO Annex 6 Parts 1, 2 & 3. ICAO Annex 14. ANRs PARTs VI, VII, VIII. FIJI AICs. Fiji AIP.

Flight preparation instructions. As applicable to the operation:

Minimum flight altitudes.

8.0 The operator shall be permitted to establish minimum flight altitudes for those routes flown for which minimum flight altitudes have been established by the State flown over or the responsible State, provided that they shall not be less than those established by that State. Where the minimum flight altitudes established by the operator and a State overflown differ, the higher values shall apply. The operator shall specify the method by which it is intended to determine minimum flight altitudes for

operations conducted over routes for which minimum flight altitudes have not been established by the State flown over or the responsible State, and shall include this method in the operations manual.

A description of the method of determination and application of minimum altitudes including:

a) procedure to establish the minimum altitudes/flight levels for visual flight rules (VFR) flights; and

b) procedure to establish the minimum altitudes/flight levels for instrument flight rules (IFR) flights.

Adequacy of aerodromes

8.1 Criteria and responsibilities for determining the adequacy of aerodromes to be used. Operator shall only use aerodromes and operating sites that are adequate for the type(s) of aircraft and operation(s) concerned. The use of operating sites shall only apply to other-than-complex aeroplanes and helicopters. See Part C Route guide.

Aerodrome operating minima

8.2 Methods and responsibilities for establishing aerodrome operating minima. The operator shall establish aerodrome operating minima for each aerodrome to be used in operations and shall approve the method of determination of such minima. Such minima shall not be lower than any that may be established for such aerodromes by the State of the Aerodrome, except when specifically approved by that State.

The Authority require that in establishing the aerodrome operating minima which will apply to any particular operation, full account shall be taken of:

a) the type, performance and handling characteristics of the aeroplane / helicopter;

b) the composition of the flight crew, their competence and experience;

c) the dimensions and characteristics of the runways which may be selected for use;

d) the adequacy and performance of the available visual and non-visual ground aids;

e) the equipment available on the aircraft for the purpose of navigation, acquisition of visual references and/or control of the flight path during the approach, landing and the missed approach;

f) the obstacles in the approach and missed approach areas and the obstacle clearance altitude/height for the instrument approach procedures;

g) the means used to determine and report meteorological conditions; and

h) the obstacles in the climb-out areas and necessary clearance margins.

Instrument approach operations

8.3 Instrument approach operations shall be classified based on the designed lowest operating minima below which an approach operation shall only be continued with the required visual reference as follows:

a) Type A: a minimum descent height or decision height at or above 75 m (250 ft); and

b) Type B: a decision height below 75 m (250 ft). Type B instrument approach operations are categorized as:

i) Category I (CAT I): a decision height not lower than 60 m (200 ft) and with either a visibility not less than 800 m or a runway visual range not less than 550 m;

ii) Category II (CAT II): a decision height lower than 60 m (200 ft) but not lower than 30 m (100 ft) and a runway visual range not less than 300 m;

iii) Category IIIA (CAT IIIA): a decision height lower than 30 m (100 ft) or no decision height and a runway visual range not less than 175 m;

iv) Category IIIB (CAT IIIB): a decision height lower than 15 m (50 ft) or no decision height and a runway visual range less than 175 m but not less than 50 m; and

v) Category IIIC (CAT IIIC): no decision height and no runway visual range limitations.

8.3.1 Category II and Category III instrument approach operations shall not be authorized unless RVR information is provided.

8.3.2 For instrument approach operations, aerodrome operating minima below 800 m visibility shall not be authorized unless RVR information is provided.

8.3.3 The operating minima for 2D instrument approach operations using instrument approach procedures shall be determined by establishing a minimum descent altitude (MDA) or minimum descent height (MDH), minimum visibility and, if necessary, cloud conditions.

8.3.4 The operating minima for 3D instrument approach operations using instrument approach procedures shall be determined by establishing a decision altitude (DA) or decision height (DH) and the minimum visibility or RVR.

8.3.5 Reference should be made to procedures for the determination of the visibility and/or runway visual range (RVR) and for the applicability of the actual visibility observed by the pilots, the reported visibility and the reported RVR.

8.1.4 En-route operating minima for VFR flights or VFR portions of a flight and, where single-engine aircraft are used, instructions for route selection with respect to the availability of surfaces that permit a safe forced landing. The operator shall ensure that operations of single-engine aeroplanes are only conducted along routes, or within areas, where surfaces are available that permit a safe forced landing to be executed.

8.1.5 Presentation and application of aerodrome and en-route operating minima.

8.1.6 Interpretation of meteorological information. Explanatory material on the decoding of meteorological (MET) forecasts and MET reports relevant to the area of operations, including the interpretation of conditional expressions.

Fuel and Oil Records Aeroplane

8.1.7 Determination of the quantities of fuel, oil and water methanol carried. The methods by which the quantities of fuel, oil and water methanol to be carried are determined and monitored in-flight. This section should also include instructions on the measurement and distribution of the fluid carried on board. Such instructions should take account of all circumstances likely to be encountered on the flight, including the possibility of in-flight re-planning and of failure of one or more of the aircraft's power plants. The system for maintaining fuel and oil records should also be described.

8.1.7.1 The operator shall maintain oil records to enable the Authority to ascertain that trends for oil consumption are such that an aeroplane has sufficient oil to complete each flight. Fuel and oil records shall be retained by the operator for a period of three months.

8.1.7.2 The operator shall maintain fuel records to enable the Authority to ascertain that, for each flight, the requirements below and 8.3.6 have been complied with.

8.1.7.3 An aeroplane shall carry a sufficient amount of usable fuel to complete the planned flight safely and to allow for deviations from the planned operation.

8.1.7.4 The amount of usable fuel to be carried shall, as a minimum, be based on:

a) the following data:

i) current aeroplane-specific data derived from a fuel consumption monitoring system, if available; or

ii) if current aeroplane-specific data are not available, data provided by the aeroplane manufacturer; and

b) the operating conditions for the planned flight including:

i) anticipated aeroplane mass;

ii) Notices to Airmen;

iii) current meteorological reports or a combination of current reports and forecasts;

iv) air traffic services procedures, restrictions and anticipated delays; and

v) the effects of deferred maintenance items and/or configuration deviations.

8.1.7.5 The pre-flight calculation of usable fuel required shall include:

a) *taxi fuel*, which shall be the amount of fuel expected to be consumed before take-off, taking into account local conditions at the departure aerodrome and auxiliary power unit (APU) fuel consumption;

b) *trip fuel*, which shall be the amount of fuel required to enable the aeroplane to fly from take-off, or the point of inflight re-planning, until landing at the destination aerodrome taking into account the operating conditions of 8.1.7.4b);

c) *contingency fuel*, which shall be the amount of fuel required to compensate for unforeseen factors. It shall be five per cent of the planned trip fuel or of the fuel required from the point of in-flight re-planning based on the consumption rate used to plan the trip fuel but, in any case, shall not be lower than the amount required to fly for five minutes at holding speed at 450 m (1 500 ft) above the destination aerodrome in standard conditions;

d) *destination alternate fuel*, which shall be:

i) where a destination alternate aerodrome is required, the amount of fuel required to enable the aeroplane to:

1) perform a missed approach at the destination aerodrome;

2) climb to the expected cruising altitude;

3) fly the expected routing;

4) descend to the point where the expected approach is initiated; and

5) conduct the approach and landing at the destination alternate aerodrome; or

1) where two destination alternate aerodromes are required, the amount of fuel, as calculated in 8.1.7.5 d) 1), required to enable the aeroplane to proceed to the destination alternate aerodrome which requires the greater amount of alternate fuel; or

2) where a flight is operated without a destination alternate aerodrome, the amount of fuel required to enable the aeroplane to fly for 15 minutes at holding speed at 450 m (1 500 ft) above destination aerodrome elevation in standard conditions; or

3) where the aerodrome of intended landing is an isolated aerodrome:

i. for a reciprocating engine aeroplane, the amount of fuel required to fly for 45 minutes plus 15 per cent of the flight time planned to be spent at cruising level, including final reserve fuel, or two hours, whichever is less; or

ii. for a turbine-engined aeroplane, the amount of fuel required to fly for two hours at normal cruise consumption above the destination aerodrome, including final reserve fuel;

e) *final reserve fuel*, which shall be the amount of fuel calculated using the estimated mass on arrival at the destination alternate aerodrome, or the destination aerodrome when no destination alternate aerodrome is required:

1) for a reciprocating engine aeroplane, the amount of fuel required to fly for 45 minutes, under speed and altitude conditions specified by the Authority; or

2) for a turbine-engined aeroplane, the amount of fuel required to fly for 30 minutes at holding speed at 450 m (1 500 ft) above aerodrome elevation in standard conditions;

f) *additional fuel,* which shall be the supplementary amount of fuel required if the minimum fuel calculated in accordance with 8.1.7.5 b), c), d) and e) is not sufficient to:

1) allow the aeroplane to descend as necessary and proceed to an alternate aerodrome in the event of engine failure or loss of pressurization, whichever requires the greater amount of fuel based on the assumption that such a failure occurs at the most critical point along the route;

i. fly for 15 minutes at holding speed at 450 m (1 500 ft) above aerodrome elevation in standard conditions; and

ii. make an approach and landing;

2) allow an aeroplane engaged in EDTO to comply with the EDTO critical fuel scenario as established by the Authority;

3) meet additional requirements not covered above;

Note 1.— Fuel planning for a failure that occurs at the most critical point along a route (8.1.7.5 f) 1) may place the aeroplane in a fuel emergency situation based on 8.3.6.1.

g) *discretionary fuel*, which shall be the extra amount of fuel to be carried at the discretion of the pilot-in-command.

8.1.7.6 Operators shall determine one final reserve fuel value for each aeroplane type and variant in their fleet rounded up to an easily recalled figure.

8.1.7.7 A flight shall not commence unless the usable fuel on board meets the requirements in 8.1.7.5 a), b), c), d), e) and f) if required and shall not continue from the point of in-flight re-planning unless the usable fuel on board meets the requirements in 8.1.7.5 b), c), d), e) and f) if required.

8.1.7.8 Notwithstanding the provisions in 8.1.7.5 a), b), c), d) and f), the Authority may, based on the results of a specific safety risk assessment conducted by the operator which demonstrates how an equivalent level of safety will be maintained, approve variations to the pre-flight fuel calculation of taxi fuel, trip fuel, contingency fuel, destination alternate fuel, and additional fuel. The specific safety risk assessment shall include at least the:

a) flight fuel calculations;

b) capabilities of the operator to include:

i) a data-driven method that includes a fuel consumption monitoring programme; and/or

ii) the advanced use of alternate aerodromes; and

iii) specific mitigation measures.

8.1.7.9 The use of fuel after flight commencement for purposes other than originally intended during pre-flight planning shall require a re-analysis and, if applicable, adjustment of the planned operation.

Fuel planning Helicopters

8.1.7.10 A flight shall not be commenced unless, taking into account both the meteorological conditions and any delays that are expected in flight, the helicopter carries sufficient fuel and oil to ensure that it can safely complete the flight. In addition, a reserve shall be carried to provide for contingencies.

8.1.7.11 V*FR operations* in a Non-Hostile Environment*.* The fuel and oil carried in order to comply with 8.1.7.10 shall, in the case of VFR operations (Non-Hostile), be at least the amount sufficient to allow the helicopter:

a) to fly to the heliport to which the flight is planned;

b) to fly thereafter for a period of 20 minutes at best-range speed; and

c) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the Authority.

V*FR operations for overwater or* Hostile Environment*.* The fuel and oil carried in order to comply with 8.1.7.10 shall, in the case of VFR operations overwater or in a Hostile Environment, be at least the amount sufficient to allow the helicopter:

d) to fly to the heliport to which the flight is planned;

e) to fly thereafter for a period of 30 minutes at best-range speed; and

f) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the Authority.

8.1.7.12 *IFR operations.* The fuel and oil carried in order to comply with 8.1.7.10 shall, in the case of IFR operations, be at least the amount sufficient to allow the helicopter:

8.1.7.13 When an alternate is not required, (the duration of the flight and the meteorological conditions prevailing are such that there is reasonable certainty that, at the estimated time of arrival at the heliport of intended landing, and for a reasonable period before and after such time, the approach and landing may be made under visual meteorological conditions), to fly to the heliport to which the flight is planned, and thereafter:

a) to fly 30 minutes at holding speed at 450 m (1 500 ft) above the destination heliport under standard temperature conditions and approach and land; and

b) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the Authority.

8.1.7.14 When an alternate is required, to fly to and execute an approach, and a missed approach, at the heliport to which the flight is planned, and thereafter:

a) to fly to the alternate specified in the flight plan; and then

b) to fly for 30 minutes at holding speed at 450 m (1 500 ft) above the alternate under standard temperature conditions, and approach and land; and

c) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the Authority.

8.1.7.15 When no suitable alternate is available, the heliport of intended landing is isolated and no suitable alternate is available. A point of no return (PNR) shall be determined, sufficient fuel shall be carried to enable the helicopter to fly to the destination to which the flight is planned and thereafter for a period that will, based on geographic and environmental considerations, enable a safe landing to be made.

8.1.7.16 *final reserve fuel*, which shall be the amount of fuel calculated using the estimated mass on arrival at the destination alternate aerodrome, or the destination aerodrome when no destination alternate aerodrome is required: An emergency exists when the fuel remaining is estimated to have reduced to an amount where an approach to land should be started without delay. The amount of fuel remaining at this stage (the 'FINAL RESERVE FUEL') is at least the sum of:

a) For VFR flights navigating by day with reference to visual landmarks in a non-hostile environment, 20 minutes fuel at best range speed + 5 % contingency fuel of the planned Flight Time or;

b) When flying IFR or VFR and navigating by means other than by reference to visual landmarks ie overwater or in a hostile environment, fuel to fly for 30 minutes at holding speed +10 % contingency fuel of the planned Flight Time and:

c) Plus any extra fuel, which should be at the discretion of the Captain and additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of potential contingencies.

8.1.7.17 In computing the fuel and oil required in 8.1.7.10, at least the following shall be considered:

a) meteorological conditions forecast;

b) expected air traffic control routings and traffic delays;

c) for IFR flight, one instrument approach at the destination heliport, including a missed approach;

d) the procedures prescribed in the operations manual for the failure of one engine while en route; and

e) any other conditions that may delay the landing of the helicopter or increase fuel and/or oil consumption.

Mass and Centre of Gravity.

8.1.8 The general principles of mass and centre of gravity including the general instructions and information necessary for verification of the various types of mass and balance documentation in use. Which shall include the methods, procedures and responsibilities for preparation and acceptance of mass and centre of gravity calculations.

8.1.8.1. Loading instructions are to be regarded as part of the operations manual. It should be noted, however, that operators are free to make their loading instructions in a separate volume if they wish, or to include them in a traffic manual.

8.1.8.2. Loading instructions should provide to traffic staff, handling agents, cabin and flight crews complete and detailed guidance on all aspects of the loading, weight and balance of aircraft, including in particular instructions on:

8.1.8.3. Controlling and promulgating the basic or APS weights and indices;

8.1.8.4. Regulating the carriage and stowage of baggage and freight in passenger compartments, including particular instructions concerning the amount of hand baggage allowed and how it is to be stowed. It is essential that emergency exits, gangways and dinghy launching stations, are kept clear during take-off and landing. (Operators should also take steps to ensure that their traffic staff and agents comply with these instructions.);

8.1.8.5. Carriage of explosive, inflammable, radio-active and other dangerous cargo;

8.1.8.6. Limitations on floor loading, use of weight spreading devices and positioning and securing of ballast;

8.1.8.7. Checking that items of freight or baggage required to be in particular compartments or holds are properly stowed. The person responsible for the trim of the aircraft must give written instructions to the person responsible for the actual loading;

8.1.8.8. Advising the pilot-in-command and cabin staff of essential seating restrictions;

8.1.8.9. The effect on RTOW of such factors as the maximum zero fuel weight, landing weight restrictions at planned destination, take-off and climb performance requirements at the departure aerodrome, and en route performance requirements;

8.1.8.10. Relevant C of A or flight manual limitations;

8.1.8.11. Fuel loading limitations;

8.1.8.12. Where appropriate, any special loading limitations for ferrying aircraft with one engine inoperative, C of A tests etc;

8.1.8.13. Where applicable, the use of the standard weights specified in Regulation 41 of the ANR, or any notional weights given in exemptions granted by the Chief Executive to the operator.

8.1.8.14. Freight loading instructions should include the following additional details, and operators may find it useful in this connection to consult British Civil Airworthiness Requirements:

a) Diagrams of cabin bays and cargo holds, with dimensions, to facilitate the preplanning of cargo distribution;

b) Particulars of the strength and useable directions of all lashing points and/or rings provided, and details of the spacing between lashing points;

c) Information on the types and working strengths of lashings provided, and directions for stowage when not in use;

d) Instructions concerning special cases such as the loading of stretchers, carriage of livestock, etc.; and

e) Where appropriate, instructions on the handling, loading and securing of palletised or container loads.

8.1.8.15. The practice of letting a load/trim sheet serve as loading instructions is not acceptable and the use of a trim slide rule does not dispense with the requirement to complete a load sheet.

8.1.8.16. It is a statutory requirement that the position of the laden centre of gravity should be given on the load sheet. For this purpose, a trim sheet may be regarded as part of the load sheet even though it may be a separate document. It is essential that the complete document includes particulars of the manner in which the load is distributed, and special attention should be paid to the wording of the loading certificate. The mandatory requirement may be met by establishing that the C of G lies within the permissible limits and it may not be essential to determine its precise position unless it needs to be known in connection with aircraft handling or other factors. The load sheet should bear the reference of the APS form used and, if average weights have been used, an endorsement to that effect.

8.1.8.17. Where a 'loading plan' method is used operators should show in their loading instructions the basic assumptions upon which the plan in formulated and should specify C of G limits more stringent that those permissible under the C of A They should also confirm in the loading instructions that loading in accordance with the 'plan' will ensure that the laden C of G always falls within the limits. If this is done, a simple statement on the load sheet that the laden C of G is between X and Y (i.e. the operator's more stringent limits) can be accepted.

8.1.8.18. Traffic staff and handling agents (including agents at overseas aerodromes) should be provided with:

a) Loading instructions;

b) Current APS forms for all types, marks and variants of aircraft being used;

c) Details of the RTOW and fuel load for each flight.

d) Where traffic staff and handling agents are responsible for calculating the RTOW, operators should ensure that they have sufficient knowledge to do so and are provided with all relevant information.

Load sheets

8.1.8.19 The load sheet, together with the APS form, should account for all items of the laden weight. Although they may not always be specified individually, the following are examples of items to be covered:

8.1.8.20 Specific gravity of Fuel, water methanol, oil, hydraulic fluid, drinking water, toilet water, de-icing fluid;

8.1.8.21 Passenger seats, children's cots, cabin floor covering and removable bulkheads;

8.1.8.22 Galley equipment including urns, hot cups, etc;

8.1.8.23 Food and beverages to be consumed in flight;

8.1.8.24 Bar stocks including the weight of the box or other container;

8.1.8.25 Navigation bag or aircraft library, and navigational equipment;

8.1.8.26 Passengers' hold baggage;

8.1.8.27 Passengers' cabin baggage, unless this is accounted for elsewhere;

8.1.8.28 Flight spares and tools, spare hydraulic or de-icing fluid, etc.;

8.1.8.29 Freight;

8.1.8.30 Crew baggage;

8.1.8.31 Dinghies, lifebelts (including demonstration lifebelts), flotation cots, survival packs, blankets, pillows and similar equipment;

8.1.8.32 Weight spreaders, lashing, ballast etc.;

8.1.8.33 All items of removable equipment and removable radios carried on the particular flight;

8.1.8.34 Food and necessary equipment when livestock is carried.

8.1.8.35 Load sheets are required to be annotated to show whether actual, standard, or approved notional weights of passengers and their baggage have been used.

8.1.8.36 Every load sheet, be it manually prepared or computer derived, must contain a 'loading certificate' as required by Regulation 41 of the ANR.

Air traffic services (ATS) flight plan

8.1.9 Procedures and responsibilities for the preparation and submission of the ATS flight plan. Factors to be considered include the means of submission for both individual and repetitive flight plans.

Operational flight plan.

8.1.10 Procedures and responsibilities for the preparation and acceptance of the operational flight plan. The use of the operational flight plan should be described including samples of the operational flight plan formats in use.

Operator's aircraft technical log.

8.1.11 The responsibilities and the use of the operator's aircraft technical log should be described, including samples of the format used.

List of documents, forms and additional information to be carried.

8.1.12 In addition to the minimum equipment necessary for the issuance of a certificate of airworthiness, the instruments, equipment and flight documents prescribed Chapter 6 Annex 6 Part 1 and Chapter 4 Annex 6 Part 3 shall be installed or carried, as appropriate, in aircraft according to the aircraft used and to the circumstances under which the flight is to be conducted. The prescribed instruments and equipment, including their installation, shall be approved or accepted by the Authority.

8.1.12.1 An aircraft shall carry a certified true copy of the air operator certificate specified in Section 1 Chapter 2, and a copy of the operations specifications relevant to the aeroplane type, issued in conjunction with the certificate when landing anywhere other than Fiji. When the certificate and the associated operations specifications are issued by the State of the Operator in a language other than English, an English translation shall be included. The certification statement is as follows:

CERTIFICATION

I hereby certify that the attached is a true copy of the [*title of the AOC*], issued at [*place*] on [*date*] by The Civil Aviation Authority of Fiji.

Signed at [*place*] on [*date*].

[*Signed by the appropriate certifying authority*]

[*Official stamp*]

8.1.12.2 The operator shall include in the operations manual a minimum equipment list (MEL), approved by the Authority which will enable the pilot-in-command to determine whether a flight may be commenced or continued from any intermediate stop should any instrument, equipment or systems become inoperative. Where the State of the Operator is not the State of Registry, the State of the Operator shall ensure that the MEL does not affect the aeroplane's compliance with the airworthiness requirements applicable in the State of Registry.

8.1.12.3 The following documents, manuals and information shall be carried on each flight, as originals or copies unless otherwise specified:

a) the aircraft flight manual (AFM), or equivalent document(s);

b) the original certificate of registration;

c) the original certificate of airworthiness (CofA);

d) the noise certificate, including an English translation, where one has been provided by the authority responsible for issuing the noise certificate;

e) a certified true copy of the Air Operator Certificate (International flights only);

f) the operations specifications relevant to the aircraft type, issued with the AOC;

g) the original aircraft radio licence, if applicable;

h) liability insurance certificate(s) (International flights only);

i) the journey log, or equivalent, for the aircraft;

j) the aircraft technical log;

k) details of the filed ATS flight plan, if applicable;

l) current and suitable aeronautical charts for the route of the proposed flight and all routes along which it is reasonable to expect that the flight may be diverted;

m) procedures and visual signals information for use by intercepting and intercepted aircraft;

n) information concerning search and rescue services for the area of the intended flight, which shall be easily accessible in the flight crew compartment;

o) the current parts of the operations manual that are relevant to the duties of the crew members, which shall be easily accessible to the crew members;

p) the MEL;

q) appropriate notices to airmen (NOTAMs) and aeronautical information service (AIS) briefing documentation;

r) appropriate meteorological information;

s) cargo and/or passenger manifests, if applicable;

t) mass and balance documentation;

u) the operational flight plan, if applicable;

v) bomb search checklist with a least risk bomb location,

w) emergency procedures (cabin evacuation) checklist,

x) dangerous goods emergency response guide, which shall be readily accessible to crew.

y) passenger safety briefing cards.

z) notification of special categories of passenger (SCPs) and special loads, if applicable; and

aa) any other documentation that may be pertinent to the flight or is required by the States concerned with the flight.

8.1.12.4 Notwithstanding 8.1.12.3, for operations under visual flight rules (VFR) by day with other-than-complex aircraft taking off and landing at the same aerodrome or operating site, the following documents and information may be retained at the aerodrome or operating site instead:

a) noise certificate;

b) aircraft radio licence;

c) journey log, or equivalent;

d) aircraft technical log;

e) NOTAMs and AIS briefing documentation;

f) meteorological information;

g) notification of SCPs and special loads, if applicable; and

h) mass and balance documentation.

8.1.12.5 Notwithstanding 8.1.12.3, in case of loss or theft of documents specified in 8.1.12.3 b) to 8.1.12.3h), the operation may continue until the flight reaches its destination or a place where replacement documents can be provided.

Ground handling instructions. As applicable to the operation:

8.2. An aircraft shall not be refuelled when passengers are embarking, on board or disembarking unless it is properly attended by qualified personnel ready to initiate and direct an evacuation of the aeroplane by the most practical and expeditious means available.

When refuelling with passengers embarking, on board or disembarking, two-way communication shall be maintained by the aeroplane's inter-communication system or other suitable means between the ground crew supervising the refuelling and the qualified personnel on board the aeroplane. A description of fuelling procedures, including:

a) safety precautions during refuelling and defueling including when an auxiliary power unit is in operation or when rotors are running or when an engine is, or engines are, running;

b) refuelling and defueling when passengers are embarking, on board or disembarking; and

c) precautions to be taken to avoid mixing fuels.

8.2.1 Aircraft, passengers and cargo handling procedures related to safety. A description of the handling procedures to be used when allocating seats, embarking and disembarking passengers and when loading and unloading the aircraft. Further procedures, aimed at achieving safety whilst the aircraft is on the ramp, should also be given. Handling procedures should include:

a) special Categories' of passengers, including children/infants, persons with reduced mobility, inadmissible passengers, deportees and persons in custody;

b) permissible size and weight of hand baggage;

c) loading and securing of items in the aircraft;

d) positioning of ground equipment;

e) operation of aircraft doors;

f) safety on the aerodrome/operating site, including fire prevention and safety in blast and suction areas;

g) start-up, ramp departure and arrival procedures;

h) servicing of aircraft;

i) documents and forms for aircraft handling;

j) special loads and classification of load compartments; and

k) multiple occupancy of aircraft seats.

8.2.2 Procedures for the refusal of embarkation. Procedures to ensure that persons who appear to be intoxicated, or who demonstrate by manner or physical indications that they are under the influence of drugs, are to be refused embarkation if deemed to be a safety risk. This does not apply to medical patients under proper care.

8.2.3 De-icing and anti-icing on the ground. A description of the de-icing and anti-icing policy and procedures for aircraft on the ground. These should include descriptions of the types and effects of icing and other contaminants on aircraft whilst stationary, during ground movements and during take-off. In addition, a description of the fluid types used should be given, including the following:

a) proprietary or commercial names,

b) characteristics,

c) effects on aircraft performance,

d) hold-over times,

e) precautions during usage.

Flight Procedures:

8.3. VFR/IFR Policy. A description of the policy for allowing flights to be made under VFR, or for requiring flights to be made under IFR, or for changing from one to the other.

8.3.1 Navigation Procedures. A description of all navigation procedures, relevant to the type(s) and area(s) of operation. Special consideration should be given to:

a) standard navigational procedures, including policy for carrying out independent cross-checks of keyboard entries where these affect the flight path to be followed by the aircraft; and

b) required navigation performance (RNP), minimum navigation performance specifications (MNPS) and polar navigation and navigation in other designated areas;

c) in-flight re-planning;

d) procedures in the event of system degradation; and

e) reduced vertical separation minima (RVSM), for aeroplanes.

8.3.2 Altimeter setting procedures, including, where appropriate, use of:

a) metric altimetry and conversion tables; and

b) QFE operating procedures.

c) It is standard practice to use QNH for all flight operations and this policy should be reflected in the Operations Manual instructions and procedures that should be clear, positive and consistent.

d) Instructions should cover all stages of the operation of the aircraft, both before and during flight. A company's basic policy should be accurately reflected in its checklists, and take account of the following:

e) pre-flight serviceability tests;

f) the settings to be made on each altimeter on the flight deck prior to take-off and at each stage of the flight;

g) during the approach phase a check of airfield height is required, as well as a cross check on the various altitude callouts to be used during the approach; and

h) where a Radar Altimeter (RA) is to be used on the approach, a cross check between indications from the RA and the altimeters, allowing for variations between the aerodrome elevation and the terrain being transited.

i) Additional instructions should be included on the following (where appropriate to the basic policy):-

j) the procedure for indicating decision heights for landing - this might range from a figure in the navigation log to altimeter bugs and/or separate ‘landing data cards’;

k) the manner of checking and of the use of any non-pressure altimeters;

l) provision of appropriate procedures if an altimeter becomes unserviceable in flight, and also the conditions to be met if this is a pre-flight allowable deficiency;

m) the manner of setting the altimeters when the take-off is carried out from the RH seat. Unless there are good reasons for doing otherwise, operators should not vary their normal policy.

Note: Neither in the policy statement nor in the check-lists is it sufficient for the word 'set' to be used by itself. The setting required by the operator should be clearly stated in-respect of each altimeter concerned, including any 'standby' altimeter.

8.3.2.1 The following matters shall also be covered in the operations manual:-

a) The calls to be made by the monitoring pilots during an instrument approach, e.g. at the outer marker and at 100 feet above DH or thereabouts. In the case of Category 2 and 3 weather minima approaches, the appropriate calls and responses will need to be stated in some detail;

b) Correct reporting of height changes to ATC: It should be particularly noted that the report should not be made before arriving at or before leaving the particular altitude or level;

c) Provision for one altimeter to be set to an appropriate QNH setting when flying at or near to the Minimum Safe Altitude (particularly for un-pressurised single-crew aircraft) would be a prudent precaution;

d) Cross-checking of altimeters at appropriate intervals by all flight-deck crew during climb and descent;

e) Instructions requiring the co-pilot to advise the pilot-in-command that he is approaching the assigned altitude or level.

Altitude alerting system

8.3.3 Procedures for aeroplanes or audio voice alerting devices for helicopters.

Ground proximity warning system (GPWS)/terrain avoidance warning system (TAWS.

8.3.4 Procedures and instructions required for the avoidance of controlled flight into terrain, including limitations on high rate of descent near the surface (the related training requirements are covered in OM-D 2.1).

8.3.5 Policy and procedures for the use of traffic collision avoidance system (TCAS)/airborne collision avoidance system (ACAS) for aircraft.

Policy and procedures for in-flight fuel management.

8.3.6. The operator shall establish policies and procedures, approved by the Authority, to ensure that inflight fuel checks and fuel management are performed.

8.3.6.1 The pilot-in-command shall continually ensure that the amount of usable fuel remaining on board is not less than the fuel required to proceed to an aerodrome where a safe landing can be made with the planned final reserve fuel remaining upon landing.

Note.— The protection of final reserve fuel is intended to ensure a safe landing at any aerodrome or Heliport when unforeseen occurrences may not permit safe completion of an operation as originally planned. Guidance on flight planning, including the circumstances that may require re-analysis, adjustment and/or re-planning of the planned operation before take-off or en-route, is contained in the Flight Planning and Fuel Management (FPFM) Manual (Doc 9976).

8.3.6.2 The pilot-in-command shall request delay information from ATC when unanticipated circumstances may result in landing at the destination aerodrome with less than the final reserve fuel plus any fuel required to proceed to an alternate aerodrome or the fuel required to operate to an isolated aerodrome.

8.3.6.3 The pilot-in-command shall advise ATC of a minimum fuel state by declaring MINIMUM FUEL when, having committed to land at a specific aerodrome, the pilot calculates that any change to the existing clearance to that aerodrome may result in landing with less than the planned final reserve fuel.

Note 1.— The declaration of MINIMUM FUEL informs ATC that all planned aerodrome options have been reduced to a specific aerodrome of intended landing and any change to the existing clearance may result in landing with less than the planned final reserve fuel. This is not an emergency situation but an indication that an emergency situation is possible should any additional delay occur.

8.3.6.4 The pilot-in-command shall declare a situation of fuel emergency by broadcasting MAYDAY MAYDAY MAYDAY FUEL, when the calculated usable fuel predicted to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the planned final reserve fuel.

Note 1.— The planned final reserve fuel refers to the value calculated in 8.1.7.5 e) 1) or 2) and is the minimum amount of fuel required upon landing at any aerodrome.

Adverse and potentially hazardous atmospheric conditions.

8.3.7 Procedures for operating in, and/or avoiding, adverse and potentially hazardous atmospheric conditions, special attention must be given to potentially hazardous atmospheric conditions including the following:

a) thunderstorms,

b) icing conditions,

c) turbulence,

d) wind shear,

e) jet stream,

f) volcanic ash clouds,

g) heavy precipitation,

h) sand storms,

i) mountain waves,

j) significant temperature inversions.

Wake turbulence.

8.3.8 Wake turbulence separation criteria, taking into account aircraft types, wind conditions and runway/final approach and take-off direction. For helicopters, consideration should also be given to rotor downwash.

Crew members at their stations.

8.3.9 The requirements for crew members to occupy their assigned stations or seats during the different phases of flight or whenever deemed necessary in the interest of safety and, for aeroplane operations, including procedures for controlled rest in the flight crew compartment.

Use of restraint devices for crew and passengers.

8.3.10 The requirements for crew members and passengers to use safety belts and/or restraint systems during the different phases of flight or whenever deemed necessary in the interest of safety.

8.3.10.1 Aircraft shall be equipped with:

a) a seat or berth for each person on board who is aged 24 months or more;

b) a seat belt on each passenger seat and restraining belts for each berth except as specified in (c);

c) a seat belt with upper torso restraint system on each passenger seat and restraining belts on each berth in the case of Aircraft with an MCTOM of less than 5 700kg and with an MOPSC of less than nine, after 8 April 2015;

d) a child restraint device (CRD) for each person on board younger than 24 months;

e) a seat belt with upper torso restraint system incorporating a device that will automatically restrain the occupant's torso in the event of rapid deceleration:

i) on each flight crew seat and on any seat alongside a pilot's seat;

ii) on each observer seat located in the flight crew compartment;

f) a seat belt with upper torso restraint system on each seat for the minimum required cabin crew.

A seat belt with upper torso restraint system shall:

a. have a single point release;

b. on flight crew seats, on any seat alongside a pilot's seat and on the seats for the minimum required cabin crew, include two shoulder straps and a seat belt that may be used independently.

8.3.10.2 Helicopters shall be equipped with:

a) a seat or berth for each person on board who is aged 24 months or more;

b) a seat belt on each passenger seat and restraining belts for each berth;

c) for helicopters first issued with an individual C of A on or after 1 August 1999, a safety belt with upper torso restraint system for use on each passenger seat for each passenger aged 24 months or more;

d) a child restraint device (CRD) for each person on board younger than 24 months;

e) a seat belt with upper torso restraint system incorporating a device that will automatically restrain the occupant's torso in the event of rapid deceleration on each flight crew seat;

f) a seat belt with upper torso restraint system on each seat for the minimum required cabin crew.

A seat belt with upper torso restraint system shall:

a) have a single point release; and

b) on flight crew seats and on the seats for the minimum required cabin crew include two shoulder straps and a seat belt that may be used independently.

Admission to flight crew compartment.

8.3.11 The conditions for the admission to the flight crew compartment of persons other than the flight crew. The policy regarding the admission of inspectors from an authority should also be included.

Use of vacant crew seats.

8.3.12 The conditions and procedures for the use of vacant crew seats.

Incapacitation of crew members.

8.3.13 Procedures to be followed in the event of incapacitation of crew members in-flight. Examples of the types of incapacitation and the means for recognising them should be included.

Cabin Safety Requirements.

8.3.14 Procedures:

a) covering cabin preparation for flight, in-flight requirements and preparation for landing, including procedures for securing the cabin and galleys;

b) to ensure that passengers are seated where, in the event that an emergency evacuation is required, they may best assist and not hinder evacuation from the aircraft;

c) to be followed during passenger embarkation and disembarkation;

d) when refuelling/defueling with passengers embarking, on board or disembarking;

e) covering the carriage of special Categories' of passengers;

f) covering the prohibition and monitoring of smoking on board and procedures to deal with passengers suspected of or found smoking;

g) covering the handling of suspected infectious diseases.

Passenger briefing procedures.

8.3.15 The operator shall ensure that passengers are:

a) given briefings and demonstrations relating to safety in a form that facilitates the application of the procedures applicable in the event of an emergency; and

b) provided with a safety briefing card on which picture-type instructions indicate the operation of emergency equipment and exits likely to be used by passengers. This card shall be published in Part B of the operations manual.

Cosmic or solar radiation

8.3.16 Procedures for aircraft operated whenever required cosmic or solar radiation detection equipment is carried.

Autopilot.

8.3.17 Policy on the use of autopilot.

Low visibility operations (LVO).

8.4 A detailed description of the operational procedures associated with LVO.

Extended-range operations with two-engine aeroplanes (ETOPS). SD-ETOPS

8.5 A detailed description of the ETOPS operational procedures.

Portable EFBs

8.6 Where portable EFBs are used on board an aircraft, the operator shall ensure that they do not affect the performance of the aeroplane systems, equipment or the ability to operate the aircraft and shall:

a) assess the safety risk(s) associated with each EFB function;

b) establish and document the procedures for the use of, and training requirements for, the device and each EFB function; and

c) ensure that, in the event of an EFB failure, sufficient information is readily available to the flight crew for the flight to be conducted safely.

d) The Authority shall approve the operational use of EFB functions to be used for the safe operation of aircraft.

Non-revenue flights.

8.7 Procedures and limitations, for example, for the following:

a) non-commercial operations by AOC holders, a description of the differences to commercial operations,

b) training flights,

c) test flights,

d) delivery flights,

e) ferry flights,

f) demonstration flights,

g) positioning flights, including the kind of persons who may be carried on such flights.

Oxygen Requirements: ANR 23 scale K

8.8 A flight to be operated at flight altitudes at which the atmospheric pressure in personnel compartments will be less than 700 hPa shall not be commenced unless sufficient stored breathing oxygen is carried to supply:

a) all crew members and 10 per cent of the passengers for any period in excess of 30 minutes that the pressure in compartments occupied by them will be between 700 hPa and 620 hPa; and;

b) the crew and passengers for any period that the atmospheric pressure in compartments occupied by them will be less than 620 hPa.;

c) passengers.

8.8.1 A flight to be operated with a pressurized aeroplane shall not be commenced unless a sufficient quantity of stored breathing oxygen is carried to supply all the crew members and passengers, as is appropriate to the circumstances of the flight being undertaken, in the event of loss of pressurization, for any period that the atmospheric pressure in any compartment occupied by them would be less than 700 hPa. In addition, when an aeroplane is operated at flight altitudes at which the atmospheric pressure is less than 376 hPa, or which, if operated at flight altitudes at which the atmospheric pressure is more than 376 hPa and cannot descend safely within four minutes to a flight altitude at which the atmospheric pressure is equal to 620 hPa, there shall be no less than a 10-minute supply for the occupants of the passenger compartment.

Note.— Approximate altitudes in the Standard Atmosphere corresponding to the values of absolute pressure used in the text are as follows:

Absolute pressure	Metres	Feet
700 hPa	3 000	10 000
620 hPa	4 000	13 000

376 hPa	7 600	25 000

Mercy Flights

8.9 There are occasions when there is a need for an aircraft to make a flight for the purpose of carrying a person for urgent specialised medical treatment to avoid permanent disability or as a lifesaving measure, or to remove them from grave and imminent danger, or for the urgent protection of property. As these flights are for the carriage of a person or cargo for hire or reward, they are classified as an Air Transport Operation.

8.9.1 If the need for the flight is urgent and one or more of the normal standards or regulatory requirements cannot be met. The Authority is prepared to consider relief from certain provisions of the regulations for the operation of a Mercy Flight. However, there shall be no relief from the applicable regulations relating to the Airworthiness of the aircraft, except where the aircraft is due for an inspection within the time that would be needed for the Mercy Flight and a positioning back to the maintenance base. Operators shall seek permission from the Authority's Airworthiness department in the first instance to defer the inspection so as to allow the Mercy Flight to proceed.

Operator policy on mercy flights.

8.9.2 Operators shall state if they are, or are not, prepared to participate in Mercy Flights in their Operations Manual. If an operator decides to participate in undertaking a mercy flight when so requested, the operator shall state the Company's policy in their operations manual (ANR 43.4(q) refers).

8.9.3 Operators are free to be more restrictive than the conditions imposed by the Authority in 8.9.4 and any such limitations shall be documented.

8.9.4 If the circumstances of any particular instance are such that the only pilot available does not have the qualifications below, then the operator shall conduct an additional Risk Assessment covering the pilot-in-command's qualifications detailing the shortfall and the associated risk to the operation. The Authority recommends that the pilot-in-command of a mercy flight shall have at least:

a) 1000 hours flight time;

b) 100 hours on type, including 50 hours as pilot-in-command on type; and

c) 6 months experience of operating in the general area through which the flight will be conducted.

8.9.5 Additionally, as an air transport flight, the operator's Chief Pilot or a designated representative shall specifically approve each Mercy Flight.

8.9.6 For a flight at night, the aircraft shall be equipped with instrument(s), (ANR 23 Table 1 (continued) (2) and (2(a),(b)&(c)) refers) as a minimum, that will mitigate the risk of spatial disorientation and the pilot-in-command should have a clear understanding of the risks of trying to fly visually without adequate internal or external references.

8.9.7 Immediately, within 48 hours, after the completion of the mercy flight the pilot-in-command shall submit to the Authority a report, marked 'CONFIDENTIAL', on all aspects of the operation made under the provisions for such flights, including the factors which led to the pilot-in-command's decision to make the flight in accordance with SD-Mercy Flights:

Chapter 9 DANGEROUS GOODS AND WEAPONS

References: ICAO Annex 6 Parts 1, 2 & 3. **ANRs 29, 43. FIJI AICs. Fiji AIP. Standards Documents - Carriage of Dangerous Goods**

9.0 ANR 29 sets out the conditions under which dangerous goods may be carried in an aircraft.

a) Although there are some definitions in the ANR, dangerous goods are regarded as goods which present any kind of hazard to an aircraft and/or its occupants or to any other person who might come into contact with them. They include explosives, compressed gases, flammables, oxidisers, poisons, irritants, disease-producing micro-organisms (infectious

substances), radioactive materials and corrosives. Substances that are likely to damage aircraft structures or which have inherent characteristics making them unsuitable for air carriage are also included. For example, magnetised materials are classified as dangerous goods because of their potential effect on aircraft instruments.

b) The classification of dangerous goods is given in the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (TI). Although the TI contains an extensive list of dangerous goods, and the conditions under which they may be carried, the list is by no means comprehensive. Other goods not listed by name but meeting the criteria for the various classes of dangerous goods in the TI must also be regarded as dangerous. TI also specifies the manner in which dangerous goods must be prepared for carriage by air. Acceptance procedures for cargo must enable staff to correctly identify those goods which meet the criteria for classification as dangerous good.

c) A written permission is required for the carriage of dangerous goods in Fiji registered aircraft, wherever they may be. Aeronautical Information Circulars are issued from time to time providing information on the procedures to be followed to obtain permission for the carriage of dangerous goods in aircraft.

d) A written permission may be issued for either:

i. the general carriage of dangerous goods; or

ii. a flight or series of flights for particular consignments.

e) All permissions will contain conditions which must be fully observed. Any permission for the general carriage of dangerous goods will require that all such goods are carried in compliance with the Technical Instructions. Operators should pay particular attention to their responsibilities detailed in the Technical Instructions and shall ensure that they are properly discharged.

f) A specific permission for the carriage of a particular consignment may be issued where a general permission is not needed (i.e. the operator does not normally carry dangerous goods) or, in exceptional circumstances, where the consignment does not fulfil the requirements of the TI. A specific permission will be valid only for the flight or series of flights to which it refers.

g) Operators shall include as a minimum the following:

i. operator's policy on the transport of dangerous goods;

ii. guidance on the requirements for acceptance, labelling, handling, stowage and segregation of dangerous goods; Additional information, as specified in TI, should also be included.

iii. special notification requirements in the event of an accident or occurrence when dangerous goods are being carried;

iv. procedures for responding to emergency situations involving dangerous goods;

v. duties of all personnel involved; and

vi. instructions on the carriage of the operator's personnel on cargo aircraft when dangerous goods are being carried.

vii. Dangerous goods training for personnel irrespective whether the operator is permitted to carry DGs.

Operators requiring further advice on the carriage of dangerous goods should consult the Air Safety Department.

9.1 The conditions under which weapons, munitions of war and sporting weapons may be carried.

a) The carriage of munitions of war in Fiji registered aircraft, wherever they may be, is prohibited by the ANR, and this prohibition should be repeated in the loading instructions contained in the operations manual.

b) Munitions of War are defined as weapons and ammunition designed for use in warfare or against the person, including parts designed for such weapons and ammunition.

c) An application for an exemption from the ANR to enable munitions of war to be carried should be made to the Air Safety Department. This should be made in writing, or by telex/fax at least 10 working days before it is required, stating precisely what munitions are involved, the manufacturer, the import/export licence number (where applicable), the names and addresses of both consignor and consignee, the destination, the airports of departure and arrival and the date of the flight.

d) Where munitions of war are also dangerous goods (e.g. ammunition) a permission to carry dangerous goods will also be required.

For further advice on the carriage of munitions of war operators should consult the Air Safety Department.

Chapter 10 SECURITY

References: ICAO Annex 6 Parts 1, 2 & 3. Annex 17 ANRs Part VIII, 43. FIJI AICs. Fiji AIP. Standards Documents SD - Air Operator's Certificate, SD - Carriage of Dangerous Goods

10 Operators shall ensure that all crew and ground staff are adequately trained in aviation security matters. Including but not limited to, Security instructions, guidance, procedures, training and responsibilities. Some parts of the security instructions and guidance may be kept confidential.

10.1 Security Requirements

10.2 Company Security Officer

10.3 Training

10.4 Reporting Acts of Unlawful Interference

10.5 Search Procedures

10.6 Aircraft Type

General Security Precautions

10.8 The operator shall ensure that there is on board a checklist of the procedures to be followed in searching for a bomb in case of suspected sabotage and for inspecting aircraft for concealed weapons, explosives or other dangerous devices when a well-founded suspicion exists that the aircraft may be the object of an act of unlawful interference. The checklist shall be supported by guidance on the appropriate course of action to be taken should a bomb or suspicious object be found and information on the least-risk bomb location specific to the aircraft.

10.8.1 Lockers and Holds

10.8.2 Security of Aircraft

10.9 Procedures For “BOMB THREAT”

10.9.1 Action by Aircraft Crew In-Flight

10.9.2 Action if Bomb Found on Aircraft

10.10 Unlawful Interference (HIJACK)

10.10.1 Precautionary Measures

10.10.2 General Policy

10.10.3 Hi-Jack Communications

10.10.4 Action by Aircraft Crew in Hi-Jack Situation

10.10.5 Unlawful Seizure of Aircraft – The Captains Authority

Chapter 11 HANDLING, NOTIFYING AND REPORTING ACCIDENTS, INCIDENTS AND OCCURRENCES

References: ICAO Annex 6 Parts 1, 2 & 3. ANRs 43 & 71. FIJI AICs. Fiji AIP. Standards Documents SD - Air Operator's Certificate, SD - Carriage of Dangerous Goods

11.0 The responsibility for reporting occurrences is prescribed in ANR 71 and all staff should be aware of their obligations under this legislation. The operator may, of course, also require a copy of any report submitted under ANR 71 to the Authority.

11.1 Responsibility for co-ordinating action on occurrence reports, mandatory or otherwise, and for initiating any necessary investigations should be assigned to a suitably qualified senior officer with clearly defined authority and status.

11.2 Where appropriate, the circumstances of an incident should be made generally known within the operator's organisation and particular care should be taken to ensure that originators of occurrence reports are informed of the outcome of any subsequent investigations.

11.3 The occurrence report form format is provided on the Authority's website. Operators may reproduce this form in their operations manuals, however, operators shall ensure that any copy is kept updated in line with the Authority's website.

Definition of accident,

11.3.1 **Accident.** An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

a) a person is fatally or seriously injured as a result of:

1) being in the aircraft, or

2) direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or

3) direct exposure to jet blast,

except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

b) the aircraft sustains damage or structural failure which:

1) adversely affects the structural strength, performance or flight characteristics of the aircraft, and

2) would normally require major repair or replacement of the affected component, *except* for engine failure or damage, when the damage is limited to a single engine (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome); or

c) the aircraft is missing or is completely inaccessible.

Note 1.— For statistical uniformity only, an injury resulting within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.

Note 2.— An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

11.3.2 **Incident.** An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation.

11.3.3 **Serious incident**. An incident involving circumstances indicating that there was a high probability of an accident and associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down.

Note 1.— The difference between an accident and a serious incident lies only in the result.

11.3.4 Procedures for handling, notifying and reporting accidents, incidents and occurrences. This section should include the following:

a) all the relevant responsibilities of all persons involved;

b) illustrations of forms to be used for reporting all types of accident, incident and occurrence (or copies of the forms themselves), instructions on how they are to be completed, the addresses to which they should be sent and the time allowed for this to be done;

c) in the event of an accident, descriptions of which departments, authorities and other organisations have to be notified, how this will be done and in what sequence;

d) procedures for verbal notification to air traffic service units of incidents involving ACAS resolution advisories (RAs), bird hazards, dangerous goods and hazardous conditions;

e) procedures for submitting written reports on air traffic incidents, ACAS RAs, bird strikes, dangerous goods incidents or accidents, and unlawful interference;

f) reporting procedures. These procedures should include internal safety-related reporting procedures to be followed by crew members, designed to ensure that the pilot-in-command/Pilot-in-Command is informed immediately of any incident that has endangered, or may have endangered, safety during the flight, and that the pilot-in-command/Pilot-in-Command is provided with all relevant information.

g) Procedures for the preservation of recordings following a reportable event.

Chapter 12 RULES OF THE AIR

References: ICAO Annex 2, 6 Parts 1, 2 & 3. ANRs 43. FIJI AICs. Fiji AIP. Standards Documents SD - Air Operator's Certificate, SD - Carriage of Dangerous Goods

Visual and Instrument Flight Rules

12.0 Visual Flight Rules

12.1 Instrument Flight Rules

12.2 Territorial Application of the Rules of the Air

Communication Procedures

12.3 General Radiotelephony Procedures

12.4 Radio Failure – Navigation Equipment

12.5 Radio Failure – Two-Way Radio Communications Equipment

Interception of Civil Aircraft and the requirement to carry the procedures

12.6 Notification Procedures

12.7 Signals for use in the event of Interception

12.8 Radio Listening Watch Procedures

Signals

12.9 Time System

ATC Clearances, Adherence to Flight Plan and Position Reports

12.10 ATC Clearances

12.11 Adherence to Flight Plans

12.12 Position Reports – On Airways

12.13 Position Reports – Off Airways

Flight Crew Observing an Accident or Receiving a Distress Transmission

12.14 Procedures for Flight Crew Observing an Accident or Receiving a Distress Transmission

The Ground / Air Visual Codes for use by Survivors

12.15 Ground-to-Air Emergency Signalling Code

12.16 Air-to-Ground Signals

12.17 Distress and Urgency Signals.

12.18 Visual Signals used to warn Unauthorised Aircraft (Restricted, Prohibited and Danger Areas)

Chapter 13 LEASING / CODE-SHARE

ANRs 38, 59, 147 or by ANR 24A

13.0 This section contains the policy, guidelines and checklist references regarding the management of an aircraft lease to ensure the regulatory obligations are met and that operational safety is not compromised by the conditions of the lease.

The use of leased aircraft plays a significant role for airlines in the provision of both domestic and international air services. Various types of leases are in general use and these are described in the 'Definitions' section below. Aircraft leasing can be arranged in many ways, which can result in varied and complex safety situations, particularly if an aircraft registered in another Contracting State is to be operated in Fiji by an Fijian operator. Coordination is required between the organisation providing the aircraft and the operator as well as the regulatory authorities concerned. It is important that inspectors ensure that all of the safety responsibilities are understood when undertaking an assessment of a leased aircraft that is to be added to an AOC. These safety responsibilities must be identified in writing and clearly met by the various parties involved.

Operations and airworthiness of foreign registered aircraft under wet or dry leasing arrangements by the holders of an AOC domiciled in Fiji are governed by.

Definitions

13.1 In this section the term "**lease (of aircraft)**" is used instead of "**cross-hire**", to minimise confusion and to be consistent with legislation and other CAAF documents.

Lease (aircraft):

A contractual arrangement whereby a properly licensed operator (AOC holder) gains commercial control of an entire aircraft without transfer of the ownership.

Lessor:

The organisation or person financing an aircraft lease and providing an aircraft to a lessee.

Lessee:

The organisation or person to whom an aircraft is leased. In most cases this will be the AOC holder who becomes the Registered Operator of an aircraft. The basic types of aircraft leases and additional definitions are:

Operational control:

The exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight.

Dry leases:

The aircraft is leased **without** crew.

Wet leases:

The aircraft is leased with crew.

Damp leases:

Wet leases with partial crew – often without cabin crew.

ACMI Lease:

is what could be described as a 'full-service' wet lease where an aircraft, crew, maintenance and insurance are provided in a single financial package by the lessor. This type of lease is often used by start-up airlines or where additional capacity with corresponding support is required by an existing operator. Usually, the aircraft is provided on a block-charge basis where a minimum number of flying hours are specified on a monthly basis. The lessee must pay for these whether or not they are actually flown. ACMI leases generally run from one month up to one to two years.

13.2 All leased aircraft will be subject to an Air Navigation Regulations to the extent necessary to satisfy the Authority as to the operational and airworthiness standards achieved. The authority will verify that any aircraft lease arrangement does not compromise operational safety, given the nature of the operations covered by the AOC. And shall review each lease agreement to ensure that:

a. the lessor and lessee are properly identified on the lease

b. the lease is signed by the appropriate personnel in both the lessor's and the lessee's organisations

c. the effective date of the lease is identified (in other words, ensure that the lease a current document)

d. operational control is specifically identified as being assigned to the operator (if another operator is identified as the operator, this will indicate that the AOC holder will not be the actual operator and this must be investigated)

e. responsibilities for performing maintenance are specifically identified and assigned to particular parties to the lease

f. responsibilities for keeping aircraft maintenance records are specifically identified and assigned to particular parties to the lease

g. maintenance programs (lessee's or the lessor's) are identified.

Policy for airworthiness certification of leased aircraft is that:

a. In accordance with international practice, the Authority is empowered to inspect such aircraft to ascertain whether they meet ICAO airworthiness Standards.

b. If the State of Registry of the leased aircraft delegates, with the agreement of the Authority, the responsibility for continuing airworthiness of the aircraft, the Authority will exercise that function in accordance with the Authority's current policy.

c. Where a lease of less than one calendar year is altered to become valid for a period greater than one calendar year, the aircraft is to be brought to Authority standards as early as possible and in all cases not later than one calendar year from the commencement of the original lease.

d. The Authority's usual procedures will apply.

e. Operators will be responsible for the reimbursement of all costs in relation to any investigations required by the Authority with respect to an application to operate leased aircraft.

13.2.1 Any lease-in

13.2.2 Wet Lease-In – Third Country Operator

13.2.3 Dry Lease-In – Third Country Registered Aircraft

13.2.4 Dry Lease-Out

13.2.5 Wet Lease-out

Information to be provided to the Authority

Lease-In

13.3. The operator intending to lease-in an aircraft should provide the Authority with the following information:

a. The aircraft type, registration markings and serial number;

b. The name and address of the registered owner;

c. A copy of the valid certificate of airworthiness;

d. A copy of the lease agreement or description of the lease provisions, except financial arrangements;

e. Duration of the lease; and

f. In case of wet lease-in a copy of the AOC of the third country operator and the areas of operation.

13.3.1 The information mentioned above should be accompanied by a statement signed by the lessee that the parties to the lease agreement fully understand their respective responsibilities under the applicable regulations.

Wet Lease-In

13.3.2 The lessee should maintain a record of occasions when lessors are used, for inspection by the State that issued its AOC.

Wet Lease-Out

13.3.3 When notifying the Authority, the operator intending to wet lease-out an aircraft should provide the Authority with the following information:

a. The aircraft type, registration markings and serial number;

b. The name and address of the lessee;

c. A copy of the lease agreement or description of the lease provisions, except financial arrangements; and

d. The duration of the lease agreement.

13.3.4 Company Procedures

Dry Leased from an Aircraft Leasing Company or Financial Institution

13.3.5 The addition of an Fijian registered dry leased aircraft supplied by a professional leasing company or financial institution to an operator with an established AOC, operating a similar or the same type of aircraft, should not present any difficulty. Similarly, the inclusion of a dry leased aircraft onto a new AOC should be straight forward.

In both cases, subject to relevant lease information being provided by the operator establishing that there are no abnormal conditions or clauses, the normal processes specified in the AOCM should be followed in order for an aircraft to be entered onto an AOC.

The operator should be asked the following questions in relation to the lease terms:

a. What are the general terms of the lease? (When provided, this will generate further questions)

b. Are their any requirements or obligations that have a safety impact or restrict or limit the operation of the aircraft in any way?

c. Are there any penalties associated with the lease agreement?

d. Who will be the Registered Operator?

e. Who will be responsible for all operational and maintenance control of the aircraft and how will this be achieved?

f. Responses to these and any further questions should be in writing.

It is not practical to provide detailed guidance in the event of responses that are of concern to the Authority as lease conditions can vary from company-to-company and aircraft-to-aircraft. Consequently, these matters should be dealt with on a case-by-case basis.

A dry Lease from another Fijian Operator - Shared Transferred Aircraft

13.3.6. A number of smaller operators under-utilise their aircraft on their own routes and services and often make their aircraft available for lease during the periods of aircraft inactivity. These leases or sub-leases, from a regulatory perspective, can be difficult to assess and oversight. With larger aircraft and operators, the potential problems associated with this sort of arrangement are usually less.

13.3.7. When an aircraft that is owned by one operator is being leased to another operator on a part-time basis – typically, one operator conducts day-time passenger services and the second operator undertakes night mail flights using the same aircraft - it is extremely important that the Authority

establishes who is responsible for what, when and how, and that effective control processes are in place to address these issues before the aircraft is added to an AOC.

13.3.8. These matters should be clearly specified in writing within the lease agreement. With such operations, significant maintenance aspects can be overlooked. In particular, if the lessee wishes to use the Lessor's Maintenance Control Manual, System of Maintenance, Operator Minimum Equipment List, maintenance Release, etc., then approval for those documents must be given to the Lessee AOC holder. This means that the lessee's Maintenance Control Manual will reflect:

a) the aircraft registration

b) the Lessor's – AOC holder's – Maintenance Control Manual

c) The Lessor's System of Maintenance

d) the Lessor's Operator Minimum Equipment List

e) the approved Lessor's maintenance Release which has been approved for use by the lessee's AOC operation.

13.3.7. The Lessee's manual suite shall be reviewed to determine whether there are adequate procedures:

a) to provide guidance in relation to the incorporation of leased aircraft into the Lessee's operating systems

b) for the use of the Lessor's system of maintenance in relation to the aircraft, engines, propellers and equipment

c) for the use of the maintenance reliability program (where applicable)

d) for training programs to provide for configuration differences, where the aircraft is maintained under the Lessor's maintenance program.

13.3.8. The regulatory assessment and oversight processes become even more complex if the aircraft is an already leased aircraft which is then being sub-leased to the second operator as described above.

13.3.9. When adding such an aircraft to an AOC, the Authority's inspectors should establish as part of the assessment process that the original leasing company – the lessor - has approved the sub-lease of their aircraft to the second operator. Assuming that this is the case, Inspectors shall ensure that the sub-lease is practical, acceptable and legitimate. Sub-leases must also not negate responsibilities required or specified under the primary lease contract.

13.3.10. Whenever a sub-leased aircraft is to be added to an AOC, inspectors should consider the following list of matters:

a) What are the general terms of the lease and sub-lease? (When provided, this will generate further questions).

b) Are their any requirements or obligations that have a safety impact or restrict or limit the operation of the aircraft in any way?

c) Are there any penalties associated with the lease or sub-lease agreements?

d) Who will be the Registered Operator?

e) What lines of communication have been formally established: who will talk to whom – names and positions of relevant people?

f) What flight documents – tech-log, defect log, MEL etc. will be used and who will manage/coordinate their use?

g) What arrangements have been made to familiarise flight crew and maintenance personnel with the flight documents and maintenance programme?

h) What considerations and arrangements have been made to assess the existing maintenance programme as this programme may be based upon a different flight profile and usage than that which may be flown by the second operator?

i) What considerations have been made for life and timed components and systems that have had their maintenance hours extended through fully justified life-extension programmes but which may not apply to an operator with a different operational and flight profile?

j) What will be the fuel policy established for both operations?

k) How will defect reporting be undertaken?

l) Who will be responsible for AD management and implementation?

m) What arrangements have been made for the initial and on-going as required briefing for staff on document usage & control?

n) What requirements are there in the contract for reporting matters of any sort to leasing company?

o) What arrangements and provisions have been put into place for manuals, amendments to manuals & a formal distribution list?

p) How will maintenance be conducted and defect rectification managed on a daily basis?

q) What arrangements have been made for flight crew training and familiarisation relevant to the leased/sub-leased aircraft?

r) Will there be any interchange of flight or cabin crew and if so what arrangements have been made?

13.3.11. The above list of questions is not finite and is provided for guidance only. Other and/or more questions may be appropriate as the need for clarification to aid assessment might require.

13.3.12. Use of a Privately Owned Aircraft on the AOC

13.3.13. Code Share

PART B

Aircraft operating matters – type related

This Part may be subdivided for each aircraft type keeping the same numbering format, namely Part B1, Part B2 etc. Taking account of the differences between types/classes, and variants of types, under the following headings:

Administration and control of Operations Manual

0.1 Introduction

0.2 System of Amendment and Revision

0.2.1 Issue and Amendments

0.2.2 Amendment Proposals

0.2.3 Operations Manual Distribution

0.2.4 List of Effective Sections

0.2.5 Revision Record

LIMITATIONS

General information and units of measurement

1. General information (e.g. aircraft dimensions), including a description of the units of measurement used for the operation of the aircraft type concerned and conversion tables.

1.1 A description of the certified limitations and the applicable operational limitations should include the following:

a. certification status (e.g. EASA / FAA (supplemental) type certificate, environmental certification, etc.);

b. passenger seating configuration for each aircraft type including a pictorial presentation;

c. types of operation that are approved (e.g. VFR/IFR, ATOI/ II/III, RNP, flights in known icing conditions etc.);

d. crew composition;

1. It will normally be sufficient if the minimum crew for public transport is specified for each type of aircraft. Note that the minimum crew for public transport will not necessarily be the same as the minimum crew specified in the Certificate of Airworthiness.

2. Except where the flight crew is limited to one or two pilots, brief instructions should be included as to the order and circumstances in which command is to be assumed by members of the crew.

3. Detailed instructions must be included in the manual as to the circumstances in which co-pilots may be permitted to fly the aircraft.

4. The Air Navigation Regulations specify areas of the world through which aircraft engaged on a flight for the purpose of public transport shall be equipped with navigation equipment specifically approved for the purpose by the Authority.

e. mass and centre of gravity;

f. speed limitations;

g. flight envelope(s);

h. wind limits including operations on contaminated runways;

i. performance limitations for applicable configurations;

j. (runway) slope;

k. De-icing;

l. airframe contamination;

m. system limitations.

Normal procedures

2. The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include the following:

a. pre-flight,

b. pre-departure,

c. altimeter setting and checking,

d. taxi, take-off and climb,

e. noise abatement, The operator shall establish appropriate operating departure and arrival/approach procedures for each aeroplane type taking into account the need to minimise the effect of aircraft noise. Helicopter operators shall ensure that take-off and landing procedures take into account the need to minimise the effect of helicopter noise. The procedures shall ensure that safety has priority over noise abatement and be simple and safe to operate with no significant increase in crew workload during critical phases of flight.

f. cruise and descent,

g. approach, landing preparation and briefing,

h. VFR approach,

i. IFR approach,

j. visual approach and circling,

k. missed approach,

l. normal landing,

m. post-landing,

(n) for aeroplanes, operations on wet and contaminated runways.

Abnormal and/or Emergency Procedures

3. The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include the following:

a. crew incapacitation,

b. fire and smoke drills,

c. for aeroplanes, un-pressurised and partially pressurised flight,

d. for aircraft, exceeding structural limits such as overweight landing,

e. lightning strikes,

f. distress communications and alerting ATC to emergencies,

g. engine/burner failure,

h. system failures,

i. guidance for diversion in case of serious technical failure,

j. ground proximity warning, including for helicopters audio voice alerting device (AVAD) warning,

k. ACAS/TCAS warning/audio voice alerting device (AVAD) warning for helicopters,

l. windshear,

m. emergency landing/ditching,

n. for aircraft, departure contingency procedures.

Performance (SD-Aircraft weight and performance)

4.0 Performance data should be provided in a form that can be used without difficulty.

4.1 Performance data.

Performance material that provides the necessary data for compliance with the performance requirements prescribed in SD-Aircraft Weight and Performance. Helicopters shall be operated in accordance with the applicable performance class requirements.

a. Helicopters shall be operated in performance class 1:

1. When operated to/from aerodromes or operating sites located in a congested hostile environment; or

2. When having an MOPSC of more than 19, except when operated to/from a helideck in performance class 2 without an assured safe forced landing capability during the take-off and landing phases shall only be conducted if the operator has been granted an approval by the authority (See SD-AWP, Sect 2, Ch 3, Para 3.1).

b. Unless otherwise prescribed by (a), helicopters that have an MOPSC of 19 or less but more than nine shall be operated in performance class 1 or 2.

c. Unless otherwise prescribed by (a), helicopters that have an MOPSC of nine or less shall be operated in performance class 1, 2 or 3.

For helicopters and aeroplanes, this performance data shall be included where applicable to allow the determination of the following:

a. take-off climb limits – mass, altitude, temperature;

b. take-off field length (for dry, wet and contaminated runway conditions);

c. net flight path data for obstacle clearance calculation or, where applicable, take-off flight path;

d. the gradient losses for banked climb-outs;

e. en-route climb limits;

f. approach climb limits;

g. landing climb limits;

h. landing field length (for dry, wet and contaminated runway conditions) including the effects of an in-flight failure of a system or device, if it affects the landing distance;

i. brake energy limits;

j. speeds applicable for the various flight stages (also considering dry, wet and contaminated runway conditions).

4.1.1 Supplementary data covering flights in icing conditions. Any certified performance related to an allowable configuration, or configuration deviation, such as anti-skid inoperative.

4.1.2 If performance data, as required for the appropriate performance class, is not available in the AFM, then other data should be included. The OM may contain cross-reference to the data contained in the AFM where such data is not likely to be used often or in an emergency.

4.2 Additional performance data for aeroplanes. Additional performance data, where applicable, including the following:

(a) all engine climb gradients,

(b) drift-down data,

(c) effect of de-icing/anti-icing fluids,

(d) flight with landing gear down,

(e) for aircraft with 3 or more engines, one-engine-inoperative ferry flights,

(f) flights conducted under the provisions of the configuration deviation list (CDL).

FLIGHT PLANNING:

Reference Approved Flight Manual, OM Part A Section 8.1.7 & 8.3.

5.0 An operational flight plan shall be completed for every intended flight. The operational flight plan shall be approved and signed by the pilot-in-command and, where applicable, signed by the flight operations officer/flight dispatcher, and a copy shall be filed with the operator or a designated agent, or, if these procedures are not possible, it shall be left with the aerodrome authority or on record in a suitable place at the point of departure. Repetitive Flight Plans are deemed to be compliant.

5.1 The operations manual must describe the content and use of the operational flight plan.

5.2 Data and instructions necessary for pre-flight and in-flight planning. Where applicable, procedures for engine(s)-out operations, ETOPS (particularly the one-engine-inoperative cruise speed and maximum distance to an adequate aerodrome and flights to isolated aerodromes should be included.

5.3 The method for calculating fuel needed for the various stages of flight.

5.4 The following data should be included:

a. detailed engine(s)-inoperative performance data including fuel flow for standard and non-standard atmospheric conditions and as a function of airspeed and power setting, where appropriate, covering:

1. drift down (includes net performance), where applicable;
2. cruise altitude coverage including 10 000 ft;
3. holding;
4. altitude capability (includes net performance); and
5. missed approach;

b. detailed all-engine-operating performance data, including nominal fuel flow data, for standard and non-standard atmospheric conditions and as a function of airspeed and power setting, where appropriate, covering:

1. cruise (altitude coverage including 10 000 ft); and
2. holding;

c. details of any other conditions relevant to ETOPS operations which can cause significant deterioration of performance, such as ice accumulation on the unprotected surfaces of the aircraft, ram air turbine (RAT) deployment, thrust-reverser deployment, etc.; and

d. the altitudes, airspeeds, thrust settings, and fuel flow used in establishing the ETOPS area of operations for each airframe-engine combination should be used in showing the corresponding terrain and obstruction clearances.

Mass and balance

References: ICAO Annex 6 Parts 1, 2 & 3. ANRs 41-43. FIJI AICs. Fiji AIP. Also refer to OM Part A Section 8.1.8.

6 Instructions and data for the calculation of the mass and balance including the following:

(a) calculation system (e.g. index system);

(b) information and instructions for completion of mass and balance documentation, including manual and computer generated types;

(c) limiting masses and centre of gravity for the types, variants or individual aircraft used by the operator;

(d) dry operating mass and corresponding centre of gravity or index.

6.1 Goods, passenger, and baggage weights

a. Subject to paragraphs (b), (c), and (d), a holder of an air operator certificate or the operator of a helicopter on aerial work operations must ensure that for every operation the weights of the following items that are carried on the helicopter are established:

1. the total actual weight of goods, excluding baggage: and
2. the total weight of passengers and their carry-on baggage: and
3. the total weight of crew members and their carry-on baggage: and
4. the total weight of checked baggage.

b. The total weight of passengers and their carry-on baggage must be established by using one of the following:

1. the actual weight of every passenger and their carry-on baggage: or
2. the declared weight of every passenger and their carryon baggage plus 4 kgs:
3. the estimated weight of a passenger or baggage

c. The total weight of crew members and their carry-on baggage must be established by using only one of the following:

1. the actual weight of every crew member and their carry-on baggage: or
2. an alternative means that is acceptable to the Authority.

d. The weight of checked baggage must be established by using the actual weight of the baggage.

Scales for weighing when standard weights are not used

6.2 At aerodromes/ heliports from which an air transport or aerial work departure occurs on a scheduled basis and actual weights are required, certified scales shall be available.

a. Where there are non-scheduled air transport or aerial work departures from a particular aerodrome/heliport estimated weights, acceptable to the pilot-in-command, may be used.

b. Scales must be-

1. of a type acceptable to the Authority; and
2. certified by an organisation acceptable to the Authority before initial use; and
3. re-certified annually by an organisation acceptable to the Authority.

Load limitations

Helicopter load limitations

6.3. Each holder of an air operator certificate and each operator of a helicopter on aerial work operations shall ensure that—

a. the limitations contained in the helicopter flight manual, or other approved document, relating to the weight and balance of a helicopter are complied with; and

b. maximum allowable weights are not exceeded for zero fuel, manoeuvre, take-off, and landing; and

c. the helicopter's centre of gravity is within the limits referred to in subparagraph (1) at departure, and will remain within those limits throughout the intended flight.

Documentation Load manifest

6.4 A holder of an air operator certificate must ensure that —

a. a load manifest is completed before every air transport operation; and

b. the load manifest is certified by the pilot-in-command; and

c. the following details are accurately recorded on the load manifest:

1. the name of the pilot-in-command, unless this is recorded by the certificate holder in another document:
2. the date of the operation:
3. the aircraft's type and registration mark:
4. the name or identification of the departure and destination aerodromes:
5. the flight number or estimated time of departure:
6. the surname and initial of every crew member and passenger, unless these details are recorded by the certificate holder in another document:
7. the total of the aircraft's empty weight, the weight of any removable equipment, the weight of consumables, and the weight of crew members:
8. the total weight of passengers and their carry-on baggage, the total weight of goods, the total weight of checked baggage, and the total weight of usable fuel:
9. the take-off weight and, unless recorded by the certificate holder in another document, the expected landing weight of the aircraft:
10. evidence that the centre of gravity of the aircraft is and throughout the flight will remain within the limits specified in the flight manual, unless this is recorded by the certificate holder in another document:
11. the maximum allowable weights for the operation including structural or ramp weight, zero fuel weight, take-off weight, and landing weight:
12. where it may be a criteria in determining any other weight limitation, the temperature;
13. the total of any weight adjustment.

Loading.

7. Cabin Floor Loading

7.1 Loading Instructions

7.2 Loading Stations

7.3 Fuel Moment Tables

Configuration deviation list

8. The CDL(s), if provided by the manufacturer, taking account of the aircraft types and variants operated including procedures to be followed when an aircraft is being dispatched under the terms of its CDL.

Minimum Equipment List (MEL)

9.0 The MEL for each aircraft type or variant operated and the type(s)/area(s) of operation. The MEL should also include the dispatch conditions associated with operations required for a specific approval (e.g. RNAV, RNP, RVSM, ETOPS). Where there is an UK CAA, EASA or FAA MMEL these shall be used as the source document.

9.1 If no UK CAA / EASA approved MMEL exists for a particular type then the MMEL accepted by the Authority will be the latest issue of the Type Certificate Holder's MMEL approved by their Primary Certificating Authority. For Type Certificate Holders approved by the FAA as the State of Design, this would be the FAA MMEL.

http://fsims.faa.gov/PICResults.aspx?mode=Publication&doctype=MMEL

9.2 The minimum equipment list, approved by the Authority, is necessary for each aircraft, based on the master minimum equipment list established for the aircraft type by the organization responsible for the type design in conjunction with the State of Design.

9.3 The operator shall prepare a minimum equipment list designed to allow the operation of an aircraft with certain systems or equipment inoperative provided an acceptable level of safety is maintained. Operators utilising the FAA MMEL format shall refer to the current FAA MMEL Policy Letter 25,

MMEL and MEL Definitions, and any other applicable Policy letters, found on the FAA Flight Standards Information Management System (FSIMS) website.

http://fsims.faa.gov/PICResults.aspx?mode=Publication&doctype=MMEL%20Policy%20Letters

9.4 The minimum equipment list is not intended to provide for operation of the aircraft for an indefinite period with inoperative systems or equipment. The basic purpose of the minimum equipment list is to permit the safe operation of an aircraft with inoperative systems or equipment within the framework of a controlled and sound programme of repairs and parts replacement.

9.5 Operators are to ensure that no flight is commenced with multiple minimum equipment list items inoperative without determining that any interrelationship between inoperative systems or components will not result in an unacceptable degradation in the level of safety and/or undue increase in the flight crew workload.

9.6 The exposure to additional failures during continued operation with inoperative systems or equipment must also be considered in determining that an acceptable level of safety is being maintained. The minimum equipment list may not deviate from requirements of the flight manual limitations section, emergency procedures or other airworthiness requirements of the State of Registry or of that of the Authority unless the appropriate airworthiness authority or the flight manual provides otherwise.

9.7 Systems or equipment accepted as inoperative for a flight shall be placarded where appropriate, and all such items should be noted in the aircraft technical log to inform the flight crew and maintenance personnel of the inoperative system or equipment.

9.8 For a particular system or item of equipment to be accepted as inoperative, it may be necessary to establish a maintenance procedure, for completion prior to flight, to de-activate or isolate the system or equipment. It may similarly be necessary to prepare an appropriate flight crew operating procedure.

9.9 The responsibilities of accepting an aircraft for operation with deficiencies rest with the pilot-in-command.

9.10 Operators may choose to keep the MEL as a standalone document, if so the operator shall insert the document reference in PART B paragraph 9.

Survival and emergency equipment including oxygen

10. A list of the survival equipment to be carried for the routes to be flown and the procedures for checking the serviceability of this equipment prior to take-off. Instructions regarding the location, accessibility and use of survival and emergency equipment and its associated checklist(s) should also be included.

10.1 The procedure for determining the amount of oxygen required and the quantity that is available. The flight profile, number of occupants and possible cabin decompression should be considered.

Emergency Evacuation Procedures

11. Instructions for preparation for emergency evacuation including crew coordination and emergency station assignment.

11.1 Emergency evacuation procedures. A description of the duties of all members of the crew for the rapid evacuation of an aircraft and the handling of the passengers in the event of a forced landing, ditching or other emergency.

(a) Pre-Flight Briefing to Passengers

(b) Emergency Situation – Overland

(c) Emergency Situation – Over Water

(d) Passenger Briefing Cards

Aircraft systems

12 The manual shall include details of the aircraft systems and of the checklists to be used. A description of the aircraft systems, related controls and indications and operating instructions. Consideration should be given to use the ATA number system when allocating chapters and numbers.

Checklists

13 A copy of the relevant Quick Reference Handbook (QRH), if applicable, shall be made available to each flight crewmember or adequate copies should be provided in the company briefing room or library for private study. It is the responsibility of operators to ensure that appropriate checklists are placed on each aircraft to be used by flight crews prior to, during and after all phases of operations, covering current Normal, Emergency and Abnormal procedures, to ensure compliance with the operating procedures contained in the aircraft flight manual or other documents associated with the certificate of airworthiness and otherwise in the operations manual. The design and utilization of checklists shall observe Human Factors principles. Guidance on the design, presentation and use of checklists may be found in CAP 676 Guidance on the Design, Presentation and Use of Emergency and Abnormal Checklists, and https://humansystems.arc.nasa.gov/flightcognition/Publications/EA_Checklist_Design.pdf

Passenger briefing

14.0 The operator shall ensure that passengers are made familiar with the location and use of:

a) seat belts;

b) emergency exits;

c) life jackets, if the carriage of life jackets is prescribed;

d) oxygen dispensing equipment, if the provision of oxygen for the use of passengers is prescribed; and

e) other emergency equipment provided for individual use, including passenger emergency briefing cards.

14.1 The operator shall inform the passengers of the location and general manner of use of the principal emergency equipment carried for collective use.

14.2 The operator shall ensure that in an emergency during flight, passengers are instructed in such emergency action as may be appropriate to the circumstances.

14.3 The operator shall ensure that, as and when deemed necessary by the PIC, during take-off and landing and whenever considered necessary by reason of turbulence or any emergency occurring during flight, all passengers on board an aircraft shall be secured in their seats by means of the seat belts or harnesses provided.

14.4 Operator shall place a copy of the Passenger Briefing Cards, each aircraft type or variant operated, in the relevant Part B of the Operations Manual.

Part C

ROUTE/ROLE/AREA AND AERODROME/OPERATING SITE INSTRUCTIONS AND INFORMATION

A route guide to ensure that the flight crew will have, for each flight, information relating to communication facilities, navigation aids, aerodromes, instrument approaches, instrument arrivals and instrument departures as applicable for the operation, and such other information as the operator may deem necessary for the proper conduct of flight operations.

ADMINISTRATION AND CONTROL OF OPERATIONS MANUAL

0.1 Introduction

0.2 System of Amendment and Revision

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0.2.5 Revision Record

MINIMUM FLIGHT LEVEL/ALTITUDE

1.0 Operators Policy;

Minimum Altitude During Take-off and Landing;

1.1 Operators Policy;

Calculation of Minimum En-route Altitudes

1.2 Operating Minima for Departure

Destination and Alternate Aerodromes

Take-off alternate aerodrome

1.3 A take-off alternate aerodrome shall be selected and specified in the operational flight plan if either the meteorological conditions at the aerodrome of departure are below the operator's established aerodrome landing minima for that operation or if it would not be possible to return to the aerodrome of departure for other reasons.

1.4 The take-off alternate aerodrome shall be located within the following flight time from the aerodrome of departure:

a) for aircraft with two engines, one hour of flight time at a one-engine-inoperative cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass; or

b) for aeroplanes with three or more engines, two hours of flight time at an all engines operating cruising speed, determined from the aircraft operating manual, calculated in ISA and still-air conditions using the actual take-off mass; or

1.5 For aeroplanes engaged in extended diversion time operations (EDTO) where an alternate aerodrome meeting the distance criteria of a) or b) is not available, the first available alternate aerodrome located within the distance of the operator's approved maximum diversion time considering the actual take-off mass.

1.6 For an aerodrome to be selected as a take-off alternate the available information shall indicate that, at the estimated time of use, the conditions will be at or above the operator's established aerodrome operating minima for that operation.

En-route alternate aerodromes

1.7 En-route alternate aerodromes, required by 1.11 for extended diversion time operations by aircraft with two turbine engines, shall be selected and specified in the operational and air traffic services (ATS) flight plans.

Destination alternate aerodromes

1.8 For a flight to be conducted in accordance with the instrument flight rules, at least one destination alternate aerodrome shall be selected and specified in the operational and ATS flight plans, unless:

a. the duration of the flight from the departure aerodrome, or from the point of in-flight re-planning, to the destination aerodrome is such that, taking into account all meteorological conditions and operational information relevant to the flight, at the estimated time of use, a reasonable certainty exists that:

1) the approach and landing may be made under visual meteorological conditions; and

2) separate runways are usable at the estimated time of use of the destination aerodrome with at least one runway having an operational instrument approach procedure; or

a) the aerodrome is isolated. Operations into isolated aerodromes do not require the selection of a destination alternate aerodrome(s) and shall be planned in accordance with 4.3.6.3 d) 4);

1) for each flight into an isolated aerodrome a point of no return shall be determined; and

2) a flight to be conducted to an isolated aerodrome shall not be continued past the point of no return unless a current assessment of meteorological conditions, traffic and other operational conditions indicate that a safe landing can be made at the estimated time of use.

Note 1.— Separate runways are two or more runways at the same aerodrome configured such that if one runway is closed, operations to the other runway(s) can be conducted.

1.9 Two destination alternate aerodromes shall be selected and specified in the operational and ATS flight plans when, for the destination aerodrome:

a) meteorological conditions at the estimated time of use will be below the operator's established aerodrome operating minima for that operation; or

b) meteorological information is not available.

1.10 Notwithstanding the provisions in 1.3, 1.7 and 1.8, the Authority may, based on the results of a specific safety risk assessment conducted by the operator which demonstrates how an equivalent level of safety will be maintained, approve operational variations to alternate aerodrome selection criteria. The specific safety risk assessment shall include at least the:

a) capabilities of the operator;

b) overall capability of the aircraft and its systems;

c) available aerodrome technologies, capabilities and infrastructure;

d) quality and reliability of meteorological information;

e) identified hazards and safety risks associated with each alternate aerodrome variation; and

f) specific mitigation measures.

1.11 Additional requirements for operations by aeroplanes with turbine engines beyond 60 minutes to an en-route alternate aerodrome including Extended Diversion Time Operations (EDTO)

1.11.1 Operators conducting operations beyond 60 minutes from a point on a route to an en-route alternate aerodrome shall ensure that:

a) for all aeroplanes:

1) en-route alternate aerodromes are identified; and

2) the most up-to-date information is provided to the flight crew on identified en-route alternate aerodromes, including operational status and meteorological conditions;

b) for aeroplanes with two turbine engines, the most up-to-date information provided to the flight crew indicates that conditions at identified en-route alternate aerodromes will be at or above the operator's established aerodrome operating minima for the operation at the estimated time of use.

1.11.2 In addition to the requirements in 1.11.1, all operators shall ensure that the following are taken into account and provide the overall level of safety intended by the provisions of Annex 6, Part I:

a) operational control and flight dispatch procedures;

b) operating procedures; and

c) training programmes.

Requirements for extended diversion time operations (EDTO)

1.12 Unless the operation has been specifically approved by the Authority, an aeroplane with two or more turbine engines shall not be operated on a route where the diversion time to an en-route alternate aerodrome from any point on the route, calculated in ISA and still-air conditions at the one-engine-inoperative cruise speed for aeroplanes with two turbine engines and at the all engines operating cruise speed for aeroplanes with more than two turbine engines, exceeds a threshold time established for such operations by that State.

Note 1.— When the diversion time exceeds the threshold time, the operation is considered to be an extended diversion time operation (EDTO).

Note 2.— Guidance on the establishment of an appropriate threshold time and on approval of extended diversion time operations is contained in Attachment C.

Note 3.— For the purpose of EDTO, the take-off and/or destination aerodromes may be considered en-route alternate aerodromes.

1.12..1 The Authority shall approve the maximum diversion time for the operator of a particular aeroplane type engaged in extended diversion time operations.

1.12..2 When approving the appropriate maximum diversion time for the operator of a particular aeroplane type engaged in extended diversion time operations, the Authority shall ensure that:

a) *for all aeroplanes:* the most limiting EDTO significant system time limitation, if any, indicated in the aeroplane flight manual (directly or by reference) and relevant to that particular operation is not exceeded; and

b) *for aeroplanes* with two turbine engines: the aeroplane is EDTO certified.

Note 1.— EDTO may be referred to as ETOPS in some documents.

1.12..3 Notwithstanding the provisions in 1.12.2 a), the Authority may, based on the results of a specific safety risk assessment conducted by the operator which demonstrates how an equivalent level of safety will be maintained, approve operations beyond the time limits of the most time-limited system. The specific safety risk assessment shall include at least the:

a) capabilities of the operator;

b) overall reliability of the aeroplane;

c) reliability of each time-limited system;

d) relevant information from the aeroplane manufacturer; and

e) specific mitigation measures.

1.12..4 For aeroplanes engaged in EDTO, the additional fuel required by 8.1.7.5 f) 2) shall include the fuel necessary to comply with the EDTO critical fuel scenario as established by the Authority.

1.12..5 A flight shall not proceed beyond the threshold time in accordance with 1.8.1 unless the identified en-route alternate aerodromes have been re-evaluated for availability and the most up-to-date information indicates that, during the estimated time of use, conditions at those aerodromes will be at or above the operator's established aerodrome operating minima for the operation. If any conditions are identified that would preclude a safe approach and landing at that aerodrome during the estimated time of use, an alternative course of action shall be determined.

1.12..6 The Authority shall, when approving maximum diversion times for aeroplanes with two turbine engines, ensure that the following are taken into account in providing the overall level of safety intended by the provisions of Annex 8:

a) reliability of the propulsion system;

b) airworthiness certification for EDTO of the aeroplane type; and

c) EDTO maintenance programme.

Note 1.— The Airworthiness Manual *(Doc 9760) contains guidance on the level of performance and reliability of aeroplane systems intended by 1.12.6, as well as guidance on continuing airworthiness aspects of the requirements of 1.12.6.*

2.0 COMMUNICATIONS FACILITIES AND NAVIGATION AIDS;

3.0 **RUNWAY / FINAL APPROACH AND TAKE-OFF AREA** (FATO) data and aerodrome/operating site facilities;

4.0 **APPROACH, MISSED APPROACH AND DEPARTURE PROCEDURES** including noise abatement procedures;

5.0 COMMUNICATION-FAILURE PROCEDURES;

6.0 SEARCH AND RESCUE FACILITIES in the area over which the aircraft is to be flown;

7.0 AERONAUTICAL CHARTS THAT SHALL BE CARRIED on board in relation to the type of flight and the route to be flown, including the method to check their validity;

8.0 **AERONAUTICAL INFORMATION AND MET SERVICES**;

9.0 EN-ROUTE COMMUNICATION/NAVIGATION PROCEDURES;

a. Provision Of Flight Watch

b. Radio Listening Watch

c. Communication Procedures

d. Navigation Procedures

10. AERODROME/OPERATING SITE categorisation for flight crew competence qualification;

11. AERODROME/OPERATING SITE LIMITATIONS (performance limitations and operating procedures etc.). For unregistered / unlicensed aerodromes / Heliports, approval to operate into the aerodrome is required from the aerodrome / Heliports operator All liability sits with the operator for operations to and from all unregistered aerodromes / Heliports. This shall be reflected in the route guide. **For helicopters this shall also be in accordance with the permission issued under Section 11 of the Civil Aviation Reform Act 1999**

11.1. For unregistered / unlicensed aerodromes, HLS and Heliports, operators shall consider each landing site independently and conduct a Risk Assessment, the list below shall be taken into account in each Risk Assessment, most will be generic however care must be taken not to just cut and paste as each landing site will offer its own unique hazards, as follows, but not limited to:

a) size and gradient of the airfield, HLS, including the performance of the aircraft in use (SD-Aircraft Weight and Performance). Best approach headings, escape routes etc.

b) dangers of moving props and rotor blades

c) Prop wash from propellers and downwash from rotors

d) incorrect approach/boarding/disembarking

e) accidental activation of aircraft safety systems (floats)

f) noise (ground handlers and staff as well as noise abatement)

g) engine exhaust

h) the presence of other aircraft

i) refuelling away from base.

j) Incident / accident on the airfield, HLS / Heliport (alternative sites?)

k) Prevailing weather conditions, turbulence etc.

l) objects falling from height

m) suspended loads/static electricity

n) Moored boats (if applicable)

11.2. In addition to 11.1 above operators shall for each aerodrome / operating, enter the information listed list below as a minimum in this section.

a) Location Name

b) Latitude / Longitude

c) Elevation

d) Runway Dimensions

1) TORA, TODA, LDA

e) Heliport Dimensions

1) FATO, TLOF, Safety Area

f) Surface, Gradient / Slope

g) MSA & Enroute MSA level (Use of Maximum Elevation Figure MEF to Calculate MSA)

h) Route; General route information via reporting points and standard altitudes

i) Alternates; alternate aerodromes to be used as diversion alternates (Heading and distance to alternate)

j) Aerodrome Operating Minima (AOM)

k) Performance for Take-Off and Landing

l) Best Approach Heading

m) Availability if Fuel, or nearest fuel available.

n) Radio / ATC Freq Communication frequencies to be used

o) Hazards; Describes of any potential hazards.

p) Operator's name & contact number

Part D TRAINING

0. ADMINISTRATION AND CONTROL OF OPERATIONS MANUAL

Description of Scope:

1.0. Training syllabi and checking programmes for all operations personnel assigned to operational duties in connection with the preparation and/or conduct of a flight.

1.1. The ANR requires operators of public transport aircraft registered in the Fiji to provide a training manual. The manual shall contain all such information and instructions as may be necessary to enable any person appointed by the operator to give or to supervise the training, experience, practice and periodical tests required under the ANR. The operator is required to submit a copy of the manual to the Authority and to make such amendments of or additions to the manual as the Authority may require for the purpose of ensuring the safety of the aircraft or of persons or property carried therein or the safety, efficiency or regularity of air navigation. The manual will be regarded by the Authority as a primary indication of the standards of training and testing likely to be achieved. It should give formal expression to the operator's training policy and requirements, together with adequate guidance to instructors and examiners.

1.2. Note particularly that the manual should be addressed primarily to training staff - each of whom should normally have a personal copy. It should not be used as a form of text book to convey information and guidance to other flying staff. The form that the manual takes will vary considerably according to the size and complexity of the operator's organisation and the aircraft he uses, and its adequacy will be assessed solely on the basis of its suitability for the operator's particular needs and circumstances.

1.3. Each copy of a manual should normally bear a serial number and a list of holders should be maintained by the person responsible for issuing amendments. Where this system is not used an operator must have satisfactory alternative arrangements for controlling the issue and amendment of manuals. Each volume of a manual must be numbered and bear a title and index giving a clear indication of its scope. The title of the person responsible for the issue of the manual should also be indicated. At the front of each volume there must be an amendment page to indicate amendment number, date of incorporation, signature or initials of person amending. Amendment pages should be dated. The numbering of pages, sections, paragraphs etc., must be orderly and systematic so as to facilitate immediate identification of any part of the subject matter. The standard of printing, duplicating, binding, indexing of sections etc., must be sufficient to enable the document to be read without difficulty and to ensure that it remains intact and legible during normal use. The amendment of a manual in manuscript will not be acceptable. Changes or additions, however slight they may be, should normally be incorporated by the issue of a fresh or additional page on which the amended material is clearly indicated. Operators should ensure that there are satisfactory arrangements for controlling the issue and amendment of manuals and that responsibilities in this regard are clearly defined.

Training and Checking Syllabi / Programmes

2.0 The operator shall establish and maintain a ground and flight training programme, approved by the Authority, which ensures that all staff and flight crew are adequately trained to perform their assigned duties The training programmes for company staff shall be based upon their role and responsibilities within the organisation, this shall include Fire and First Aid training as a minimum. The training programmes for flight crew shall be in line with the recommendations published in the Operational Evaluation Board reports and Operational Suitability Data / Type Certificate Data Sheets and shall:

a) include ground and flight training facilities and properly qualified instructors as determined by the Authority;

b) consist of ground and flight training in the type(s) of aircraft on which the flight crew member serves;

c) include proper flight crew coordination and training in all types of emergency and abnormal situations or procedures caused by engine, airframe or systems malfunctions, fire or other abnormalities;

d) include upset prevention and recovery training (unusual attitude training);

e) include training in knowledge and skills related to visual and instrument flight procedures for the intended area of operation, charting, human performance including threat and error management and in the transport of dangerous goods;

f) ensure that all flight crew members know the functions for which they are responsible and the relation of these functions to the functions of other crew members, particularly in regard to abnormal or emergency procedures; and

g) be given on a recurrent basis, as determined by the Authority and shall include an assessment of competence.

Note 1.— Flight training may, to the extent deemed appropriate by the Authority, be given in flight simulation training devices approved for that purpose.

The requirement for recurrent flight training in a particular type of aircraft shall be considered fulfilled by the use, to the extent deemed feasible by the Authority, of flight simulation training devices approved the Authority for that purpose, or the completion within the appropriate period of the proficiency check in that type of aircraft.

Flight Crew,

2.1 Operators shall detail all relevant training items pertaining to their duties.

2.2 Th training is to be carried out in accordance with the operator's Part D training manual, and includes CRM, DG, Emergency and Survival Training, Checking and Line training. At the end of the type related training the candidate will be well versed in the company SOPs and will have completed a Skills Test (ST) and initial Operator Base Check. If type conversion is carried out by a contracted service provider, then the pilot must carry out an initial Base and Line check in accordance with the details specified in the operator's manual.

2.3 When a pilot joins with a valid type rating, or a freelance pilot is engaged that already holds a type rating and valid Base check with another operator, it shall be ensured that they complete an initial Base and Line Check as detailed within this manual, in order to ensure that these individuals are prepared and competent to operate in accordance with the Operations Manual procedures, the use of specific equipment, specific roles and any different areas of operation.

2.4 CRM Training

a. Initial CRM Training

b. Recurrent CRM Training

2.5 Operator Conversion Training and Checking

2.6 Differences and Familiarisation Training

2.7 Training for Aircraft Systems and Navigation Aids not covered by Type Rating Training

a. The operator shall identify all additional equipment fitted to aircraft within the Company fleet and shall ensure that both training and checking programmes are established. Some of this equipment is highly relevant to both conversion, Base, and Line training and checking. Examples include EGPWS, TAWS, GPS, FMS, TCAS2.

2.8 Operator Training and Checks

a. Checks and Qualification Requirements for Air Transport Operations

b. Operator Base Check

c. Pilot Qualification to Operate in either Pilot's Seat

d. Line check / Area/Role/Route Competence

2.9 The operator shall, for each type of aeroplane, assign to all flight crew members the necessary functions they are to perform in an emergency or in a situation requiring emergency evacuation. Annual training in accomplishing these functions shall be contained in the operator's training programme and shall include instruction in the use of all emergency and life-saving equipment required to be carried, and drills in the emergency evacuation of the aeroplane.

2.10 Helicopter Underwater Escape Training (HUET)

2.11 Role Change

2.12 Check A / Pre Flight Inspection

2.13 Recent Experience

a. Recent Experience – Single Pilot Operations under IFR

b. Recent Experience – Single Pilot Operations at Night

2.14 Instrument Rating

2.15 Type Rating

2.16 Upgrading to PIC (if applicable)

2.17 Company Specific Training Requirements

2.18 Company Training and Checking Staff

2.19 Training Department Organisation

2.20 Chief Training Captain

2.21 Company Training and Checking Staff (SD - Guidance Procedures for Check Captains and Examiner of Airmen)

General Responsibilities

a. Training and Checking staff shall be appointed by the Chief Pilot and their individual duties and responsibilities will be as detailed in this manual. Each appointee shall be responsible for the following:

b. Carrying out training or conducting a check as directed on flight crew members and ensuring that appropriate standards of Base are maintained;

c. Recommending the correction of any procedure not in accordance with the Operations Manual;

d. Supervising ground and en-route training;

e. Familiarising flight crew with the latest operational procedures;

f. If holding a relevant Authorisation, carrying out as directed Type Rating Tests and Instrument Rating Revalidation Renewal Tests and Operator Proficiency Checks and Line Checks on behalf of the Company;

g. Making proposals for improving safety standards and efficiency in training and line operations;

h. Completing training and check forms promptly on completion of the training or check and for forwarding the completed forms to the appropriate office;

i. Where so qualified, validating pilot licences as appropriate on satisfactory completion of a test or check.

2.22 Appointment and Approval

a. Prior to appointment to a training position, nominees must have been checked in those duties applicable to the appointment. Details of their competence to conduct the duties of the particular training or checking capacity must be verified and evidence retained on the individual's personal training file.

b. Where training and check personnel are required to occupy either pilot's seat, they must be additionally checked and certified in their normal and emergency duties in both seats.

c. Flight crew nominated to conduct Type Rating and Instrument Rating Renewal Tests have to be authorised by the CAAF. The authorisation permits the nominated examiner to conduct Type Rating and Instrument Rating Tests on the helicopter. The approval from the CAAF FOI shall be retained within the individuals training file.

2.23 Minimum Requirements - Check and Training Captain

The Check and Training Captain is also function of the operations sections in the Air Operators Certificate and as such it will generally be considered against the following criteria:

a. Competence – Any pilot whose flying ability is called into question is subject to consideration for licensing action.

b. Qualification – Any licence holder who acts outside of the privileges for which they are qualified is subject to consideration for licensing action.

c. Fitness – Fitness in this context means fitness of character. The Authority will consider all relevant matters, including whether the holder has demonstrated a propensity not to obey the law or to act dishonestly or without integrity. Information that may call into question a licence holder's fitness includes, but is not limited to:

d. Drug related offences/activities. If the licence holder is suspected of taking drugs that would cast doubt on their fitness of character and medical fitness. If a licence holder is convicted of dealing in illegal drugs or of drug trafficking, this would cast doubt on their fitness to hold a position of responsibility such as an instructor or examiner. There are international (ICAO and UN) obligations for authorities to take action against pilots who engage in drug trafficking.

e. Alcohol / Drugs. Performing an aviation function whilst intoxicated will invalidate being a "fit person".

f. Criminal convictions. Anyone convicted of serious violent, sexual, drug-related, financial offences, or the Air Navigation Regulations shall not be regarded as a fit and proper person to hold a Check and Training certificate, an instructor rating or examiner authorisation.

g. Falsification of documents, or failure to keep, records. Where Person Licencing (PEL) or Operations section receives credible information alleging falsification of records relating to flying training, flying tests, examinations, log books etc, (or of failure to keep such records where this is a requirement) licensing action may be taken, particularly in the case of an instructor or examiner.

h. Propensity not to comply with rules and regulations. Anyone displaying such a propensity in a manner detrimental to safety, particularly if it is likely to adversely influence the behaviour of others, may be considered unfit to hold a Check and Training certificate or licence.

i. Any other action that would impact on flight safety or the safety of persons on the ground.

PICs nominated as Check and Training Captains shall have;

a. Above average aircraft handling skills

b. Good interpersonal skills

c. In depth knowledge of the company operations manuals

d. At least 10 hours and 200 sectors of appropriate PIC experience on type.

2.24 Dangerous Goods Training

Cabin Crew Training,

3.0 Operators shall detail all relevant training items pertaining to their duties.

3.1 Induction training syllabuses must provide for cabin crew members, after completion of ground training and tests, to operate a minimum number of sectors as supernumerary crew or "under supervision". The minimum number must be agreed by the Authority. Passengers may not be able to distinguish between such trainees and fully trained cabin crew and in an emergency will expect help and guidance from anyone wearing a crew uniform. Operators must therefore ensure before assignment as supernumerary crew that trainees are adequately briefed and tested in their assigned duties in both normal and emergency conditions.

3.2 Trainee cabin crew must be given a properly organised course of instruction on the duties of cabin crew in normal, abnormal and emergency situations.

3.3 It is particularly important that cabin crew be given theoretical and practical training involving fire and smoke in the passenger cabin.

3.4 Syllabuses for cabin crew training courses must be approved by the Authority.

3.5 The ground course must include comprehensive instruction on the location and use of all emergency equipment carried on the aircraft and in the procedures for emergency evacuation and loss of

pressurisation. The syllabus should normally include the following subjects as appropriate to the type of aircraft:

a) crew responsibilities;

b) basic aircraft technical knowledge;

c) doors and other exits;

d) location and use of all emergency and survival equipment;

e) location and use of all normal equipment in aircraft cabin and galleys;

f) pressurisation and oxygen;

g) preparation for and execution of all types of emergency landing;

h) public address announcements of all kinds including use of megaphones when carried;

i) use of specialised equipment when carried, such as tropical and arctic survival equipment;

j) responsibility of cabin crew in dealing with emergencies involving fire and smoke;

k) the importance of ensuring that passengers are aware of and obey no smoking signs. Emphasis should be placed on periodic checking of areas not normally scrutinised e.g. toilet areas;

l) An appreciation of the chemistry of fire as a preliminary to consideration of the choice of extinguishing agents for particular fire situations, the techniques of application of extinguishing agents, and the consequences of misapplication;

m) Discussion of the operational practices of ground-based emergency services at aerodromes and how these can be co-ordinated with the evacuation of the aircraft where an emergency landing takes place on an airfield;

n) Crowd control techniques including the use of the communications equipment provided;

o) Company procedures for aircraft security and bomb searches, action to be taken in the event of 'hi-jacking'; and procedures for Cabin Crew to gain entry to a secure flight deck.

p) Where the flight deck crew consists of only two pilots how they should help in the event of pilot incapacitation. Including:

1) Familiarity with and proper use of the pilot's check list;

2) Fastening and unfastening pilot's seat harness and locking and unlocking the inertia reel; and

3) Using pilot's sliding seat mechanism, training to be given whilst the seat is occupied with someone simulating physical collapse. Emphasis should be placed on locking the pilot in his seat rather than on removing him.

4) First Aid. Instruction on this subject should be given by an instructor holding formal qualifications for the purpose.

5) Instruction on aero-medical topics such as:

6) guidance on the avoidance of food poisoning, with emphasis on the choice of a pre-flight meal, and the requirement to serve different dishes, both main and subsidiary, to the pilot-in-command and co-pilot;

7) the possible dangers associated with the contamination of the skin or eyes by kerosene and other aviation fuels and the immediate treatment; and

8) the recognition and treatment of hypoxia;

9) tropical hygiene.

10) Cabin crew must be instructed to ensure that passenger hand baggage is securely stowed in approved locations so as not to constitute a hazard or obstruction in the event of an emergency evacuation, and to insist that large items which cannot satisfactorily be stowed in the cabin should be carried in the hold.

3.6 Practical training programmes should ensure that:

a) Cabin crew are trained to recognise and act promptly in situations requiring an emergency evacuation;

b) Cabin crew are trained to carry out established emergency evacuation procedures on their own initiative in the event that the flight crew are incapacitated or otherwise prevented from participating;

c) Cabin crew are trained to recognise when exits are blocked or evacuation equipment is inoperative and to act promptly in preventing the use of those exits;

d) During ditching and evacuation drills, each trainee opens at least one over wing emergency exit; opens each different type of door; removes and positions for use at least one escape rope; attaches evacuation slide fittings in their proper places; evacuates the aircraft by means of at least one evacuation slide; locates and operates the megaphone and removes liferafts from stowage and places in the launching area. Additionally, the trainee, must demonstrate the ability to locate and remove from stowage the aircraft hand held fire extinguishers and locate each first aid kit and remove from stowage at least one first aid kit.

e) each trainee observes an operational demonstration of the escape rope being used as a means of emergency evacuation; the inflation or release, as applicable, of an evacuation slide; the inflation of the liferaft; the survival equipment contained in the liferaft; the contents of the first aid kits; and administering of crew and passenger oxygen by supplemental means and portable equipment with the inclusion of mouth-to-mouth resuscitation techniques;

f) the trainee attends demonstrations of the type of fire extinguishers carried on company aircraft on various types of fire including simulated gallery fires, electrical fires and cabin furnishing fires. The demonstration should also show the effect of misapplication of agents;

g) the trainee handles and uses each type of fire extinguisher carried on the aircraft;

h) the trainee experiences a smoke-filled environment and the use of the portable breathing apparatus carried in the aircraft;

i) the trainee observes the inflation of a flotation cot;

j) the trainee boards a dinghy or slide raft from the water;

k) the trainee practices the donning of life-jackets and oxygen masks;

l) trainees are familiar with the use of the aircraft PA and Inter Phone system.

3.7 All ground training should be followed by appropriate tests and the cabin crew member's competence established in accordance with the Authority's approved training programme.

3.8 Conversion Training.

a) Cabin crew converting onto a new aircraft type must be given a properly organised course of instruction in their duties in normal, abnormal and emergency situations. Syllabuses for cabin crew conversion courses must be approved by the Authority.

b) Conversion training syllabuses must provide for cabin crew members, after completion of ground training and tests, to operate a minimum number of sectors "under supervision" or as supernumerary. The minimum number must be agreed by the Authority.

c) The ground course should include at least items (a) to (i) and (p) in paragraph 3.5 above and items (d), (e), (f), (g), (h), (i), (l) in paragraph 3.6 above.

d) All conversion training should be followed by appropriate tests and the crew members competence established in accordance with the requirements of the ANR.

e) Periodic Training and Testing

3.9 Recent Type Experience - Cabin Crew

a. A person may not fly as a cabin crew member unless they have within the preceding 90 days acted as a cabin staff member on the type of aircraft to be used on the flight.

b. Cabin crew that lack the recent type experience required by 3.9 (a) above may be re-validated on type either by operating one flight on that type as supernumerary cabin staff or by ground

refresher training or both. The extent of the ground refresher training must be approved by the Authority.

Flight Operations Officer/ Flight Dispatcher.

4.0. Must satisfactorily completed an operator-specific training course that addresses all the specific components of its approved method of control and supervision of flight operations in accordance with ICAO Annex 6 Part 1 paragraph 4.2.1.3, including the requirement to undergo DG training.

Note.— Guidance on the composition of such training syllabi is provided in the ICAO Training Manual (Doc 7192), Part D-3 — Flight Operations Officers/Flight Dispatchers.

4.1. This training course however must be approved by the Authority and such persons conducting the course must also be qualified.

Technical Crew & Operations Personnel

5.0. Operators shall detail all relevant training items pertaining to their duties

Training and Checking Procedures

6.0. The primary purpose of this chapter is to indicate the nature of the arrangements considered necessary to secure an adequate standard of compliance with the statutory provisions.

6.1. The ICAO requirements relating to the training and periodical testing of crew members are brought down in general terms in the ANRs. These requirements shall be expanded upon by an operator in the organisation's training manual Part D to the extent acceptable to the Authority that will ensure that the ICAO requirements are met.

6.2. In this regard, operators should particularly note the wording of the ICAO requirement in regard to training in duties and functions, the inclusion of proper flight crew coordination and training in all types of emergency and abnormal situations or procedures caused by power plant, airframe or systems malfunctions, fire or other abnormalities, that all flight crew members know the functions for which they are responsible and the relation of these functions to the functions of other crew members, particularly in regard to abnormal or emergency procedures and that the training programme shall include an assessment of competence.

6.3. A suitably qualified person should be designated to take general charge of all arrangements for training and testing. His authority and responsibilities should be clearly defined.

Appointment of Check/Training Staff.

7.0. Training should be given by suitably qualified persons within the operator's organisation, exceptionally an operator may obtain outside assistance.

7.1. It is important that examiners and instructors are experienced and qualified for their work and operators are to ensure that they are trained in teaching and examining techniques.

7.2. The required qualifications for the nomination of training personnel must be contained in the operator's training manual.

7.3. Tests for purposes other than those outlined in paragraph 4.1 may be conducted by personnel appointed by the operator and approved by the Authority. Details of such appointments should be sent to the Authority not later than 14 days before the appointment becomes effective.

7.4. Operators may need to use the services of manufacturers pilots or those from foreign operators for flight training, checking and route supervision/training. As a general rule a Fiji licence, or a temporary validation of a foreign licence, will have to be obtained. The Authority will specify the requirements in individual cases. When manufacturers or other operator's pilots are used to give training they must be properly licensed and approved to conduct line training, IRRs and competency checks. To supervise route flying such pilots are required to hold full company command qualification for public transport flights and to meet all the competency check requirements. Training staff from other operators or from manufacturers must be made familiar with the contents of the operations manual and the training manual of the operator to which they are temporarily attached.

7.5. Operators must obtain certified copies of duty and rest period records for the 28 days prior to the crew members being rostered; appropriate Flight/Duty Records must be maintained for the period that the crews are utilised on public transport flights.

Simulation of Emergency and Abnormal Conditions

8.0 The operator shall ensure that when passengers or cargo are being carried, no emergency or abnormal situations shall be simulated.

Type Rating Courses and Operator Base Checks

8.1 Because of the unacceptable risks when simulating emergencies such as tail rotor failure, icing problems, certain types of engine problems (i.e. during continued take-off or go-around, total hydraulic failure etc.), or because of environmental considerations associated with some emergencies (e.g. fuel dumping), those emergencies will preferably be covered in a simulator. If no flight simulator is available those emergencies may be covered in the aircraft using a safe airborne simulation, bearing in mind the effect of any subsequent failure, and discussion on the ground.

Electrical Malfunctions

8.2 If a Flight is used as part of the training programme, then most electrical malfunctions should be simulated in a Simulator.

8.3 Where training is carried out in an aircraft, electrical failures including generators and fuel pumps may be simulated by touch drills or by either pilot switching the relevant system off, however, the briefing must make this clear. No system may be degraded beyond what is safe for continued operation of the aircraft as switching / removing power from a system could possibly result in permanent loss of the system due to relay problems.

8.4 The use of 'touch drills' is an acceptable means of compliance.

Appointment of CAAF Authorised Examiners

9.0 In Fiji flight tests for Commercial Pilots Licence (CPL), Airline Transport Pilots Licence (ATPL) Aircraft Type Rating, Initial Instrument Rating, Foreign Licence Conversion Checks shall only be conducted by suitably Type Rated Flight Operations Inspectors (FOIs) or in certain cases where there is no suitably Type Rated FOIs then by examiners authorised by the Authority.

9.1 Authorised examiners, although employed by the operator, shall conduct such tests on behalf of the Authority.

9.2 An Aircraft Type Rating Examiner (Pilots) must be qualified under the provisions of the ANR to act as pilot-in-command of the aircraft type, and his ability to perform the functions of a pilot-in-command while occupying the co-pilots seat must be checked by the Authority and recorded.

9.3 Type Rating (Base) renewal checks, Line checks, and Instrument Rating renewal checks(as required by ANR45) with be conducted by examiners or Check and Training Captains approved by the Authority.

9.4 Applications for appointment as an Approved Check Captain must be sponsored by the operator and submitted to the Authority for consideration. The Authority will advise on the qualifications and experience required, and will require the applicant for approval to undergo training and flight tests prior to conducting checks on behalf of the Authority. Any such application must contain the following particulars:

a) Full name;

b) Licence Type No. and Expiry Date;

c) Aircraft Types endorsed in the licence;

d) Date of last Aircraft Rating, Certificate of Test, for the aircraft type to which the application is related; and whether annotated “Command” or “Co-pilot”

e) Date of last Instrument rating - Certificate of Test, and the type of aircraft on which the test was taken;

f) Date of last medical;

g) Total Command hours on all types;

h) Total Command hours in the last 12 months on the type to which the application relates;

i) If application relates to a turbo-jet aircraft the total Command hours on turbo-jet aircraft (all types);

j) If the application relates to a turbo-prop aircraft the total Command hours on turbo-prop aircraft (all types);

k) Whether, or not, the person proposed has undertaken and passed an approved "Instructional Technique' course.

l) Whether or not the person holds, or has held, Check Captain Approval from any other civil aviation authority. If yes, full details should be supplied and supported by documentary evidence; and

m) Any other information thought relevant to the application.

Helicopter Approved Check and Training Captain flight experience requirements

9.5 Each holder of an air operator certificate shall ensure that each person performing the functions of a helicopter or simulator Check and Training Captain, for a helicopter type, in an operational competency assessment programme;

a) has satisfactorily completed the appropriate competency checks required to serve as pilot-in-command in air transport operations in the helicopter type; and

b) holds or for operations in a flight simulator has held a current Check and Training Captain approval; and

c) has acquired the flight experience as stated in the operators approved Training Manual

d) completes introduction and recurrent training requirements under this Part applicable to the testing to be carried out; or

e) meets alternative criteria of experience, training and competency acceptable to the Authority.

9.6 Limitation of Examiner Privileges in The Case of Vested Interests

Examiners are not to examine candidates where the above definition could apply. Examples of this are as follows:

a. Relatives

b. Close friends (although this is difficult in a small Company and is at the discretion of the authority)

c. Business associates

d. Other vested interest as deemed on a case-by-case basis by the authority.

Supervision of Examiners

10 The conduct of tests by CAAF of Approved Check Captains, and of crew training generally, shall be audited by CAAF Inspectors during the currency of an Air Operators Certificate. The purpose of these inspections is to ensure that training and testing is in compliance with the operators training manual and within the terms and conditions of the appointment of CAAF Approved Check Captains.

Use and approval of flight simulators and trainers

11.0. Provision is made in the ANR for use of apparatus such as flight simulators, flight trainers and fuselage 'mock-ups' for certain periodical tests and conversion training. These devices should be individually approved by the Authority and may be used only under the supervision of a person approved for the purpose. The following are examples of the considerations that must be made in assessing a device as fit for purpose when comparing it to the line aircraft operated:

a. For the purpose of the training/checking, does the device simulate a specific airport related environment, e.g. RWYs/ Ground movement area layout/SIDs/STARs/Approach procedures/ Visual procedures

b. For the purpose of the training/checking, does the device need to simulate a specific physical environment, e.g. Surrounding terrain / Weather conditions / Surrounding traffic? / Navigations AIDS / ARA

c. Has any specific training/checking feature or capability been identified (e.g. Preset functions/processes: automated lesson plans, particular resets, speedup functions,

repositioning capabilities, freeze functions, preloaded aircraft or weather settings, pre-set visual or flight conditions, etc)?

d. Has any alternative means of delivering the training been determined so as to prevent potential negative impact on training? E.g. FMS/radio nav fit different from the fleet therefore utilising a CBT

e. Has any device specific simulation limitations affecting the training been identified?

f. No flight simulation is perfect. Simulation limitations are acceptable as long as they are managed properly and do not negatively affect the final outcome of the training provided.

g. The operator is responsible for the identification of any simulation limitations that might affect the training. Some of them may have negligible impact on the training and do not need any remedial action (unrealistic ice accretion on windshield or airframe vibration). Others might impact the training but can still be accepted if the consequences are small enough to be corrected by other training means or methods (eg. Nr audio cues poor, Incorrect/generic runway lighting layout for RTOs).

h. In all cases, the operator shall identify the simulation limitations when initially accepting the device for the training and thereafter continually during its use. The impact on training shall be assessed and the remedial actions shall be documented and implemented. When no remedial is needed, the training organisation shall record the initial assessment made and keep it updated as this evaluation may need to be revised later on during the life cycle of the device.

i. Has the training course related to the use of the device been adjusted to counterbalance the effects of known simulation limitations.

j. All training/checking staff must have been trained and checked to address the known simulation limitations and documented as such.

11.1. All training staff should be instructed that simulators which are used in flight training and checking must be treated with no less respect concerning flight safety than would be appropriate in an aircraft during actual flight. The practising of procedures or continuing manoeuvres which would be unacceptable in flight operations are also unacceptable in the simulator. Therefore, during simulator operations close adherence to established operating procedures and practices and crew co-ordination procedures (e.g., altitude, airspeed, and flight path deviation callouts and pilot incapacitation procedures, etc.) should be strongly emphasised.

11.2. The operator shall classify any differences between the aircraft and FFS in accordance with the Air Transport Association (ATA) chapters dependent upon the Compliance Levels as follows:

a) **Master Differences** requirements are drafted by the manufacturer and certifying authorities, namely the FAA's Flight Standardization Board (FSB). The operator must ensure that the methods used to conduct differences training are appropriate to the degree of difference between the base aircraft and the variation(s). For the purposes of describing degrees of difference and for defining acceptable training and checking methods, five levels of differences have been defined; Levels A - E. These levels are compatible with those described in the manufacturer reports, but are discussed here primarily for guiding operators in selecting differences training where a report does not exist for the aircraft type.

b) **Level A differences**: Level A differences are those differences of which the flight crew member needs to be aware, but which have little effect on systems operations. For example, an engine starter on one variation has different time limits but does not have differences in controls, indicators, function, or procedures. Self instruction methods, such as highlighted pages of operating manuals or training bulletins, are acceptable for these differences. For Level A differences, checking is not required.

1) No influence on flight characteristics;

2) No influence on procedures (normal and/or abnormal);

3) Differences in presentation; and

4) Differences in operation.

Method: self-instruction via the operations manual or flight crew information.

c) **Level B differences**: Level B differences are those differences in systems, controls, and indicators that have only minor procedural differences. Level B differences are of great enough degree to require formal training in general operational subjects, aircraft systems, or both, but are not of great enough degree to require systems integration training. An example of a Level B difference is a fuel system with additional fuel tanks, pumps, and gauges. Procedural differences are limited to the operation of transfer valves and pumps while an aircraft is in cruise flight. Appropriate instructional methods for Level B differences include, but are not limited to, audio visual presentations, lectures, and computer-based instruction (CBI). A task or systems check for Level B differences must be conducted after training.

1) No influence on flight characteristics;

2) Influence on procedures (normal and/or abnormal); and

3) Possible differences in presentation and operation.

Method: flight crew information, computer-based training, system device training or special instruction by instructor.

d) **Level C differences**: Level C differences are part task differences of flight crew member knowledge, skills, and/or abilities. Level C differences are those differences of great enough degree to require a systems integration training module but that are not of great enough degree to require actual flight. An example of a Level C difference is the installation of a flight management system (FMS) computer. Appropriate training devices in the systems integration module are dedicated systems trainers or Level 4 or higher FSTDs. Level C differences require a check following training. Appropriate devices are the same as for Level C training. Checking methods appropriate to Level C differences are demonstrations of skill in the procedures affected by the difference. In the case of the installation of an FMS computer, checking might consist of pre-flight programming of the computer and a demonstration of its use in navigation, climbs, and descents.

1) Influence on flight characteristics;

2) Influence on procedures (normal and/or abnormal); and

3) Eventually differences in presentation and operation.

4) or aircraft or a waiver because of previous experience, special instruction or training programme.

e) **Level D differences**: Level D differences are full task differences of flight crew member knowledge, skills, and/or abilities. Level D differences are those differences for which there is a requirement for flight training modules in a Level 6 or higher FSTD. When Level D differences exist between two aircraft, general operational subject modules, aircraft systems modules, and systems integration modules may be required. An example of a Level D difference is the installation of an electronically integrated flight instrumentation display. Aircraft operations using such a display are required to contain flight training in most phases of flight. Level D differences require a check following training. The check must be conducted using scenarios representing a real-time flight environment.

1) Influence on flight characteristics; and/or

2) Influence on procedures (normal and/or abnormal); and/or

3) Differences in presentation and/or operation; and

4) FSTD is level D qualified.

Method: a specified partial training on another FSTD or aircraft or a waiver because of previous experience, special instruction or training programme.

f) **Level E differences:** Level E differences are such significant full task differences that a “high fidelity” environment is required to attain or maintain knowledge, skills, or abilities. Level E differences are those differences for which there is a requirement for flight training, including landing events. An example of a Level E difference is the installation of a Short Take-off and Landing (STOL) kit on an aircraft, resulting in a very different flare and landing attitude. A Level C or D full flight simulator (FFS) or an aircraft is required for flight training in Level E

differences. Checking for Level E differences requires a full proficiency check in a Level C or D FFS or an aircraft.

Syllabuses for training and checks

12.0 The training and periodical tests of all crew members are required to be conducted in accordance with a syllabus agreed with the Authority. Proposed changes in a syllabus or any significant departure from an agreed training programme must be agreed by the Authority before implementation.

Records of training and checks

12.1 Operators are legally obliged to keep records of all training and checks and to make them available if necessary to other operators. Records should incorporate certificates indicating the competence of Check Captains to perform the duties in respect of which they have been tested. The form of record and certificates to be maintained must be agreed by the Authority.

12.2 Training records should show a trainee's progress through each phase of his training. They should include information about the results of tests, and when applicable, indicate the number of times each exercise was covered.

Multi type operation

13.0 As a general rule pilots should be limited to operating two aircraft types or, where there are significant differences between variants of a type, to one variant. The Authority is prepared to consider exemptions from this rule for aircraft that are relatively simple to operate and for pilots employed as instructors or examiners.

Problems of small operators

14.0 The arrangements discussed in the foregoing paragraphs may not be practicable in the case of a very small organisation operating one or two aircraft and employing, say, three or four crews. Special arrangements in such cases may be agreed with the Authority. A problem may arise in connection with the periodical testing of the examiner himself. In the larger firms, employing several pilot examiners, one can test the other and there is no real difficulty, but where the total complement of captains warrants only one examiner, arrangements should be made for his periodical tests to be conducted by an independent examiner outside the operator's organisation. In cases of serious difficulty in this connection, the Authority may be able to arrange for assistance.

Freelance' Crew Members

15.0 The employment of freelance crews is generally undesirable but where, exceptionally, an operator employs them he may accept base and line competency checks carried out by another operator only if they were administered on an aircraft identical in every respect to his own, and the “freelance’ crew holds a licence issued by the same Authority as his own. The original or certified true copies of the appropriate tests should be obtained and endorsed by the operator to the effect that he accepts them as meeting his own standard and that he is satisfied as to the competency of the crew member. Additionally the operator must satisfy himself that the flight crew member is fully conversant with the company operations manual and flight procedures. In the case of pilots-in-command route competency must also be established and certified. In all cases flight and cabin crew must be tested as to their knowledge of emergency/survival drills and equipment. Operators must obtain certified copies of duty and rest period records for the period 28 days prior to the freelance crew member being rostered; and appropriate Flight Duty Period records must be maintained for the period that such crews are in his employ.

Security training

16.0 Operators should ensure that all flight deck and cabin crew are adequately trained in aviation security measures. Including liaison between the flight deck crew and cabin crew on the procedure for the entry of cabin crew into a secure flight deck. “Hijack’ training, Bomb search, Self defence, and dealing with disruptive and unruly passengers.

Retraining and re-testing

17.0 Operators must ensure that training staff are adequately instructed on the action to be taken when unsatisfactory performance by any crew member, either during training or during line operations, leads to re-testing or further training. For example; following an unsatisfactory base check, a pilot should not be submitted to a series of re-tests in the item(s) concerned until he attains a satisfactory

standard. Where the failure indicates a fundamental weakness in ability or technique, consideration should be given to further training or practice. Similarly, if a pilot is found to be unsatisfactory during the course of line operations, the pilot-in-command should report the circumstances without delay and the pilot withdrawn from further duty until re-training and/or rechecking has been carried out. A record should be maintained of the action taken.

Simulation of instrument flight conditions

18.0 The method of simulating instrument flight conditions in an aircraft in flight requires formal approval from the Authority. To gain this approval the screens, or other devices used, will need to meet the requirements of both the Flight Operations and the Airworthiness sections.

Variants of the same aircraft type

19.0 A company may operate aircraft of the same type but which may differ in engines, systems, equipment, flight deck lay-out and so on. In such circumstances the operator must conduct a 'differences course' for his crews to ensure they are adequately trained on each variant. Operators should check the Type Certificate Data Sheets and or the Operational Evaluation Board reports for confirmation of Type Differences and variants. The syllabuses of such courses must be approved by the Authority.

Dangerous Goods Training

20.0 For all members of their organisation, flight deck and cabin crews.

Operators must establish and maintain dangerous goods and awareness training programmes through a CAAF approved provider at no longer than twenty-four (24) month intervals from the last training completion which shall be completed for all company members of staff who work directly with the carriage of Cargo, passengers and aircraft. i.e. Operations staff, Ground staff and Crew.

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Appendix A Specimen AOC

CIVIL AVIATION AUTHORITY OF FIJI

AIR OPERATOR CERTIFICATE

	FIJI	Phone: +(679) 892 3155 Fax: +(679) 672 1500 Website: www.caaf.org.fj Address: Private Mail Bag (NAP 0354) Nadi Airport Fiji
	Civil Aviation Authority of Fiji (CAAF)	
AOC # XXX/XX	This Air Operator Certificate (AOC) is issued to: **Xxxxxx Xxxxxxx Fiji Limited** Address: PO Box XXXX Phone: XXXXXXX Mobile: XXXXXXX Email:	**OPERATIONAL POINT OF CONTACT AND NOMINATED AOC POST HOLDERS** Accountable Manager: Mobile Contact: (+679) Email: Chief Pilot: Captain Mobile contact: (+679) Email: Acting Chief Engineer: Mobile Contact: (+679) Email: Quality Assurance Manager Mobile Contact: (+679) Email: Safety Management System Manager Mobile Contact: (+679) Email:
Date of Expiry 31st December 20XX		

Note: The holder of this certificate shall give to the Controller Air Safety not less than 14 days' notice in writing of the intended abolition of any of the operational points of contacts and nominated AOC Post Holders, or of any intended change in the person holding the post or in his duties.

This certificate certifies that **XXXXX XXXXXXXXX** is authorised to perform commercial air transport operations, as defined in the attached operations specifications, in accordance with its operations suite of manuals.

Date of Issue **29th December 20XX**	Name and Signature: Title: **Controller Air Safety** Air Safety Department Authorised Person, Civil Aviation Authority of Fiji

CIVIL AVIATION AUTHORITY OF FIJI

OPERATIONS SPECIFICATIONS

AOC # XXX/XX

(subject to the approved conditions in the operations manual)

1. Any person authorised by the Chief Executive of the Civil Aviation Authority of Fiji in that regard shall have access to any premises in the occupation or control of the holder of this certificate for the purpose of examining the premises and any document, equipment, tools, material or other things of whatsoever nature, relating to the operation of aircraft thereunder kept or used or intended to be used in connection with the operation of the aircraft.

2. Any person authorised by the Chief Executive of the Civil Aviation Authority of Fiji in that regard shall be permitted at any time to board and fly in any aircraft operated under this certificate, and to enter and remain on the flight deck; provided that the pilot-in-command of the aircraft may refuse to allow the inspector to enter or remain on the flight deck if, in his opinion, the safety of the aircraft would thereby be endangered.

3. Any person authorised by the Chief Executive of the Civil Aviation Authority of Fiji in that regard shall be permitted to board and fly in any aircraft in which any person is given a periodical test by or on behalf of the holder of this certificate in pursuance of Regulation 34 and Regulation 45 of the Air Navigation Regulations, as from time to time amended or any provisions in substitution therefor. The Inspector shall be permitted to witness the test and may for that purpose enter and remain on the flight deck; provided that the pilot-in-command of the aircraft may refuse to allow him to enter or remain on the flight deck if, in his opinion, the safety of the aircraft would thereby be endangered.

4. The holder of this certificate shall furnish the Controller Air Safety of the Civil Aviation Authority of Fiji a copy of every operations manual, training manual and of all other written instructions to his operating staff, for the time being in effect concerning the operation of the aircraft under this certificate.

5. Every flight under this certificate shall be conducted in accordance with the relevant provisions of the aforesaid operations manual, training manual and instructions.

6. The holder of this certificate shall give to the Controller Air Safety of the Civil Aviation Authority of Fiji not less than 28 days notice in writing of any intended change in the employment or cessation of the employment of a Contractor to maintain any of the aircraft or any part of its equipment, including its radio station, or any intended change in the duties of the Contractor in that regard.

Authorised by:
Controller Air Safety
Air Safety Department
Authorised Person Civil Aviation Authority of Fiji

Effective Date: 01/01/22
AOC Expiry Date: 31/12/22
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CIVIL AVIATION AUTHORITY OF FIJI

OPERATIONS SPECIFICATIONS
AOC # XXX/XX
(subject to the approved conditions in the operations manual)

7. Authority

These specific operating provisions are issued under the authority of Regulation 34 of the Air Navigation Regulations.

8. Applicability

These provisions shall apply to all public transport flights conducted by the certificate holder except flights over a Foreign State, which has different requirements; in which case the more restrictive provisions shall apply.

9. Air Service Licence

This certificate shall not exempt the holder from any of the provisions of the Civil Aviation Act 1976, Civil Aviation (Licensing of Air Services) Regulations 1978.

10. Definitions and Abbreviations

All words, phrases, and abbreviations used herein have the same meanings as those used in the Air Navigation Regulations.

11. Weighing of Passengers and Cargo

When calculating the total weight of the aircraft in respect of passengers and cargo to be entered in the loadsheet the actual weight of passengers and cargo shall be used in accordance with ANR 41(7) and (8).

Authorised by:
Controller Air Safety
Air Safety Department
Authorised Person Civil Aviation Authority of Fiji

Effective Date: 01/01/22
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CIVIL AVIATION AUTHORITY OF FIJI

OPERATIONS SPECIFICATIONS
AOC # XXX/XX
(subject to the approved conditions in the operations manual)

Special Limitations

Special Authorisations	Yes	No	Specific Approval	Remark
Flight Rules	☑	☐	1. All public transport flights must be conducted under the requirements specified in respect of 'Performance Category C' aircraft. 2. IFR Flights are authorised only over those routes which have been promulgated in the Fiji AIP, Jeppesen Manual or the certificate holder's operations manual. 3. Departures from airports not equipped for night operations must be made allowing sufficient time for the aircraft to reach the route MSA and return to that airport prior to ECT. 4. All flights over sectors greater than 50 nautical miles from land shall be conducted in aircraft equipped and crewed for flight under instrument Flight Rules. 5. VFR flights are authorised only on those occasions when the weather reports or forecasts indicate at the time of dispatch that the visibility over the whole of the route will be not less than 8 kilometers.	
Communications Equipment	☑	☐	Radio equipment capable of maintaining two-way communications with Air Traffic Services must be carried on all flights.	
Survival Equipment	☑	☐	The minimum survival equipment required to be carried on board when operating around the coastal waters of Viti Levu, the southern coast of Vanualevu, the Yasawas and the Mamanuca Group, coastal waters around Kadavu, Vatulele and the Lomaiviti Group are as follows:- 1. For each person on board a lifejacket equipped with a whistle and waterproof torch: Provided that lifejackets constructed and carried solely for use by children under 2 years of age need not be equipped with a whistle. 2. A serviceable radio emergency locator transmitter (ELT) capable of transmitting on 406MHZ when required to carry a life raft.	

Authorised by: **Jim Samson**
Acting Controller Air Safety
Air Safety Department
Authorised Person Civil Aviation Authority of Fiji

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CIVIL AVIATION AUTHORITY OF FIJI

OPERATIONS SPECIFICATIONS
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(subject to the approved conditions in the operations manual)

Special Limitations

Special Authorisations	Yes	No	Specific Approval	Remark
Additional Survival Equipment	☑	☐	When operating beyond the Lomaiviti Group into the Koro Sea and the whole of the Lau Group to Ono-i-Lau and the northern coastal waters of Vanualevu and Taveuni the following additional survival equipment must be carried on board; 1. A life raft sufficient to accommodate all persons on board; 2. A survival kit, related to the number of passengers carried, which is sufficient to support all persons on board for at least a period of 48 hours with the following items listed in Scale J of ANR 23; 3. HF radio equipment capable of maintaining two way communication with Nadi Radio on the appropriate frequency when operating in the Southern Lau Group.	

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Acting Controller Air Safety
Air Safety Department
Authorised Person Civil Aviation Authority of Fiji

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CIVIL AVIATION AUTHORITY OF FIJI

OPERATIONS SPECIFICATIONS
AOC # XXX/XX
(subject to the approved conditions in the operations manual)

Special Limitations

Special Authorisations	Yes	No	Specific Approval	Remark
Safety Management Systems	☑	☐	The operator shall in accordance with guidelines published by the Authority, implement a Safety Management System acceptable to the Authority	
Dangerous Goods Initial/Recurrent Training	☑	☐	Company Flight Crew and Ground Handlers shall have completed Dangerous Goods training and maintain current DG status through refresher training required as per ANR 29(4) and SD-DG; 2.6 when operating aircraft(s) listed under this certificate.	
Crew Resource Management Initial/Recurrent Training	☑	☐	Company Flight Crew shall have completed initial CRM training and maintain current CRM status through refresher training required as per AIC 03/13 when operating aircraft(s) listed under this certificate.	
Navigation Equipment	☑	☐	The navigation equipment carried on flights conducted under Instrument Flight Rules shall be so arranged that in the event of failure of one component at any time in the flight, the aircraft can still be navigated under IFR.	
Private Flights	☑	☐	No aircraft shall be used for the purpose of private flights without prior notification and approval of the Authority.	

Authorised by: **Jim Samson**
Acting Controller Air Safety
Air Safety Department
Authorised Person Civil Aviation Authority of Fiji

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CIVIL AVIATION AUTHORITY OF FIJI

OPERATIONS SPECIFICATIONS
AOC # XXX/XX
(subject to the approved conditions in the operations manual)

Special Limitations

Special Authorisations	Yes	No	Specific Approval	Remark
Planning of Routes	☑	☐	No aircraft shall operate at any place where continuous two-way communications with Air Traffic Services is not available unless the operator has arranged a system of flight following and alerting to cover that portion of the flight not covered by Air Traffic Services.	
Flight Crew	☑	☐	Two pilots shall be carried on every flight conducted under Instrument Flight Rules unless the aircraft is fitted with a serviceable autopilot capable of maintaining aircraft heading and altitude Two crew members shall be carried on every flight conducted in aircraft fitted with more than 9 passenger seats.	
Operations to destinations without Air Traffic Control	☑	☐	Operations must not be conducted to destinations where Air Traffic Control is not provided unless advisory information is available on local traffic. This may be from a remote ATS unit.	

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Air Safety Department
Authorised Person Civil Aviation Authority of Fiji

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CIVIL AVIATION AUTHORITY OF FIJI

OPERATIONS SPECIFICATIONS
AOC # XXX/XX
(subject to the approved conditions in the operations manual)

Special Limitations

Special Authorisations	Yes	No	Specific Approval	Remark
Aircraft Registered In a State Other than Fiji	☑	☐	The operator may conduct air transport services using leased or chartered aircraft of the types specified in the Operations Specifications. To be acceptable to the Authority, the terms of any lease or charter agreement must clearly specify the State of which party (Operator or Lessor) has Operational and Maintenance control and is responsible for ensuring compliance with regulatory requirements.	
Aircraft Operations Within the Territory of Fiji	☑	☐	The holder of this certificate is authorised to conduct flights between any airport in Fiji that have been authorised under **"Authorised Airports and Limitations"**.	
Aircraft Operations outside the Territory of Fiji	☑	☐	Application must be made to the Civil Aviation Authority of Fiji for approval to conduct flights outside Fiji.	
Continuing Airworthiness	☑	☐	CAAF/XXX ANR 145C	
Mercy Flights	☑	☐	All flights conducted as mercy flights must be conducted in accordance with the company approved manuals derived from the Standards Document Mercy Flights published by the Authority or any other alternative means of compliance acceptable to the Authority.	

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Air Safety Department
Authorised Person Civil Aviation Authority of Fiji

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CIVIL AVIATION AUTHORITY OF FIJI

OPERATIONS SPECIFICATIONS
AOC # XXX/XX
(subject to the approved conditions in the operations manual)

ISSUING AUTHORITY CONTACT DETAILS

Telephone: +(679) 892 3155
+(679) 999 XXXX
Fax: +(679) 672 1500
Email:

OPERATIONS SPECIFICATIONS
(subject to the approved conditions)

Aircraft Model:

Types of operations: Commercial air transportation ☑ passengers ☑ cargo ☑other Charter

A to B AOC

Within the area enclosed by rhumb lines joining successively the following points:-

17° S / 176°30E to 15°30 S / 178°E to 15°30 S / 179°W to 17°30 S / 178°W to 21° S / 178°W to 21° S / 180°E to 19°30 S / 177°30E to 17° S / 176°30E.

Non-scheduled general charter flights may be made with BN2A Islander, Bandeirante EMB110 and Cessna C172 aeroplanes from point A to point B under the following conditions:-

1. To and from all land airports in Fiji

Scheduled flights may be made with BN2A aircraft from point A to point B to the following destinations:-

	D - DESTINATION	A - ALTERNATE	R - RESTRICTED
NAUSORI	D	A	-
SAVUSAVU	D	A	R
MATEI	D	A	-
LEVUKA (BURETA)	D	A	R
KADAVU	D	A	-
LABASA	D	A	-
KORO	D	A	R
MOALA	D	A	-
NADI	D	A	-
GAU	D	A	-

An airport authorised for restricted use may only be used by pilots who have been certified as competent to use the airport on a training record maintained by the operator

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CIVIL AVIATION AUTHORITY OF FIJI

OPERATIONS SPECIFICATIONS

AOC # XXX/XX

(subject to the approved conditions in the operations manual)

OPERATIONS SPECIFICATIONS

(subject to the approved conditions)

Aircraft Model:				
Aircraft Model:				

Types of operations: Commercial air transportation ☑ passengers ☑ cargo ☑other Charter

(1) An aircraft operated by an operator domiciled in Fiji, when flying over water for the purpose of public transport, shall, without prejudice to the regulations contained in Part III and except as may be necessary for the purpose of take-off and landing, fly at such an altitude as would enable the aircraft to reach a place at which it can if it has only one engine and in the event of the failure of that engine, carry out a safe forced landing.

A "safe forced landing area" is a landing area where it can be reasonably expected that the ensuing forced landing will not lead to serious injury even though the aeroplane may incur extensive damage.

Scheduled flights may be made with XXXXX aircraft within from point A to Point B the following destinations: -

	D – DESTINATION	A – ALTERNATE	R – RESTRICTED
KADAVU	D	A	R
LABASA	D	A	-
LAUCALA	D	A	-
NADI	D	A	-
NAUSORI	D	A	-
SAVUSAVU	D	A	R
ROTUMA	D	A	-
TAVEUNI	D	A	-

Scheduled flights may be made with the C172 aircraft from point A to point B to the following destinations:-

	D - DESTINATION	A - ALTERNATE	R - RESTRICTED
NAUSORI	D	A	-
SAVUSAVU	D	A	R
MATEI	D	A	-
LEVUKA (BURETA)			R
KADAVU	D	A	-
LABASA	D	A	-
KORO			R
MOALA	D	A	-
NADI	D	A	-
GAU	D	A	-
YASAWA			R
NANUKU			R
VANUABALAVU			R
LAKEBA			R

Flights may be made with XXX, XXX and XXX aeroplanes to destinations not listed above after the holder of this certificate has satisfied the Controller Air Safety of the Civil Aviation Authority of Fiji with regards to the holder's experience, equipment, staffing, maintenance and other arrangements in relation to such flights.

NOTE: Flights to and from other airports are also subject to the approval of the Air Transport Licensing Board.

Flights into private certified airports require the prior written permission of the certificate holder

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Authorised Person Civil Aviation Authority of Fiji

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SECTION 3

Arrangements for Maintenance Support

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Quality Control and Assurance 2

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CHAPTER 1 - MAINTENANCE SUPPORT ARRANGEMENTS

1 General

1.1 It is the responsibility of the Operator to satisfy the Civil Aviation Authority of Fiji Air Safety Department, that his maintenance support arrangements are to a satisfactory standard. The Operator may have his own maintenance organisation or may contract-out his maintenance to another organisation acceptable to the CAAF.

1.2 The Operator remains responsible for the safe operations of his aircraft when accomplishment of maintenance is contracted out and must therefore be satisfied with the standards of airworthiness achieved by the contractor. The Operator must monitor the contractor's response to the provisions of the maintenance agreement, employing such technical resources as are necessary to achieve this task.

1.3 Maintenance support arrangements will normally be based on an organisation approved by the CAAF for the maintenance or overhaul of the type of aircraft concerned.

(a) The support arrangements for aircraft used for commercial air transport must be based on an organisation approved by the CAAF in accordance with FJAR 145. Where organisations hold an appropriate JAR 145 approval issued by another state they may be accepted by CAAF.

(b) The maintenance support arrangements for balloon operators must be under the control of organisations approved by the CAAF for the purpose.

(c) The maintenance support arrangements for microlight/ultralight aircraft must be under the control of organisations, appropriately approved by the CAAF for the purpose. Ref. AIC. 7/94.

1.4 In considering the maintenance of aircraft, for the purpose of this document, maintenance is taken to include the overall control of Airworthiness and the accomplishment of scheduled and unscheduled servicing and inspection tasks.

(a) An organisation may be acceptable to the CAAF for maintenance support without all of the necessary facilities to accomplish certain maintenance tasks provided contracted arrangements exist with a facility acceptable to the CAAF.

1.5 All maintenance support organisations must have management systems to ensure effective support of the Operator's fleet of aircraft for which they have responsibility, over the whole of the routes operated. Quality Control and Assurance must be exercised as necessary to achieve satisfactory standards of continuing Airworthiness.

2 Certifying Personnel - Authorisation

2.1 Authorisations to sign Certificates of Release to Service and Certificates of Maintenance for all aircraft types operated for Commercial Air Transport shall be issued in accordance with these requirements by the holder of FJAR-145 approval issued by the CAAF.

(a) Personal Authorisation Certificates shall be signed only by persons nominated in the company exposition, in accordance with any company procedures approved by the CAAF, and will be issued only to personnel who comply with the appropriate requirements prescribed in the following paragraphs. Such authorisations should state the aircraft type(s) and systems for which the authorisation is valid and the extent of certification authority granted.

(b) Each Personal Authorisation Certificate shall be identified by the approval reference of the organisation, a reference number or designator for the individual, and by a statement/code uniquely related to the task.

(c) Where a system of coding is used to indicate the extent or type of certification authority, such coding system will not be changed except by agreement with the CAAF.

(d) For each Personal Authorisation Certificate issued, a related record (see JAR 145.35(a) will be maintained which contains details of the supporting training successfully completed, and the examination and assessments conducted to determine the scope of the authorisation.

(e) A record of any temporary Personal Authorisation Certificates issued will be maintained containing details of the person(s) authorised, the reason for issue, and the person who authorised the issue (but see (a)).

(f) Inspection stamps are issued to each person issued with a Personal Authorisation Certificate

for their individual use, and a record of the stamps issued will be maintained. The format of the stamps shall be described in the Maintenance Organisation Exposition (MOE). Any alternative method which proposes the use of electronic "swipe" cards or the use of hand written personal identification numbers for documents which incorporate carbon copies, such as the Technical Log, shall be agreed in writing with the CAAF.

(g) Records must not be destroyed or dispersed without the written agreement of the CAAF.

2.2 Persons authorised to issue Certificates of Release to Service

Authorisations to issue Certificates of Release to Service shall be granted only to persons who comply with (a), (b) and (c), and either (d) or (e) as appropriate.

(a) Be age 21 or over.

(b) Have completed a course of training approved by the CAAF relevant to the scope of the authorisation with satisfactory examination results.

(c) Have been trained and have passed an examination on relevant company procedures.

(d) In respect of aeroplanes, be the holder of a current Fiji Aircraft Maintenance Engineer's Licence Without Type Rating valid in the appropriate Categories and Sub-divisions.

(e) In respect of rotorcraft, be the holder of a current Fiji Aircraft Maintenance Engineer's Licence Without Type Rating valid in the appropriate Categories and Sub-divisions.

NOTE: "Appropriate Category" means the Category of Licence defined in BCAR Section L which would, were the certification of the work not covered by the authorisation, be mandatory when account is taken of both CAA UK Airworthiness Notices No. 3 and 10.

Holder of a Fiji Aircraft Maintenance Engineer's Licence endorsed with a Type Rating will be deemed to have satisfied the requirements of paragraphs (b) and (d) or (e) as appropriate for that type.

2.3 Limited Authorisations

2.3.1 Where a person:-

(a) Holds at least an authorisation in one complete Category on the aircraft type concerned; or

(b) Holds a valid Flight Engineer's Licence for the type of aircraft concerned, and exercises the privilege of certification only when performing the duties of a Flight Engineer.

(c) Holds a valid Commercial Pilot's Licence for the type of aircraft concerned, and exercises the privilege of certification only when performing the duties of a flight crew member, whilst operating away from a supported maintenance location and subject to the need for such authorisation being agreed by the CAAF.

The CAAF may approve training and examination standards different from those of 2.2(b) and (c) in respect of work beyond the scope of the authorisation or licence held, and may permit the issue of limited authorisations to persons who do not entirely comply with 2.2(d) or (e). The extent of such authorisations shall be defined within the limits of tasks specifically endorsed on the authorisation. The conditions and scope of such authorisations shall be agreed by the CAAF with the approved organisation.

2.3.2 Where a person does not satisfy the requirements of paragraph 2.2(d) or (e) the CAAF may approve training and examination standards different from those of 2.2(b) and (c) to permit the holder to act as a Line Maintenance Certifying Mechanic and to certify minor scheduled line maintenance and defect rectification, within the limits of tasks specifically endorsed on the authorisation.

The certification privileges are restricted to work that the authorisation holder has personally performed. The conditions and scope of such authorisations shall be agreed by the CAAF with the approved organization.

2.4 Provision For Staff Outside Fiji

2.4.1 The CAAF may in certain circumstances approve the issue of an authorisation to persons holding a qualification considered by the CAAF to be equivalent to the requirement established in 2.2(d)or (e) The CAAF will consider exercising this provision on the written application of a FJAR-145 organisation, or submission of an appropriate procedure for approval, provided that :-

(a) The nominated person is employed by the FJAR-145 organization outside Fiji and is engaged solely for the support of the FJAR-145 organisation; and

(b) The training requirements of 2.2(b) and (c) are complied with; and

(c) The basic qualifications considered to be equivalent established in 2.2(d) or (e) are acceptable to the Authority. (See Note).

NOTE: There may be a need for the CAAF to investigate the national qualification system concerned, the minimum acceptable standard being equivalent to ICAO Annex 1 Type II. Where the acceptability of the local standard is not considered equivalent, compliance with 2.2(d) or (e) may be required.

2.4.2 The CAAF may also in certain circumstances approve a procedure of the organisation, which allows the authorisation of individuals outside of FJAR 145 organisations, to issue Certificates of Release to Service. The need is likely to arise solely from the rectification of defects carried out at locations not normally supported by the FJAR-145 approved organisation or an organisation sub-contracted to provide line maintenance support. Such authorisation may be issued by the FJAR-145 organisation to a nominated individual subject to the following:-

(a) The requirements for the certification arises solely from the rectification of unscheduled defects at a place where the FJAR-145 organisation concerned does not have representation or a sub-contracted arrangement for line maintenance support.

(b) The individual to be authorised is employed by an organisation approved under the appropriate national aviation regulations for the maintenance of that aircraft type in that country and who holds an authorisation, or equivalent, issued by that organization for the purposes of the certification of defect rectification.

(c) The authorising signatory establishes, in accordance with a procedure approved by the CAAF, the experience and competence of the individual proposed for authorisation and the validity of regency of the authorisation held. Records of such investigation shall be kept to support the authorisation granted.

(d) The authorisation granted shall specify the extent of certification privileges and be given a unique reference. Such authorisation shall be granted for the particular occasion only.

2.5 Persons Authorised To Issue Certificates of Maintenance

2.5.1 Authorisations to issue Certificates of Maintenance shall be granted only to persons who comply with (a) to (d).

(a) Be the holder of a current Fiji Aircraft Maintenance Engineer's Licence Without Type Rating valid in at least two categories in the appropriate sub-divisions (other than Category "X" Compasses).

NOTE:

(i) In respect of authorisation for rotorcraft certifications. Categories "A" and "C" may be considered as separate categories.

(ii) "Appropriate Sub-Division" means the category of licence defined in BCAR Section L which would, were the certification of the work not covered by the Authorisation, be mandatory when account is taken of both Airworthiness Notices No. 3 and 10.

(b) Have at least eight years experience of aircraft maintenance, which includes at least two years recent experience involving the certification of maintenance.

(c) Hold a position within the Approved Organization compatible with the responsibilities involved.

(d) Have successfully completed at least familiarisation training on the aircraft type for which the Authorisation is to be granted, have been trained in the procedures of the organisation, and have achieved the agreed standard in an examination set by the organisation in conformity with Supplement No.1 to this Notice and based upon (i) to (vii).

(i) The concept of approval in accordance with FJAR-145 and other requirements prescribed by the CAAF.

(ii) The status of the Certificate of Maintenance and the responsibilities of a signatory of the certificate.

(iii) The form and implementation of the Approved Maintenance Schedule for the type of aircraft concerned.

(iv) The details of the systems and procedures contained in the Exposition and the associated documents, together with the he requirements of the organisation for their implementation.

(v) The maintenance support systems which are related to continuing airworthiness, e.g. reliability programmes, defect control, production control, development engineering, training, certification authority and modification control.

(vi) The form and use of the aircraft Technical Log, deferred defect log, fuel and instrument log, and the minimum equipment list.

(vii) The form and implementation of mandatory inspections/modifications as required for the type of aircraft concerned.

2.6 Validity of Authorisations

2.6.1 Authorisations granted in accordance with paragraph 2, except as provided for under paragraph 2.4, shall only be used, subject to their conditions of validity, whilst the holder is in the employ of the Approved Organisation which issued them and the holders licence, if any, remains valid. The Approved Organisation shall provide authorised persons with a copy of all Personal Authorisation Certificates issued to them whilst in its employ.

2.6.2 The authorisation holder may, upon leaving the employ of the organisation who issued the authorisation request verification from the CAAF, of the authorisation held.

2.6.3 The CAAF, upon request will, when satisfied, signify the scope and validity of the authorisation held by signing the document.

3 Scheduled Maintenance Inspections

3.1 The CAAF approval of aircraft maintenance or overhaul organisations normally refers to one address shown on the Approval Certificate as the address where work will be undertaken within the terms of the approval. This location is usually the main base of the organisation. Additional subsidiary bases may exist, where suitable facilities and a supporting maintenance control organisation are provided, which may be added to the CAAF approval after investigation. Scheduled Maintenance Inspections (SMI) are normally accomplished at such approved locations.

3.2 The Approval Certificate in which the CAAF approval is defined also permits maintenance tasks to be accomplished at other locations as shown in the company's Exposition. This is intended to take account of minor locations which may be classed as either a base, or a line maintenance station at which Scheduled Maintenance Inspections take place.

3.3 Supporting maintenance organisations must ensure that expositions, or a related document such as a line maintenance manual, include details of the facilities, procedures, organisation and scope of work to be accomplished at each location where Scheduled Maintenance Inspections take place.

4 Staff Numbers

4.1 The organisation providing maintenance support must satisfy the CAAF that it has a sufficient number of staff, including qualified maintenance personnel, to meet the demands which will be placed upon it. Support appropriate to the route pattern, transit frequency and maintenance requirements of the Operator must be provided at main bases and route stations.

4.2 The CAAF will require assurance that shift duty periods are adequately staffed and will effectively enable scheduled and unscheduled tasks to be performed. Particular attention should be paid to ensuring that adequate staff are available to perform tasks of Airworthiness significance in proper manner. Company policies in respect of maintenance personnel duty periods should be made known to the CAAF.

4.3 The licensed and authorised personnel employed by the maintenance support organisation must be appropriately qualified to perform the tasks required, including the issue of Certificates of Maintenance and of Certificates of Release to Service for scheduled maintenance inspections and the rectification of defects.

5 Training

5.1 Maintenance organisations must have a programme of training to ensure that:

(a) All maintenance personnel are adequately trained to perform the duties required of them;

(b) Personnel required to issue Certificates of Maintenance and Certificate of Release to Service receive familiarisation training on the aircraft type and instruction in the correct operation of the Operator's Airworthiness control procedures to enable them to perform these tasks on the type of aircraft for which support is being provided.

NOTE: Requirements for the training of persons engaged in the maintenance of aircraft in accordance with the requirements of FJAR 145 are published in those chapters.

(b) Persons contracted to perform line maintenance tasks through maintenance agreements or Secondary Authorisations are trained in any significant differences which exist between the

(c) Operator's aircraft and that which they are normally employed to maintain together with any relevant company procedures they are required to observe;

(d) Personnel engaged in maintenance-related tasks receive refresher training at regular intervals covering any changes to the aircraft and its maintenance, taking into account the results of in-service experience gained by the Operator and that published by the aircraft, engine and equipment manufactures. Attention should also be paid to changes in company procedures, the ANR and the CAAF requirements.

5.2 Records should be maintained of all training undertaken by personnel including any results of assessments or examinations.

5.3 Training must include formal instruction and practical experience.

5.4 Management, Quality Assurance and other relevant personnel should be trained in the techniques of maintenance management and the achievement of airworthiness appropriate to the posts held.

5.5 The number of maintenance personnel, including management, supervisors, quality audit staff and mechanics to be trained before the introduction into service of a new type of aircraft should be agreed with the CAAF. Numbers should take into account the complexity of the aircraft and its systems, the fleet size, the anticipated pattern of aircraft utilisation and the organisation's previous experience of similar aircraft.

CHAPTER 2 - CONTRACTING-OUT MAINTENANCE

1 General

1.1 The management and accomplishment of engineering support may be achieved by the Operator using his own or an associated maintenance organization. Alternatively all or part of the arrangements may be contracted to a separate organization.

1.1.1 Contracted arrangements for engineering support and maintenance do not absolve the Operator from the overall responsibility for ensuring the safe operation and continuing Airworthiness of the aircraft.

1.2 Where the Operator does not maintain the aircraft he operates using only his resources, full details of the division of responsibilities between the Operator and the contracted maintenance organization must be included in an agreement between the two parties. Matters to be addressed in such an agreement are contained at Appendix A.

1.3 Where an Operator contracts-out part or all of the maintenance to a separate organization, he must nominate a person for engineering liaison purposes. This person will be responsible to the Operator for planning the timely presentation of the aircraft to the engineering support organization for all contracted maintenance; for liaison on all matters relating to the maintenance contract or agreement and for Airworthiness matters affecting the safe operation of the aircraft. Where the Operator has several types of aircraft a different person may be nominated for each fleet.

1.3.1 The Operator's representative(s) should visit the contracted maintenance organisation at the inception of the agreement, and periodically thereafter, to ensure that the standards agreed are being maintained. Reports of all such visits should be kept and made available to the CAAF on request.

1.4 An arrangement whereby more than one maintenance organization is contracted by an Operator in respect of the airworthiness control of a particular aircraft type will not normally be acceptable to the CAAF, other than for maintenance support at route stations or where a distinct division of aircraft is established e.g. different maintenance schedules apply.

1.5 An Operator may only arrange separately for the maintenance, overhaul and repair of engines or other components with the knowledge and agreement of his principal maintenance contractor.

1.5.1 In order to be able to discharge his responsibilities for continued airworthiness and to issue Certificate of Maintenance the contractor must satisfy himself on a continuing basis that the requirements of the approved maintenance schedule are being complied with, including condition monitoring and reliability reporting, and be made aware of any significant performance trends.

1.5.2 Responsibilities for the assessment and incorporation of manufacturer's Service Information and for compliance with mandatory requirements must be clear defined in the agreement.

1.6 In its assessment of the overall engineering support arrangements provided by the Operator, the CAAF will require to examine and may require to hold copies of all agreements, including side letters and addenda, between the parties concerned.

1.7 Any proposal to change the maintenance arrangements, e.g. a change to another maintenance organisation or significant organisational, procedural or technical change to a maintenance agreement, must be notified to the CAAF at least 28 days prior to the proposed date of implementation.

1.8 Arrangements other than in accordance with this chapter will need to be specifically agreed with the CAAF.

2 Contracting-Out Full Support

2.1 The operator may contract full maintenance support to an organisation approved by the CAAF for the maintenance or overhaul of the type(s) of aircraft concerned.

2.2 The Operator must ensure that the maintenance organisation competently discharges its responsibilities under the agreement, to his satisfaction, and is responsible for satisfying the CAAF that the organisation meets the requirement, insofar as they relate to the contracted work.

2.3 Written agreements should clearly define what responsibility for action is allowed to the maintenance organisation without prior consultation, and what tasks require agreement by the Operator.

2.4 Whenever an aircraft is presented for scheduled or unscheduled maintenance it is essential that a precise indication is given of the inspections required, all defects known to exist on the aircraft plus any additional work required to be carried out (after consultation with the maintenance organisation as necessary).

NOTE: Operators must appreciate that a maintenance organisation cannot carry out work or certify inspections without their instructions or agreement and it follows that they should be quite specific when making known their work requirements to the organisation of their choice. Difficulties regularly occur because there is a misunderstanding between customer and maintenance organisation as to the former requirements.

2.4.1 Although the provisions of the approved maintenance schedule allow maintenance checks to be carried out and certified in various ways the CAAF requires, for AOC support purposes, that one organisation is nominated by the Operator to perform the tasks of overall airworthiness control. It is expected that this organisation will be the Operator's principal maintenance contractor.

2.4.2 In exercising its responsibilities for the overall management and control of maintenance the contracted maintenance organisation must be satisfied with the completion and certification of all tasks performed by the Operator during the maintenance or by other organisations/engineers.

3 Contracting-Out Line Maintenance Support

3.1 Line Maintenance is defined as those maintenance activities required to prepare an aircraft for flight including:

Pre-flight inspections and servicing,

Daily inspections,

Minor scheduled maintenance not requiring input to main base

Defect rectification.

3.2 A written agreement should exist between the Operators or his principal contracted maintenance organisation and the organisation contracted for the performance of line maintenance, detailing the tasks to be performed on behalf of the Operator. The arrangements must be defined in company instructions so that responsibilities procedures and communication paths are made clear to all concerned.

3.3 The authorisation of maintenance personnel employed by the line maintenance contractor must conform to any requirements and limitations imposed by the conditions of the CAAF Approval held by the Operator or his principal maintenance contractor as appropriate.

3.4 It is the responsibility of the Operator or his principal maintenance contractor to ensure that the continuing performance of the line maintenance contractor is such as to ensure safe operation of the Operator's aircraft.

4 Contracting-Out Ground Handling

4.1 Operators may enter into ground handling agreements with other operator’s organisations for the provisions of services associated with aircraft arrival, turn around and dispatch. In these cases a written agreement should detailing the tasks to be performed on behalf of the Operator.

4.2 Where appropriate the IATA Standard Ground Handling Agreement AHM 810 provides an acceptable basis for an agreement; however, it is essential that maintenance or flight crew personnel responsible for accepting the aircraft for flight are made aware of any matter which is not included in the agreement at that station.

4.3 It is the responsibility of the Operator or his principal maintenance contractor to ensure that the continuing performance of the ground handling contractor is such as to ensure safe operation of the Operator's aircraft, and that necessary training has been performed.

5 Contracting-Out to Foreign Maintenance Organisations

5.1 Maintenance support may only be contracted to a foreign organisation if it is appropriately approved by the CAAF and the requirements of this document will apply. The CAAF will not normally accept the contracting-out of full support to a foreign maintenance organisation unless that organisation holds JAR 145 Approval for the particular aircraft.

5.2 If the organisation does not hold CAAF approval the following conditions will apply.

5.2.1 The national airworthiness standard under which the maintenance organisation has been approved will have to be known by the CAAF to be comparable with the CAAF standards.

5.2.2 The arrangements must provide for the CAAF to be allowed to inspect, upon notification, the facilities at any of the nominated locations.

5.2.3 Details of the proposed maintenance arrangements must be acceptable to the CAAF.

5.2.4 A formal maintenance agreement in accordance with this Chapter must be established, appropriate to the tasks being undertaken. Such an agreement should aim to ensure an airworthiness standard comparable with the CAAF requirements, paying particular attention to the following:

(a) That the method of certifying individual maintenance tasks and the responsibilities of nominated signatories ensure that the authority given to the signatories and the nature of the work they certify provide equivalence to CAAF certification. The signatories must be persons employed by the foreign maintenance organisation.

(b) That all works is completed and certified in accordance with the maintenance organisation or Operator's approved technical procedures.

(c) That the work undertaken is within the scope of the approval of the organisation granted by the responsible authority.

(d) That all applicable the CAAF Operator/maintenance organisations' procedures or requirements are covered e.g. duplicate inspections, fuel flow tests, flight tests, compass swings etc.

(e) That necessary maintenance manuals or equivalent technical literature are provided and worked to, except for authorised deviations.

(f) That all replacement parts for the specific aircraft are appropriately certified and are to a satisfactory standard, in particular replacement for any system or component which may have been the subject of special conditions or additional requirements prior to certification in Fiji.

NOTES: 1 These provisions do not obviate the need for a Certificate of Maintenance and a Certificate of Release to Service on completion of Scheduled maintenance inspections, issued in accordance with the provisions of the Air Navigation Regulation.

2 The CAAF will assess the qualification standards achieved by the contracted organisation when granting personnel authorisations.

6 Contracting-Out Engine Maintenance

6.1 When an Operator chooses to contract-out maintenance of engines independently from the overall arrangements existing for maintenance support of the aircraft, it is essential that the primary maintenance contractor:

(a) Is fully in agreement with the proposed arrangements; and,

(b) is kept continuously aware of engine condition monitoring and any adverse trends in reliability or performance which arise, if he is not directly a party to such monitoring;

(c) is made aware of the status of engines fitted to aircraft in respect of modifications, service bulletins and airworthiness directives;

(d) liaisons with the engine maintenance contractor in respect of the requirements of the approved maintenance schedule for the aircraft so that the engine maintenance reflects the needs of the aircraft for airworthiness.

6.2 At all times the liaison between the aircraft and engine maintenance organisations must be such as to enable the appropriately authorised person to carry out the required Certificate of maintenance and safely discharge his statutory responsibility when doing so.

7 APPENDIX A - MAINTENANCE AGREEMENT

7.1 Where an Operator chooses to contract maintenance to another organisation, a written contract must be drawn up indicating the divisions of responsibility between the two parties for the overall support of the aircraft and for compliance with statutory regulations and other relevant requirements.

7.2 The purpose of the contract is to demonstrate a firm commitment by the two parties to the maintenance support of the aircraft in the operation for which application has been made for an Air Operator's Certificate.

7.3 It is strongly recommended that the parts of the agreement dealing with maintenance are sub-divided into those tasks to be accomplished by the contractor and those tasks which, will remain the responsibility of the Operator. This is particularly necessary where, for example, the Operator retains responsibility for line maintenance or spares provision.

7.4 **Maintenance contracts**

The following paragraphs are not intended to provide a standard maintenance contract but to provide a list of the main points that should be addressed, when applicable, in maintenance contract between an Operator and a FJAR 145 approved/accepted Organisation. As only the technical parts of the maintenance contracts have to be acceptable to the CAAF, the following paragraphs only address technical matters and excludes matters such as costs, delay, warranty, etc..

When maintenance is contracted to more than one FJAR 145 approved/accepted organisation (for example aircraft base maintenance to X, engine maintenance to Y and line maintenance to Z1, Z2 & Z3), attention should be paid to the consistency of the different maintenance contracts.

A maintenance contract is not normally intended to provide appropriate detailed work instruction to the personnel (and is not normally distributed as such). Accordingly there must be established organisational responsibility, procedures and routines in the Operator and FJAR 145 Organisations to take care of these functions in a satisfactory way such that any person involved is informed about his responsibility and the procedures which apply. These procedures and routines can be included/appended to the operator's MME and maintenance organisation's MOE or consist in separate procedures. In other words procedures and routines should reflect the condition of the contract.

7.5 **Aircraft Maintenance**

This paragraph applies to a maintenance contract that includes base maintenance and, possibly, line maintenance. Para 7 addresses the issue of maintenance contracts restricted to only line maintenance, aircraft maintenance also include the maintenance of the engines and APU while they are installed on the aircraft.

7.5.1 Scope of Work

The type of aircraft and engines subject to the maintenance contract must be specified. It should preferably include the aircraft's registration numbers.

The type of maintenance to be performed by the FJAR 145 approved/accepted Organisation should be specified unambiguously.

7.5.2 Locations identified for the performance of maintenance/Certificates held. The place(s) where base and line maintenance will be performed should be specified. The certificate held by the maintenance organisation at the place(s) where the maintenance will be performed should be referred to in the contract. If necessary the contract may address the possibility of performing maintenance at any location subject to the need for such maintenance arising either from the unserviceability of the aircraft or from the necessity of supporting occasional line maintenance.

7.5.3 Sub-contracting

The maintenance contract should specify under which conditions the FJAR 145 approved/accepted Organisation may subcontract tasks to a third party. In addition the Operator may require the FJAR 145 approved/accepted Organisation to request the Operator's approval before subcontracting to a third party. Access should be given to the operator to any information (especially the quality monitoring information) about the FJAR 145 approved/accepted Organisation's subcontractors involved in the contract. It should however be noted that under Operator's responsibility both the

operator and the CAAF are entitled to be fully informed about subcontracting, although the CAAF will normally only be concerned with aircraft, engine and APU subcontracting.

7.5.4 Maintenance Programme

The maintenance programme under which the maintenance has to be performed has to be specified. The operator must have that maintenance programme approved by the CAAF. When the maintenance programme is used by several Operators, it is important to remember that it is the responsibility of each operator to have that maintenance programme approval under its own name by the CAAF.

7.5.5 Quality Monitoring

The terms of the contract should include a provision allowing the Operator to perform a quality surveillance (including audits) upon the FJAR 145 approved/accepted organisation. When the FJAR 145 approved/accepted organisation is performing functions not covered by JAR 145 such as airworthiness directives incorporation, planning and follow-up planning of maintenance tasks, etc..., such functions must be under the control of the operators quality system. The maintenance contract should specify how the results of the quality surveillance is taken into account by the FJAR 145 approved/accepted organisation (see also Para 7.5.25 Meetings). The maintenance contract should also specify that the quality monitoring function of the contracted accepted organisation should be extended to cover the specific maintenance functions the organisation performs.

7.5.6 Airworthiness Data

The airworthiness data used for the purpose of this contract as well as that required by the CAAF must be specified. This may include, but may not be limited to:

- Maintenance Programme,
- AD's,
- major repair/modification data,
- aircraft Maintenance Manual,
- aircraft pilot-in-command,
- Wiring diagram,
- Trouble shooting manual,
- Minimum Equipment List (normally on board the aircraft),
- Operations Manual,
- Flight Manual

7.5.7 Incoming Conditions

The contract should specify in which condition you must send the aircraft to the FJAR 145 approved/accepted Organisation. For checks of significant i.e. "C" Checks and above, it may be beneficial that a workscope planning meeting be organised so that the tasks to be performed may be commonly agreed (see also Para 7.5.25 "Meetings").

7.5.8 Airworthiness Directives

It is very important that the contract specify which country's Airworthiness Directive (AD), have to be applied (normally: those approved by the country of registration of the aircraft) and who supplies the Airworthiness Directive. The Operator may however agree to apply instructions more restrictive than those AD's.

This may be the case when an aircraft owner wishes to ease the leasing of the aircraft in different possible countries and then wishes to have his aircraft in compliance with different countries AD's at the same time.

The application of an AD may be divided into the following phases:

1. applicability;
2. mean of compliance;

3. planning;
4. incorporation;
5. follow-up.

It is not intended that the Operator in order to exercise its maintenance responsibility, performs itself the items 1,2,3 &5; however, those items shall remain under its responsibility.

7.5.9 When the FJAR 145 approved/accepted Organisation only performs the incorporation of the AD (item 4 above) the contract should specify what information the operator is responsible to provide to the FJAR 145 approved/accepted organisation, such as the due date of the AD, the selected means of compliance, etc... In addition the type of information the Operator will need in return to complete the control should be specified.

7.5.10 When the FJAR 145 approved/accepted Organisation also performs actions among items 1,2,3 & 5 above.

The contract will have to specify what information the FJAR 145 approved/accepted Organisation need in order to initiate those action and what is the decision process when various options are selected (e.g. date and means of compliance).

The maintenance contract should allow the Operator to have access to all the necessary information from the FJAR 145 approved/accepted Organisation so that the Operator may exercise its airworthiness responsibility. The information provided by the FJAR 145 approved/accepted Organisation should allow the operator to control the performance of items 1 to 5 (as applicable) by the FJAR 145 approved/accepted Organisation and, when necessary, to override a decision of the FJAR 145 approved/accepted Organisation if it appears necessary to the continuous airworthiness of the aircraft.

7.5.11 Service Bulletin/Modifications

Normally, the decision to embody Service Bulletins (SB's) or modification belongs to the Operator. However, the Operator may delegate that decision provided that the conditions of delegation are clearly established (e.g. the modification does not affect the interchangeably and the reliability (which should be demonstrated), the modification does not affect the maintenance or operational procedures etc.).

Such delegation may be useful in the case of a FJAR 145 approved/accepted Organisation that maintains to a common standard a fleet of aircraft that belong to different Operators.

The Operator will have to demonstrate that it has a thorough control of that procedure.

The contract should specify, where applicable, who is updating the SB and modification status and what type of information has to be exchanged for that purpose (see also Para 7.5.24 "Exchange of Information")

7.5.12 Hours & Cycles Control

Hours and cycles control is the responsibility of the Operator but, there may be cases where the FJAR 145 approved/accepted Organisation, performs that control, especially when it carries out planning functions. In the latter case, the FJAR 145 approved/accepted Organisation must be in receipt of the current flight hours and cycles on a regular basis so that it may update the records (see Para 7.2.24 "Exchange of Information").

7.5.13 Component Control/Removal Forecast

According to the contract, maintenance tasks may include component removal/installation planning and performance. The contract should then specify who carries out the component control and what type of information has to be exchanged for that purpose (see "Exchange of Information").

7.5.14 Life Limited Part

Life Limited Parts control is the responsibility of the Operator.

7.5.14.1 Should the Life Limited Parts control be performed by Operator the FJAR 145 approved/accepted Organisation will have to provide the Operator with all the necessary information about the LLP

removal/installation so that the Operator may update its records (see also Para 7.5.24 "Exchange of Information").

7.5.14.2 It may also be agreed between the Operator and the FJAR 145 Approved/Accepted Maintenance Organisation that the Life Limited Parts control is carried out by the FJAR 145 approved/accepted Organisation. This will have to specified in the contract. The FJAR 145 approved/accepted Organi**s**ation will need to be in receipt of current hours/cycles of the aircraft, as well as any other information necessary to perform the control. The Operator should be in receipt of the Life Limited Parts status in order to exercise his airworthiness responsibility (see also "Exchange of Information"). The contract may contain additional requirements about the origin of parts (see Para 7.5.15 "Supply of Parts").

7.5.15 Supply of Parts

The contract should specify whether a particular type of material or component comes from the operator's or the FJAR 145 approved/accepted Organisation's store, which type of component is pooled etc... Attention should be paid on the fact that it is the FJAR 145 approved/accepted Organisation's competence and responsibility to be in any case satisfied that the component in question meets the approved data/standard and to ensure that the aircraft component is in a satisfactory condition for fitment. In other words, there is definitely no way for a FJAR 145 Maintenance Organization to accept whatever he receives from the operator without verification.

7.5.16 Scheduled Maintenance

The maintenance contract shall specify who is planning maintenance checks in accordance with the approved aircraft maintenance programme.

7.5.16.1 When the Operator is planning the maintenance checks, the support documentation to be given to the FJAR 145 approved/accepted Organisation should be specified. This may include, but may not be limited to:

- applicable work package, including job cards;
- scheduled component removal list;
- modification to be incorporated;
- etc .

When the FJAR 145 approved/accepted Organisation determines, for any reason, to defer a maintenance task, it has to be formally agreed by the Operator. If the deferment goes beyond an approved limit, refer to "Deviation from the Maintenance Schedule". This should be addressed, where applicable, in the maintenance contract.

7.5.17 Unscheduled Maintenance/Defect Rectification

The contract should specify to which level the FJAR 145 approved/accepted Organisation may rectify a defect without reference to the Operator. As a minimum the approval and incorporation of major repairs should be addressed. The deferment of any defect rectification shall be submitted to the operator and, if applicable to the CAAF.

7.5.18 Deferred Tasks

See paragraphs 7.16 and 7.17 and JAR 145 leaflet 12 JAR 145 “Release to Service after incomplete maintenance”. In addition, the use of the operators MEL and the relation with the Operator in case of a defect that cannot be rectified at the line station should be addressed.

7.5.19 Deviation from the Maintenance Schedule

Deviations have to be requested by the Operator to the CAAF in accordance with a procedure acceptable to CAAF. The contract should specify the support the FJAR 145 approved/accepted Organisation may provide to the operator in order to substantiate the deviation request.

7.5.20 Test Flight

If any test flight is required, it shall be performed in accordance with the Operator's Maintenance Management Exposition.

7.5.21 Release to Service Documentation

The release to service has to be performed by the FJAR 145 approved/accepted Organisation in accordance with its MOE procedures. The contract should, however, specify which support forms have to be used (Operators technical log, FJAR 145 approved/accepted Organisation's maintenance visit file, etc..) and the documentation the FJAR 145 approved/accepted Organisation should provide to the Operator upon delivery of the aircraft. This may include but may not be limited to:

- Certificate of Release to Service - Mandatory
- Flight test report,
- List of modifications embodied,
- List of repairs,
- List of AD's incorporated,
- Maintenance visit report, etc.

7.5.22 Maintenance Recording

The Operator may contract the FJAR 145 approved/accepted Organisation to retain some of the maintenance records. It should be ensured that every requirement is fulfilled by either the Operator or the FJAR 145 approved/accepted Organisation. In such a case, free and quick access to the above mentioned records should be given by the FJAR 145 approved/accepted Organisation to the Operator and the CAAF.

7.5.23 Reliability Report

Where necessary, responsibility for the production of data for the Reliability Report should be defined into the contract.

7.5.24 Exchange of Information

Each time exchange of information between the Operator and the FJAR 145 approved/accepted Organisation is necessary, the contract should specify what information should be provided and when (i.e. on what occasion or at what frequency), how, by whom and to whom it has to be transmitted.

7.5.25 Meetings

In order that the CAAF may be satisfied that a good communication system exists between the Operator and the FJAR 145 approved/accepted Organisation, the terms of the maintenance contract should include the provision for a certain number of meetings to be held between both parties.

7.5.25.1 Contract Review

Before the contract is applicable, it is very important that the technical personnel of both parties that are involved in the application of the contract meet in order to be sure that every point leads to a common understanding of the duties of both parties.

7.5.25.2 Workscope Planning Meeting

Workscope Planning meetings may be organised so that the tasks to be performed may be commonly agreed.

7.5.25.3 Technical Meeting

Scheduled meetings may be organised in order to review on a regular basis technical matters such as AD's, SB's, future modifications, major defects found during maintenance check, reliability, etc...

7.5.25.4 Quality Meeting

Quality meetings may be organised in order to examine matters raised by the

Operator's quality surveillance and to agree upon necessary corrective actions.

7.5.25.5 Reliability Meeting

When a reliability programme exists, the contract should specify the Operator's and the FJAR 145 approved/accepted Organisation's respective involvement in that programme including the participation to reliability meetings.

7.6 **Engine Maintenance**

This paragraph deals with engine shop maintenance. "On Wing" engine maintenance should be covered by Para 7.5 above.

7.6.1 Scope of Work

The type of engine subject to the maintenance contract must be specified.

The type of maintenance to be performed by the FJAR approved/accepted Organisation should be specified unambiguously.

7.6.2 Location identified for the performance of maintenance/certificates held. The place(s) where base and line maintenance will be performed should be specified. The certificate held by the maintenance organisation at the place(s) where the maintenance will be performed has to be referred to in the contract.

7.6.3 Subcontracting

The maintenance contract should specify under which conditions the FJAR 145 approved/accepted Organisation may subcontract tasks to a third party (whether this third party is FJAR 145 approved/accepted or not). In addition, the operator may require the FJAR 145 approved/accepted Organisation to request the operator's approval before subcontracting to a third party. Access should be given to the Operator to any information (especially the quality monitoring information) about the FJAR 145 approved/accepted Organisation's subcontractors involved in the contract. It should however be noted that under Operators responsibility both the Operator and the CAAF are entitled to be fully informed about subcontracting, although the CAAF will normally only be concerned with aircraft, engine and APU subcontracting.

7.6.4 Maintenance Programme

This maintenance programme under which the maintenance has to be performed has to be specified. The Operator must have that Maintenance Programme approved by the CAAF. When the Maintenance Programme is used by several Operators, it is important to remember that it is the responsibility of the Operator to have that programme approved by the CAAF.

7.6.5 Quality Monitoring

The terms of the contract should include a provision allowing the operator to perform a quality surveillance (including audits) upon the FJAR 145 approved/ accepted Organisation. When the FJAR 145 approved/accepted Organisation is performing functions not covered by FJAR 145 such as Airworthiness Directives incorporation planning and follow-up, planning of maintenance tasks, etc., such functions must be under the control of the Operators own quality system. The maintenance contract should specify how the result of the quality surveillance is taken into account by the FJAR 145 approved/accepted Organisation (see Para 7.6.24 "Meetings"). The maintenance contract should also specify that the quality monitoring function of the contracted FJAR 145 approved/accepted Organisation should be extended to cover the specific maintenance functions the organisation performs.

7.6.6 Airworthiness Data

The airworthiness data used for the purpose of this contract as well as that required by the CAAF must be specified. This may include, but may not be limited to:

- Maintenance Programme;
- AD's;
- Major repairs/modification data;
- Engine overhaul manual;
- other?

7.6.7 Incoming Conditions

The contract should specify in which condition the Operator should send the engine to the FJAR 145 approved/accepted Organisation. For instance it is important to specify the configuration of the engine, e.g. including the list of the components that remain fitted to the engine before sending it to the FJAR 145 approved/accepted Organisation. It may also be valuable that a work scope planning

meeting be organised so that the tasks to be performed may be commonly agreed (see also Para 7.6.24 "Meetings").

7.6.8 Airworthiness Directive's

It is very important that the contract specify which country's Airworthiness Directive have to be applied (normally: those approved by the country of registration of the aircraft on which the engines are to be fitted) and who supplies the Airworthiness Directive. The operator may however agree to apply instruction more restrictive than those AD's. This may be the case for instance for engines that my be fitted on aircraft from different states of registry.

The application of an AD may be divided into the following phases:-

1. applicability;
2. mean of compliance;
3. planning;
4. incorporation;
5. follow-up.

It is not requested that the operator, in order to exercise its maintenance responsibility, perform itself items 1,2,3 and 5 however, those items shall remain under the operator's responsibility.

7.6.8.1 When the FJAR 145 approved/accepted Organisation only performs the incorporation of the AD (item 4 above), the contract should specify what information the Operator is responsible to provide to the FJAR 145 approved/accepted Organisation, such as the due date of the AD, the selected means of compliance, etc. In addition the type of information the operator will need in return to complete the control should be specified.

7.6.8.2 When the FJAR 145 approved/accepted Organisation also performs actions among item 1,2,3 & 5 above:

- the contract should specify what information the FJAR 145 approved/accepted Organisation need in order to initiate those actions and what is the decision process when various options are selected (e.g. date and mean of compliance).
- the maintenance contract should allow the Operator to have access to all the necessary information from the FJAR 145 approved/accepted Organisation so that the Operator may exercise its airworthiness responsibility. The information provided by the FJAR 145 approved/accepted Organisation should allow the Operator to control the performance of items 1 to 5 (as applicable) by the FJAR 145 approved/accepted Organisation and, when necessary, to override a decision of the FJAR 145 approved/accepted Organisation if it appears necessary to the continuous airworthiness of the engine.

7.6.9 SBs Modifications

Generally, the decision to embody SB's or modification belongs to the Operator. However, the Operator may delegate that decision provided that the conditions of delegation are clearly established (e.g. the modification does not affect the inter-changeability and the reliability (which should be demonstrated), the modification does not affect the maintenance or operational procedures, etc.).

Such a delegation may be useful in the case of an FJAR 145 approved/accepted Organisation that maintains to a common standard a fleet of engines that belong to different Operators.

The Operator will have to demonstrate that it has a thorough control of that procedure.

The contract should specify, where applicable, who is updating the SB and modification status and what type of information has to be exchanged for that purpose (see also Para 7.6.23 "Exchange of Information").

7.6.10 Hours & Cycles Control

Hours and Cycles control is the responsibility of the Operator, but there may be cases where the FJAR 145 approved/accepted Organisation performs that control, especially when it carries out planning functions. In the latter case, the FJAR 145 approved/accepted Organisation must be in

receipt of the current flight hours and cycles on a regular basis so that it may update the control (see also Para 7.6.23 "Exchange of Information").

7.6.11 Component Control/Removal Forecast

According to the contract, maintenance tasks may include component removal/installation planning and performance. The contract should then specify who performs the component control and what type of information has to be exchanged for that purpose (see also Para 7.6.24 "Exchange of Information").

7.6.12 Life Limited Parts

Life limited parts control is the responsibility of the operator.

7.6.12.1 When this life limited parts control is performed by the operator, the FJAR 145 approved/accepted Organisation will have to provide the Operator with all the necessary information about the LLP removal/installation so that the operator may update its control (see also Para 7.6.23 "Exchange of Information").

7.6.12.2 It may also be agreed between the operator and the FJAR 145 approved/accepted Organisation that the life limited parts control is carried out by the FJAR 145 approved/accepted organisation. This will have to be specified in the contract. The FJAR 145 approved/accepted Organisation will need to be in receipt of current hours/cycles of the aircraft, as well as any other information necessary to perform the control .The Operator should be in receipt of the life limited parts status in order to exercise his airworthiness responsibility (see also Para 7.6.23 "Exchange of Information").

The contract may contain additional requirements about the origin of parts (see also Para 7.6.13 "Supply of Parts).

7.6.13 Supply of Parts

The contract should specify whether a particular type of material or component comes from the Operator's or the FJAR 145 approved/accepted Organisation's store, which type of component is pooled, etc. Attention should be paid on the fact that it is the maintenance organization competence and responsibility to be in any case satisfied that the component in question meets the approved data/standard and to insure that the aircraft component is in a satisfactory condition for fittment. In other words, there is definitely no way for a maintenance organisation to accept whatever he receives from the Operator without adequate verification.

7.6.14 Scheduled Maintenance

The maintenance contract shall specify who is planning shop visits in accordance with the approved maintenance programme.

7.6.14.1 When the Operator is planning the shop visit, the support documentation to be given to the FJAR 145 approved/accepted Organisation should be specified. This may include, but may not be limited to:

- applicable work package, including job cards;
- scheduled component removal list;
- modifications to be implemented;

When the FJAR approved/accepted Organisation determines, for any reason, to defer a maintenance task, it has to be formally agreed by the Operator. If the deferment goes beyond an approved limit, refer to Para 7.6.18 "Deviation from the Maintenance Schedule". That should be addressed, where applicable, in the maintenance contract.

7.6.14.2 When the FJAR 145 approved/accepted Organisation is planning the shop visits, it should be in receipt from the Operator of all relevant information that will allow the performance of its planning function.

When the FJAR 145 approved/accepted Organisation defers a maintenance task, that information should be brought to the Operator's attention. If the deferment goes beyond an approved limit, refer to para "Deviation from the Maintenance Schedule". This should be addressed, where applicable, in the maintenance contract.

7.6.15 On Wing Engine Condition Monitoring

If the Operator contracts the engine condition monitoring to a FJAR 145 approved/accepted Organisation, the FJAR approved/accepted Organisation should be in receipt of all the relevant information to perform this task, including any parameter reading deemed necessary to be supplied by the Operator for this control. The contract should also specify what kind of feed-back information (such as engine limitation, appropriate technical advice, etc..) the FJAR approved/accepted Organisation has to provide to the Operator (see also Para 7.6.23 "Exchange of Information").

7.6.16 Unscheduled Maintenance/Defect Rectification

The contract should specify to which level the FJAR 145 approved/accepted Organization may rectify a defect without reference to the Operator. As a minimum the approval and incorporation of major repairs should be addressed. The deferment of any defect rectification shall be submitted to the Operator and, if applicable, to the CAAF.

7.6.17 Deferred Tasks

See Para 7.6.15 and 7.6.16 above.

7.6.18 Deviation from the Maintenance Schedule

Deviations have to be requested by the Operator to the CAAF. The contract should specify support the FJAR 145 approved/accepted Organisation may provide to the Operator in order to substantiate the deviation request.

7.6.19 Test Bench

The contract should specify the acceptability criterion and whether a representative of the Operator should witness an engine undergoing test.

7.6.20 Release to Service Documentation

The contract should specify the documentation the FJAR 145 approved/accepted Organisation should provide to the Operator upon delivery of the aircraft/engine. This may include but may not be limited to:

- JAA Form 1, FAA Form 8130 etc
- test bench report
- list of modifications embodied
- list of repairs
- list of AD's performed etc

7.6.21 Maintenance Recording

The Operator may contract the FJAR 145 approved/accepted Organisation to retain some of the maintenance records required. It should be insured that every requirement is fulfilled by either the Operator or the FJAR 145 approved/accepted Organisation. In such a case, free and quick access to the above mentioned records should be given by the FJAR 145 approved/accepted Organisation to the Operator and the CAAF.

7.6.22 Reliability Report

Where necessary, responsibility for the production of data for the reliability report should be defined into the contract.

7.6.23 Exchange of Information

Each time exchanges of information between the Operator and the FJAR approved/accepted Organisation is necessary, the contract should specify what information should be provided and when (i.e. on what occasion or at what frequency), how, by whom and to whom it has to be transmitted.

7.6.24 Meetings

In order that the CAAF may be satisfied that a good communication system exists between the operator and FJAR 145 approved/accepted Organisation , the terms of the maintenance contract should include the provision for a certain number of meetings to be held between both parties.

7.6.24.1 Contract Review

Before the contract is applicable, it is very important that the technical personnel of both parties that are involved in the application of the contract meet in order to be sure that every point leads to a common understanding of the duties of both parties.

7.6.24.2 Workscope Planning Meetings

Workscope Planning meetings may be organised so that the tasks to be performed may b

7.6.24.3 Technical Meetings

Scheduled meetings may be organised in order to review on a regular basis technical matters such as AD's, SB's, future modifications, major defects found during shop visit, reliability etc.

7.6.24.4 Quality Meetings

Quality meetings may be organised in order to examine matters raised by the Operator's quality surveillance and to agree upon necessary corrective actions.

7.6.24.5 Reliability Meetings

When a reliability programme exists the contract should specify the operators and the FJAR 145 approved/accepted Organisation respective involvement in that programme, including the participation to reliability meetings.

7.7 **Aircraft Line Maintenance**

This paragraph applies to maintenance contract that includes line maintenance but excludes base maintenance activities.

7.7.1 Scope of Work

The type of aircraft subject to the maintenance contract must be specified. It should include the aircraft's registration numbers.

The extent of maintenance to be performed by the FJAR 145 approved/accepted Organisation should be specified unambiguously.

7.7.2 Location identified for the performance of maintenance/certificates held.

The places(s) where line maintenance will be performed should be specified The certification held by the maintenance organisation at the place(s) where the maintenance will be performed has to be referred to in the contract.

7.7.3 Subcontracting

The maintenance contract should specify under which conditions the FJAR 145 approved/accepted Organisation may subcontract tasks to a third party (whether this third party is FJAR 145 approved/accepted or not). At the minimum the contract should make reference to JAR 145.1 and 145.75. Additional guidance is provided by Leaflet No 3 "JAR 145 extension of the quality system to a non JAR 145 organisation in addition, the operator may require the FJAR 145 approved/accepted organisation to request the Operator's approval before subcontracting to a third party. Access should be given to the Operator to any information (especially the quality monitoring information) about the FJAR 145 approved/accepted Organisation's subcontractors involved in the contract. It should however be noted that under operators responsibility both the operator and the CAAF are entitled to be fully informed about subcontracting, although the CAAF will normally only be concerned with aircraft, engine and APU subcontracting.

7.7.4 Quality Monitoring

The fact that the Operator's contractor is appropriately approved/accepted in accordance with FJAR 145, does not preclude the Operator from performing a quality surveillance (including audits) upon the FJAR 145 approved/accepted Organisation.

7.7.5 Airworthiness Data

The airworthiness data used for the purpose of this contract as well as the authority responsible for the acceptance/approval, (normally the authority of registration of the aircraft) must be specified. This may include, but may not be limited to:

- aircraft Maintenance Manual;
- aircraft PIC;
- Wiring diagrams;
- Trouble shooting manual;
- Minimum Equipment List (normally on board the aircraft);
- Operations Manual;
- Flight Manual.

7.7.6 Supply of Parts

The contract should specify whether a particular type of material or component is supplied by the Operator or the FJAR 145 approved/accepted Organisation. Attention should be paid on the fact that it is the FJAR 145 competence and responsibility to be in any case satisfied that the component in question meets the approved data/standard and to ensure that the aircraft component is in a satisfactory condition for fitment. In other words, there is definitely no way for a FJAR 145 Organisation to accept whatever he receives from the operator.

Storage conditions should also be addressed.

7.7.7 Pooled Parts

Guidance is provided by Leaflet No. 11 "JAR 145 acceptance of aircraft components".

7.7.8 Unscheduled maintenance/Defects rectification

The contract should specify to which level the FJAR 145 approved/accepted Organisation may rectify a defect without reference to the operator, and what action should be taken in case the defect rectification may not be performed by the FJAR 145 approved/accepted Organisation.

7.7.9 Deferred Tasks

The use of the Operator's MEL and the relation with the Operator in case of a defect that cannot be rectified at the line station should be addressed.

7.7.10 Release to Service

Release to service has to be performed by the FJAR 145 approved/accepted Organisation in accordance with its MOE procedures. The contract should however specify which support forms have to be used (Operator's technical log, etc.).

7.7.11 Exchange of Information

Each time exchange of information between the Operator and the FJAR 145 approved/accepted Organisation is necessary, the contract should specify what information should be provided and when, how, by whom and to whom it has to be transmitted.

7.7.12 Meetings

Before the contract is applicable, it may be beneficial that the technical personnel of both parties that are involved in the application of the contract meet in order to be sure that every point lead to a common understanding of both parties duties.

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CHAPTER 3 - AIRWORTHINESS CONTROL PROCEDURES

1 General

Procedures described in company manuals and/or required to be provided by this publication must be published in company documents and made available to staff concerned as necessary to ensure that they are aware of the procedures and their own resultant duties and responsibilities.

2 Maintenance Schedules - Control and Development

2.1 Two copies of the proposed Maintenance Schedule must be prepared and submitted for approval to the CAAF, Air Safety Department. When the schedule is approved the applicant will be formally notified by means of a Maintenance Schedule Approval Document, AD 271, which also defines the frequency and conditions for issue of Certificates of Maintenance and Release to Service for Scheduled Maintenance Inspections (SMI).

Note: The CAAF Maintenance Programme Compliance Document, gives guidance in respect of the preparation and submission of schedules for the CAAF approval.

2.2 Procedures must ensure that the data contained in an approved schedule is reviewed periodically, e.g. at minimum intervals of six months, with the object of ensuring that the detailed schedule requirements continue to have practical applicability in the light of experience and adequately meet the maintenance needs of the aircraft if continuing airworthiness in the respective operating circumstances is to be ensured.

2.3 Reviews must take account of variations from the original certification standard of the aircraft which may have occurred as a result of modifications and respond to recommendations of the manufacturer contained in maintenance manuals and Service Bulletins.

2.4 Changes in the use of aircraft may affect the conditions for approval of the maintenance schedule, for example with respect to annual utilisation, average flight duration and operating environment. Amendments to schedules and to engine maintenance programmes must be submitted for approval in response to significant changes.

2.5 A continuous analysis must be undertaken of defects arising on the aircraft during flight and at maintenance inputs, from Technical Logs and from worksheets raised during scheduled maintenance inspections, particularly those where major structural inspections are undertaken. Results of the analysis must be used to amend the maintenance schedule as appropriate to eliminate repetitive defects and trends.

2.6 Requirements for the maintenance of aircraft are contained in BCAR Chapter A6-2 (B6-2), including requirements for Maintenance Schedules, Certificates of Maintenance Certificates of Release to Service, Duplicate Inspections and the Retention of Records, Appendix 1 to Chapters A6-2 and B6-2 describes an acceptable means of compliance with requirements for condition monitored maintenance programmes.

2.7 It is particularly important that maintenance schedule reviews take account of the age and utilisation of the aircraft and the continuity of corrosion control programmes. More frequent maintenance may be required, as aircraft grow older.

3 The Certification of Maintenance

3.1 Certificate of Release to Service

3.1.1 A Certificate of Release to Service fulfils the requirements of ANR Article 16 for a Certificate of Compliance to be issued after overhauls, repairs, replacements, modifications and mandatory inspections have been carried out on an aircraft which is registered in Fiji and has a Certificate of Airworthiness in force, except as follows:-

(a) A Certificate of Release to Service is not required for certain prescribed repairs or replacements carried out on an aircraft not exceeding 2730kg Maximum Total Weight Authorised with Certificate of Airworthiness in the Special Category.

(b) If a repair or replacement of a part of an aircraft is carried out when the aircraft is at such a place that it is not reasonably practicable (i) to carry out the work in a manner that a Certificate of Release to Service may be issued, or (ii) for the Certificate to be issued at that particular

place, the PIC may fly the aircraft, if, in his opinion, it is safe to do so, to the nearest place at which a Certificate may be issued.

NOTE: The ANR prescribes that in such cases written particulars of the flight and the reasons for making it are to be given to the CAAF within ten days thereafter.

3.1.2 A Certificate of Release to Service shall be issued at the completion of any Scheduled Maintenance Tasks specified by an Approved Maintenance Schedule on an aircraft, which is registered in Fiji and has a Certificate of Airworthiness in any category (except Special Category).

3.1.3 The Certificate of Release to Service issued at the completion of any Scheduled Maintenance Tasks shall be signed in each of the licence/authorisation categories relevant to the work speciality of the particular Scheduled Maintenance Tasks, except that the CAAF may direct, for specific aircraft types that some "X" category certifications are not required.

3.1.4 A Certificate of Release to Service shall only be issued by appropriately authorised staff on behalf of the FJAR 145 approved Maintenance Organisation responsible to the operator for the maintenance of the aircraft in accordance with procedures prescribed in the Maintenance Organizations Exposition.

3.1.5 The Certificate of Release to Service should contain the statement prescribed in Appendix A.

3.2 Certificate Of Maintenance

3.2.1 An aircraft registered in Fiji in respect of which a Certificate of Airworthiness in the Transport Category (Passenger), Transport Category (Cargo) or Aerial Work Category is in force, shall be subject to a maintenance review at intervals specified in the Approved Maintenance Schedule or the relevant Approval Document of the Maintenance Schedule, as appropriate. At the completion of a review, a Certificate of Maintenance shall be issued.

3.2.2 The signatory shall only issue a Certificate of Maintenance when satisfied, at the time of the review, that the following aspects of maintenance have been carried out:-

(a) All maintenance specified in the Approved Maintenance Schedule has been carried out within the prescribed time period and any extension to limiting periods is in accordance with the CAAF approved procedures.

(b) All modifications and inspections deemed mandatory by the CAAF have been carried out within the prescribed time periods and any extension to limiting periods has been authorised by the CAAF. Due account must be taken of any repetitive inspections.

(c) All defects entered in the Technical Log have been rectified or deferred in accordance with the CAAF approved procedures.

(d) All Certificates of Release to Service required have been issued in accordance with the procedures of the FJAR 145 Maintenance Organisation.

NOTES: (1) The time intervals for the Certificate of Maintenance will be specified on a calendar "not exceed" basis only and therefore, it is not necessarily intended to align with any check.

(2) The Certificate of Maintenance requires only one signature.

3.2.3 A Certificate of Maintenance shall be issued only by appropriately authorised staff. On behalf of the FJAR 145 approved organization responsible to the operator for the maintenance of the aircraft in accordance with procedures prescribed in the Maintenance Organization Exposition.

3.2.4 The Certificate of Maintenance shall be in the format prescribed in Appendix C.

3.3 Maintenance Statement

3.3.1 The CAAF Air Operator's Certificates Minimum Requirements Document requires that the Aircraft Technical Log must contain, as well as a valid Certificate of Maintenance, a Maintenance Statement.

3.3.2 The purpose of the Maintenance Statement is to advise the Aircraft PIC and Maintenance Personnel of the forthcoming maintenance requirements.

3.3.3 The statement is to be completed by the FJAR 145 Maintenance Organisation following each scheduled maintenance inspection, and should include details of all out-of-phase inspections and

component changes etc, falling due prior to the next scheduled maintenance inspection. Where these are too numerous to include in a Maintenance Statement, or the operator wishes to provide for repeated inspections etc, alternative procedures and recording systems may be adopted with the agreement of the CAAF.

3.3.4 Where scheduled maintenance inspection may be completed as a line maintenance function the Maintenance Statement may be of a form, which enables the accomplishment of such minor inspections within the overall validity of the statement.

3.3.5 A specimen Maintenance Statement is shown in Appendix B.

4 Defects and Occurrences

4.1 An assessment of both the cause and any potentially hazardous effect of defects or combination of defects, and occurrences must be made in order to initiate any necessary further investigation and analysis.

4.2 A system of assessment should be in operation to support the continuing Airworthiness of aircraft and to provide a continuous analysis of the effectiveness of the Operator's control system in use.

4.3 The system should provide for:-

(a) Significant Incidents and Defects. The monitoring on a continuous basis of incidents and defects that have occurred in flight and of defects found during maintenance and overhaul, highlighting any that appear significant in their own right.

(b) Repetitive Incidents and Defects. The monitoring on a continuous basis of defects occurring in flight and found during maintenance and overhaul, highlighting any that are repetitive.

(c) Deferred and Carried Forward Defects. The monitoring on a continuous basis of deferred and carried forward defects.

(d) Unscheduled Removals and System Performance. The analysis of unscheduled component removals and of the performance or aircraft systems; and its use as part of a maintenance programme.

Occurrence Reporting To Manufacturers

5.1 The Operator's maintenance organisation should have procedures for ensuring that the organisation responsible for type certificate of each aircraft type (usually the constructor) receive adequate reports of occurrences to that type, to enable it to issue appropriate service instructions and recommendations to all Operators.

5.2 Liaison with the manufacturer is necessary to establish whether published or proposed service information will resolve the problem or to obtain a solution to a particular problem.

6 Mandatory Occurrence Reporting to the CAAF

6.1 In addition to reporting occurrences to manufacturers, an Operator's maintenance organisation has responsibilities for Mandatory Occurrence Reporting as required by the Air Navigation Regulations in respect of public transport aircraft the MTWA of which exceeds 2300kg. Guidance on meeting the mandatory requirements is given in CAP 382 ('Mandatory Occurrence Reporting - Informational and Guidance').

6.2 The maintenance organisation should operate procedures to discharge these responsibilities and personnel should be instructed as to their use. As far as possible these procedures should be integrated with the Airworthiness occurrence control system.

6.3 Mandatory Occurrence Reports should normally be made to the CAAF through the person authorised under paragraph 8.1 of this chapter.

6.4 An Operator who has contracted-out maintenance support may also need to submit occurrence reports direct to the CAAF and to liaise with the maintenance organisation to ensure that adequate follow-up action takes place, including the provision of supplementary reports.

This is particularly necessary where a foreign maintenance organisation is involved.

7 Other Occurrence Reporting to the CAAF

7.1 The organisation should ensure that such other reporting requirements as are prescribed from time to time are met: e.g. reporting Bird and Lighting Strikes in accordance with the relevant Aeronautical Information Circular.

8 Responsibility for Reporting Occurrences

8.1 Responsibility for co-ordinating action on Airworthiness occurrences and for initiating any necessary further investigation and follow-up activity should be assigned to a suitably qualified senior person with clearly defined authority and status.

8.1.1 Operational and maintenance responsibilities may be combined in one individual as long as the necessary integration is provided by the organisation, i.e. where the Operator undertakes his own maintenance.

8.2 A suitably qualified engineer within the support organisation should be assigned responsibility for co-ordinating with the Operator's operational staff in connection with occurrences which have both airworthiness and operational implications.

8.2.1 This is particularly necessary where the Operator contracts out his maintenance, when it must be clearly shown who performs this task in both the Operations and the Engineering Manuals.

9 Deferred and Carried Forward Defects

9.1 The systems for controlling deferred and carried forward defects must be described in Operations and Engineering Manuals. When transferring a defect in the Technical Log to the deferred sheets or carrying forward a defect during a maintenance check, the conditions agreed with the CAAF for the control of deferred defects must be complied with.

Notes: (1) Deferred defects are defined as those defects reported in operational service which are deferred for later rectification's.

(2) Carried forward defects are defined as those defects arising during maintenance which are carried forward for rectification at a later maintenance input.

9.2 There should be a system to consider the cumulative effect of a number of deferred or carried forward defects occurring on the same aircraft. Any restrictions contained in the Minimum Equipment List must be considered. Whenever possible deferred defects should be made known to the flight crew during pre-flight briefing, prior to their arrival at the aircraft.

9.3 There should be a procedure to ensure that the period for which defects are deferred or carried forward reflects the importance of the defect as it affects Airworthiness and/or safe operation. Limitation periods to be applied should be identified in the Exposition or Manual (e.g. flight hours, calendar time, number of sectors, return to base). The control system should ensure that the number of deferred defects and the length of time during which each defect is deferred are kept to a minimum.

9.4 There should be a procedure to ensure that deferred defects are transferred to worksheets at maintenance periods, and to ensure that deferred which have not been actioned during maintenance periods, are re-entered on to a new deferred defect record sheet, the original date of the defect must be retained.

9.5 There should be a procedure to ensure that the necessary components or parts are made available or ordered on a priority basis, and that they are fitted at the earliest opportunity.

9.6 There should be a cross reference in the Technical Log to enable each defect which has been deferred to be traced back to its original entry.

10 Repetitive Defects

10.1 There should be a system to control and monitor repetitive defects on a continuous basis appropriate to the number of aircraft operated and the nature of the operation. The system should ensure that the history of a particular repetitive defect is not lost at scheduled inspections. A limit to the number of times a particular defect may be repeated should be established, after which it should be brought to the attention of a senior person in the Organisation, usually the Quality Manager. This person is responsible for ensuring that positive action is taken to obviate a further repetition of the defect.

10.2 Defects should be recorded in a standardised way to assist in identifying which problems are repetitive. There should be an arrangement to ensure that line and outstation maintenance personnel have access to repetitive defect information.

11 Instructions to Maintenance Personnel

11.1 In addition to the technical and procedural contents of documents such as maintenance manuals and the Exposition prepared by the maintenance organisation, there is a need for a system of bulletins or instructions with which to advise maintenance personnel of matters of immediate technical importance, and to define company practices where these differ from other published information.

11.2 The maintenance organisation must therefore have a system for publishing instructions, which should be:-

(a) Distributed individually to maintenance personnel or in such a way that person has access to a copy and there is a record kept to show that he has seen each document issued.

(b) Numbered sequentially and dated. Where instructions are revised an issue or revision number must be shown.

(c) Identified as to content, e.g. by ATA Chapter or by aircraft type number so as to permit easy access to particular subjects.

11.3 The principal source of matters to be addressed by the issue of instructions is expected to be the in-service experience of the aircraft being operated and maintained, to which the maintenance organisation finds a need to respond with guidance to maintenance personnel. Other likely sources of information which should not be overlooked include UK CAA Airworthiness Notices, CAAF Airworthiness Advisory Leaflets, Occurrence Digest, GASIL, in-service experience reports and similar continuing Airworthiness information published by Airworthiness authorities and manufacturers.

11.4 Where instructions are issued which conflict with, or vary, information published by manufacturers or other sources it must be clearly shown which information takes priority. It must also be ensured that instructions cannot be construed as overriding published mandatory information or concern matters beyond the scope of the Approval held by the organisation.

12 Technical Records

12.1 A department responsible for the compilation and co-ordination of technical records should maintain a data recording system:

(a) Such that it is possible to ensure that the hours of service or elapsed times quoted in the approved Maintenance Schedule are not exceeded as regards components and structural assemblies, and that scheduled maintenance periods are adhered to.

(b) To record the number of landings, flights or cycles, and the use of maximum contingency or intermediate contingency power, when this information is specified in the approved Maintenance Schedule or manufacturer's manuals as basis for inspection or other necessary action.

(c) To process the foregoing, information into aircraft, engine and propeller log books or equivalent records, to maintain the records and documents concerning overhaul and repair work, component changes, mandatory modifications and inspections and to maintain the Modification Record Book.

12.2 A computer may be used as part of a technical records system with the agreement of the CAAF. In this case procedures should be instituted which will ensure that the computerised record will provide storage, preservation and retrieval to the same level as would have been achieved by hard copy records. The CAAF acceptance of computerised recording does not exempt the Operator or his contracted maintenance organization from complying with the appropriate provisions of the Air Navigation Regulation for the keeping and retention of records.

13 Documentation for Maintenance Checks

13.1 The department responsible for technical records should also be responsible for the accuracy of the documents for a maintenance check and should maintain a procedure to ensure that only documents to the latest amendment state are issued, and that all superseded documents are withdrawn and cancelled. Working documents made available for use by hangar engineering staff such as worksheets or cards should include:

(a) A list of inspections, checks or work items required to meet the requirements of the approved maintenance schedule and adequate directions for their implementation.

(b) The part numbers and serial numbers (unless not relevant to component control) of all components to be removed and replaced, and their locations on the aircraft.

(c) Details of any modifications which have to be incorporated during the check.

(d) Any mandatory or special inspections, or any other checks which are required to be made by the company in addition to those required by the approved maintenance schedule.

(e) Detailed procedures for engine runs, power unit or propeller change, fuel flow tests, duplicate inspection of controls landing gear retraction tests etc., as applicable.

(f) A list of outstanding deferred and carried forward defects.

13.2 Additional worksheets or cards should be provided for recording the work completed as a result of the maintenance check and any defects arising from inspections.

13.3 All worksheets or cards should be readily identified and should bear an issue number. They should also be identified to associate them positively with the relevant items in the maintenance schedule. The procedures for documentation control should ensure that if any worksheet or card is mislaid, or lost this will be readily apparent on completion of the check, and that each 'pack' of worksheets or cards is complete and certified before the aircraft is release for service.

13.4 Before issue, all worksheets or cards must be recorded on a 'workpack control' sheet which should also state the following:

(a) Name and CAAF Approval reference of the maintenance organisation.

(b) Aircraft type and registration letters.

(c) The maintenance check to be carried out.

(d) The date.

(e) The approved maintenance schedule reference number and amendment state.

(f) The name of the Operator whose aircraft is being maintained.

13.5 Technical records are deemed to be essential records and may not be destroyed without permission form the CAAF.

13.6 The compilation of maintenance check documentation may, alternatively, be allocated to a maintenance-planning department, subject to the agreement of the CAAF. In such case the company Exposition must contain details not only of the procedures of the planning department through which the documentation is complied but also of the monitoring programme exercised by Quality Assurance.

14 Airworthiness Directives and Manufacturers Technical Information

14.1 Maintenance organization must have procedures and the necessary personnel to ensure that Airworthiness Directives are complied with as required. It must be quite clear, when maintenance accomplishment is in any way subcontracted, where responsibility lies for compliance with Directives.

14.2 When assessing the overall capability of the organization to provide satisfactory maintenance support, the CAAF will take into account the organisation’s arrangement for:

(a) The assessment of incoming technical information from manufactures, including Service Bulletins, relating to relevant aircraft types.

(b) Initiating action as necessary on such information, particularly in relation to the Maintenance Schedule.

(c) Responding to requests by the Manufacturer and the CAAF to have 'in- service' experience reports transmitted for their evaluation.

Note: The CAAF may require access to an Operator's assessments of manufacturer's service information to assist in evaluation of such information for the purpose of possible mandatory classification.

14.3 When manufacturer's service information is received an immediate assessment must be made to establish priority of response. Matters of significant Airworthiness importance, such as those having an impact on ETOPS flights, must be responded to promptly.

Note: CAAF requirements for Extended Range Twin Operations (ETOPS) are contained in MRD8.

14.4 By means of Modification Records (AD 259), Technical Records, Log Books or other means adopted by the organization it must be possible at any time to establish the record of compliance with Directives and Service Information for each of the Operator's aircraft.

14.5 Operators must ensure that the relevant aircraft manufacturer is aware that they are users of this aircraft so that all relevant service information, details of in-service experience of the aircraft and amendments to manuals, including the Flight Manual, are received and embodied in a timely manner, This is especially important where the Operator is not the original owner of the aircraft, or it has been leased from the owner.

14.6 Where manuals, including the Flight Manual, have been prepared or amended by an agency other than the manufacturer, the Operator must ensure that amendments are prepared as necessary, submitted to the CAAF through an appropriately approved organisation for approval and incorporated into manuals promptly.

14.7 The technical library must hold and make available to personnel concerned the necessary technical data e.g. JAA/CAA and the CAAF publications, the ANR, manufacturer's manuals, any relevant service information, any other related literature appropriate to the aircraft type; covered by the AOC and copies of appropriate company manuals, procedures and Instructions. A person must be appointed to be responsible for the technical library.

14.8 Arrangements must be made for:

(a) The supply of amendments, so that all publications are kept up-to-date and for department concerned to be notified of such amendments, and of any additional technical information relevant to the work undertaken.

(b) Maintenance manual information recorded on microfilm, microfiche or disk to be checked at specific intervals for amendments state and legibility, and any temporary amendments to be kept available adjacent to each reader.

14.9 Arrangements should be made for all technical drawings to be suitably stored and a procedure operated to ensure that only drawings of the correct issue are released. A person should be made responsible for maintaining an up-to-date records of drawings available and also for notifying departments concerned when drawings have been superseded by a later issue.

14.10 The technical library must make arrangements for manuals or sections of manuals, schedules, service information, etc;, appropriate to the work undertaken, to be made available to line maintenance stations and a suitable procedure maintained to ensure that such information is kept up to date.

14.11 Microfilm, microfiche and compact disk viewing and printing equipment must be available, as appropriate, at each location where manuals in these formats are in use, and in the library. Adequate arrangements must be made for regular maintenance of the equipment and users should be made aware of contact points for servicing and repair.

15 Spares

15.1 **Provision and Storage** The Operator must provide for sufficient spares to be available to ensure that aircraft, engine and equipment defects can be promptly rectified. Spares may be provided by either the Operator or the maintenance organisation, as contractually agreed, but must as far as possible be located where they will be required to be used.

15.2 Account must be taken of the Operator's Minimum Equipment Lists (MEL) to ensure that essential spares to support the rectification of defects in systems required for operation are placed where they are most likely to be needed and in such numbers as to ensure that successive defects will be promptly addressed.

15.3 Operators may make arrangements with manufactures and overhaul agencies for the provision of spares on demand subject to the arrangements being the subject of a firm contract. Spares obtained

from another Operator or Maintenance Organisation will only qualify for installation if the source is considered to be acceptable within the criteria defined in UK CAA Airworthiness Notice 17.

15.4 The CAAF may require to examine spares provisioning arrangements; and any agreements entered into to ensure that adequate support for defect rectification is being made. Where necessary the CAAF may require additional provisions to be made.

15.5 Spares provisions at each maintenance location should be determined when the particular base or station is commissioned and published in the company instructions/procedures defining the maintenance operations undertaken at the particular location.

15.6 Spares holdings should be reviewed at regular intervals at all locations to ensure that:

(a) Redundant items are removed e.g. for aircraft no longer operated.

(b) Superseded parts, or those with out of date modification states, are removed for replacement or up-dating.

(c) Previously assessed numbers of spares remain adequate for support in relation to routes, frequency of flights and number of aircraft.

(d) Airworthiness Directives and other mandatory requirements published while parts are in storage are complied with before the part is released for service.

15.7 **Storage Procedures** All spares must be stored, at all times and locations, in such a manner as to ensure that they remain airworthy and fit for use when required. Parts must be used in rotation so that they remain in stores for as short a time as possible, i.e. first in - first out.

15.7.1 Procedures must be established to control the return to stores of items withdrawn for use but not needed, especially where the item has been installed in the aircraft and subsequently removed. The robbery of components from completed assemblies must be rigidly controlled and any removal positively identified.

15.7.2 Spares having a limited allowable shelf like, including materials and consumable products must be identified and controlled.

15.7.3 Stores reference or batch numbers should be recorded on worksheets, cards or technical log pages so as to facilitate subsequent tracing of the associated part to source.

15.7.4 Management procedures and conditions of storage must be reviewed regularly to ensure that satisfactory standards are being implemented.

16 Instructions to Flight Crews

16.1 Operators should arrange for written instructions to be included in the Operations Manual so that:

(a) Aircraft PICs are advised of the action to be taken to obtain engineering assistance when aircraft are away from main base, of the procedures which are acceptable for any necessary certifications, and of the procedure to be adopted where any doubt exists over work being carried out by any other organisation, or which cannot be certified.

(b) Where no arrangements have been made in respect of engineering support at route stations, aircraft PICs are advised of the procedures to be followed for reporting defects to main base. See also Chapter 8 paragraph 9.

(c) Where it is desired to transmit advisory information of a temporary nature to flight crews, e.g. in respect of modifications to the aircraft, trial installations or other changes which the crew need to be aware of during their operations of the aircraft, or which impose operating restrictions, an information sheet should be included in the Technical Log containing the relevant data.

17 Aircraft Refuelling - Quality Assurance

17.1 The Operator must be satisfied with the quality of all fuel taken on board his aircraft, particularly in respect of freedom from water contamination.

17.1.1 Fuel suppliers within Fiji are required to comply with the provisions of the Air Navigation Regulation concerned with Aviation Fuel at Aerodromes and must ensure that fuel dispensed is fit for use in

aircraft. The Operators must comply with this Article himself if he has a facility or vehicle in which fuel is stored and/or delivered to aircraft.

17.1.2 The Operator is required to:

(a) Keep a record of the fuelling arrangements at each station where fuel is uplifted, indicating the company or person responsible for monitoring the fuel suppliers. This may be a nominated airline at each location, or the Operator may, himself, choose to monitor the supplier's quality performance.

(b) Institute a fuel uplift-sampling programme taking into account matters such as:

[i] Known supplier quality performance, including any history of contamination.

[ii] Local environmental conditions, e.g. likely sources of contamination including microbiological contamination.

[iii] Supply facilities.

[iv] Frequency of use.

(c) Provide flight crew with guidance on the accomplishment of fuel uplift sample checks and clear instructions as to when these are to be carried out.

(d) Provide maintenance personnel with guidance, in respect of fuel quality sampling, in relation to their station. Ensure that persons engaged in refuelling activities are properly trained for their tasks.

(e) Audit the arrangements as defined to ensure the continuing acceptability of fuel quality throughout the operation.

17.3 The minimum frequency of fuel contamination checking, at the point of uplift, must be declared in guidance to maintenance personnel and acceptable to the CAAF.

17.4 The control of fuel storage and dispensing by suppliers should conform to the standards defined in CAP 343, Aviation Fuel at Aerodromes.

18 All Weather Operations - Maintenance Requirements

18.1 All Weather Operations, defines the means by which an Operator can achieve approval to perform operations in Category 2 or 3 landing conditions In order to perform such operations certain aircraft systems must be fully serviceable and the equipment in those systems must be to a defined modification standard.

18.2 The Operator or his maintenance organisation must publish guidance to maintenance personnel and flight crews on the control of the validity of all weather categorisation. This guidance should take the form of:

(a) A list of the systems required to be fully serviceable in order to qualify the aircraft for Category 2 or 3 operations.

(b) A company procedure for the control of the modification status of the equipment fitted in the he required systems which are deemed to be ‘sensitive' in terms of all weather operations.

(c) Placards applied to both equipment and installation to alert maintenance personnel to the need to fit only controlled equipment.

(d) Procedures for downgrading all weather capability from Category 3 or 2 to Category 1 in the event that an uncontrolled item of equipment is fitted or after any defect in an affected system or any event which results in disturbance of the system.

(e) Procedures for up-grading capability from Category 1 to Category 2 or 3 as appropriate when serviceability is proven, normally by performing a successful Category 2 approach or Category 3 landing in Category 1 weather conditions (sometimes referred to as a standard landing).

18.3 Provisions should be made to inform the crew of the Category 2 or 3 status of the aircraft before the flight is begun.

18.4 When setting alert levels in system reliability monitoring, consideration must be given to the levels of reliability assumed in qualifying the aircraft for Category 2 or 3 operations. Significant trends must be responded to promptly or all weather classification must be suspended until remedial action has been taken. Note: The published company procedures for controlling the engineering aspects of all weather operations, incorporating the subjects included in this paragraph, forms part of the details required by the CAAF for grant of operational approval.

It should, therefore, be sent to the Airworthiness Office, for assessment.

19 Preparation of Aircraft for Flight

19.1 The ANR Regulation 31 concerned with pre-flight action required to be taken by the aircraft PIC prescribes that he, or she, is satisfied that the aircraft is fit to make the intended flight. In order to permit the PIC to discharge this responsibility, in respect of the maintenance of the aircraft, the Operator must:

(a) Ensure that the Operations Manual and Maintenance Schedule contain a pre-flight inspection to be completed by the crew, or by maintenance personnel where available, with which to verify that the aircraft continues to be serviceable. Details of this inspection should also be included in the Technical Log.

(b) Provide information, preferably, in the Technical Log, to advise the PIC when the next Scheduled Maintenance Inspection (SMI) is due, by flying hours and calendar time, any defects existing on the aircraft affecting its operational Airworthiness and safety, and any maintenance actions falling due before the next SMI.

(c) Where a procedure acceptable to the CAAF exists for the control of maintenance actions necessary between Scheduled Maintenance Inspection it may not be practicable to include full details in the Technical Log. In such cases it should be possible for flight crew to verify, with the assistance of maintenance personnel if necessary, that no maintenance task is due or will become due before the end of the intended flight.

(d) Provide any other information to the REW concerning the aircraft and its systems, including changes resulting from modifications, which may affect the operation of the ircraft.

(e) Have management and quality assurance procedures, which will ensure that, whether the aircraft is dispatched by the Operator or the task is wholly or partly sub-contracted:

[i] Fuel uplifted prior to flight is free from contamination.

[ii] Refuelling of the aircraft is carried out in a controlled manner taking into account essential safety measures for fire prevention. CAP 74 - Aircraft Fuelling, provides guidance to all persons concerned with the fuelling of aircraft, including helicopters.

[iii] Baggage and cargo is loaded and restrained in accordance with Flight Manual limitations and that cargo doors are securely fastened.

[iv] Push-back and start-up are carried out to a standard procedure for the specific type of aircraft, under the control of a suitably trained person, that the area in which engines will be started is free from debris and contamination likely to damage the engines and that fire-fighting facilities are immediately available.

Note: It is recommended that ground personnel take appropriate precautions when pushback occurs during electrical storms and lightning. Interphone connection should not be made with the aircraft and dispatch instructions should be given with agreed hand signals.

[v] Control surface and landing gear locks, restraint devices and blanks are removed.

[vi] Proper attention is given to the rectification of recorded defects, compliance with the MEL and any limitations imposed in respect of the period of flights, flying hours or calendar time, and

[vii] The aircraft is serviced and inspected as required by the approved maintenance schedule.

19.2 Where aircraft are not dispatched by or under the direct control of appropriately authorised maintenance personnel it must be ensured that persons performing dispatch tasks have been

properly trained to do so and have been given written authority to that effect, and where tasks are divided between two parties the responsibility of each are clearly defined.

19.2.1 Written authority may be granted individually or to a group of persons by virtue of a maintenance agreement, where the contracted party has its own system of authorisation.

19.2.2 Where flight crew personnel are authorised it is sufficient for the particular training and authority to be included in training records.

20 Cabin Reconfiguration - Approval and Control

20.1 Any change to the cabin configuration from that for which the aircraft was first certificated constitutes a modification which must be approved by the CAAF. Airworthiness requirements to be satisfied in order to gain CAAF approval of cabin re-configuration for the carriage of cargo are shown in Appendix D to this Chapter.

20.2 Revised or alternative seating layouts, the fitting of stretchers or the conversion of the cabin to a cargo carrying role all constitute modifications which must conform to an approved design and be certified with the issue of a Certificate of Release to Service (CRS) each time they are installed or the original configuration is restored. (See also paragraph 20.8).

20.3 The Operations Manual and instructions to maintenance personnel must contain precise description, preferably pictorial, of the approved configuration and any limitations to be observed. It is recommended that the various actions necessary are summarised in a checklist in each case, particularly in respect of the fitting or securing of emergency equipment and exits. Checklists should be readily available to personnel when carrying out configuration changes.

20.4 Where any possibility of error exists, such as in the position of seats and of fitting incorrect seats at and adjacent to emergency exists, the aircraft and the item to be fitted should be clearly marked and the pictorial diagram of the configuration should illustrate the arrangements.

20.5 Clear and easily interpreted guidance must be given to persons responsible for loading and securing the aircraft for flight so that the conditions of the approved modification are observed. In cases where the main cabin is used for the carriage of cargo it should be possible to readily install a configuration embodying methods of restraint which will ensure compliance with cabin design limitations without the need for extensive calculations at the point of dispatch.

20.5.1 It must be ensured that all cabin configurations are fully represented in APS weights and indices used in the loading calculations made prior to flight dispatch.

20.6 Approved modifications for cargo configurations should contain the various restraint practices used by the Operator to facilitate the satisfactory carriage of different types and sizes of load.

20.7 Operators must have a care and maintenance programme for cargo containers and pallets used either in cargo holds or the main cabin, particularly where the container itself is designed to provide necessary restraint and, in some cases, fire containment. CAAF requirements for the use, care and maintenance of Unit Load Devices (ULD) are contained in Appendix E to this Chapter.

20.8 Certification of Changes

20.8.1 Certificates of Release to Service (CRS) must be issued for each change of configuration. The CRS must refer to the modification being embodied or removed but may do so through reference to a company instruction or role diagram etc, which directly records compliance with the requirements of the modification.

20.8.2 Certificates of Release to Service may be issued by appropriately licensed or authorised personnel.

21 Balloons

21.1 The Operator must establish procedures to ensure:

(a) that all appropriate Maintenance Schedules, Maintenance Manuals, Service Bulletins, CAAF or Foreign mandatory inspections/modifications publications and any other supporting information necessary for the maintenance of a particular balloon are available to personnel working on the balloon;

(b) that all such publications are kept up-to-date and that the Approved Maintenance Schedule is regularly reviewed to reflect the maintenance needs of the balloons;

(c) that all manufacturers' service information is evaluated and appropriate action taken as considered necessary;

(d) that all required scheduled maintenance, mandatory inspections modifications and defect rectification are carried out;

(e) that all materials and parts used or held in storage have been obtained from acceptable sources and are fit for use;

(f) that storage conditions are satisfactory and batch control guarantees traceability to source;

(g) that calibration/servicing, where appropriate, of tools, test equipment or servicing rigs is carried out at the appropriate intervals and suitable records are maintained;

(h) all technical documentation such as log books, work sheets etc., are maintained in a complete and up-to-date manner;

(i) that any outstanding defects considered acceptable for flight on completion of the particular scheduled maintenance are notified to the PIC and endorsed in the Technical Log;

(j) that the organisation responsible for type certification of each balloon type usually the manufacturer), and the maintenance organisation, receive adequate reports of all Airworthiness occurrences to that type, to enable the issue of appropriate service instructions and recommendations to all operators.

Note: Mandatory Occurrence Reporting is required by the Air Navigation Regulations in respect of public transport aircraft exceeding 2300 kg MTWA. It is recommended that balloon operators not affected by this requirement nevertheless report to the CAAF any occurrence interpreted as within the guidance given in MRD 11 - Mandatory Occurrence Reports and Accidents Investigation.

21.2 The Operator must establish a procedure acceptable to the CAAF to ensure that pilots-in-command discharge the following responsibilities:

(a) that all routine servicing/maintenance is carried out including pre-flight checks;

(b) that defects affecting Airworthiness or safe operation of the balloon are recorded in the Sector Record Page of the Technical Log;

(c) ensure that defects are rectified before flight by appropriately qualified persons, or are deferred in a manner acceptable to the CAAF and in accordance with the provisions of an allowable defects list.

22 Aircraft External Damage Marking

22.1 In the course of normal service aircraft may suffer external damage in the form of scratches and minor dents as a result of collision with cargo and baggage loading equipment, access steps and vehicles.

22.2 Operators should have a system for identifying such damage after inspection and acceptance by the supporting maintenance organisation so that it is readily apparent when new damage occurs.

22.3 Damage should be entered in a record kept in the aircraft either directly on pictorial diagrams or by use of a grid referencing system. Such records may be included in the Technical Log or another readily available document.

22.4 When considered desirable as a means of prompt recognition of accepted damage it is acceptable for the actual damage to be marked using a suitable method of identification.

22.5 The damage record for each aircraft must be reviewed from time to time to ensure that it has been kept up to date, that repaired damage is removed from the record and that the cumulative effects of damage do not exceed manufacturers' limitations.

23 Aircraft Furnishings

23.1 Operators and maintenance organizations must have adequate control over the cleaning of aircraft furnishing materials. For this, they need to have a knowledge of the material type, the recommended

cleaning or proprietary finishing processing methods, the effects of time in service on the flame resistance properties, the flame retardant processes applied, if any, and the method of re-application of such a process, where this is necessary.

23.2 Where materials, e.g. seat covers, require the application of a proprietary flame retardant process in order to satisfy Airworthiness requirements it is strongly recommended that each item is identified with the number and type of cleaning actions it receives until it is re-proofed.

23.3 It is not acceptable to place reliance on unsubstantiated claims concerning the continuance of flame resistant properties of a material after durability or additional flame retarded processes have been applied. Where such processes have been applied, there is a need to prove the continued acceptability of a particular material or process in service, and, therefore, further flame resistance tests must be conducted in accordance with requirements identified in UK CAA Airworthiness Notices 58 and 59 as appropriate.

24 The Maintenance Of Cabin And Other Safety Provisions

24.1 Provisions made for the safety of passengers in flight and in the event of emergency alighting may be subject to abuse by passengers either deliberately or by virtue of frequent use. It is therefore essential that regular inspections take place to ensure that the means by which the particular provision is implemented remain valid and any defined or implied inspection requirements are accomplished.

24.1.1 In some cases re-configuration of the cabin can result in seat positions, placards and emergency equipment being moved or omitted.

24.2 Subjects which require frequent monitoring include the following matters where the requirement has been notified as a UK CAA Airworthiness Notice, with, or without a specific maintenance requirement:

(a) Stowage and accessibility of lifejackets.

(b) Continuing compliance, and test, of floor proximity escape path marking.

(c) Testing of cabin and toilet smoke detector systems.

(d) Access to and functioning of type III and IV exits.

(e) Integrity of cargo compartment fire containment capability, linings and seals.

(f) Inspection of catering carts and trolleys, brakes, restraints and placards.

(g) Functional test of inflatable escape chutes and flotation devices (aeroplane and helicopters).

(h) Continuing integrity of toilet fire precautions.

(i) Protection of life rafts and flotation bags from damage after deployment.

(j) Compliance with approved cabin configurations for seat positions, access to exits and minimum space for seated passengers, particularly where seats are regularly removed and refitted.

(k) Statutory provisions for the marking of exits and break-in areas.

Appendix A. Certificate of release to service format

CERTIFICATE OF RELEASE TO SERVICE

"Certifies that the work specified except as otherwise specified was carried out in accordance with FJAR 145 and in respect to that work the aircraft/aircraft component is considered ready for release to service".

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Appendix B. Maintenance statement format

MAINTENANCE STATEMENT

<table>
<tr><td colspan="4">MAINTENANCE STATEMENT
Aircraft Type: Registration Mark:</td></tr>
<tr><td colspan="4">The next SCHEDULED MAINTENANCE INSPECTION is due at: hrs
or on:</td></tr>
<tr><td colspan="4">The following out of phase inspections/component changes are due before the next Scheduled Maintenance Inspection specified above:</td></tr>
<tr><td rowspan="2">Item</td><td colspan="2">Due</td><td rowspan="2">Sector Log Ref on Completion</td></tr>
<tr><td>Hrs</td><td>Date</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="4">This maintenance statement is not complete unless a valid Certificate of Maintenance is attached.</td></tr>
</table>

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APPENDIX C. Certificate of maintenance format

CERTIFICATE OF MAINTENANCE

Aircraft Type .....

Nationality and Registration Mark .....

CAAF Approved Maintenance Schedule reference .....

Certified that the maintenance of this aircraft including its engines together with its equipment and radio station has been carried out in accordance with the approved maintenance schedule as required by the Air Navigation Regulations for the time being in force.

The next Certificate of Maintenance is due .....

Signed : .....

Authorisation No : .....

Date : .....

Organisation : .....

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APPENDIX D. The conversion of passenger cabins for the carriage of cargo (aeroplane) - airworthiness requirements

1 General

1.1 The Flight Manual may often include structural limitations in terms of floor loading and the strength of fixtures but no information is usually given in respect of crash worthiness, emergency escape or fire precautions. In any event the Flight Manual rarely defines the configuration used by the Operator and any details included in the Flight Manual, for example in respect of restraint methods, are in a Section which, is not usually subject to the CAAF assessment and approval.

1.2 Where the Operator wishes to use such aircraft for the purpose of carrying cargo, approval of the associated cabin configuration must be obtained by modification action to show compliance with the following requirements.

2 All Aeroplanes with a Maximum Certificated Take-Off Eight Above 5700 Kg (12,500 Lb)

2.1 **Fire Precautions,** JAR 25.855 and either:

a) JAR 225.857 (b) as a Class B cargo compartment, or

b) JAR 25.857 (e) as a Class E cargo

2.2 **Crash worthiness,** JAR 25.561 (c) and 25.787 and

2.3 **Emergency Exits**, JAR 25.787, 25.803(a), 25.805 and 25.809.

3 ALL AEROPLANES WITH A MAXIMUM CERTIFICATED TAKE-OFF WEIGHT OF 5700KG (12,500LB) AND BELOW

3.1 **Fire Precautions.** There are no compartment classifications in BCAR Section K or BCAR 23.

(a) If the crew can easily detect the presence of smoke (eg. where there is no physical barrier between crew and load) then no smoke detectors or additional fire extinguishers are required (although Operators may consider them to be desirable in which case they may be incorporated into modifications).

The Operation Manual must say 'land at the nearest available airfield' in such circumstances.

(b) If the crew are separated from the cargo then a detector is required. Detectors would also be required in a pressurised aircraft unless it can be shown that the air flow path from a fire to the cabin air outflow will bring a fire to the notice of the crew reasonably quickly.

3.2 **Crash worthiness** The load; must be restrained to the requirements of BCAR K3-8 paragraphs 2 and 3 and K4-3 paragraph 2, or BCAR 23.56(e) and 23.787. The means of restraint may be a bulkhead, barrier net, tie downs or nets or any combination shown to meet the requirements.

3.3 **Emergency Exits** The load must not prevent or impinge upon the crew emergency exit route or the exit. BCAR Chapter K4-3 paragraph 2, 4.3 and 4.4 apply, or BCAR 23.787 and 23.807.

4 FLIGHT MANUAL

Where emergency procedures are simple in content, i.e. 'land at nearest airfield in the event of a cabin fire', it is acceptable for them to be included in the Operations Manual only (see paragraph 5 below). In any other cases, for example where more detailed operational limitations/conditions or crew action is necessary a Flight Manual Supplement or Change Sheet will be required and should be submitted for approval with the modification proposal.

5 OPERATIONS MANUAL

5.1 An Operations Manual amendment must be submitted as part of the modification. It must be possible, by reference to the Operations Manual or related instructions such as a loading manual, to respond to the Airworthiness considerations taken into account the Modification. If the crew are themselves responsible for achieving the passenger to cargo re-configuration the Operations Manual guidance must be such as to enable them to readily satisfy the limitations and approved arrangements of the modification.

5.2 Typical contents of the Operations Manual will include:

(a) The identity of the Modification and CAAF Approval.

(b) The means of identifying fire and the necessary response derived from above.

(c) Any other guidance in respect of fire in the cabin. (The modification may include guidance from other parts of the Flight Manual, FCOM, POH etc).

(d) Cargo loading limitations, e.g. maximum height, width and forward dimensions. (There imitations in the Manual e.g. floor loading and attachment point strengths any be repeated).

(e) Methods/Routes of escape in the event of an emergency landing/stop. The locations of smoke/oxygen masks and other fire-fighting equipment may also be shown including fire extinguishers if appropriate, (i.e. if the crew is/are able to use them.

6 REQUIREMENT FOR A MODIFICATION

6.1 A modification is required to show how the aircraft cabin is converted from passenger to cargo use and how the relevant Airworthiness requirements are satisfied.

6.2 The modification should be presented to the CAAF in the draft form for classification. It should describe the cabin in its modified condition for carrying of cargo and typically will include extracts from the manufacturer's loading instructions. Cargo 'bays' should be shown, if applicable, together with the relevant floor loading limitations, (with or without floor spreader boards as appropriate).

6.3 The involvement of an approved design organisation will be necessary where design changes take place, special equipment is fitted or it is necessary to make performance assessments, (unless the changes are the subject of a manufacturer's approved modification or Service Bulletin). Typical instances include the installation of fixed freight restraining bulkheads/barriers, the location of smoke detectors and the determination of cabin airflow patterns.

APPENDIX E. The use, care and maintenance of cargo unit load devices (ULD)

1 USE OF CARGO CONTAINERS, PALLETS AND NETS (UNITS LOAD DEVICES)

1.1 In addition to providing an efficient means of transfer and loading, containers and pallets are designed to ensure that cargo and baggage is properly restrained.

1.2 To ensure that the restraint capability of both containers, pallets and nets are fully effective and that Airworthiness requirements are satisfied, it is essential that no unit is used which is damaged beyond the ULD manufacturer's specified limits. In the case of containers, doors and screens must be fully attached using all fasteners and latches.

1.3 Specific attention must be paid to the manner in which cargo is loaded on to pallets and the method of restraint utilised. The net (or strap) and pallet combination must restrain the loaded cargo as required by the Flight Manual, usually to withstand inertia forces of 1 1/2g forwards in the case of a Class II system or 9g in the case of a Class I system. Instances are frequently found where nets are used solely to hold the load together without due attention being paid to the need to attach the load to the pallet so as to comply with aircraft design requirements.

1.4 Operators are reminded of their responsibilities for safe operation including security of cargo. Contracts with cargo agencies must state clearly how cargo is to be restrained and the contractor's performance must be regularly monitored, including checks at the point of loading on to the aircraft.

2 CARE AND MAINTENANCE OF UNIT LOAD DEVICES

2.1 CAAF requirements in respect of the care and maintenance of cargo containers, nets and pallets (ULD) are contained in UK CAA Airworthiness Notice 92. It is recommended that the Operator's care and maintenance programme is included in the Loading Manual or a similar document to which persons responsible for using containers have access.

2.2 Acceptable damage limits must be given, as stated in the manufacturer's manual, together with the company procedure for responding to unacceptable damage. The procedures should show how units are to be directed to a appropriately approved organisation for repair and show the position in the company of the persons responsible for declaring units fit for service at each station served. Operators may arrange for containers damaged overseas to be repaired locally provided that the repair facility is appropriately approved by the Responsible Authority and details of the repair are recorded and certified in accordance with the requirements of that Authority.

2.3 It is essential that cargo/baggage-handling personnel are kept fully aware of the Airworthiness implications of damage and mis-use of cargo restraint equipment. Empty containers for example, should be stored on rails at the correct height to permit transfer to trolleys. Containers must never be lifted with fork-lifts especially when full, unless they are specifically designed for the purpose.

2.4 ULDs should be inspected before use and discarded, if damaged, for detailed examination and repair at a later date. Inspections of all ULDs should be made at each station at frequent intervals to ensure that overall standards remain high and the condition of ULD is satisfactory.

2.5 Specific guidance should be given to both loading and maintenance personnel so that the division of duties in respect of ULD serviceability is fully understood.

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CHAPTER 4 - MAINTENANCE FACILITIES

1 General

Facilities provided by the supporting maintenance organization, at each location where maintenance is performed, must be adequate for the size and scope of the operation and be such as to enable personnel to perform their duties satisfactorily.

2 Working Accommodation

2.1 Covered accommodation must be provided to house aircraft completely during Scheduled Maintenance Inspections except as may be agreed by the CAAF in a particular case. The accommodation should have provision for heating and have a good standard of overall and concentrated lighting. The floors should be sealed to minimise dust and to assist in maintaining a satisfactory house-keeping standard.

2.2 Minor scheduled or pre-planned maintenance of aircraft in the open is acceptable provided it is closely controlled by the Operator/maintenance organisation concerned. It must be ensured that:

(a) work packages are continually assessed in order to determine that their contents do not include complex maintenance tasks which, with more effective planning, could be conducted at a maintenance base where covered accommodation is available.

(b) due consideration is given to the weather conditions prevailing at the time the maintenance is being completed, including the extent of the external work required and the amount of protection given to the personnel involved.

(c) there is sufficient ground servicing and support equipment for the tasks undertaken including provision of effective lighting, heating, portable covers and access equipment.

2.3 Those areas of an aircraft that may require unscheduled work in the open, e.g. for rectification of defects, major replacements, or any work where the ingress of moisture, dust etc., could be detrimental, must be provided with protective cover against adverse weather conditions, and adequate lighting to facilitate the work.

3 Maintenance Equipment

3.1 Sufficient rostrums, stands or docks must be provided to permit access to all parts of the aircraft, together with suitable racks and stands for engines, aerofoil surfaces and other components removed from aircraft. Accommodation must also be provided for drawings, maintenance manuals, maintenance schedules, worksheets etc.

Particular emphasis is placed on the need for complete docking installations for larger aircraft where positioning of rostrums, stands, ladders and lifts is time consuming and their use does not provide comprehensive access to upper surfaces of wings, fuselage and tail.

3.2 Equipment necessary for the completion of work required by the approved Maintenance Schedule must be available, together with any special test equipment needed for the diagnosis of faults and related functional checks specified in the relevant technical publications.

4 Test Facilities and Tools

4.1 The organisation must have, or must have access to, suitable facilities for carrying out such tests as are necessary to establish compliance with the appropriate standards and specifications.

4.2 Maintenance equipment, tools and test equipment should be controlled to ensure that they remain fit for use when required and, where necessary, services or calibrated at such intervals as necessary to maintain confidence in their accuracy. Equipment and tools should be marked with the date when the next check is due.

5 Office Accommodation

5.1 Suitably furnished offices for quality control and inspection staff and supervisors should be provided and should be such that manuals and drawings may be studied and aircraft maintenance documents may be controlled, completed and checked without undue disturbance.

6 Storage Facilities

6.1 A controlled stores area must be provided at each location where spare parts and materials are held, and a person should be appointed to be responsible for its day-to-day operation. A secure area must also be provided where it is necessary to segregate parts and materials which, are unfit, or improperly certified for aircraft use.

6.2 Suitable controlled arrangements must be made for the storage of bulky items such as wheels, brakes, engines, propellers and major aircraft assemblies which, cannot be housed in the main store.

6.3 Provisions must be made for the storage of:

Tools and Equipment,

' Pre-load' items awaiting immediate fitting to the aircraft to rectify deferred or carried forward defects, Flammable Materials.

6.4 The environmental conditions in all storage facilities must be such as to ensure that parts and materials are maintained in a fit condition for use throughout their period of storage.

7 Workshops

7.1 Workshop facilities are not normally the subject of an investigation for AOC purposes. Overhaul and repair services provided by the maintenance organisation must be the subject of direct approval by the CAAF in accordance with the provision or FJAR-145.

8 Line Maintenance Facilities

8.1 The numbers and qualifications of staff at line stations must be sufficient to perform the tasks allocated to the station. Shift arrangements must ensure that persons are available when needed and to ensure continuity of control over servicing and dispatch activities. Arrangements must be made to ensure that in-coming shifts are made fully aware of any outstanding or incomplete task.

8.2 Scheduled or pre-planned tasks must only be allocated to line stations where sufficient staff and down-time are available to perform the task, in a manner commensurate with its Airworthiness significance, the working conditions are appropriate to the nature of the task and the necessary tools, equipment, test apparatus and technical instructions are available.

8.3 Each line station must be provided with:

(a) A summary of the technical literature provided for the station. The list should be kept up to date and made available to the technical library so that amendments and periodic checks of currency can be made.

(b) A summary of the station spares holding with an indication of which items are held for priority purposes, e.g. to meet possible MEL compliance requirements or ETOPS dispatches etc.

(c) Company procedures and technical instructions appropriate to the aircraft types supported.

(d) Such extracts from the maintenance schedule, in the form of worksheets or cards etc, as are necessary to perform the tasks allocated to the station.

(e) Access to deferred and repetitive defect information to assist in the diagnosis of reported defects.

(f) Details of any subcontracts for line support, fuel supply, loading and ground handling entered into by the Operator to enable the person responsible for dispatch to ensure that all significant Airworthiness tasks are satisfactorily accomplished.

(g) Maintenance facilities and working accommodation appropriate to the scale to work and undertakings of the station.

(h) Ground support equipment as appropriate including equipment or access to equipment for the ground de-icing or anti-icing of aircraft as necessary.

8.4 Ground De-Icing and Anti-Icing

8.4.1 It must be ensured that de-icing equipment is checked immediately before the commencement of winter operations and at intervals throughout the winter season to verify that the equipment is fully serviceable at each location where aircraft are likely to require de-icing.

8.4.2 Items such as mixer nozzles must be correctly calibrated and it must be ensured that they are not replaced with incorrectly calibrated nozzles during the winter season.

8.4.3 Satisfactory procedures for testing mixtures of de-icing fluids must be established together with suitable conditions for the storage and identification of de-icing fluid.

8.4.4 Where facilities for common use are provided at airports or this task is contracted-out to a specialist organisation such audit checks must be carried out by the Operator as are necessary to ensure that de-icing/anti-icing of his type of aircraft will be carried out effectively and in a manner to ensure subsequent safe operation.

8.5 Balloons

8.5.1 No scheduled or unscheduled tasks may be carried out on a balloon in the open during adverse weather conditions. All work must be completed in conditions appropriate to the task being undertaken with adequate lighting, heating etc., and such as to avoid ingress of moisture or other contaminants detrimental to the balloon or its components.

8.5.2 Equipment necessary for the completion of work required by the approved maintenance schedule must be available together with any special test equipment needed for the diagnosis and rectification of defects. Where some of the specialist tasks are sub-contracted to another organization/person, it must be shown that any necessary equipment can be provided on site within a reasonable time period appropriate to the nature of balloon operation.

8.5.3 It is the responsibility of the Operator to ensure that balloons are stored and transported in such a manner, and with adequate protection, so as to ensure continuing Airworthiness and security form damage and other deterioration.

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CHAPTER 5 - QUALITY CONTROL AND ASSURANCE

1 General

1.1 The maintenance organization's systems for quality control and assurance must take into account all of the facilities and procedures utilized to ensure continued Airworthiness, at each of the Operator's locations where activities take place affecting the Airworthiness of the aircraft.

NOTE: FJAR-145.65 defines such requirements.

1.2 Quality control must therefore be effective throughout the operation and maintenance of aircraft and quality auditing must ensure that control is being properly applied and achieving satisfactory results.

1.3 The organization's quality control policies and systems must be described in the Exposition or Engineering Manual together with the Quality Assurance audit programme.

2 Procedures

2.1 Staff assigned to quality control and assurance duties must be:

(a) Sufficiently experienced in the company systems and procedures and technically knowledgeable of the aircraft being maintained so as to enable them to perform their duties satisfactorily;

(b) experienced in the techniques of quality control and assurance or receive suitable training before taking up their duties;

(c) given clearly defined terms of reference and responsibility within the organisation.

NOTE: This is particularly important where QC/QA personnel are also expected to perform other duties in the organisation, e.g. to issue C of M or other maintenance certification.

2.2 The department responsible for Quality Control and Assurance must arrange for independent quality audit checks to be carried out on a planned basis. Emphasis should be placed on the company systems employed to achieve and ensure Airworthiness their suitability and effectiveness. The scope of quality checks within the organisation should follow the guidelines given at Appendix A to this Chapter.

2.3 All quality checks must be recorded and assessed and any criticisms forwarded to the person responsible for the particular facility or procedure for corrective action to be taken. There must be a feed-back system for confirming to the quality assurance staff that corrective action has been taken and to ensure that persons concerned with any audit deficiency are kept aware of both the adverse report and the outcome.

Quality Control A management system for programming and co-ordinating Airworthiness standards within an organisation to provide for maintenance, overhaul, repair and defect rectification to be accomplished in compliance with CAAF requirements, together with the specific company or customer requirements, and continuing Airworthiness.

Quality Assurance Overall supervision of Airworthiness achievement to ensure that the standards set by the system of Quality Control are enforced.

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APPENDIX A. Quality Control and Assurance

1 Quality Assurance procedures should ensure that audit checks are carried out as follows:

NOTE: This summary of quality assurance checks is not exhaustive but is intended to provide an indication of the range of checks necessary. Additional or different checks may be needed in respect of particular support arrangements.

1.1 Check on aircraft whilst undergoing scheduled maintenance for:

(a) compliance with maintenance schedule requirements and ensuring that only worksheets and cards reflecting the latest amendment standard are used,

(b) completion of worksheets, including the transfer of defects to additional worksheets; their control, and final assembly. Action taken in respect of items carried forward, not completed during the particular inspection or maintenance task,

(c) compliance with manufacturers' and company standard specifications,

(d) standards of inspection and workmanship,

(e) conservation of aircraft corrosion prevention techniques and other protective processes,

(f) procedures adopted during shift-changeover to ensure continuity of inspection and responses,

(g) precautions taken to ensure that all aircraft are checked, on completion of any work or maintenance, for loose tools and miscellaneous small items such as split pins, wire, rivets, nuts, bolts and other debris, general cleanliness and housekeeping.

1.2 Checks on aircraft in service for:

(a) compliance with company approved practices for cargo restraint, load distribution and spreading such that the approved modifications for cargo configurations are observed,

(b) procedures to ensure that the APS weight data in use reflects the aircraft configuration and the weight balance schedule,

(c) satisfactory condition of cargo/baggage compartments and their linings, cargo handling and restraint equipment and special provisions for the carriage of livestock and attendants,

(d) continuing compliance with CAA Airworthiness Notices in respect of cabin and other safety provisions.

1.3 Check on Technical Logs for:

(a) correct completion of sector record pages and their transmission to technical records.

(b) satisfactory rectification of defects or their deferral in accordance with the MEL and company procedures. The recording of component details and stores control numbers, cross-referencing to deferred defect records and additional worksheets where appropriate, and the inclusion of rectification details in the Sector Record Page,

(c) compliance with required reporting procedures in the event of flights taking place after rectification of defects without issue of a Certificate of Release to Service.

(d) certification of modifications including the installation of role equipment such as stretchers and conversion of the aircraft from passenger to cargo roles, and return to passenger,

(e) correct use of maintenance and inspection, control systems included in the technical log for the completion of scheduled and pre-planned tasks between Scheduled Maintenance Inspections,

(f) operation of systems for recording external damage to the aircraft which has been inspected and is considered safe for further operation.

1.4 Checks on Technical Service Information for:

(a) adequacy of aircraft manuals and other technical information appropriate to each aircraft type, including engines, propellers and other equipment, and the continuing receipt of revisions and amendments,

(b) assessment of manufacturers service information, determining its application to the Operator's aircraft and the recording of compliance or embodiment in each aircraft,

(c) maintaining a register of manuals and technical literature held within the company, their locations and current amendment status,

(d) ensuring that all company manuals and documents, both technical and procedural, are kept up to date.

1.5 Checks on the Company's general Airworthiness Control Procedures for:

(a) responding to the requirements of Airworthiness Directives, mandatory modifications and inspections, UK CAA Airworthiness Notices and special fleet checks instituted in response to occurrence etc.

(b) monitoring company practices in respect of scheduling or pre-planning maintenance tasks to be carried out in the open, and adequacy of the facilities provide,

(c) effective completion of maintenance reviews at intervals provided, required by the approved maintenance schedule and the availability of information into the certificate signatory,

(d) operation of the defects analysis system for the Operator's airframes, engines and systems and its integration with the system for mandatory occurrence reporting; the highlighting of repetitive defects and the control of deferred defects,

(e) authorisation of personnel to perform inspections and maintenance tasks on the Operator's aircraft and for the issue of C of M and CRS; the effectiveness and adequacy of training and the recording of personnel experience, training and qualifications for grant of authorisation,

(f) the effectiveness of technical instructions issued to maintenance staff,

(g) the adequacy of staff in terms of qualifications, numbers and ability in all areas support for the Operator which affect Airworthiness,

(h) the efficacy and completeness of the quality audit programme.

(j) compliance with the requirements of the approved Maintenance Schedule, including maintenance/inspection periods, component overhaul/test/calibration control, records of cycles/landings etc, and for granting variations at the request of the Operator,

(k) maintaining logbooks and other required records on behalf of the Operator,

(i) ensuring that major and minor repairs are only carried out in accordance with approved repair schemes and practices.

1.6 Checks on Stores and Storage Procedures for:

(a) the adequacy of stores and storage conditions for rotable components, small parts, perishable items, flammable fluids, engines and bulky assemblies,

(b) the procedure for examining incoming components, materials and items for conformity with order, release documentation and approved source.

(c) the 'batching' of goods and identification of raw materials, the acceptance of part life items into stores, requisition procedures,

(d) labelling procedure including the use of serviceable/unserviceable/repairable labels, and their certification and final disposal after installation. Also labelling procedures for components which are serviceable but 'part life' only,

(e) the internal release procedure to be used when components are to be forwarded to other locations within the organisation,

(f) the procedure to be adopted for the release of goods or overhauled items to other organisations.

(g) the procedure for the requisitioning of tools together with the system for ensuring that the location of the tools is known at all times. (This procedure should also cover items being sent away for rectification or calibration),

(h) control of shelf life and storage conditions in the stores. Control of the free-issue dispensing of standard parts, identification and segregation.

1.7 Checks on Maintenance Facilities for:

(a) cleanliness, state of repair and correct functioning of hangars, hangar facilities and special equipment, and the maintenance of mobil equipment,

(b) adequacy and functioning of special services and techniques including welding, NDI, weighing, painting,

(c) viewer/printer equipment provided for use with micro-fiche, micro-film and compact disk ensuring regular maintenance takes place and an acceptable standards of screen reproduction and printed copy are achieved,

(d) the adequacy of special tools and equipment appropriate to each type of aircraft, including engines, propellers and other equipment.

1.8 Checks at line and Route Stations, in addition to the foregoing as applicable for:

(a) the adequacy of facilities and staff,

(b) the provision of covered accommodation for aircraft when maintenance is undertaken which requires a controlled environment, and for the accomplishment of work in the open where this is unavailable,

(c) the cleanliness, site of repair, correct functioning and maintenance of ground support equipment including ground de-icing/anti-icing equipment,

(d) the effectiveness of any sub-contracted arrangements for ground handling, servicing and maintenance support and compliance with the operator's contracted arrangements,

(e) quality monitoring of fuel supplies including suppliers checks and uplift contamination checks; the effectiveness and completion of fuel tank water drain checks;

(f) the care and maintenance of cargo containers, freight, nets, pallets and other cargo equipment,

(g) the currency, scope and effectiveness of locally raised technical instructions and the procedures for bringing them to the notice of maintenance personnel,

(h) adequacy of the technical publications held at the station for the operator's aircraft, their currency and procedures for amendment,

(i) the accuracy and control of worksheets or cards, to ensure that only up-to-date issues are use.

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CHAPTER 6 - THE ENGINEERING MANUAL

1 General

1.1 The Operator is required to provide a description of his maintenance support arrangements for the direction and guidance of flight crew and maintenance personnel engaged in the day to day operation and maintenance support of his aircraft, throughout his operating network.

The manual is also required as a basis for the CAAF acceptance of the arrangements, a pre-requisite for the grant of an AOC.

1.2 For the purposes of these requirements this description of the arrangements will be referred to as the ENGINEERING MANUAL but may take other forms in practice, as defined in this Chapter.

1.3 The Operator may:

(a) publish a discrete Engineering Manual containing a full description of the support provided for his Operation or,

(b) use the Operations Manual to satisfy the requirement for an Engineering Manual including the necessary details as a Volume, Section or Chapter of that manual as appropriate and he may:

(c) refer in his manual to the Exposition of the approved maintenance organisation for those parts of the maintenance arrangements which are described therein or,

(d) he may use the Exposition to describe the whole of his maintenance arrangements.

1.4 The CAAF will require to hold copies of the Manual as dictated by the nature of the operation and the necessary surveillance.

1.6 Operators of balloons may utilise a section of the Operations Manual to describe all of their maintenance arrangements.

2 Preparation Of The Manual

2.1 The purpose of the Engineering Manual is to describe the maintenance arrangements made by the Operator to support his operation, in accordance with these requirements. The contents of the Manual should therefore address all of the subjects included in this document. The Contents List given at the front of this document may be used as a summary of subjects to be included in the Engineering Manual.

2.1.1 Whether details appear in the Operator's engineering manual or in the maintenance organisation's Exposition will depend on the nature of the relationships between the two parties.

2.2 It is apparent from the foregoing that the Operator will need to liaise closely with his maintenance organisation in the preparation of his Engineering Manual, to take advantage of those aspects of his maintenance support which are adequately described in the Exposition.

2.3 It is recommended that the Engineering Manual is divided into parts appropriate to the functions of maintenance. The Exposition in particular should be divided between main base and line maintenance functions and may be further; sub-divided for ease of use and to facilities its management.

2.4 In preparing the Manual account should be taken of CAAF and UK CAA publications and other sources of information, including:

MRD1 - Air Operator’s Certificate of Competency

MRD8 - ETOPS

MRD11 - Mandatory Occurrence Reports and Accident Investigation

MRD16 - Airworthiness of Aircraft

MRD17 - AME Licensing

MRD18 - Approval of Organizations

MRD20 - Approval of Persons

Fiji Aeronautical Information Circulars

CAP 74 Aircraft fuelling - fire prevention and safety measures for the fuelling of aeroplanes and helicopters

CAP 359 All weather Operations

CAP418 Condition Monitored Maintenance

CAP434 Aviation Fuel at Aerodromes

CAP455 Airworthiness Notices

CAP512 Ground De-icing of Aircraft

CAP553 and CAP 554 BCAR Sections A and B

CAP549 Master Minimum Equipment Lists (MMEL) and Minimum Equipment Lists (MEL)

CAP562 Civil Aircraft Airworthiness Information and Procedures

Aeronautical Information Circulars

JAR-145 Approved Maintenance Organisations

CAP 172 Safety Management Systems for Commercial Air Transport Operations

JAR OPS Sub Part M

2.5 Where a maintenance organisation provides all or part of the support for more than one Operator it should be possible to clearly identify the support provided for each operator in the Engineering Manual or Exposition.

CHAPTER 7 - THE TECHNICAL LOG

1 General

1.1 A Technical Log is required to be kept for any aircraft with a Certificate of Airworthiness in either the Transport or Aerial Work Category and at the end of every flight (except as indicated below) the aircraft pilot-in-command must enter the following details:

1.1.1 The times when the aircraft took off and landed.

1.1.2 Particulars of any defect known to him if it affects the Airworthiness or safe operation of the aircraft, (if there are no defects the aircraft PIC must make an entry to his effect).

1.1.3 Any other particular required by the CAAF.

1.1.4 His/her signature and the date.

1.2 If the aircraft is 2730 kg or less MTWA and is not operated by the holder of an AOC (or by a person who is required to hold an AOC) the CAAF may approve a different record (see paragraph 5 'Alternative Records').

1.3 If a number of consecutive flights occur within the same period of 24 hours at the same aerodrome with the same aircraft pilot-in-command, all entries may be made at the end of the last flight unless defect becomes known to the PIC in the meantime, which must be entered as it occurs.

2 CAAF Requirements

2.1 In addition to the particulars required by the Air Navigation Regulations as indicated above, the Technical Log may contain maintenance control and Flight Crew advisory information for use during the routine operation of the aircraft between scheduled maintenance inputs to main base.

2.2 The log must contain pre-serialized Sector Record Pages of a design acceptable to the CAAF, provision to record acceptable deferred defects which are waiting rectification, a valid Certificate of Maintenance and a Maintenance Statement.

2.3 A specimen Certificate of Maintenance is shown in Appendix C to Chapter 3.

3 The Sector Record Page

3.1 Each sector record page must include provision to record:

(a) The aircraft type and registration.

(b) The date, place and times of take-off and landing.

(c) The name and address of the Operator (the address may be omitted if it is printed on the title page to the log).

(d) Particulars of defects.

(e) The post-flight signature of the aircraft PIC and the date.

(f) The fuel state on arrival.

(g) Details of rectification action taken in respect of defects together with a pre-printed Certificate of Release to Service (CRS) in such a position as to be readily identifiable with the defect entry to which is relates. (Provision should also be made for CRS signature with the date and authority for issue).

(h) The quantities of fuel and oil uplifted and the quantity available in each tank or combination of tanks at the beginning of each flight (see note).

NOTE: the format in which fuel quantities are recorded must encourage the identification of any gross errors present in the quantity of fuel onboard e.g. by comparison of the calculated and actual fuel uplifted, using the recorded fuel on arrival. Common units of quantity should be used within columns or provision should be made in the record for the conversion units to a standard.

(i) The running total of flying hours so that the flying hours remaining to the next inspection can be readily determined, and the date of such inspection.

(j) The completion of pre-flight and/or daily inspections.

(k) The times when de-icing was started and completed, unless otherwise agreed with the CAAF.

3.1.1 It may also be necessary to record additional information for specific aircraft. Examples include:

(a) **Maximum or Intermediate Contingency Power.** It is necessary to record the duration of maximum and intermediate contingent power usage, and subsequently to transfer the information to the engine log book or maintenance record. For rotor craft the record of each use of such power settings must also subsequently be transferred to the log cards or other appropriate documents applicable to those components of the transmission which always transmit the power from a single engine only; i.e. components upstream of any combining gearbox.

(b) Landings

(c) Flight Pressure Cycles

3.1.2 This list is not exhaustive and additional records may be required. The supplementary information to be recorded should be assessed by the Operator in consultation with the relevant maintenance organisation and submitted for agreement to the CAAF.

3.2 The sector Record Page layout should be divided to show clearly what is required to be completed after flight and what is required to be completed in preparation for the next flight.

3.3 Typical layouts for Sector Record Pages are shown in the Appendices to this Chapter:

Appendix A Multi sector Record

Appendix B Single Sector Light aircraft record

Appendix C Single Sector large aircraft record

Appendix D Balloons

4 Retention of Records

4.1 All entries made on a Sector Record Page must be made in duplicate with provision for one copy of each entry to be removed from the Technical Log and retained on the ground before the next flight commences.

4.1.1 In the case of an aeroplane not exceeding 2730kg MTWA or a helicopter, it is not reasonably practicable for a copy of the Sector Record Page to be kept on the ground, it may be carried in the aeroplane or helicopter in a container approved for the purpose by the CAAF.

4.2 Arrangements must be made to extract information recorded in the Sector Record Page for use by the maintenance organization. Additional copies of the page may be necessary for this purpose.

4.3 All entries in the Sector Record Page must be retained by the Operator for a period of not less than two years after the particular aircraft has been destroyed or permanently withdrawn from service except that the CAAF may consider a different retention period in a particular case.

4.3.1 Where the Operator arranges for the relevant maintenance organisation to retain copies of sector Record Page on his behalf he will nevertheless continue to be responsible for the records under the Air Navigation Regulation relating to the preservation of records. If he ceases to be the operator of the aircraft he also remains responsible for transferring the records, if requested, to any other person who becomes the Operator of the aircraft.

5 Alternative Records

5.1 In circumstances when the operator of an aircraft with a Certificate of Airworthiness in the transport Category is permitted to use an alternative form of record the following arrangements must be made if the aircraft undertakes a flight or flights for the purpose of public transport. The pertinent details must be transferred to the Sector Record Page from the Alternative Record, including:

(a) Total flight hours.

(b) Hours to next maintenance check and date of such check.

(c) Any acceptable deferred defects awaiting rectification. (It is strongly recommended that the standard record of deferred defects is utilized for all aircraft, whether a full Sector Record Page or Alternative Record is used, (see Appendix E).

(d) Any maintenance actions falling due before the next scheduled maintenance inspection (see paragraph 7, Maintenance Statement). When the aircraft returns to non-AOC flying the above details must be transferred to the alternative record to ensure continuity of maintenance control.

NOTE: The form of alternative record must be approved by the CAAF. Operators are advised to contact the CAAF for guidance before considering the adoption of such a record.

5.2 Alternative records and any Sector Record Pages completed during the period must be made available to the maintenance organization when the aircraft is presented for the accomplishment of scheduled maintenance so that a full assessment of the maintenance needed by the aircraft can be verified.

5.3 Use of an alternative record does not alter the Operator's responsibilities for recording defects as they become known to the PIC and for their rectification. Where defects are deferred, or transferred to aircraft log books for entry of rectification details and issue of CRS, detailed cross-referencing must be included so that continuity of maintenance actions can be established.

6 Acceptable Deferred Defects

6.1 A procedure for deferring the rectification of defects where this is permitted by the Minimum Equipment List (MEL) for that aircraft should be published in the Operations Manual and Engineering Technical Procedures. A suitable records sheet for this purpose is shown at Appendix E, however, Operators may develop procedures and records more suited to their methods of defect control, and to permit, for example, recording of rectification attempts and component replacement.

6.2 The CAAF investigates operator's procedures for deferring defects at the time of application for an AOC to ensure that they will be effective, in practice and result in defects remaining un-rectified for minimum periods. Any change in procedures must be notified to the CAAF for further investigation.

6.3 When a defect is to be transferred, the 'Action Taken' column of the Sector Record should be completed in the following manner.

Transferred to ADD Record sheet serial no:.....

Item No.....

Signed.....

Date

6.3.1 Details of the defect, Sector Record page serial number, signature of person authorising deferment and date (or aircraft hours) of origin, should be entered on the ADD Record. The period for which the deferred defect may be carried should also be stated in accordance with the company procedure.

6.3.2 On rectification of the defect it is necessary to enter on the current Sector Record page:

(a) the ADD Record sheet serial number and item number.

(b) details and date of the original defect and of the rectification, together with the applicable component change date or other action, and to Complete the Certificate of Release to Service. The 'Defect Cleared' columns of the ADD Record must than be signed and dated.

6.4 Completed ADD Records may be removed from the Technical Log at each Schedules Maintenance Inspection. Where single defects remain current on each page, resulting in numerous pages being carried in the log it is acceptable to consolidate these entries on to a single page for ease of assessment by the crew. When this occurs the original date of entry must be retained so that the duration of entry can be readily established.

6.5 Where deferred defects are transferred to worksheets at maintenance periods there should be a procedure to ensure that defects which have not been actioned are re-entered on a new deferred defect record sheet, ensuring that the original date of the defect is retained.

7 The Maintenance Statement

7.1 The purpose of the Maintenance Statement is to advise the Pilot-in-Command and maintenance personnel of the forthcoming maintenance requirements.

7.2 The statement is to be completed by the maintenance organization following each scheduled maintenance inspection and should include details of all out-of-phase inspections and component changes etc; falling due prior to the next SMI. Where these are too numerous to include in a Maintenance Statement or the Operator wishes to provide for repeated inspections, etc; alternative procedures and recording systems may be adopted with the agreement of the CAAF.

NOTE: Where scheduled maintenance inspection may be completed as a line maintenance function the Maintenance Statement may be of a form which enables the accomplishment of such minor inspections within the overall validity period of the Statement.

7.3 A specimen Maintenance Statement is shown at Appendix B of Chapter 3.

8 Procedures

8.1 Detailed instructions should be given to flight crew in the Operations Manual and to maintenance engineers in Engineering Manuals on the manner in which the Technical Log is to used and completed. These should be repeated in the Log itself if necessary to ensure a disciplined response by pilots and engineers.

8.2 Specific guidance should be given in respect of special inspections, Line Maintenance Requirements, Notices to crew, External Damage Recording systems and compliance with short-term mandatory requirements etc; which may also be included in the Technical Log.

8.3 As a general rule one legible copy of each Sector Record Page should remain in the log for a sufficient period to permit the identification of a repetitive defect by maintenance engineers at the point of operation. Similarly deferred defect records should not be removed prematurely. It will be necessary to ensure a balance exists between permitting a degree of defect analysis on the aircraft on the one hand and preventing a situation in which too many pages, particularly of deferred defects, obscures the Airworthiness status of the aircraft.

8.4 In cases when the copy of the Sector Record page provided for maintenance control is not extracted directly by the maintenance organization, Operations Manual procedures must show the responsibilities of the Operator for removing and dispatching completed pages to that organization. It is essential that details of flights undertaken and any defects, whether rectified or deferred are advised promptly to the maintenance organization, so that maintenance planning and spares provision can be effective.

9 Flight with Uncertified Rectification of Defects

9.1 The Air Navigation Regulations permits an aircraft to be flown to a place where a Certificate of Release to Service can be issued for the rectification of a defect when the aircraft is at a place where it is not reasonably practicable to do so.

9.2 If such a flight is undertaken the Pilot-in-Command of the aircraft must notify the CAAF within ten days, giving particulars of the flight and the reasons for making it. The flight itself must be to the nearest place where the necessary certification can be made, it must be flown by a route for which it is properly equipped, and must take into account any hazards to the liberty or health of the persons on board.

9.2.1 All reports should be addressed as noted below. Operational aspects will then be co-ordinated with the Flight Standards Inspector. Reports should include the following details:

(a) Aircraft Type, Registration, Date, Time, Place and Flight Number.

(b) Technical Log reference for Sector Record Page on which the defect is recorded,

and the deferred number.

(c) Description of Defect and Rectification

(d) Person/Organization who carried out the work, and confirmation that the Operator's maintenance organization was consulted and authorized this course of action.

(e) Whether or not a duplicate inspection was necessary and if so, who carried it out.

(f) An indication of whether normal operation of the aircraft was affected (altitude, route, etc).

(g) Name and signature of the aircraft PIC.

NOTE: Reports should be addressed to the CAAF Flight Standards Inspector. It is recommended that Operators prepare a reporting form with provisions for entering the above information and arrange for copies to be available to the flight crew.

10 Guidance for Compilation and Maintenance

10.1 The information in this section gives guidance in the compilation and maintenance of a Technical Log to record the essential data required by the Air Navigation Regulations, British Civil Airworthiness Requirements (BCAR) and FJAR145.

10.2 The detailed requirements for Technical Logs are prescribed in BCAR, Chapter A6-8.

10.3 The Technical Log must be compiled by the operator and be related to the type of aircraft operated and routes flown and, although the format is not mandatory, the log must contain the information and documents required by BCAR, Chapter A6-8.

10.4 The Technical Log should contain the following:

(i) A valid Certificate of Maintenance (C of M), a maintenance record sheet giving the categories of the signatories required for signing the Certificate, and a maintenance statement giving details of the next maintenance check, any out of phase inspections and components changes etc; falling due prior to the next SMI due in order to comply with the approved Maintenance Schedule.

(ii) A record sheet for recording the times at which the aircraft took off and landed, any defect in any part of the aircraft or its equipment affecting Airworthiness, and other reports that may be required by the company.

(iii) A Certificate of Release to Service (CRS) in respect of work done for the rectification of defects.

(iv) A record sheet for entering the defects which have been accepted for deferment (Acceptable Deferred Defects).

(v) A record sheet in duplicate for entering the quantities of fuel and oil uplifted and the quantities available in each tank, or combination of tanks, at the beginning of the flight.

(vi) A record of all ground de-icing carried out.

10.5 The Technical Log should be so made to provide duplicate copies of all entries except the record of deferred defects (paragraph 4(iv) unless this is required by the company. Care should be taken to

ensure that all copies are legible.

10.6 In order that the entries should be consistent and correct, it is good practice to have the procedures printed in the Log for guidance of flight crews and aircraft maintenance engineers.

10.7 Appendix A, B, to this chapter provides examples of acceptable layouts for the content of the Technical Log, and deferred defect record page but these may be varied according to the demands of a particular operator.

10.7.1 When a defect is to be transferred, the 'Action Taken' column of the Sector Record should be completed in the following manner:-

Transferred to ADD Record sheet serial No.

Item No

Signed

Date

10.7.2 Details of the defect, Sector Record sheet serial number, signature of person authorising deferment and date (or aircraft hours) or origin, should be entered on the ADD Record. The period for which the deferred defect may be carried should also be stated in accordance with the company procedure.

10.7.3 On rectification of the defect it is necessary to:

(i) Enter on the current Sector Record details such as:

(a) ADD Record sheet serial number and item number.

(b) Original Sector Record sheet serial number and date.

(c) Details of the original defect and the rectification together with the applicable component change data or other action.

(ii) Complete the Certificate of Release to Service.

10.7.4 The 'Defect Cleared' Columns of the ADD Record should then be signed and dated.

10.7.5 Completed ADD Record sheets may be removed from the Technical Log at each maintenance check.

10.8 The CAAF requires to be satisfied that the format of Technical Logs and associated procedures satisfy the intent of the requirements prescribed in BCAR, Chapter A6-8.

CHAPTER 8 – FLIGHT RECORDERS

General

1.1 Aircraft shall be equipped with flight recorders in accordance with the requirements of ICAO Annex 6 Part 1, Chapter 6.3 and Appendix 8.

1.2 Crash protected flight recorders can comprise one or more of the following systems: a flight data recorder (FDR), a cockpit voice recorder (CVR), an airborne image recorder (AIR) and/or a data link recorder (DLR). Image and data link information may be recorded on either the CVR or the FDR.

1.3 Light weight flight recorders comprise one or more of the following systems: an aircraft data recording system (ADRS), a cockpit audio recording system (CARS), an airborne image recording system (AIRS) and/or a data link recording system (DLRS) . Image and data link information may be recorded on either the CARS or the ADRS.

1.4 Notwithstanding (1) above, an aircraft may be operated without a required recorder if –

a) it is being flown to a place where the recorder can be installed, repaired or replaced; or

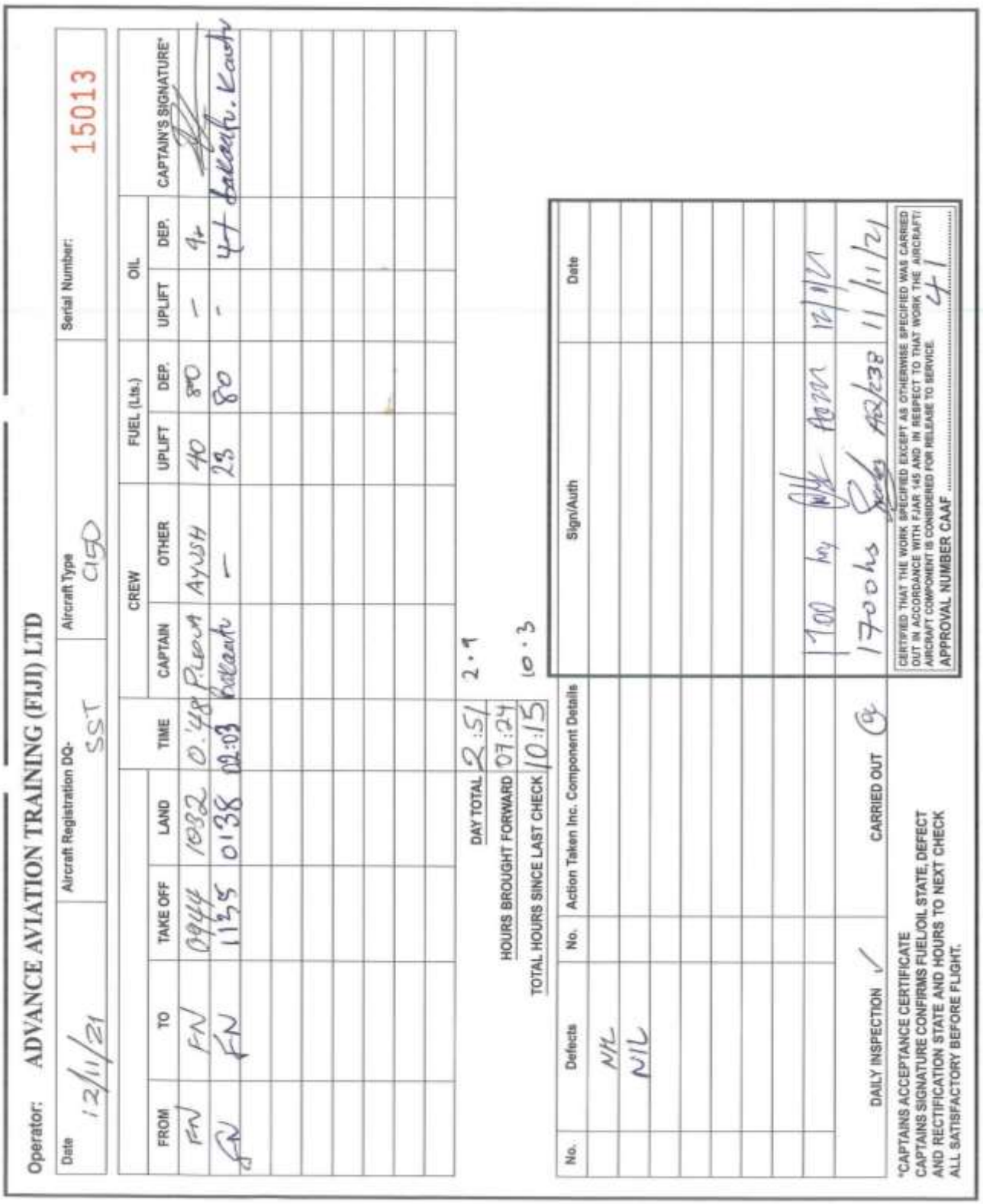
b) the operation is being carried out in accordance with the operator's Minimum Equipment List that is acceptable to the Authority.

1.5 Flight recorders fitted under requirements of (1.1) shall be equipped with an under-water sonar location device.

1. Requirement

1.1 The air operator is required to maintain regular up to date and sufficient documentation concerning FDR parameter allocation, conversion equations, periodic calibration and other serviceability/maintenance information and ensure their availability to accident investigation authorities.

Appendix A



Operator: ADVANCE AVIATION TRAINING (FIJI) LTD

Date: 12/11/21 | Aircraft Registration DQ-: SST | Aircraft Type: C150 | Serial Number: 15013

FROM	TO	TAKE OFF	LAND	TIME	CREW CAPTAIN	CREW OTHER	FUEL (Lts.) UPLIFT	FUEL (Lts.) DEP.	OIL UPLIFT	OIL DEP.	CAPTAIN'S SIGNATURE*
FN	FN	0944	1032	0.48	P.Leon	Ayush	40	80	–	4+	
FN	FN	1135	0138	02:03	Kalianth	–	23	80	–	4+	Kalianth. Kanth

DAY TOTAL 2:51 2.9

HOURS BROUGHT FORWARD 07:24

TOTAL HOURS SINCE LAST CHECK 10:15 10.3

No.	Defects	No.	Action Taken Inc. Component Details	Sign/Auth	Date
	NIL				
	NIL				
				1700hrs	11/11/21

DAILY INSPECTION ✓ CARRIED OUT ✓

*CAPTAINS ACCEPTANCE CERTIFICATE
CAPTAINS SIGNATURE CONFIRMS FUEL/OIL STATE, DEFECT AND RECTIFICATION STATE AND HOURS TO NEXT CHECK ALL SATISFACTORY BEFORE FLIGHT.

CERTIFIED THAT THE WORK SPECIFIED EXCEPT AS OTHERWISE SPECIFIED WAS CARRIED OUT IN ACCORDANCE WITH FJAR 145 AND IN RESPECT TO THAT WORK THE AIRCRAFT/ AIRCRAFT COMPONENT IS CONSIDERED FOR RELEASE TO SERVICE.
APPROVAL NUMBER CAAF .....

Appendix B

TECHNICAL LOG & SECTOR RECORD

AOC / PRIVATE*

*Delete as Appropriate

SHEET No	17526
DATE OF FLIGHT(S)	
AIRCRAFT TYPE	
REGISTRATION	DQ -
NEXT CHECK DUE	
HOURS:	DATE:

SECTOR	ROLE EQUIPMENT				
	EQUIPMENT	IAW	SIG	AUTH	DATE

SECTOR	OIL UPLIFT			
	ENG 1	ENG 2	MGB	SIG

FUEL QTY FROM PREVIOUS SHEET | KG / LTRS

SECTOR	PRE FLIGHT SIG	PILOT ACCEPTANCE		TASK REF	FROM	TO	FUEL STATE			TAKE-OFF TIME	LANDING TIME	FLIGHT TIME (DECIMAL)	STARTS		NO OF LDGS	FUEL ON LDG KG / LTRS	NIL DEFECT SIG
		SIG	NAME				UPLIFT LITRES	PLACE	DEP KG / LTRS				ENG 1	ENG 2			
1										:	:						
2										:	:						
3										:	:						
4										:	:						
5										:	:						
6										:	:						
7										:	:						
8										:	:						

GROUND RUNS / COMP WASH

TOTAL THIS PAGE

TOTAL BROUGHT FORWARD

TOTAL CARRIED FORWARD

Daily Inspection Carried Out

CERTIFICATE OF RELEASE TO SERVICE – Certifies that the work specified except as otherwise specified was carried out in accordance with ANR-145C Approval No: CAAF/XXX and in respect to that work the aircraft / component is considered ready for Release to Service.

NAME:.....

SIG:.....AUTH:.....

DATE:.....TIME:.....

RECORD OF: DEFECTS / GROUND RUN / TEST FLIGHT / FLIGHT REPORT

SECTOR / ITEM	REQUIREMENT / DEFECT	SIGN	DATE	ACTION TAKEN	SIGN	AUTHORITY	DATE	TIME

Form: XXX/OPS/0X Ver 1.3