SUPER LEGACY XP LIMITED

OPERATING MANUAL
OMA
PC-12/47
GAR 91& 125 Operations

Super Legacy XP Limited

85 Great Portland Street
London W1W 7LT

The Super Legacy XP Limited Operating Manuals are made up of the following documents.

They are intended for electronic distribution and any amendment will result in the re-issue of an entire document.

The current revision status is 0

OMA	General
OMB	Aircraft Specific
OMC	Route and Aerodrome
OMD	Training
OME	Not used
OMF	Forms
MEL	Minimum Equipment List

List of Effective Pages

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Master Contents List - OMA

Administration and Control of the Manual

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GENERAL/BASIC

0. ADMINISTRATION AND CONTROL OF THE MANUAL

0.1 Introduction & Safety Policy

Super Legacy XP Limited is a Non-Commercial Complex Aircraft operator based in London and has made a declaration to the Bailiwick of Guernsey Director of Civil Aviation (DCA) (the Competent Authority), being the authority entitled to exercise oversight under the Air Navigation (Bailiwick of Guernsey) Law, 2012.

Super Legacy XP Limited will continuously operate in accordance with the Air Navigation (Bailiwick of Guernsey) Law, 2012. Super Legacy XP Limited shall provide access to enable the 2-Reg Regulatory Authority and DCA to fulfill their respective oversight responsibilities.

This Operations Manual is for the guidance of the Crew and Operations staff, in the execution of their duties. It contains information and instructions on the manner in which every flight operation shall be conducted. Supplemental to this Operations Manual crews should make themselves fully familiar with the Aircraft Flight Manual, Pilot Operating Handbook (i.e. Aircraft Operations Manual containing type specific information) and the Jeppesen Flight Guide.

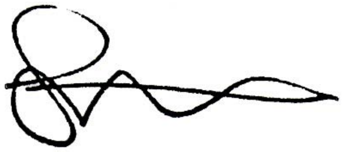
Safety will always be our number one priority and Super Legacy XP Limited will be rigorous in maintaining a high safety standard in our daily flight operations.

Super Legacy XP Limited manages safety risks related to its operations to as low a level as reasonably practicable. All identified safety hazards will be analysed and, where possible, eliminated or avoided. When this is not possible, mitigation is developed, implemented and tracked to verify that the level of the associated risks is acceptable.

All staff have a duty to openly and honestly report events and hazards. All such reports will be thoroughly investigated in a non-punitive manner.

All operations and maintenance personnel are to be familiar with this Manual and are to comply with its provisions. Changes to the Manual will be promptly disseminated to all company personnel.

The Accountable Manager has the authority and responsibility for keeping the Operations Manual current and for the conduct of all operations in accordance with the Operations Manual.



Accountable Manager
Stephen Williams
Accountable Manager

0.2 System of Amendment and Revision

Manual amendments will be promulgated as required by the Accountable Manager in the form of a new electronic manual for every Post Holder.

Each amended page shall record the appropriate amendment number and date.

The Change Management Table includes a list of changes.

0.2.1 List of Manual Holders

A copy of the manuals must be onboard any company aircraft. The manuals are distributed electronically and the operator will ensure that all staff have ready access to the operations manuals

Copy	Holder
Master	Stephen Williams
Copy 1	2-FLYT

0.2.2 Record of Amendments

Number	Date	Date Entered	Entered By

0.2.3 Change Management Table

Revision Number	Date	Revisions/Notes

Glossary

2-REG	The Guernsey Aviation Regulator
ABAS	Aircraft-based Augmentation System
ACAS	Aircraft Collision Avoidance System
ACARS	Aircraft Communication Addressing and Reporting System
ADD	Acceptable Deferred Defects
ADS	Automatic Dependent Surveillance
ADS-C	Automatic Dependent Surveillance – Contract
AFIS	Aerodrome Flight Information Service
AFM	Aircraft Flight Manual
AIRAC	Aeronautical Information Regulation and Control Cycle
AIREP	Special Air Report
AIRMET	Air Meteorological Information Reports

ALS	Approach Lighting system
AMO	Approved Maintenance Organisation
ANP	Actual Navigation Performance
APCH	Approach
APU	Auxiliary Power Unit
APV	Approach procedures with Vertical Guidance
ASD	Accelerate Stop Distance
ATIS	Automatic Terminal Information Service
ATM	Air Traffic Management
ATS	Air Traffic Services
BALS	Basic Approach Lighting System
B-RNAV	Basic Area Navigation (European Standard)
CAT	Clear Air Turbulence
CBT	Computer-based Training
CDFA	Continuous Descent Final Approach
CDI	Course Deviation Indicator
CDL	Configuration Deviation List
CDU	Control Display Unit
CFL	Cleared Flight Level
CFIT	Controlled Flight into Terrain
CFP	Computer Flight Plan
CG	Centre of Gravity
CMM	Compliance Monitoring Manager
CMV	Converted Meteorological Visibility
COTS	Commercial Off-the-Shelf
CPAP	Continuous Positive Airway Pressure
CPDLC	Controller-Pilot Data Link Communications
CRD	Child Restraint Device
CRM	Crew Resource Management
CSP	Communications Service Provider
CVR	Cockpit Voice Recorder
CWOM	Cold Weather Operation Manual
DCA	Director of Civil Aviation (Bailiwick of Guernsey)
DH	Decision Height
DME	Distance Measuring Equipment
DSP	Downlink Service Provider
EASA	European Aviation Safety Agency
ECAC	European Civil Aviation Conference
EFBs	Electronic Flight Books
EGPWS	Enhanced Ground Proximity Warning System
EGT	Exhaust Gas Temperature
ELT	Emergency Locator Transmitter
EMI	Electromagnetic Interference
ERP	Emergency Response Plan
ETP	Equal Time Points
EVS	Enhanced Vision System
FAA	Federal Aviation Administration
FAF	Final Approach Fix
FATO	Final Approach and Take-off
FDE	Fault Detection and Exclusion (GNSS)
FDR	Flight Data Recorder
FG	Flight Guidance
FMS	Flight Management System
FSTD	Flight Simulation Training Device
FTE	Flight Technical Error
GBAS	Ground –Based Augmentation System
GHS	Globally Harmonised System of Labelling

GLS	GNS Landing System
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
GPWS	Ground Proximity Warning System
HF	Horizontal Flight
HIALS	High Intensity Approach Lighting System
HLA	High Level Airspace (formally MNPS)
HoT	Hold-over Time
IAF	Initial Approach Fix
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
IF	Intermediate Fix
IFR	Instrument Flight Rules
ILS	Instrument Landing System
INS	Inertial Navigation System
JAA	Joint Aviation Authorities
LNAV	Lateral Navigation mode (Flight Guidance System)
LOFT	Line Oriented Flying Training
LOUT	Lowest Operational Use Temperature
LRNS	Long Range Navigation System
LTS	Lower Than Standard
LVP	Low Visibility Procedures
LVTO	Low Visibility Take-Off
IRS	Inertial Reference System
MAPt	Missed Approach Point
MDA	Minimum Descent Altitude
MDH	Minimum Descent Height
MEA	Minimum Enroute Altitude
MEL	Minimum Equipment List
MFD	Multi-function Display
MHA	Minimum Holding Altitude
MIALS	Medium Intensity Approach Lighting System
MLS	Microwave Landing System
MMEL	Master Minimum Equipment List
MNPS	Minimum Navigation Performance Specifications
MOCA	Minimum Obstruction Clearance Altitude
MOR	Mandatory Occurrence Reports
MPED	Medical Portable Electronic Device
MSA	Minimum Safe Altitude
MSA	Minimum Sector Altitude
MWA	Mountain Wave Activity
NADP	Noise Abatement Departure Procedure
NATR	Nominated Airworthiness Technical Representative
OAT	Outside Air Temperature
OCH	Obstacle Clearance Height
OEI	One Engine Inoperative
OEW	Operational Empty Weight
OFP	Operational Flight Profile
OML	Operational Multi-Pilot Limitation
PBN	Performance-based Navigation
PED	Portable Electronic Device
PIC	Pilot in Command
PF	Pilot Flying
PNF	Pilot Not Flying
P-RAIM	Predictive Receiver Autonomous Integrity Monitoring
P-RNAV	Precision Area Navigation (European Standard)

RA	Resolution Advisories
RAIM	Receiver Autonomous Integrity Monitoring
RCP	Required Communications Performance
REACH	Registration, Evaluation, Authorisation & Restriction of Chemicals
RHS	Right Hand Seat
RIE	Rectification Interval Extension
RNP	Required Navigation Performance
RTF	Radio-telephony Phraseology
RVR	Runway Visual Range
RVSM	Reduced Vertical Separation Minima
Sap	Stabilised Approaches
SARPS	Standards and Recommended Practices
SDR	Service Difficulty Reports
SATCOM	Satellite Communications
SELCAL	Selective Calling radio Equipment
SIC	Second in Command
SIGMET	Significant Meteorological Information
SLOP	Strategic Lateral Offset Procedures
SMS	Safety Management System
SOPs	Standard Operation Procedures
SSR	Secondary Surveillance Radar (ATC Transponder)
STPD	Standard Temperature Pressure Dry
SVR	Slant Visibility Range
TA	Traffic Advisories
TAWS	Terrain Awareness and Warning System
TCH	Type Certificate Holders
TCAS	Traffic Collison Avoidance System
TDA	Temporary Danger Area
TOD	Top of Descent
TPED	Transmitting Portable Electronic Device
VAR	Volcanic Air Report
VAAC	Volcanic Ash Advisory Centre
VAT	Airspeed at Threshold
VFR	Visual Flight Rules
VGP	Vertical Glide Path
VMC	Visual Meteorological Conditions

Organisation and Responsibilities

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1. ORGANISATION AND RESPONSIBILITIES

1.1 Organisational Structure

Super Legacy XP Limited is based in London and is engaged in the use of PC-12/47 aircraft for demonstration/sales purposes and also the transportation of passengers under GAR 91 & 125 regulations.

The area of operation is Western Europe. Detailed below which are enclosed within lines joining successively the following points:

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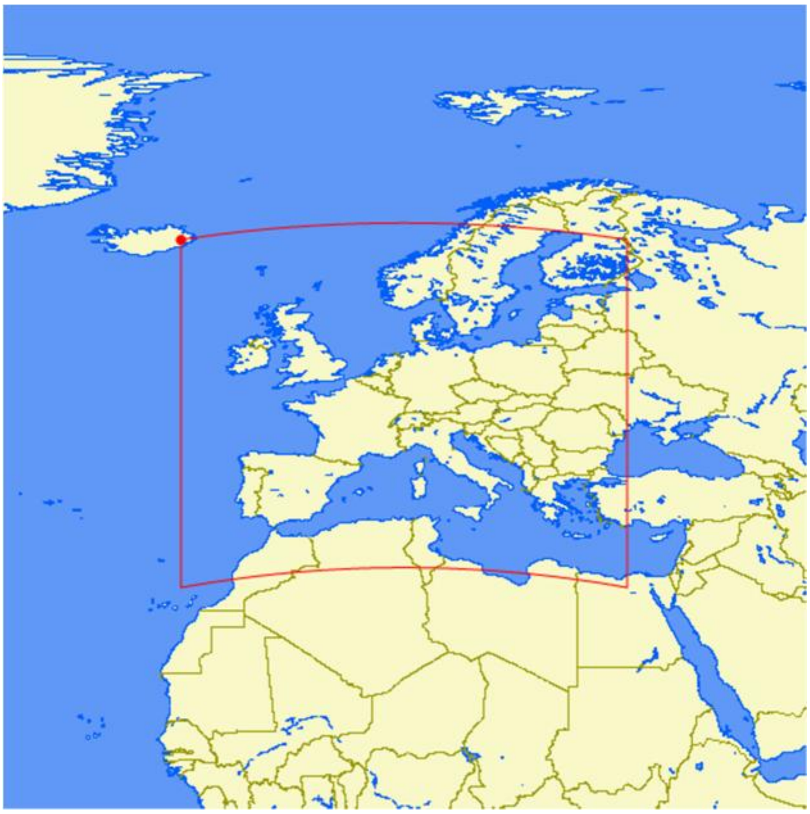
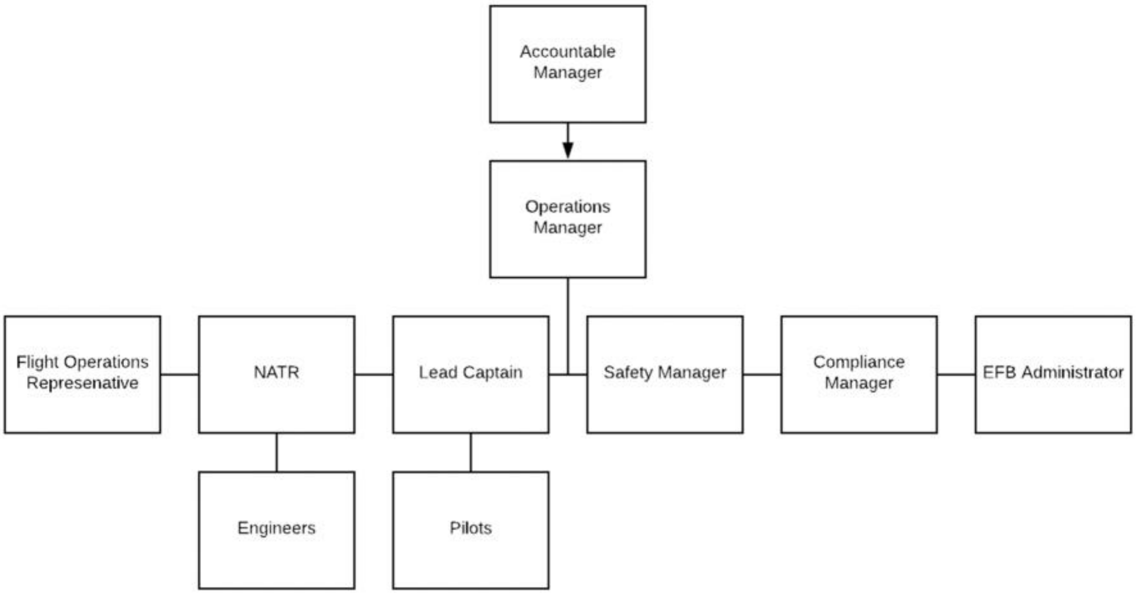


The following is an organogram description of the organisational structure of Super Legacy XP Limited.



1.2 Names of Nominated Postholders

Post	Name
Accountable Manager	Stephen Williams
Operations Manager	Stephen Williams
Lead Captain	Stephen Williams
NATR/TC	Oriens Maintenance Services Limited
Flight Operations Representative	Stephen Williams
Safety Manager	Stephen Williams
Compliance Manager	TBA
EFB Administrator	Stephen Williams

1.3 Duties, Authorities and Accountabilities of Operations Management Personnel

The following are the duties, authorities and accountabilities of the management personnel of the company and the qualifications required to hold those positions.

1.3.1 Accountable Manager

The Accountable Manager shall be familiar and comply with the laws, regulations and procedures, pertinent to the performance of his/her duties, prescribed for the areas to be traversed, the aerodromes or operating sites to be used and the related air navigation.

Accountabilities and duties

The Accountable Manager is accountable for overall safe operation of Super Legacy XP Limited and ensuring that all activities can be financed and carried out in accordance with the applicable requirements and establishing and maintaining an effective management system.

The Accountable Manager will take responsibility and/or delegate:

a. Development of the overall Safety Policy.

b. Communication with the regulatory authority on all matters concerning flight operations;

c. Recruiting and oversight of all staff

d. Development of training programmes in conjunction with the Lead Captain

e. Development and implementation of the Safety Management Systems in conjunction with the Safety Manager;

f. Development of the safety awareness programme in conjunction with the Safety Manager;

g. Development of the Super Legacy XP Limited emergency response in conjunction with the Safety Manager;

Qualifications

a. Holds or has held an appropriate licence, or has acquired supervisory experience; and

b. Demonstrates knowledge with respect to the operation of the company, the content of the Operations Manual, and the provision of the regulations and the standards necessary to carry out the duties and responsibilities to ensure safety.

1.3.2 Operations Manager

The Operations Manager shall be familiar and comply with the laws, regulations and procedures, pertinent to the performance of his/her duties, prescribed for the areas to be traversed, the aerodromes or operating sites to be used and the related air navigation. The Operations Manager will deputise for the Accountable Manager in his absence.

Accountabilities and duties

The Operations Manager is accountable for overall operation of the company and safe flight operations and that Super Legacy XP Limited safety management goals are met. The duties of the position include:

a. organising, staffing and directing:

  i. Flight operations;

  ii. Cabin safety;

  iii. Crew scheduling; and

b. Controlling operations of all aircraft operated;

c. Managing functions which impact on operational control (e.g. maintenance, crew scheduling, load control, equipment scheduling);

d. Liaising with any third parties who affect aircraft operations;

e. Ensuring that crew scheduling complies with flight and duty time limitations;

f. Ensuring that air operations are carried out in accordance with national and international regulations, standards and Super Legacy XP Limited operating policy;

g. Receiving and taking action with respect to any aeronautical information affecting the safety of flight;

h. Ensuring that all crew are advised of any changes to the regulations and operating standards;

i. Distributing aircraft safety information;

j. Ensuring that flight crew qualifications are kept current;

k. Maintaining the operations library;

Qualifications

a. Holds or has held an appropriate licence, or has acquired supervisory experience; and

b. Demonstrate knowledge with respect to the operation of company, the content of the Operations Manual, and the provision of the regulations and the standards necessary to carry out the duties and responsibilities to ensure safety.

1.3.3 Lead Captain

The Lead Captain shall be familiar and comply with the laws, regulations and procedures, pertinent to the performance of his/her duties, prescribed for the areas to be traversed, the aerodromes or operating sites to be used and the related air navigation. The Lead Captain will deputise for the Operations Manager in his absence.

Accountabilities and Duties

The Lead Captain is accountable for the overall professional standards of all flight crew under their authority and ensuring that all operations and training safety management goals are met. The duties of the Lead Captain include:

a. Developing standard operational standards & procedures;

b. Planning all required training programmes for Super Legacy XP Limited flight crews;

c. Issuing flight safety directives and notices to the flight crews as required;

d. Ensuring that all aerodromes / routes served by Super Legacy XP Limited are operationally suitable and meet Super Legacy XP Limited requirements;

e. Supervising aircraft crews;

f. Assuming any responsibilities delegated by the Accountable or Operations Managers;

g. Developing training material as required, in conjunction with the Accountable Manager.

Qualifications

a. Holds an appropriate licence and a valid Instrument Rating for the category of aircraft operated;

b. Holds a type rating for the aircraft operated;

c. Is qualified in accordance with Super Legacy XP Limited training programme to act as a Pilot in Command (PIC) on the aircraft operated; and

d. Demonstrate knowledge of the content of the Operations Manual, Training Manuals, Standard Operating Procedures, Aircraft Flight Manual and Pilot Operating Handbook (Aircraft Operations Manual), and the provisions of the civil aviation regulations and standards necessary to carry out their duties.

1.3.4 NATR/TC

The NATR also referred to as the Technical Co-ordinator (TC) shall be familiar and comply with the laws, regulations and procedures, pertinent to the performance of his/her duties.

Accountabilities and Duties

The NATR is accountable for ensuring that all aircraft are maintained in accordance with Bailiwick of Guernsey Regulatory Authority requirements and that any maintenance related safety management goals are met. The duties include:

a. Planning and controlling all aircraft maintenance;

b. Liaising with the national civil aviation authority on maintenance topics;

c. Liaising with all non-Super Legacy XP Limited persons or Approved Maintenance Organisations (AMOs) performing maintenance on Super Legacy XP Limited aircraft;

d. Processing and taking action on any Technical or Maintenance SMS reports;

e. Ensuring that Airworthiness Directives and Service Bulletins that affect Super Legacy XP Limited aircraft are actioned appropriately; and

f. Advising as unserviceable any aircraft that are unsafe, or that do not comply with Bailiwick of Guernsey Regulatory Authority requirements.

g. Ensuring that aircraft maintenance records are kept up to date;

Qualifications

a. Demonstrated knowledge of the planning, implementation and organisation of the maintenance programmes and control system for the aircraft operated; and
b. Demonstrated knowledge of the national regulations and standards relating to aircraft maintenance.

1.3.5 Safety Manager

The Safety Manager shall be familiar and comply with the laws, regulations and procedures, pertinent to the performance of his/her duties.

Accountabilities and Duties

The Safety Manager shall be accountable for day to day administration of the Super Legacy XP Limited Safety Management System. The Safety Manager is the focal point of the Safety Risk Management System. In that role he/she has direct access to the Accountable Manager, the Operations Manager and the Lead Captain in safety matters. The duties of the Safety Manager include:

a. Monitoring and advising on all Super Legacy XP Limited safety activities which may have an impact on flight and ground safety;

b. Facilitating hazard identification, risk analysis using the Super Legacy XP Limited SMS Reporting Tool;

c. Categorising findings to assist in prioritising corrective actions;

d. Monitor the implementation of actions taken to mitigate risks, as listed in the safety action plan

e. Use the SMS Analysis Tools to identify operational issues.

f. Investigating and recommending action on any SMS Occurrence reports, and Providing feedback to the reporter of the Occurrence;

g. Provide periodic reports on safety performance to all personnel;

h. Ensure maintenance of safety management documentation;

i. Ensure that there is safety management training available and that it meets acceptable standards;

j. Provide advice on safety matters; and

k. Ensure initiation and follow-up of internal occurrence/accident investigations.

l. Promoting the Safety Management System

Qualifications

a. Extensive operational experience; and

b. Receive appropriate training in the SMS and know their responsibilities. Refer to OM Part D, 2.14.

1.3.6 Compliance Monitoring Manager

To ensure that the operator continues to meet the regulatory requirements the Accountable Manager has designated a Compliance Monitoring Manager. The role of the compliance monitoring manager is to ensure that the activities of the operator are monitored for compliance with the applicable regulatory requirements, and any additional requirements as established by the operator, and that these activities are carried out properly under the supervision of the relevant head of functional area.

The Compliance Monitoring Manager shall be familiar and comply with the laws, regulations and procedures, pertinent to the performance of his/her duties.

Accountabilities and Duties

The Compliance Monitoring Manager shall be accountable directly to the Accountable Manager, and has access to all parts of Super Legacy XP Limited and as necessary, any contracted operator.

The compliance monitoring manager is responsible for ensuring that the compliance monitoring programme is properly implemented, maintained and continually reviewed and improved.

The CMM will also:

a. Take appropriate action on and distributing accident, incident, and other MOR reports;
b. Arrange and undertake compliance inspections and audits;
c. Provide feedback on compliance to management and staff.

Qualifications

The compliance monitoring manager will:

Be able to demonstrate relevant knowledge, background and appropriate experience related to the activities of the operator, including knowledge and experience in compliance monitoring.

1.3.7 Flight Operations Representative (FOR)

Reporting to the Accountable Manager the FOR will ensure that the operator continues to meet the Bailiwick of Guernsey requirements the Flight Operations Representative will be the single point of contact for all flight operations matters on behalf of the operator with the Bailiwick of Guernsey Regulatory Authority and has sufficient authority to deal with findings and observations.

Accountabilities and Duties

The Flight Operations Representative shall be accountable directly to the Accountable Manager, and has access to all parts of Super Legacy XP Limited.

The FOR shall:

a. be responsible for ensuring the aircraft flight manual (AFM) or pilot operating handbook (POH) remains up to date with the latest amendments
b. ensure that the MMEL/MEL amendment process is in accordance with RP6 and the company operations manual (if applicable).
c. be responsible for ensuring that any changes to their contact information are advised to 2-Reg. ensure that all communication from the 2-Reg is notified and actioned by the other post holders.

Qualifications

The FOR will be able to communicate effectively in English.

The FOR must have a good working knowledge of flight operations processes and procedures

1.3.8 Electronic Flight Bag Administrator

The role of the EFB Administrator is a key factor in the management of the EFB system. The EFB Administrator is the person responsible for the complete system with appropriate authority.

The EFB Administrator is responsible for hardware and software configuration management and for ensuring, in particular, that no unauthorised software is installed. The EFB Administrator is also responsible for ensuring that only a valid version of the application software and current data packages are installed on the EFB system.

The EFB Administrator is responsible for conducting internal quality control measures to ensure that all EFB administration personnel comply with the defined procedures.

EFB administration will be subject to independent routine audits conducted by the Compliance Monitoring Programme.

The EFB administrator has received appropriate training in their role and will have a good working knowledge of the proposed system hardware, operating system and relevant software applications.

The administrator training material will be made available on request to the competent authority.

The EFB Administrator (EFBA) is the person in overall charge of the EFB system, including hardware and software. He/she will also be responsible for ensuring that only the current version of the application software and data packages are installed on the EFB system. Training must be provided to the EFBA to ensure that they are capable to undertake the responsibilities.

The EFBA responsibilities include: -

1. Ensuring that any hardware conforms to the required specification.

2. No unauthorised software is installed and that the current versions of application software and data packages are installed

3. Support the EFB users on the use of the applications.

4. Conduct appropriate level of testing on new/updated EFB software and operating system.

5. Provide appropriate safeguards to protect the integrity of electronically held documentation and data from unauthorised changes.

6. Ensure all staff who may be involved with the system are aware of their roles and responsibilities, and the hazards that are associated with the use of an EFB.

7. Oversight of sub-contracted services associated with the EFB system and will also
coordinate the flow of information within the Operator's departments required to maintain an effective EFB system. For example, where applicable the MEL will require amendment when an EFB system is introduced or modified, and the EFBA will ensure that this takes place.

8. The EFBA will interface with the operator's Compliance Monitoring and/or Safety
Management Systems, and ensure that appropriate action is taken when required by these systems.

9. Ensure security knowledge of EFB systems is up to date

1.4 Duties, Authorities and Accountabilities of the Pilot in Command (PIC)

The PIC shall be familiar and comply with the laws, regulations and procedures, pertinent to the performance of his/her duties, prescribed for the areas to be traversed, the aerodromes or operating sites to be used and the related air navigation.

Along with the Second-in Command (SIC), the PIC is the day to day interface with the client and it is expected that he/she will at all times be punctual, courtesy and polite with the passengers; escort passengers to/from the terminal; carry and load bags and generally take care of the passengers requirements. It is expected that the PIC will, at all times whilst on duty, be well dressed in accordance with the Super Legacy XP Limited uniform requirements.

The PIC is responsible for the operation and safety of the aircraft and for:

a. The safety of all crew members, passengers and cargo on board, as soon as he/she arrives on board, until he/she leaves the aircraft at the end of the flight;

b. The initiation, continuation, termination or diversion of a flight in the interest of safety;

c. The operation and safety of the aircraft from the moment it is first ready to move for the purpose of taxiing prior to take-off, until the moment it comes to rest at the end of the flight and the engine(s) used as primary propulsion unit(s) is/are shut down;

d. Only commencing a flight if he/she is satisfied that all operational limitations referred in the Operations Manual are complied with, as follows:

i. ensuring that the aircraft is airworthy, registered and that the documentation specified in section 2.7 is on board the aircraft;
ii. instruments and equipment (including emergency equipment) required for the execution of that flight are installed in the aircraft and are operative, unless operation with inoperative equipment is permitted by the minimum equipment list (MEL) or equivalent document, as required in OM 8.11;
iii. operating the aircraft in accordance with Super Legacy XP Limited procedures and aircraft limitations, as specified in the AFM, specifically checking the aircraft performance is adequate to comply with the applicable rules of the air, the airspace and the aerodromes, taking into account the charting accuracy of any charts and maps used;
iv. determining the aircraft mass and balance;
v. completing an aircraft pre-flight inspection before each departure, when all cargo, bags and passengers are loaded the PIC must conduct a “final walk-round” to check that holds and hatches are closed, chocks removed and any other required ground checks are complete;
vi. ensuring that all aircraft crew members have valid licenses, medical certificates and passports and visas; and
vii. ensuring that they do not operate an aircraft unless they are properly rated and meet the currency requirements in section 5.2;

e. Ensuring that a flight is not commenced, or will not be continued beyond the nearest suitable aerodrome when the capacity of any flight crew member to perform duties is significantly reduced from causes such as fatigue, sickness or lack of oxygen. Except in a multi-crew operation the pilot-in-command may continue a flight beyond the nearest weather permissible aerodrome when adequate mitigating procedures are in place.

f. Deciding on acceptance of the aircraft with unserviceabilities in accordance with the configuration deviation list (CDL) or minimum equipment list (MEL), as applicable;

g. Record flight times and defects in the aircraft technical log, copying the log to Operation;

h. Ensuring that flight recorders are not disabled or switched off during flight; and in the event of an accident or an incident that is subject to mandatory reporting ensuring they:

   a. are not intentionally erased;

b. re deactivated immediately after the flight is completed; and
c. are reactivated only with the agreement of the investigating authority.

i. The PIC has the authority to refuse transportation of any person or object if their carriage poses any risk to the safety of the aircraft or its occupants. This may include any:

a. Passengers who have special needs that cannot be provided on the aircraft; or
b. Persons that appear to be under the influence of alcohol or drugs.

The ultimate decision whether, when, and where to make the flight rests with the PIC.

j. The pilot-in-command shall, as soon as possible, report to the appropriate air traffic services (ATS) unit any hazardous weather or flight conditions encountered that are likely to affect the safety of other aircraft;

k. In an emergency situation that requires immediate decision and action, the PIC may take any action he/she considers necessary. In such cases he/she may deviate from rules, operational procedures and methods in the interest of safety; and
l. Notifying authorities of any accident, suspected communicable disease, acts of unlawful interference, or landing at an airport other than a State's international airport caused by circumstances beyond the control of the PIC.

Furthermore, the PIC shall:

m. Not commence a flight unless they will believe they are medically fit to carry out the flight. This includes physical and mental fitness, not suffering from any disease or disability, which makes the pilot unable to execute the tasks necessary to operate an aircraft; perform their details or perceive correctly his/her environment. In the event that they believe they are not fit they are to report this as early as practical to the Operations Manager;

n. Revise aircraft charts (paper/electronic); Aircraft Flight Manual (AFM) Performance Manual
Operating Manual; and Checklist updates as required;

o. Prior to flight check weather & NOTAMs and thereafter continue to re-evaluate changing weather conditions;

p. Ensure that all flight planning requirements (including fuel & oxygen requirements) have been met
(as per section 2.1.5);

q. Brief the passengers in accordance with the requirements specified in section 8.14.1

r. Ensure that before taxiing, take-off and landing, all exits and escape paths are unobstructed; and that before take-off and landing, and whenever deemed necessary in the interest of safety, all equipment and baggage are properly secured.

s. Ensure compliance with customs and immigration laws, and to complete the general declaration, when required;

t. Complete all post flight duties, including disconnecting batteries, ensuring engine and other aircraft covers are securely fitted; and leaving the cabin in tidy and clean condition;

u. Ensure that all flight paperwork is returned to Operations including the Operational Flight
Plan, Mass and Balance Calculation and Performance Calculations.

v. Notify operations of any deviation from the planned itinerary or overnight location; The qualifications required to act as PIC are specified in section 5.1.

1.5 Duties and Responsibilities of Crew Members Other Than the PIC

All crew members shall report to the PIC:

a. any fault, failure, malfunction or defect, which he/she believes may affect the airworthiness or safe operation of the aircraft, including emergency systems; and
b. any incident that was endangering, or could endanger, the safety of the operation.

1.5.1 Second-in-Command

The SIC shall be familiar and comply with the laws, regulations and procedures, pertinent to the performance of his/her duties, prescribed for the areas to be traversed, the aerodromes or operating sites to be used and the related air navigation.

The Second-in-Command (SIC) shall assist the PIC in the operation of the aircraft in accordance with the directions of the PIC. The SIC may carry out take-offs and landings under the authority of the PIC and shall take over control in the event of PIC incapacitation.

Along with the PIC the SIC is the day to day interface with the client and it is expected that he/she will at all times be punctual, courtesy and polite with the passengers; and when required escort passengers to/from the terminal; carry and load bags and generally and take care of the passengers requirements. It is expected that the SIC will, at all times whilst on duty, be well dressed in accordance with the Super Legacy XP Limited uniform requirements.

Their duties shall include all that are delegated by the PIC and specifically include:

a. Ensure that they are medical fit to carry out the flight. This includes physical and mental fitness, not suffering from any disease or disability, which makes the pilot unable to execute the tasks necessary to operate an aircraft; perform their details or perceive correctly his/her environment. In the event that they are not fit they are to report this as early as practical to operations;

b. Stocking of the aircraft and galley as necessary; and

c. Maintaining the Electronic Flight Bag, and keeping it charged and updated.

The qualifications required to act as SIC are specified in section 5.1 Flight Crew Licences and Ratings.

1.5.2 Cabin Crew

Super Legacy XP Limited do not use Cabin Crew but may elect to carry additional personnel to provide in-flight service duties. It is important that the role of this person is clearly communicated to the passengers so that they understand any limits on their safety qualifications and do not wait in an emergency situation or rely on a person for safety direction, who is not trained or qualified for that function.

1.6 Other Personnel

1.6.1 Operations Assistant

The person responsible for scheduling the aircraft shall have knowledge of the Super Legacy XP Limited Operations Manual and procedures, national and international regulations and standards, and Super Legacy XP Limited aircraft. He/she shall also have effective communication skills to communicate to other members of the team. The position also requires knowledge and skill with computer software.

Some duties and responsibilities of this position will include:

a. Scheduling trips for owners/passengers

b. Maintaining and updating aircraft / crew schedules

c. Providing the flight crew with the Operational Flight Plan and latest weather information

d. Preparing and maintaining passenger manifests

e. Maintaining department records

f. Obtaining international permits, overflights and visas and coordinating with airport handlers for international flights, as applicable

g. Maintaining records of charts and other flight crew materials

h. Maintaining a flight following system

i. Coordinating aircraft handling and fuelling with aircraft handlers.

j. Helping to arrange maintenance on the aircraft including preparation of work-orders, and file appropriately all related paperwork.

k. Scheduling ground transportation and accommodations

l. Arranging security if needed and communicating this information to passengers;

m. Liaising with flight crews, management, maintenance, and passengers

n. Arranging catering as required.

1.6.2 Line Service Personnel

Duties and responsibilities include:

a. Refuelling the aircraft

b. Assisting in routine maintenance

c. Moving or towing the aircraft

d. Assisting in prefight checks

e. Cleaning and restocking the aircraft

Operational Control

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2. OPERATIONAL CONTROL

2.1 Operational Control System

Operational control means 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. This also includes flight following until the aircraft arrives at its destination.

In the case of in-flight re-planning, continuation of a flight refers to the point from which a revised flight plan applies.

2.1.1 General Description

Super Legacy XP Limited records planned trips in an online diary to enable forward planning, produce passenger manifests and provides crewing rostering functions.

The flight planning software, Rocket Route, is used to calculate Flight Plans, Load Manifests, provide weather information and other operational requirements such as NOTAMS. Airport and Aircraft performance is calculated using either Pilatus PC12 Digital AFM or AFM data.

2.1.2 Responsibilities and Authorities

All flights or series of flights away from base must be authorised before departure by the Operations Manager. The operational control of a flight is thereafter delegated to the PIC. The PIC's name is recorded in the Aircraft Technical Log.

Super Legacy XP Limited uses a pilot self-dispatch system. A flight release will be deemed to have been authorised when the PIC has determined that:

a. The flight will be conducted in accordance with the applicable civil aviation regulations and standards; including but not exclusive to runway/taxiway dimensions, pavement classification number, availability of ground handling, de-icing facilities, fuel and oil availability, required fire cover etc.

b. The all required licences, permits, certificates, are valid and have been verified

c. The required equipment, documents and manuals are on board the aircraft and updated with the latest revision in accordance with Form 10 Aircraft Documentation Revision Checklist.

d. All required aircraft maintenance work has been completed, the aircraft Certificate of Airworthiness is valid and sufficient time remains on the aircraft before the next required maintenance, to complete the series of flights;

e. The meteorological conditions (having considered applicable surface observations, winds and temperatures aloft, terminal and area forecasts, air meteorological information reports (AIRMETs), significant meteorological information (SIGMET) and pilot reports), are such that the flight can be conducted safely and within Bailiwick of Guernsey Authority and International regulations and standards; and

f. The Operational Flight Plan has been completed.

g. Aeronautical charts carried containing data appropriate to the applicable air traffic regulations, rules of the air, flight altitudes, area/route and nature of the operation. Due consideration shall be given to carriage of textual and graphic representations of:

Aeronautical data including, as appropriate for the nature of the operation:

i. airspace structure;
ii. significant points, navigation aids (navaids) and air traffic services (ATS) routes;
iii. navigation and communication frequencies;
iv. prohibited, restricted and danger areas; and
v. sites of other relevant activities that may hazard the flight; and
vi. Topographical data, including terrain and obstacle data.

A combination of different charts and textual data may be used to provide adequate and current data. The aeronautical data shall be appropriate for the current aeronautical information regulation and control (AIRAC) cycle. The topographical data shall be current having regard to the nature of the planned operation.

h. The procedures and the visual signals information for use by intercepting and intercepted aircraft are detailed in 13.1 Interception Signals - General.

In the event that a new requirement for a flight develops when operating away from base, the PIC will have the authority to release the aircraft after having satisfying themselves that conditions a. to h. above have been met.

2.1.3 Flight Planning

Super Legacy XP Limited has established 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 concerned.

A flight shall not be commenced until all pertinent flight data has been compiled; including the Operational Flight Plan log and an ATC flight plan has been filed. Super Legacy XP Limited uses a crew self- dispatch system. It is the PIC's responsibility to ensure that all flight planning documents required by this Operations Manual have been prepared and filed prior to departure.

The PIC shall also ensure that flight planning requirements of the State/States in which the operation is being conducted have been met. For details on State requirements reference can be made to the Jeppesen Flight Guide.

a. Dependent on the length and complexity of the planned flight, the Operational Flight Plan may be completed based on considerations of aircraft performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes /operating sites concerned.

b. The operational flight plan ((Form 1 –example Operational Flight Plan)) contains the following items:

i. Aircraft registration;

ii. Aircraft type and variant;

iii. Date of flight;

iv. Flight identification;

v. Names of all crew members;

vi. Duty assignment of all crew members;

vii. Place of departure;

viii. Time of departure (actual off-block time, take-off time);

ix. Place of arrival (planned and actual);

x. Time of arrival (actual landing and on-block time);

xi. Type of operation (VFR, ferry flight, etc.);

xii. Route and route segments with checkpoints/waypoints, distances, time and tracks;

xiii. Planned cruising speed and flying times between check-points/waypoints (estimated and actual times overhead);

xiv. Safe altitudes and minimum levels;

xv. Planned altitudes and flight levels;

xvi. Fuel calculations (records of);

xvii. Fuel on board when starting engines;

xviii. Alternate(s) for destination and, where applicable, take-off and en-route;

xix. Initial ATS flight plan clearance and subsequent reclearance;

xx. In-flight replanning calculations; and xxi. Relevant meteorological information.

The PIC shall sign all formal flight plan logs to signify acceptance and accuracy. In the event of Air Traffic Control or other agency changing the planned route then the PIC will amend the OFP or ask Operations to issue a new Operational Flight Plan to assist with any updated route and revised fuel calculations.

Operations will provide the handling agent with a list of passengers in the form of a Passenger Manifest (Form F2 – Passenger Manifest which must be carried on board. If there is any unplanned enplanement or dis-embarking of passengers prior to departure, the PIC shall ensure that the handling agent and operations are advised of the revised manifest details, so that an accurate Passenger Manifest can be left at the point of departure for all flights with passengers.

2.1.4 Ferry Flights

A Flight Permit will be required whenever the Certificate of Airworthiness (C of A) is not in force (e.g. overdue inspection, aircraft damage, unserviceability, etc.). Essential crew only (no passengers) shall be carried on Ferry Flights. The flight shall be conducted in accordance with all conditions specified in the Flight Permit.

2.1.5 Flight Planning Requirements

2.1.5.1 Flight Planning - General

Before commencing a flight the PIC shall be familiar with the available flight information that is appropriate to the intended flight. The PIC shall not commence a flight unless it has been ascertained that the facilities available and directly required for such flight and for the safe operation of the aircraft are adequate, including communication facilities and navigation aids.

2.1.5.2 Evaluation of Meteorological Conditions

a. Before commencing a flight the PIC shall be familiar with all available meteorological information appropriate to the intended flight. Preparation for every flight under the instrument flight rules shall include:

i. applicable surface observations
ii. winds and temperatures aloft
iii. terminal and area forecasts
iv. air meteorological information reports (AIRMETS)
v. significant meteorological information (SIGMET) and
vi. pilot reports

b. the planning of an alternate course of action to provide for the eventuality that the flight cannot be completed as planned because of weather conditions

Pilots shall continue to re-evaluate changing weather conditions

The ultimate decision whether, when and where to make the flight rests with the PIC.

2.1.5.3 VFR Flight

A flight to be conducted in accordance with the visual flight rules shall not be commenced unless available weather information indicates that the meteorological conditions along the route, or that part of the route to be flown under the visual flight rules, will permit flight under visual flight rules and VFR charts for the route to be flown are carried on board the aircraft.

VFR flights or VFR portions of an IFR flight shall be reduced to the minimum and only when operationally necessary.

No VFR-flights shall be operated in visibility less than 5 km.

Airspace	B	C D E	F G	
			Above 900m (3000ft) AMSL or above 300m (1000ft) above terrain, whichever is the higher	At and below 900m (3000ft) AMSL or 300m (1000ft) above terrain, whichever is the higher
Distance from cloud	Clear of Cloud	1500m horizontally 300m (1000ft) vertically		Clear of cloud and in sight of the surface
Flight visibility	8km at and above 3050m (10000ft) AMSL (Note 1) 5km below 3050ft (10000ft) AMSL			5km

Note 1: When the height of the transition altitude is lower than 3050m (10000ft) AMSL, FL100 should be used in lieu of 10000ft.

When VFR operations are to be conducted in high performance aircraft, risk factors related to the routes and traffic shall be assessed by the PIC and mitigation developed to ensure that the identified risks are reduced to an acceptable level.

2.1.5.4 IFR Flight Planning Requirements

The PIC shall only commence or continue (in the case of an in-flight re-planning) an IFR flight towards the planned destination aerodrome if the latest available meteorological information indicates that, at the estimated time of arrival, the weather conditions at the destination or at least one destination alternate aerodrome are at or above the applicable aerodrome operating minima.

a. When a take-off alternate aerodrome is required

Super Legacy XP Limited crew must select and specify in the Operational Flight Plan a take-off alternate aerodrome if it would not be possible to return to the departure for meteorological or performance reasons.

The take-off alternate for single engine aircraft shall be within 30 minutes flight time at the Aircraft Flight Manual normal cruise speed in standard conditions based on the actual take-off mass.

Aircraft Type	Maximum Take-off mass (kgs.)	Flight Level	Cruise Speed (KTAS)
Pilatus PC-12	4717	FL50	237
		FL150	256

b. When a destination alternate aerodrome is required.

A flight to be conducted in accordance with the instrument flight rules shall not be commenced unless the available information indicates that conditions at least one destination alternate will be at or above the required minima at the estimated time of arrival. Crew will select two destination alternate aerodromes when the weather reports and forecasts at the destination indicate that during a period commencing one hour before and ending one hour after the estimated time of arrival, the weather conditions will be below the applicable planning minima or if no meteorological information is available. Both destination alternates will be specified in the Operational Flight Plan (Form 1 Pilots Flight Plan)

c. When no destination alternate aerodrome is required.

For IFR flights, the pilot-in-command shall specify at least one weather-permissible destination alternate aerodrome in the flight plan, unless:

i. the available current meteorological information indicates that, for the period from 1 hour before until 1 hour after the estimated time of arrival, or from the actual time of departure to 1 hour after the estimated time of arrival, whichever is the shorter period, the approach and landing may be made under visual meteorological conditions (VMC);

OR

ii. the place of intended landing is isolated and:

1) An instrument approach procedure is prescribed for the aerodrome of intended landing; and

2) Available current meteorological information indicates that the following meteorological conditions will exist from 2 hours before to 2 hours after the estimated time of arrival:

A cloud base of at least 300 m (1 000 ft) above the minimum associated with the instrument approach procedure; and

Visibility of at least 5.5km or of 4km more than the minimum associated with the procedure.

d. Isolated Aerodrome Procedures

For the selection of alternate aerodromes and the fuel policy, the PIC shall consider an aerodrome as an isolated aerodrome if the flying time to the nearest adequate destination alternate aerodrome is more than 90 minutes.

Flights to an isolated aerodrome will also require Lead Captain approval.

e. PBN Operations

An aerodrome will be selected as a destination alternate aerodrome if an instrument approach procedure that does not rely on GNSS is available either at that aerodrome or at the destination aerodrome.

a. The limitation applies only to destination alternate aerodromes for flights when a destination alternate aerodrome is required. A take-off or en route alternate aerodrome with instrument approach procedures relying on GNSS may be planned without restrictions. A destination aerodrome with all instrument approach procedures relying solely on GNSS may be used without a destination alternate aerodrome if the conditions for a flight without a destination alternate aerodrome are met.

b. The term ‘available’ means that the procedure can be used in the planning stage and complies with planning minima requirements.

2.1.5.5 Planning Minima for IFR Flights.

The following minima is for planning purposes, once the aircraft has departed then the minima required for each approach is as published for each approach, no “downgrading” or “time constraints” apply at destination or alternate aerodromes.

<table>
<tr><td colspan="4">The PIC shall not select an aerodrome as specified below unless the appropriate weather reports or forecasts or any combination thereof indicate that, during a period commencing 1
hour before and ending 1 hour after the expected time of arrival at the aerodrome, the weather conditions will be:</td></tr>
<tr><td>Take-Off alternate</td><td>Destination (except isolated destination)</td><td colspan="2">Destination Alternate or Isolated Destination or En-route alternate</td></tr>
<tr><td rowspan="5">At or above the applicable landing minima.

The ceiling must be taken into account when the only approaches available are non- precision approaches and/or circling approaches.</td><td rowspan="5">At or above landing minima.

For a non-precision approach or a circling approach, the ceiling must be at or above MDA(H).</td><td>Type of approach</td><td>Planning Minima</td></tr>
<tr><td>Cat II</td><td>N/A</td></tr>
<tr><td>Cat I</td><td>- Non-precision</td></tr>
<tr><td>Non- precision</td><td>- Non-precision –
- RVR +1000m
- Ceiling MDH +200ft</td></tr>
<tr><td>Circling</td><td>Circling
(The ceiling must be at or above the prescribed circling minima).</td></tr>
</table>

2.1.5.6 Fuel and Oil Supply Requirements

The PIC shall only commence a flight if the Aircraft carries sufficient fuel and oil.

In computing the fuel required including to provide for contingency, the following shall be taken into consideration:

a. Forecast meteorological conditions;
b. Anticipated ATC routings and traffic delays;
c. Procedures for loss of pressurisation or failure of engine while en-route, where applicable;
and

d. Any other condition that may delay the landing of the Aircraft or increase fuel and/or oil consumption.

Nothing shall preclude amendment of a flight plan in-flight, in order to re-plan the flight to another destination,

2.1.5.6.1 Visual flight rules (VFR) flights:

a. By day, to fly to the aerodrome of intended landing and thereafter to fly for at least 30 minutes at normal cruising altitude; or
b. By night, to fly to the aerodrome of intended landing and thereafter to fly for at least 45 minutes at normal cruising altitude

2.1.5.6.2 IFR flights:

a. When no destination alternate is required, to fly to the aerodrome of intended landing, and thereafter to fly for at least 45 minutes at normal cruising altitude; or
b. When a destination alternate is required, to fly to the aerodrome of intended landing, to an alternate aerodrome and thereafter to fly for at least 45 minutes at normal cruising altitude provided that all requirements can be complied with from the point where the flight is re-planned. In summary for IFR flights:

a. Taxi Fuel

The fuel amount expected to be used prior to take-off, local conditions at the departure aerodrome and APU consumption will be taken into account.

b. Trip Fuel (+ Trip)

Fuel for the take-off and climb from the aerodrome elevation to initial cruising level taking into account the expected departure route, fuel from the top of climb to the top of descent including any step climbs and descents to the point where the approach is initiated taking into account the expected arrival procedure and fuel for the approach and landing at the destination aerodrome.

c. Contingency Fuel (+5%)

5% of the trip fuel. Note: Contingency fuel is carried to allow for unseen factors which could increase the trip fuel, such as winds differing from forecast, ATC re-routes, inability to cruise at optimum levels, or an individual aircraft burning more fuel than expected. Contingency fuel may be used also be used to allow for a longer than expected taxi time before take-off.

d. Alternate Fuel (as required)

Fuel for the missed approach from the applicable MDA/DA at the destination aerodrome to the missed approach altitude, taking into account the missed approach procedure and fuel for the climb from the missed approach altitude to the cruising level taking into account the expected departure routing and fuel for the cruise from the top of climb to the top of descent, taking into account the expected routing, and fuel for descent from the top of descent to the point where the approach is initiated taking into account the expected arrival procedure and fuel for approach and landing. Where two destination alternate aerodromes are required then the alternate aerodrome which requires the greater amount of fuel shall be planned for.

e. Final Reserve Fuel (45 mins reserve)

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, or other air traffic delays, may result in landing with less than the planned final reserve fuel.

Note: 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, or air traffic delays, 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.

The pilot-in-command shall declare a situation of fuel emergency by broadcasting “MAYDAY MAYDAY MAYDAY FUEL”, when the calculated usable fuel estimated to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the planned final reserve fuel.

f. Additional Fuel

The minimum additional fuel that will permit the aircraft to descend as necessary and proceed to an alternate aerodrome in the event of an engine or pressurisation failure at the most critical point of the journey, hold there for 15 minutes at 1500 feet above the aerodrome level in standard conditions and make an approach and landing, if the above calculated fuel is not sufficient for such an event.

Additional fuel will include extra fuel required at the discretion of the PIC. g. Extra Fuel
Any fuel loaded onto the aircraft, for whatever reason, that is in addition to the above calculation h. Isolated Aerodrome Procedure
When planning to an aerodrome for which an alternate does not exist the fuel required is the sum of:

i. Taxi Fuel
ii. Trip Fuel
iii. Contingency Fuel
iv. Additional Fuel, plus not less than
v. Fuel to fly for a minimum of 2 hours calculated with normal cruise consumption after arriving overhead the destination aerodrome, including final reserve fuel,
vi. Extra fuel, at the discretion of the Pilot in Command

2.1.5.7 Oxygen Supply Requirements

a. The Pilatus PC12 is operated at flight altitudes for which oxygen is required. In accordance with (b) it is therefore equipped with oxygen storage and dispensing apparatus capable of storing and dispensing the required oxygen supplies.

b. All pressurised Aircraft operated above flight altitudes at which the pressure altitude in the passenger compartments is above 10 000 ft carry enough breathing oxygen to supply:

i. All crew members and:

(a) 100 % of the passengers for any period when the cabin pressure altitude exceeds 15000 ft, but in no case less than 10 minutes' supply;

(b) at least 30 % of the passengers, for any period when, in the event of loss of pressurisation and taking into account the circumstances of the flight, the pressure altitude in the passenger compartment will be between 14 000 ft and 15 000 ft; and

(c) at least 10 % of the passengers for any period in excess of 30 minutes when the pressure altitude in the passenger compartment will be between 10 000 ft and 14 000 ft;

ii. All the occupants of the passenger compartment for no less than 10 minutes, in the case of Aircraft operated at pressure altitudes above 25 000 ft, or operated below that altitude, but under conditions that will not allow them to descend safely to a pressure altitude of 13 000 ft within 4 minutes.

c. All pressurised Aircraft operated at flight altitudes above 25 000 ft shall, in addition, be equipped with:

i. A device to provide a warning indication to the flight crew of any loss of pressurisation; and
ii. Quick donning masks for flight crew members.

2.1.5.7.1 Determination of Oxygen

A flight to be operated with a pressurized aircraft shall not be commenced unless a sufficient quantity of stored breathing oxygen is carried to supply all crew members and passengers, as is appropriate to the circumstances of the flight.

a. In the determination of the amount of oxygen required for the routes to be flown, it is assumed that the aircraft will descend in accordance with the emergency procedures specified in 12.1.5 Emergency Descent Procedures without exceeding its operating limitations, to a flight altitude that will allow the flight to be completed safely (i.e. flight altitudes ensuring adequate terrain clearance, navigational accuracy, hazardous weather avoidance, etc.).

b. The amount of oxygen shall be determined on the basis of cabin pressure altitude and flight duration, and on the assumption that a cabin pressurisation failure will occur at the pressure altitude or point of flight that is most critical from the standpoint of oxygen need.

c. Following a cabin pressurisation failure, the cabin pressure altitude shall be considered to be the same as the aircraft pressure altitude.

Crew member seats are fitted with quick donning masks are fitted for crew members and is a type of mask that:

a. Can be placed on the face from its ready position, properly secured, sealed and supplying oxygen upon demand, with one hand within 5 seconds and thereafter can remain in position, both hands being free;

b. Can be donned without disturbing eye glasses and without delaying the flight crew member from proceeding with assigned emergency duties;

c. Once donned, does not prevent immediate communication between the flight crew members and other crew members over the aircraft intercommunication system; and

d. Does not inhibit radio communications.

2.1.5.7.2 Engine Inoperative Glide Performance

In the event of total engine failure best glide speeds are available in the POH under Airspeeds for Emergency Operations

2.1.5.7.3 First-aid Oxygen

First-aid oxygen is a supply of undiluted oxygen for passengers who, for physiological reasons, might require oxygen, following a cabin decompression. The amount of oxygen shall be calculated using an average flow rate of at least 3 litres Standard Temperature Pressure Dry (STPD) per minute per person and shall be sufficient for the remainder of the flight after cabin depressurisation when the cabin altitude exceeds 8’000 feet but does not exceed 15’000 feet, for at least 2% of the passengers carried, but in no case for less than one person.

For dispensing units carried and its use, refer to the AFM of the aircraft type concerned.

2.1.6 Closing ATC Flight Plans/Flight Itineraries

When operating in controlled airspace flight plans are normally closed automatically by ATC. If there is any doubt, the PIC shall check with the ATC unit upon arrival at destination to ensure that the ATC flight plan has been closed. When operating on a VFR flight the PIC will notify operations upon arrival.

2.1.7 Flight Following and Flight Watch

Current information on the location of Super Legacy XP Limited aircraft is to be maintained at Guernsey. The PIC will ensure that departure and arrival messages are passed to Flight Operations who are responsible for flight following. This information will be passed by AFIS, aircraft satellite phone, crew phone or other suitable means.

2.2 Aircraft Mass and Balance, Loading

During any phase of operation, the loading, the mass and the centre of gravity (CG) position of the aircraft must comply with any limitation specified in the AFM, or the operations manual, if more restrictive. Placards and instrument markings are displayed in the aircraft.

In the Certificate Limitations section of the AFM, the forward and aft CG limits are specified. These limits ensure that the certification stability and control criteria are met throughout the whole flight and allow the proper trim setting for take-off. Super Legacy XP Limited ensures that these limits are respected by:

a. Applying adequate operational margins to the certified CG envelope in order to compensate for the following deviations and errors:

b. Deviations of actual CG at empty or operating mass from published values due, for example, to weighing errors, unaccounted modifications and/or equipment variations.

c. Deviations in fuel distribution in tanks from the applicable schedule.

d. Deviations in the distribution of baggage and cargo in the various compartments as compared with the assumed load distribution as well as inaccuracies in the actual mass of baggage and cargo.

e. Deviations in actual passenger seating from the seating distribution assumed when preparing the Load Manifest documentation. Large CG errors may occur when ‘free seating’, i.e. freedom of passengers to select any seat when entering the aircraft, is permitted. Although in most cases reasonably even longitudinal passenger seating can be expected, there is a risk of an extreme forward or aft seat selection causing very large and unacceptable CG errors, assuming that the balance calculation is done on the basis of an assumed even distribution. The largest errors may occur at a load factor of approximately 50 % if all passengers are seated in either the forward or aft half of the cabin. Statistical analysis indicates that the risk of such extreme seating adversely affecting the CG is greatest on small aircraft.

f. Deviations of the actual CG of cargo and passenger load within individual cargo compartments or cabin sections from the normally assumed mid position.

g. Deviations of the CG caused by gear and flap positions and by application of the prescribed fuel usage procedure, unless already covered by the certified limits.

h. Deviations caused by in-flight movement of galley equipment and passengers.

i. Defining and applying operational procedures in order to:

   i. Ensure an even distribution of passengers in the cabin;
   ii. Take into account any significant CG travel during flight caused by passenger/crew movement; and
   iii. Take into account any significant CG travel during flight caused by fuel consumption/transfer.

2.2.1 Weighing of an Aircraft

New aircraft that have been weighed at the factory may be placed into operation without reweighing if the mass and balance records have been adjusted for alterations or modifications to the aircraft. Aircraft transferred from one EU operator to another EU operator do not have to be weighed prior to use by the receiving operator, unless the mass and balance cannot be accurately established by calculation.

The mass and centre of gravity (CG) position of an aircraft will be revised whenever the cumulative changes to the dry operating mass exceed ±0.5 % of the maximum landing mass or the cumulative change in CG position exceeds 0.5 % of the mean aerodynamic chord. This will be done either by weighing the aircraft or by calculation.

When weighing an aircraft, normal precautions will be taken, which are consistent with good practices such as:

a. Checking for completeness of the aircraft and equipment;

b. Determining that fluids are properly accounted for;

c. Ensuring that the aircraft is clean; and

d. Ensuring that weighing is accomplished in an enclosed building.

Any equipment used for weighing shall be properly calibrated, zeroed and used in accordance with the manufacturer's instructions. Each scale will be calibrated either by the manufacturer, by a civil department of weights and measures or by an appropriately authorised organisation within 2 years or within a time period defined by the manufacturer of the weighing equipment, whichever is less. The equipment shall enable the mass of the aircraft to be established accurately. One single accuracy criterion for weighing equipment cannot be given. However, the weighing accuracy is considered satisfactory if the accuracy criteria in the table below are met by the individual scales/cells of the weighing equipment used:

For a scale/cell load	An accuracy of
below 2 000 kg	± 1 %
from 2 000 kg to 20 000 kg	± 20 kg
above 20 000 kg	± 0.1 %

2.2.2 Operational Mass & Balance Calculations and Reports

Aircraft take-off, enroute and landing weights shall not exceed that which would allow the aircraft to meet performance requirements for take-off, en-route and landing at any aerodrome used. This is allowing for expected reductions in mass as the flight proceeds.

Each aircraft has a current Mass and Balance report with an up-to-date equipment list. Using this information, the centre of gravity location and operational empty weight (OEW) is calculated.

Prior to departure, the PIC shall forward the current fuel state of the aircraft to Operations. Operations then produces a computerised Load Manifest (Form 3) for each flight specifying the load and its distribution in such a way that the mass and balance limits of the aircraft are not exceeded. When completing these calculations, the fuel is added last to confirm that at "Zero Fuel Weight", the centre of gravity for that weight is within the allowable envelope.

The Load Manifest documentation contains the following information:

a. Aircraft registration and type;

b. Flight identification, number and date, as applicable;

c. Name of the pilot-in-command;

d. Name of the person who prepared the document;

e. Dry operating mass and the corresponding CG of the aircraft;

f. Mass of the fuel at take-off and the mass of trip fuel;

g. Mass of consumables other than fuel, if applicable;

h. Load components including passengers, baggage, freight and ballast;

i. Take-off mass, landing mass and zero fuel mass;

j. Applicable aircraft CG positions; and k. The limiting mass and CG values.

The Load Manifest Report is verified and signed by the PIC. If the computerised Load Manifest report is not available then a manual Load Manifest report must be manually calculated by the PIC, signed and a copy left at the departure point and kept for 24 hours. The original of the form will be returned and retained in Super Legacy XP Limited files for a six month period following the flight.

The Load Manifest report system is routinely verified to ensure that the integrity of Load Manifest data and documentation generated are correct, at intervals not exceeding 6 months. Super Legacy XP Limited checks that every time there is an amendment to the Aircraft Mass and Balance, that this data is correct.

The PIC shall ensure that the loading of:

a. The aircraft is performed under the supervision of qualified personnel; and

b. Traffic load is consistent with the data used for the calculation of the aircraft Load Manifest.

The PIC is responsible for the proper loading, including load security, weight and weight distribution. All loads (including fuel) shall be distributed using the current Load Manifest report and the loading. The load shall be distributed to ensure that the C of G will remain within the prescribed limits throughout the entire flight.

The PIC will ensure that all items carried that are not included in the equipment list that forms part of the Mass and Balance report, have been included in the weight calculations.

Furthermore the PIC will ensure that only hand baggage that can be adequately and securely stowed is taken into the passenger compartment; and all baggage and cargo on board that might cause injury or damage, or obstruct aisles and exits if displaced, is stowed so as to prevent movement.

Rocket Route has the Load Manifest for each sector. Any last Minute changes may be dealt with by adjusting the passenger seating, numbers, baggage or fuel on the Load Manifest
and saving the Release.

<u>Notwithstanding, the above the CG position may not need to be on the Load Manifest documentation, if the load distribution is in accordance with a pre-calculated balance table or if it can be shown that for the planned operations a correct balance can be ensured, whatever the real load is.</u>

2.2.3 Dry Operating Mass

a. The dry operating mass shall include:

1. Crew and crew baggage;
2. Catering and removable passenger service equipment; and
3. Tank water and lavatory chemicals

b. The dry operating mass shall be corrected to account for any additional crew baggage. The position of the additional baggage shall be accounted for when establishing the centre of gravity of the aircraft.

c. The decision to use actual or standard masses for crew members and passengers is covered in “Standard Mass Values for Crew Passengers and Baggage shown below.

d. When determining the actual mass by weighing, crew members’ personal belongings and hand baggage will be included. Such weighing will be conducted immediately prior to boarding the aircraft.

2.2.4 Standard Mass Values for Crew, Passengers and Baggage

Weights to be used when completing Load Manifest calculations are as follows:

Pilatus PC-12	Kgs	Lbs.
Max Baggage	180	

Actual weights for crew, passengers and baggage shall be used when it is apparent that the standard weights as indicted below are not appropriate.

Passenger	Passenger Weight to be used (includes hand luggage)	Hold Baggage Weight to be used
Adult male 12 years of age & up	96kgs (212lbs)	13kgs (29lbs) within Europe or 15kgs (33lbs) for Intercontinental
Adult female 12 years of age & up	78kgs (172lbs)	
Infants and Children to 11 years of age	35kgs (77lbs)	

For Crew a standard weight of 85kgs (187lbs) may be used.

Freight/Cargo Actual (determined through use of scales) and verify to confirm the maximum floor loading is not exceeded, nor, the maximum mass per cargo compartment.

2.2.5 Fuel Density

Super Legacy XP Limited uses the actual fuel density or, if not, the density calculated in accordance the following:

Fuel (Standard Specific Gravity at 15C)	Jet A1	1.74 lbs - .79 kg per lt.
	Oil (Turbine)	2.21 lbs – 1.00 kg per lt

2.3 Minimum Equipment List

2.3.1 Purpose of the MEL

The Certificate of Airworthiness of an aircraft is not in force, and a flight shall not be commenced, if the equipment, systems and instruments and all required equipment are functioning correctly, unless:

a. The aircraft is operated in accordance with Super Legacy XP Limited minimum equipment list (MEL);
b. Super Legacy XP Limited is approved by the competent authority to operate the aircraft within the constraints of the master minimum equipment list (MMEL); or
c. The aircraft is subject to a permit to fly issued in accordance with the applicable airworthiness requirements.

The MEL is an alleviating document having the purpose to identify the minimum equipment and conditions to operate safely an aircraft having inoperative equipment. Its purpose is not, however, to encourage the operation of aircraft with inoperative equipment. It is undesirable for aircraft to be dispatched with inoperative equipment and such operations are permitted only as a result of careful analysis of each item to ensure that the acceptable level of safety, as intended in the applicable airworthiness and operational requirements is maintained. The continued operation of an aircraft in this condition shall be minimized.

As specified in section 2.1.2 Responsibilities and Authorities, it is the responsibility of the PIC to ensure that the aircraft Certificate of Airworthiness is in valid before commencing a flight.

2.3.2 Extent of the MEL

Super Legacy XP Limited has included guidance in the MEL on how to deal with any failures that occur between the commencement of the flight and the start of the take-off. If a failure occurs between the commencement of the flight and the start of the take-off, any decision to continue the flight shall be subject to pilot judgement and good airmanship. The PIC/Pilot in Command may refer to the MEL before any decision to continue the flight is taken.

2.3.3 Definition

The Minimum Equipment List (MEL) is a document that lists the equipment that may be temporarily inoperative, subject to certain conditions, at the commencement of flight. This document is prepared by Super Legacy XP Limited for their own particular aircraft taking account of their aircraft configuration and all those individual variables that cannot be addressed at MMEL level, such as operating environment, route structure, geographic location, aerodromes where spare parts and maintenance capabilities are available, etc., in accordance with a procedure approved by the competent authority.

The MMEL, as defined in the mandatory part of the operational suitability data established in accordance with Commission Regulation (EU) No 748/2012, is developed in compliance with CS- MMEL or CS-GEN-MMEL. These Certification Specifications contain, among other, guidance intended to standardise the level of relief granted in MMELs, in particular for items that are subject to operational requirements. If a MMEL established as part of the operational suitability data is not available and items subject to operational requirements are listed in the available MMEL without specific relief or dispatch conditions but only with a reference to the operational requirements, Super Legacy XP Limited may refer to CS-MMEL or CS-GEN-MMEL guidance material, as applicable, to develop the relevant MEL content for such items.

There is a MEL for each aircraft type or variant operated and the type(s)/area(s) of operation. The MEL includes the dispatch conditions associated with operations required for a specific approval (e.g. RNAV; RNP; RVSM; ETOPS).

2.3.4 Non-Safety-Related Equipment

Most aircraft are designed and certified with a significant amount of equipment redundancy, such that the airworthiness requirements are satisfied by a substantial margin. In addition, aircraft are generally fitted with equipment that is not required for safe operation under all operating conditions, e.g. instrument lighting in day VMC.

All items related to the airworthiness, or required for the safe operation, of the aircraft and not included in the list are automatically required to be operative.

Equipment, such as entertainment systems or galley equipment, may be installed for passenger convenience. If this non-safety-related equipment does not affect the airworthiness or operation of the aircraft when inoperative, it does not require a rectification interval, and need not be listed in Super Legacy XP Limited MEL, if it is not addressed in the MMEL. The exceptions to this are as follows:

Where non-safety-related equipment serves a second function, such as movie equipment being used for cabin safety briefings, Super Legacy XP Limited has developed and included operational contingency procedures in the MEL in case of an equipment malfunction.

Where non-safety-related equipment is part of another aircraft system, for example the electrical system, procedures shall be developed and included in the MEL for deactivating and securing in case of malfunction. In these cases, the item shall be listed in the MEL, with compensating provisions and deactivation instructions if applicable. The rectification interval will be dependent on the secondary function of the item and the extent of its effect on other systems.

If Super Legacy XP Limited chooses to list non-safety-related equipment in the MEL, not listed in the MMEL, they shall include a rectification interval category. These items may be given a 'D' category rectification interval provided any applicable (M) procedure (in the case of electrically supplied items) is applied.

Super Legacy XP Limited has established an effective decision making process for failures that are not listed to determine if they are related to airworthiness and required for safe operation. In order for inoperative installed equipment to be considered non-safety-related, the following criteria shall be considered:

a. The operation of the aircraft is not adversely affected such that standard operating procedures related to ground personnel, and crew members are impeded;

b. The condition of the aircraft is not adversely affected such that the safety of passengers and/or personnel is jeopardised;

c. The condition of the aircraft is configured to minimise the probability of a subsequent failure that may cause injury to passengers/personnel and/or cause damage to the aircraft;

d. The condition does not include the use of required emergency equipment and does not impact emergency procedures such that personnel could not perform them.

2.3.5 Amendments to the MEL following changes to the MMEL – Applicable Changes and Acceptable Timescales

The following are applicable changes to the MMEL that require amendment of the MEL:

a. A reduction of the rectification interval;

b. Change of an item, only when the change is applicable to the aircraft or type of operations and is more restrictive.

An acceptable timescale for submitting the amended MEL to the Bailiwick of Guernsey Regulatory Authority is 90 days from the effective date specified in the approved change to the MMEL.

Reduced timescales for the implementation of safety-related amendments may be required if the
Agency and/or the Bailiwick of Guernsey Regulatory Authority consider it necessary.

2.3.6 MEL Format

The MEL format and the presentation of items and dispatch conditions does reflect those in the MMEL. The ATA 100/2200 Specification numbering system for MEL items is adopted.

2.3.7 MEL Preamble

The MEL preamble shall:

a. Reflect the content of the MMEL preamble as applicable to the MEL scope and extent;

b. Contain terms and definitions used in the MEL;

c. Contain any other relevant specific information for the MEL scope and use that is not originally provided in the MMEL;

d. Provide guidance on how to identify the origin of a failure or malfunction to the extent necessary for appropriate application of the MEL;

e. Contain guidance on the management of multiple unserviceabilities, based on the guidance given in the MMEL; and

f. Contain guidance on placarding of inoperative items to inform crew members of equipment condition, as appropriate. In particular, when such items are accessible to the crew during flight, the control(s) and indicator(s) related to inoperative unit(s) shall be clearly placarded

2.3.8 Scope of the MEL

The MEL shall include:

a. The dispatch conditions associated with flights conducted in accordance with special approvals held by Super Legacy XP Limited.

b. Specific provision for particular types of operations carried out by Super Legacy XP Limited.

2.3.9 Extent of the MEL

The Super Legacy XP Limited MEL will include guidance in the MEL on how to deal with any failures that occur between the commencement of the flight and the start of the take-off. If a failure occurs between the commencement of the flight and the start of the take-off, any decision to continue the flight shall be subject to pilot judgement and good airmanship. The PIC/Pilot in Command may refer to the MEL before any decision to continue the flight is taken.

2.3.10 Equipment Carried Out Of Scope of the MEL

When an aircraft has installed equipment which is not required for the operations conducted, Super Legacy XP Limited may wish to delay rectification of such items for an indefinite period. Such cases are considered to be out of the scope of the MEL, therefore modification of the aircraft is appropriate and deactivation, inhibition or removal of the item shall be accomplished by an appropriate approved modification procedure.

2.3.11 Rectification Interval Extension (RIE)

A rectification interval is established for each MMEL item in accordance with the following categories:

a. Category A: No standard interval is specified; however, items in this category shall be rectified in accordance with the conditions stated in the MMEL.

1) Where a time period is specified in calendar days or flight days, the interval excludes the day of discovery.

2) Where a time period is specified other than in calendar days or flight days, it shall start at the point when the defect is deferred in accordance with the operator's approved MEL.

b. Category B: Items in this category shall be rectified within 3 calendar days, excluding the day of discovery.

c. Category C: Items in this category shall be rectified within 10 calendar days, excluding the day of discovery.

d. Category D: Items in this category shall be rectified within 120 calendar days, excluding the day of discovery. Items in this category meet the following criteria:

1) the absence of the item does not adversely affect crew workload;

2) the crew do not rely on the function of that item on a routine or continuous basis; and

3) the crew's training, subsequent habit patterns and procedures do not rely on the use of that item.

Prior to any changes to the RIE, an application will be made to the Bailiwick of Guernsey Regulatory Authority. Procedures for the extension of rectification intervals shall only be applied under certain conditions, such as a shortage of parts from manufacturers or other unforeseen situations (e.g. inability to obtain equipment necessary for proper troubleshooting and repair), in which case Super Legacy XP Limited may be unable to comply with the specified rectification intervals.

2.3.12 General MEL Procedures

All Super Legacy XP Limited Ground personnel and Crew shall be trained in accordance with the MEL training course in part D 2.17 MEL Training.

Flight crews shall comply with MEL procedures approved for the specific aircraft. For Bailiwick of Guernsey Regulatory Authority registered aircraft with maintenance provided by the NATR see section D2.17 MEL Training which includes detailed instructions on the technical log, MEL usage and actions to take when a defect is discovered “away from base”.

MEL deferral procedures are specified in each MEL approved for the aircraft. Flight crews shall ensure
that all “Operations” and “Maintenance” procedures are followed.

The operational and maintenance procedures referenced in the MEL shall be based on the operational and maintenance procedures referenced in the MMEL. Modified procedures may, however, be developed by Super Legacy XP Limited when they provide the same level of safety, as required by the MMEL. Modified maintenance procedures shall be developed in accordance with Commission Regulation (EC) No 2042/2003.

Providing appropriate operational and maintenance procedures referenced in the MEL, regardless of who developed them, is the responsibility of Aviata Limited.

Any item in the MEL requiring an operational or maintenance procedure to ensure an acceptable level of safety shall be so identified in the ‘remarks’ or ’exceptions’ column/part/section of the MEL. This will normally be ‘(O)’ for an operational procedure, or ‘(M)’ for a maintenance procedure. ‘(O)(M)’ means both operational and maintenance procedures are required.

The satisfactory accomplishment of all procedures, regardless of who performs them, is the responsibility of Super Legacy XP Limited.

2.3.13 Operational and Maintenance Procedures

Operational and maintenance procedures are an integral part of the compensating conditions needed to maintain an acceptable level of safety, enabling the Bailiwick of Guernsey Regulatory Authority to approve the MEL. The Bailiwick of Guernsey Regulatory Authority may request presentation of fully developed (O) and/or (M) procedures in the course of the MEL approval process.

Normally, operational procedures are accomplished by the flight crew; however, other personnel may be qualified and authorised to perform certain functions.

Normally, maintenance procedures are accomplished by the maintenance personnel; however, other personnel may be qualified and authorised to perform certain functions in accordance with Commission Regulation (EC) No 2042/2003.

Operational and maintenance procedures shall be readily available for use when needed for the application of the MEL.

Unless specifically permitted by a maintenance procedure, an inoperative item may not be removed from the aircraft.

2.3.14 Applicable Changes

Changes to the operational and maintenance procedures referenced in the MMEL are considered applicable and require the amendment of the maintenance and operating procedures referenced in the MEL when:

a. The modified procedure is applicable to Super Legacy XP Limited MEL; and

b. The purpose of this change is to improve compliance with the intent of the associated MMEL dispatch condition.

An acceptable timescale for the amendments of maintenance and operating procedures, as defined in a., shall be 90 days from the date when the amended procedures referenced in the MMEL are made available. Reduced timescales for the implementation of safety related amendments may be required if the Bailiwick of Guernsey Regulatory Authority considers it necessary.

2.3.15 Operation of an Aircraft within the constraints of the MMEL

On initial certification and operation, Super Legacy XP Limited may apply using the Bailiwick of Guernsey Regulatory Authority Form for a ninety day permission to operate without an MEL. The application confirms the MMEL submitted complies with Aircraft TC Holder (State of Design) TCDS, and will be used in conjunction with the Bailiwick of Guernsey Regulatory Authority 'Operational and emergency equipment' document when reference to National regulations is made in the MMEL. Personnel authorising operations under such approval shall be adequately trained in technical and operational disciplines to accomplish their duties. They shall have the necessary operational knowledge in terms of operational use of the MEL as alleviating documents by flight crew and maintenance personnel and engineering competence.

Beyond this initial period operation of an aircraft outside the constraints of the MEL but within the constraints of the MMEL shall only be applied for under certain exemptional conditions, such as a shortage of parts from manufacturers or other unforeseen situations (e.g. inability to obtain equipment necessary for proper troubleshooting and repair), in which case Super Legacy XP Limited may be unable to comply with the constraint specified in the MEL. The NATR is authorised on behalf of Super Legacy XP Limited to make an application to the Bailiwick of Guernsey Regulatory Authority in such a case.

2.4 Recording of Aircraft Defects

The PIC shall record all defects in the Aircraft Technical Log at the termination of the flight during which they were detected. All PIC are required to then notify Operations that a defect is entered on the Technical Log.

If the aircraft has a malfunction or defect there will also be an appropriate warning given to the flight crew station by removing, placarding or tagging the affected item. In the case of deferred defects the PIC shall assure him/herself that the affected equipment does not affect the safety of the flight.

2.5 Distribution of Operational Information

a. Aircraft Flight Manual, Checklist, Operating Manual & Chart Update revisions (paper and electronic) will be promulgated as required by the Operations Manager. They will be issued to Captain on duty at that time.
b. With each revision there will be two copies of the Aircraft Documentation Revision Checklist, one for the Technical Log and one to return to Operations post update.

c. It is the responsibility of the Captain to insert all revisions and updates are issued to him/her in a timely manner and to return the Aircraft Documentation Revision Checklist to Operations,

d. Any discrepancies between the Revision Status and the indicated Status on the Aircraft Documentation Revision Checklist shall be brought to the attention of the Operations Manager immediately.

e. Super Legacy XP Limited will disseminate other operational information to pilots and other personnel through the use of Super Legacy XP Limited Safety Notices. Safety Notices will be disseminated through the Safety Notice system. Pilots will check the file before each flight, read new items and sign as having read.

f. The Operations Manager will ensure that any other Super Legacy XP Limited personnel are aware of the latest information. The Operations Manager will also notify pilots who are operating away from the main base of pertinent new information.

2.6 Temporary Amendments

Temporary amendments or deviations will be distributed in the same manner as other operational information. They will be also transmitted to all aircraft crew via e-mail along with information on the conditions under which such deviations may or must, be used, if such considerations apply.

2.7 Documents, manuals and information to be carried

Unless otherwise stipulated by Bailiwick of Guernsey Regulatory Authority regulations the documents, manuals and other information may be made available in electronic form or carried in a documents folder of aircraft library.

2.7.1 Aircraft Documents Required To Be Carried

a. Certificate of Airworthiness. The certificate of airworthiness shall be a normal certificate of airworthiness, or a permit to fly issued in accordance with the Bailiwick of Guernsey Regulatory Authority requirements if applicable.

b. Aircraft Registration Certificate. Note: a temporary registration certificate is not acceptable for international travel

c. Aircraft Insurance Documents. Consideration should be given to obtaining translations for visits to certain countries such as Mexico, Turkey etc.

d. Radio Station Licence

e. Aircraft Noise Certificate

f. Copy of the POC

2.7.2 Operational Documents Required To Be Carried

g. Operations Manual

h. Aircraft Flight Manual. The Aircraft Flight Manual (AFM), or equivalent document' means the flight manual for the aircraft or other documents containing information required for the operation of the aircraft within the terms of its certificate of airworthiness, unless these data are available in the parts of the Operations Manual carried on board.

i. Checklists covering Normal, Abnormal and Emergency procedure

j. Aircraft Technical Logbook (including the relevant release to service) /Journey log. This includes the following information details of the aircraft's nationality and registration;

- i. the date of the flight;
- ii. the names of the crew members and their duty assignments;
- iii. the departure and arrival points and times of the flight;
- iv. the nature of the flight; and
- v. any observations regarding the flight, and sign the log.

If an aircraft undertakes two or more consecutive flights, each of which begins and ends

- i. within a period of 24 hours;
- ii. at the same aerodrome; and
- iii. with the same pilot in command, then the pilot in command may complete the log at the end of the last of those flights.

k. Minimum Equipment List (MEL). Additional, the Bailiwick of Guernsey Regulatory Authority MEL approval certificate.

l. ATS flight plan. The filed flight plan relative to the intended flight

m. NOTAMS and AIS Briefing Documents appropriate to the route to be flown

n. Special Airspace letter of approval (if approved for RVSM, RNP, HLA(MNPS) etc.)

o. Current and Suitable Aeronautical Charts

(i) The aeronautical charts carried shall contain data appropriate to the applicable air traffic regulations, rules of the air, flight altitudes, area/route and nature of the operation. Due consideration shall be given to carriage of textual and graphic representations of:

(1) aeronautical data including, as appropriate for the nature of the operation:

airspace structure;

significant points, navigation aids (navaids) and air traffic services

(ATS) routes;

navigation and communication frequencies;

prohibited, restricted and danger areas;

sites of other relevant activities that may hazard the flight;

(2) Topographical data, including terrain and obstacle data.

(ii) A combination of different charts and textual data may be used to provide adequate and current data.

(iii)The aeronautical data shall be appropriate for the current aeronautical information regulation and control (AIRAC) cycle.

(iv)The topographical data shall be reasonably recent, having regard to the nature of the planned operation.

2.7.3 Flight Crew Documents Required To Be Carried

p. Pilot’s medical certificate (the original, a copy is not allowed)

q. Valid Pilot’s Licence with the appropriate current aircraft type rating endorsed (the original, a copy is not allowed) including English language proficiency endorsement.

r. Pilot’s personal identification document (i.e. passport) containing his/her photo (the original, a copy is not allowed)

s. Bailiwick of Guernsey Validation of Flight Crew License

2.7.4 Document to be carried for Transport of Passengers/Cargo

t. General Declaration (GENDEC); if required for the Country of Entry.

u. Passenger Manifest; either in paper or electronic

v. The Cargo Manifest in paper form (if carrying cargo)

w. Dangerous Goods report for the Pilot in Command

2.7.5 Procedures and Visual Signals for use by Intercepting and Intercepted Aircraft

The procedures and the visual signals information for use by intercepting and intercepted aircraft shall reflect those contained in 13.1 Interception Signals - General

2.7.6 Documents that may be pertinent to the Flight

Any other documents that may be pertinent to the flight or required by the State concerned which the flight may include, for example, forms to comply with reporting requirements. The States concerned are those of origin, transit, over-flight and destination of the flight.

2.7.7 Documents to be Produced

The PIC must, within a reasonable time after being requested to do so by an authorised person, produce the documents or records from the list in 2.7.1 above: Items a; b; d; i; and t.

2.7.8 Acceptable format for Documents, Manuals and Information

The documents, manuals and information may be available in a form other than on printed paper. EFB approval is authorised by the Bailiwick of Guernsey Regulatory Authority, therefore an electronic storage medium is acceptable.

2.7.9 Search and Rescue Information

This information is found in the Jeppesen Enroute Guide and 12.1 Airborne Emergencies

Safety Management System

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3. SAFETY MANAGEMENT SYSTEM

3.1 Definitions

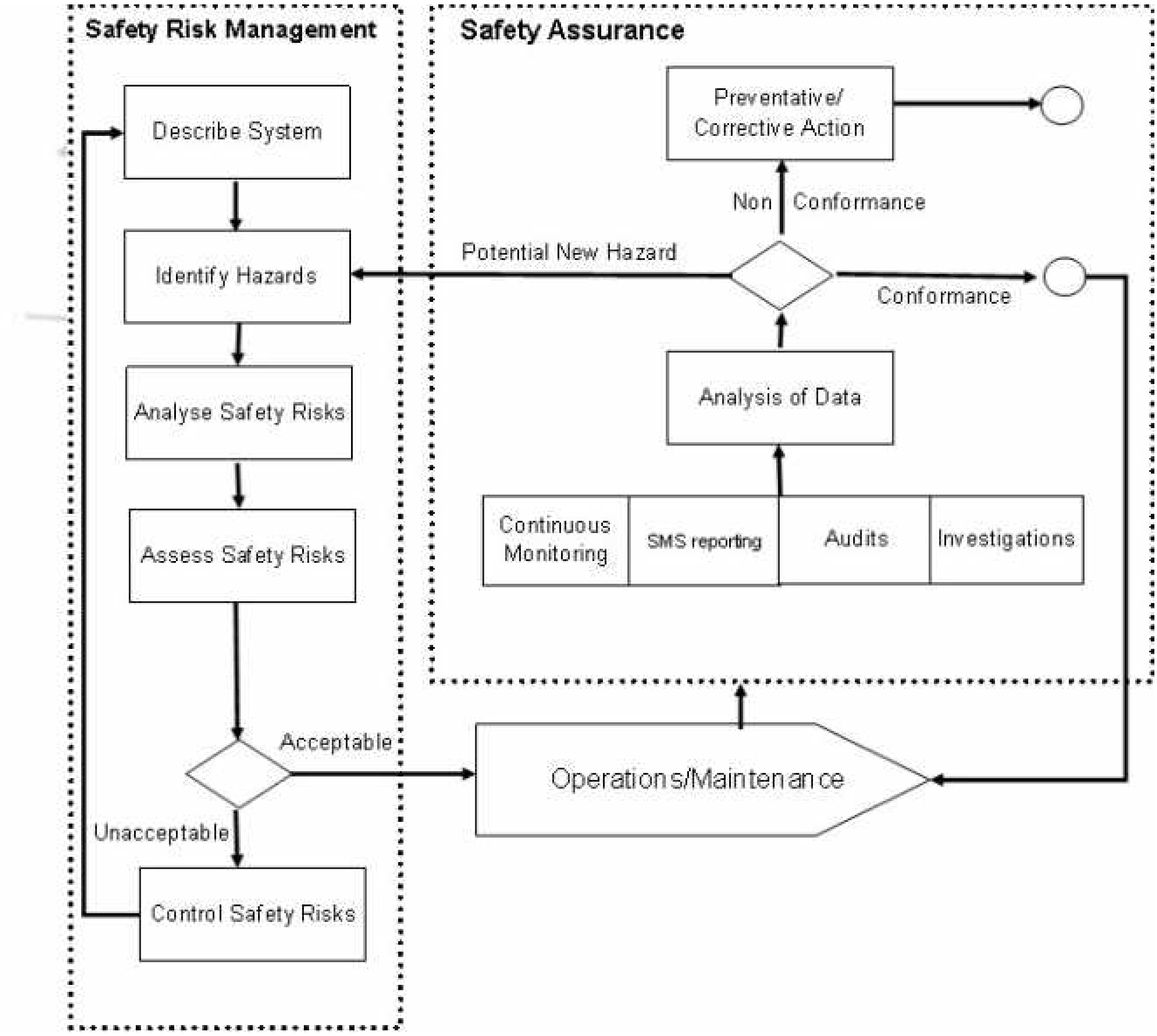
ALARP	As low as reasonably practicable
Audit	A systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent to which requirements are complied with.
ERP	Emergency Response Planning
Hazard	Condition or circumstance that can cause damage or injury.
Inspection	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.
Mitigation	The measures taken to eradicate a hazard or to reduce the severity or likelihood of a risk (avoidance, reduction, segregation of exposure).
Probability	The likelihood that an unsafe event might occur.
Risk	The consequence of hazard, measured in terms of likelihood and severity.
Risk Management	The identification, analysis and elimination, and/or mitigation to an acceptable level of risks that threaten the capabilities of an organisation
Safety	Safety is the state in which the risk of harm to persons of property damage is reduced to and maintained at or below an acceptable level through a continuing process of hazard identification and risk management.
Safety requirements	The safety requirements will be satisfied in terms of operational procedures, technology and systems, programmes, and contingency arrangements (=measures)
System Safety Deficiency	The circumstance that permit hazards of a like nature to exist.
Severity	Possible consequence of an unsafe event or condition, taking as reference the worst foreseeable situation

3.2 Scope

The Safety Management System (SMS) aims to provide a safe working environment, protecting employees, customers, visitors and assets. Super Legacy XP Limited is a private aircraft operator who is committed to operations guided by its SMS.

Super Legacy XP Limited recognises significant benefits in learning more about its safety status. Building a realistic appreciation of its safety status can only be achieved by regular open reporting of hazards and adverse events. Super Legacy XP Limited operational, technical and other staff will always have the full support of the Accountable Manager as long as they operate professionally in accordance with Super Legacy XP Limited manuals and procedures. All Super Legacy XP Limited personnel have a duty to openly and honestly report events and hazards. The Accountable Manager undertakes to ensure that all such reports will be thoroughly investigated in a non-punitive manner.

Super Legacy XP Limited is committed to the continued development of its SMS, in order to sustain safe and commercially viable operations. The Accountable Manager accepts accountability for the SMS and the goals it holds, and is committed to maintaining and developing safe practice within Super Legacy XP Limited.



3.3 Safety Policy Statement & Objectives

The Safety Policy Statement is in section 0.1 Introduction & Safety Policy.

Safety is paramount in all Super Legacy XP Limited staff and it is the joint responsibility of everyone connected with the operation.

The objective of Super Legacy XP Limited SMS is to achieve a zero level of preventable injury or damage situations. Super Legacy XP Limited has established the strategic safety objective to manage all identified hazards to a level as low as reasonably practical (ALARP). In order to achieve the safety objective the following safety management principles have been established:

a. Safety, being paramount to our operating practice, will be given priority at all times;

b. Safety will be recognised by management and employees as an integral and vital part of the successful performance for all roles;

c. Direct responsibility for the safety of an operation rests with the supervisor of each operation.
During flights the designated PIC is the supervisor of the operation and will seek to ensure that all operations are conducted without incident;

d. Each individual employee will perform their duties giving primary concern for their own safety as well as that of their fellow employees, the owners and their guests;

e. All Super Legacy XP Limited personnel shall be involved in the Safety Management System;

i Employee awareness, compliance, inspection, investigation and education programmes will be incorporated into all aspects of the operation;

ii All personnel will endeavour to identify, report and eliminate hazardous conditions;

iii All reported hazardous events will be investigated to determine underlying causes;

iv All proposed new equipment acquisitions, facilities, operations and procedures will be reviewed with safety in mind; and

v All personnel will comply with all applicable laws and regulations. Super Legacy XP Limited safety management goals are:

a. To provide through the Super Legacy XP Limited online SMS portal the tools necessary to ensure the safe working environment of Super Legacy XP Limited.

b. To keep developing and promoting the Super Legacy XP Limited Safety Awareness Programme.
c. To seek Continuous Improvement of its safety performance. This is achieved through:

i. Proactive and reactive evaluations of facilities, equipment, documentation and procedures through safety audits and surveys;

ii. Proactive evaluation of individuals' performance to verify the fulfilment of their safety responsibilities; and

iii. Reactive evaluations in order to verify the effectiveness of the system for control and mitigation of risk.

3.3.1 Safety Accountability of the Accountable Manager

The Accountable Manager is responsible, as detailed in section 1.3, for sustaining conditions that promote the safe operation of Super Legacy XP Limited aircraft, providing the resources (in time and money) to assure the safe operation of Super Legacy XP Limited aircraft, and actively supporting the Safety Management System.

3.3.2 Safety Accountability of the Safety Manager

The Safety Manager is, as detailed in section 1.3, the unique focal point as regards the development, administration and maintenance of the Super Legacy XP Limited Safety Risk Management System.

3.3.3 Safety Accountability of the Compliance Monitoring Manager

The Compliance Monitoring Manager, as detailed in section 1.3, is tasked with ensuring that the activities of Super Legacy XP Limited are monitored for compliance with the applicable regulatory requirements, and any additional requirements as established by the operator, and that these activities are carried out properly

3.3.4 Safety Review Board

Not applicable for non-complex operators.

3.3.5 Safety Action Group

Not applicable for non-complex operators.

3.3.6 Other Staff Responsibilities

Flight crew members, aircraft maintenance personal and others involved in the operation are expected to contribute to the safety and efficient of the operation by:

a. Adhering to directions contained in the Operations Manual, Aircraft Flight Manual and all other related manuals and procedures,

b. Participating proactively in the SMS by:

i. Using the SMS Reporting Tool to identify hazards and safety-risk management deficiencies;

ii. Providing appropriate input to management to ensure that Safety Risks are identified and appropriately mitigated if necessary;

iii. Applying safety checklists to make sound decisions.

3.3.7 Summary of Responsibilities

Development of Safety Management System & Policy	AM	Commitment to Safety and Quality
Strategy Resources Goals	AM, SM, OM, CMM & Lead Captain	Continuous rework of strategy, resources and goals
Operation	AM, OM, SM, CMM	Defines Standards Control and supervision of daily activities Ensures conformity with requirements and efficient daily business (e.g. by Inspections) Analyses feedback & reports
		Initiates and monitors implemented actions Supervision of relevant subcontractors

Feedback & Reporting	All employees	Identification and reporting of divergences, nonconformities, potential hazards and proposals
Safety Investigation	AM, SM, CMM, Lead Captain	Investigations of accidents and serious incidents to: - Determine root causes, - Make safety recommendations and - Thereby prevent accidents
Audits	CMM	Independent auditors monitor the adherence to standards and requirements by means of audits
Inspections	AM, SM, OM	Ensure Adherence to internal standards and requirements during daily business by means of inspections
Data evaluation	AM, SM	Collation and Evaluation of Feedback & Reports to identify trends and systematic gaps. Preparation of conclusions resulting from the data evaluation for the AM
Risk management	SM	Identification of hazards, assessment of risks based on likelihood and severity, risk mitigation and communication
Controlling / Management Evaluation	AM, CMM	Systematic, comprehensive and documented review of the SMS, operational policies and procedures
Safety Awareness Programme	AM, SM	Development and Communication

Emergency Response Plan	AM, OM, SM	Ensuring that there is: orderly and efficient transition from normal to emergency operations; Delegation of emergency authority; Assignment of emergency responsibilities; Authorisation by key personnel for actions contained in the plan Coordination of efforts to cope with the emergency; and Safe continuation of operations or return to normal operations as soon as possible.

3.4 Documentation Control Procedures & Record Keeping

The Super Legacy XP Limited SMS is designed to be principally an online reporting system.

These records are organised in a way that ensures traceability and retrievability for the appropriate retention period.

In the absence a notified period retention period, all records are kept for a minimum period of 5 years. This includes a copy of the Super Legacy XP Limited declaration, details of approvals held and the Operations Manual.

3.4.1 Analysis of records, flight documents, additional information and data

All records, flight documents, additional information and data shall be analysed in accordance with the Safety Management System and the Compliance Monitoring Program. This procedure is designed to gather and ensure continuous learning as well as improvements within the department.

3.4.2 Procedures for document storage

All records are kept in paper form or in electronic format or a combination of both. The records will remain legible throughout the required retention period. The retention period starts when the record has been created or last amended.

Paper records are stored in dry secure storage. Computer systems are continuously backed up using
Dropbox and are password protected to guard against unauthorised personnel to alter the data.

The Dropbox backup is stored on a remote server. When hardware or software changes take place, special care will be taken that all necessary data continues to be accessible at least through the full period specified in the relevant subpart.

Task	Frequency	Responsibility
Establish File	On receipt	Operations Manager
Maintain File	Continuously	
Sort through files	Annually	
Archive files	As listed below	
Destroy files	After minimum storage times	

3.4.3 Storage of organization related documents

Records are to be kept in a paper format or in electronic format or in a combination of both and are retained for a minimum period, as specified below:

Document	Place of Storage	Minimum Storage Time	Responsibility
A copy of the operator's declaration	Dropbox	5 years	Operations Manager
Details of approvals held	Dropbox	5 years	Operations Manager
Operations Manual and all its Revisions	Dropbox	5 years	Operations Manager

Copy of the CAMO certificate on file.	Dropbox	1 year periodically	Operations Manager

3.4.4 Storage of information used for the preparation and execution of a flight

Document	Place of Storage	Minimum Storage Time	Responsibility
Operational Flight Plan (OFP)	Dropbox	3 months	Operations Manager
ATS Flight Plan			
NOTAM, AIS			
Mass and balance documentation			
Technical Log/Journey Log	Dropbox	36 months after date of last entry	Operations Manager

3.4.5 Storage of reports related to incidents, accidents and occurrences

Document	Place of storage	Minimum storage time	Responsibility
Proximity and Air Traffic Incident Report Form“ (Attachment 3)	Dropbox	5 Years	Operations Manager
Accident, Incident and Occurrence Report Form	Dropbox	5 Years	Operations Manager

3.4.6 Storage of Flight Crew records

Personnel records shall be stored for the periods indicated below, even if “The Operator” ceases to be the operator of that aircraft or the employer of that crewmember, provided this is within the timescales prescribed; If a crewmember becomes a crewmember for another operator, “The Operator” shall make the crewmember’s records available to the new operator, provided this is within the timescales prescribed.

Document	Place of storage	Minimum storage time	Responsibility
Flight Duty and Rest Period record	Dropbox	15 months	Operations Manager
License • Flight Crew License • Attachment to License • Medical Certificate	Dropbox	As long as the crewmember is exercising the privileges of the license for the operator.	Operations Manager
Conversion training and checking	Dropbox	3 Years	
Recurrent training and checking	Dropbox	3 Years	
Differences and familiarization training and checking	Dropbox	3 Years	
Training and Checking to operate in either pilot’s seat	Dropbox	3 Years	
Recent experience	Dropbox	15 Months	
Route and aerodrome competence	Dropbox	3 Years	
Training and qualifications for the specific operations:	Dropbox	5 Years	Operations Manager
Dangerous Goods No Carry	Dropbox	3 Years (ICAO 9284)	
Radiation Exposure Records of the crewmembers	Operator does not operate above FL490. Records not required.	To the age of 75 30 years after leaving the company 95 years after the date of birth	NPRE provides Data, ACM for storage time

3.4.7 Storage of records of other personnel

Document	Place of Storage	Minimum Storage Time	Responsibility
Training/qualification records of other personnel for whom a training program is required	Dropbox	Last 2 Training records	Operations Manager

3.4.8 Storage of safety and compliance management records

Records	Person(s) in Charge	Recording/ Archiving means	Record Keeping period
Minutes of Safety Reviews	Safety Manager	Paper or electronic	5 years
Event Reports	Safety Manager	Online/electronic	Permanent
Hazard Register	Safety Manager	Online/electronic	Permanent
Risk Assessment, Description, Evaluation and Control (RADEC) Register	Safety Manager	Online/electronic	Permanent
Audit Reports including the follow-up of corrective actions	Compliance Manager	Online/electronic	5 years
Safety Training Register	Operations Manager	Online/electronic	Permanent

3.5 Safety Risk Management & Hazard Identification

Super Legacy XP Limited has developed a Safety Risk Management System around layers of defense rather than a single defensive action. Risks are identified Proactively, Predictively and Reactively.

All Super Legacy XP Limited personnel have a duty to provide reports of incidents, safety deficiencies, observed hazards.   .

The Super Legacy XP Limited SMS Reporting is used to record both proactive hazards and capture hazards predictively.

The Safety Manager uses Occurrence Reporting logic to determine if the occurrence is reportable to the Bailiwick of Guernsey Regulatory Authority. A list of the mandatory reportable occurrences can be found in section Form 5 Examples of Events Requiring an Occurrence Report to be filed.

The SMS includes the predictive Flight Safety Risk Assessment Tool which uses an online Risk Assessment form to calculate the Flight Safety Risk Score prior to flights.

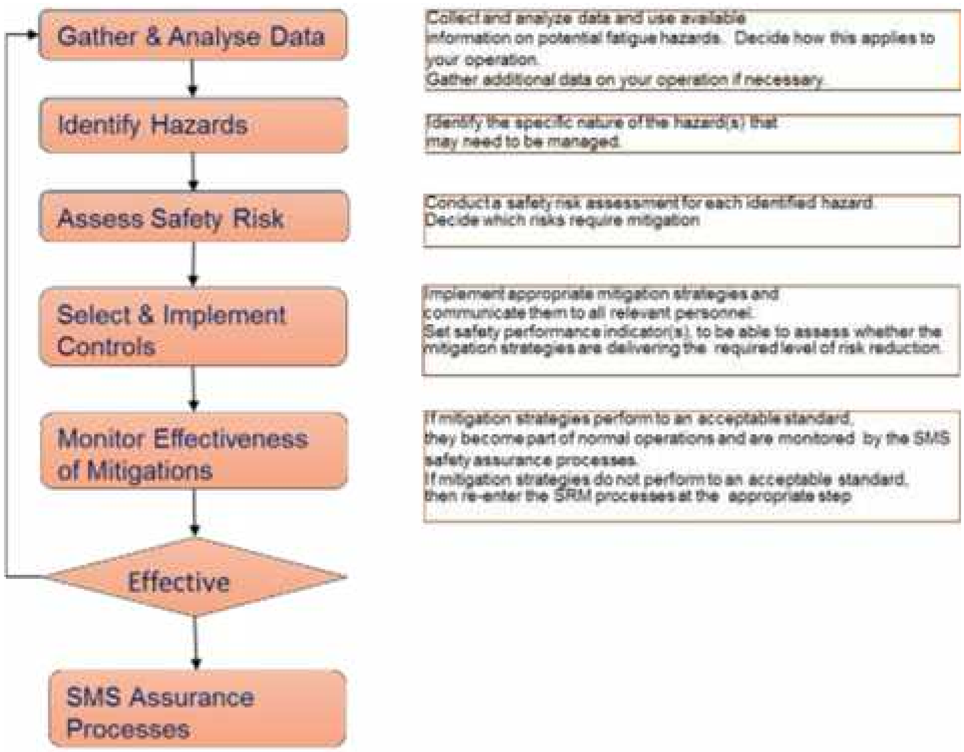
The SMS is also used to report reactively any events that have occurred, both internally as well as findings received by auditors. The SMS will then identify the root cause of non-compliance, assesses the risk against at a frequency / severity matrix, to help define a corrective action plan to eliminate or mitigate the root causes and prevent reoccurrences.

SMS processes

a. identify safety hazards; and

b. assess the level of risk that a given hazard represents; and

c. if necessary, put in place controls and mitigation strategies, and monitor to make sure that they manage the risk at an acceptable level.



3.6 Safety Risk Assessments

3.6.1 Pro-active and Reactive Risk Assessments

Where hazards are identified they are assessed through the Probability and Severity charts using a Risk Matrix to categorised as Acceptable, Review or Unacceptable. Mitigation is taken as necessary to ensure all hazards are reduced to an Acceptable risk

Risk Likelihood	Risk Severity				
	Catastrophic 5	Hazardous 4	Major 3	Minor 2	Negligible 1
Frequent 5	Unacceptable	Unacceptable	Unacceptable	Review	Review
Occasional 4	Unacceptable	Unacceptable	Review	Review	Review
Remote 3	Unacceptable	Review	Review	Review	Acceptable
Improbable 2	Review	Review	Review	Acceptable	Acceptable
Extremely Improbable 1	Review	Acceptable	Acceptable	Acceptable	Acceptable

SAFETY RISK PROBABILITY	
Frequent	Likely to occur many times (has occurred frequently)
Occasional	Likely to occur sometimes (has occurred infrequently)
Remote	Not likely to occur, but possible (has occurred rarely)
Improbable	Very unlikely to occur (not known to have occurred)
Extremely improbable	Almost inconceivable that the event will occur

SAFETY RISK SEVERITY	
Catastrophic	- Multiple deaths - Equipment destroyed
Hazardous	- A large reduction in safety margins, physical distress or a workload such that crewmembers cannot be relied upon to perform their tasks accurately or completely - Serious injury - Major equipment damage
Major	- A significant reduction in safety margins, a reduction in the ability of crewmembers to cope with adverse operating conditions as a result of increase in workload, or as a result of conditions impairing their efficiency - Serious incident - Injury to persons
Minor	- Nuisance - Operating limitations - Use of emergency procedures - Minor incident
Negligible	- No significant consequences

3.6.2 Predictive Risk Assessments

The online SMS Flight Risk Assessment Tool (see Appendix 3-A) may be used to calculate a Risk Score prior to Flights. This tool may be used at the discretion of the Operations Manager, or request of the PIC prior to flight to calculate a Risk Score based on the Safety Criteria.

A Flight Safety Risk score at or less than 20 is Acceptable. Above this is level appropriate mitigation will be considered, and above 35 level the risk level must be reduced by appropriate mitigation before flight.

Mitigation will be discussed between the AM, OM and PIC as appropriate, and the Flight Risk Assessment Tool then amended accordingly.

3.7 Safety Mitigation & Controls

Using information from the reports, the Safety Manager will use information from these reports to evaluate all hazard & occurrence reports and develop mitigation and controls.

The three main means of mitigation and control safety risks are as follows.

a. Avoidance: The activity creating the risk is ceased. This solution is chosen when the risk of continuing the activity outweighs the cost of reducing the risk. The benefit of continuing does not justify the cost of reducing the risk to a safe risk level. Ceasing the activity means the severity and likelihood are reduced to 0.

b. Reduction: An activity's level of risk is reduced by either reducing the severity of the outcome, or reducing the likelihood of the risk occurring. This could involve limitations on when or how regularly the activity is carried out, or by the level of training and protection given to anyone at risk.

c. Segregation: The activity is isolated from other risk groups to minimise the outcome. Redundancy and/or additional procedures can also be used to reduce probability of a risk, if the risk relates to the loss of a safety measure.

The SMS is used to Monitor Risks and develop Preventative Mitigating Actions. The Safety Manager to whom he/she delegates the task, will analyse all hazard & occurrence reports in accordance with Super Legacy XP Limited procedures and a response will be provided to the person making the report (with a copy to the Pilot in Command). If it is determined that a modification to a procedure process or program is required, such information will be entered on in the SMS Company Change Procedure. Submitted SMS reports are reviewed on a frequent basis to determine the effectiveness of the remedial measures.

3.8 Safety Action Planning

The purpose of the SMS is to detect non-compliance with and/or non-adequacy of procedures required to ensure safe operations; initiate corrective action and monitoring effectiveness.

Upon the receipt of any occurrence report through the SMS the Safety Manager will conduct an investigation to evaluate the root causes, address the effects of the non-compliance, and recommend mitigation. When the evaluation is completed it will be analysed to ensure that the agreed acceptable level of risk, as well as the safety objectives and goals and are being met, and the results recorded in the SMS.

The Safety Manager will if necessary generate the State Mandatory Occurrence Reports (MOR) from the data submitted. If required by the State in which the incident occurs, the PIC will submit a report on any such violation to the appropriate authority of such State; in that event, the pilot-in-command will also submit a copy of it to the competent authority.

3.9 Safety Assurance Processes

The assurance processes form another layer in an operator's defenses against fatigue-related risk. SMS safety assurance processes are also part of the routine operation of the SMS, and they monitor how well the entire SMS is functioning. They:

a. check that the SMS is functioning as intended;

b. check that it is meeting the safety objectives defined in the SMS policy;

c. check that it is meeting regulatory requirements;

d. identify where changes in the operating environment have the potential to increase fatigue risk; and

e. identify areas for improvement in the management of fatigue risk (continuous improvement of the SMS).

The results of safety surveys and feedback on safety management activities, will be reviewed with the AM.

The Safety Manager will provide detailed periodic reports on safety performance to the AM with a summary to all personnel.

The Compliance Monitoring Manager will provide periodic reports on compliance to the AM.

3.10 Emergency Response Planning

Guidance on reporting Accidents and Incidents can be found in:

12.3 Accident – Incident Reporting and
12.4 Emergency Response Plan.

3.11 Management of Change

When a report received through the SMS or information gained through any other process results in the decision to modify a process, procedure or program the proposed change will be reviewed by the Accountable Manager. The SMS allows users to track such Company Change Procedures.

If the change is approved it will be implemented in accordance with the following procedures:

a. The change process includes a risk assessment using the SMS system, which records it.
b. The amended process or procedure or information in the amended program, will be distributed to all company personnel by e-mail by the Operations Manager or person assigned the task, and
c. The Operations Manual and other associated documentation will be amended and distributed to all document holders.

Prior to undergoing any significant change that could impact Super Legacy XP Limited; a change management process will be undertaken. Events that will indicate the need for such a process are:

a. The introduction of a new aircraft type;

b. Significant change in the nature of the operation (e.g. dynamic business growth, new operating environment, etc.);

c. Changes in hiring or scheduling practices;

d. Changes to organisational structure;

e. Significant change in aircraft maintenance arrangements, etc.

As soon as it has been determined that the change event will occur the Operations Manager or the person to whom the responsibility is delegated, will develop a Change Management Plan. The Change Management Plan will include:

a. A risk analysis of the change event and an assessment of the changes required to items such as:

i. Operating and maintenance procedures and processes,
ii. Personnel training and competency certification,
iii. The Operations Manual,
iv. Maintenance Control Manual or Maintenance Procedures Manual,
v. Aircraft SOPs, etc., and

b. A plan for development of the required changes.

When the required changes have been developed, a Safety Management System Audit will be conducted before the change is implemented. After implementation of the change the Operations Manager will review system performance at regular intervals. If there is any doubt of the effectiveness of the change management process, a more comprehensive post-implementation review or a Safety Management System Audit will be conducted.

3.12 Compliance Monitoring

The implementation and use of a compliance monitoring function allows an operator to monitor compliance with all relevant requirements, including those of the SMS. In doing so, they will as a minimum, and where appropriate, monitor compliance with Super Legacy XP Limited procedures that were designed to ensure safe operating activity.

The compliance monitoring program covers, as a minimum and where appropriate, the scope of approved operations; manuals, logs, and records, training standards, management system procedures and manuals.

3.12.1 Procedures to ensure Regulatory Compliance

The independence of the compliance monitoring function will be established by ensuring that audits and inspections are carried out by personnel not responsible for the function, procedure or product's being audited.

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

i. Any such audits or inspections are performed under the responsibility of the compliance monitoring manager; and

ii. Super Legacy XP Limited 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.

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.

The Compliance Monitoring Manager monitors compliance with Super Legacy XP Limited procedures to ensure safe operations, airworthy aircraft and the serviceability of both operational and safety equipment.

3.12.2 Compliance Monitoring Programme

The Compliance Monitoring Schedule in contained within Appendix B to this chapter.

3.12.2.1 Schedule of the Monitoring Programme

The Compliance Monitoring Manager conducts Inspections to ensure compliance. Inspections are recorded using the Appendix 3-B Compliance Monitoring Schedule.

3.12.2.2 Audit Procedures

The Accountable Manager will arrange the Audits, which may performed by the Compliance Monitoring Manager, or they may appoint one or more auditors by choosing personnel having the related competence.

3.12.2.3. Reporting Procedures

The findings of an Audit are recorded using the SMS Audit Form. Each finding will be allocated an outcome by the Compliance Monitoring Manager:

A – Severe Outcome (immediate correction required)

B – Potential Risk Airworthiness (1 week correction period)

C – Breach of Regulations/No flight safety risk (1 month correction period)

D – Breach of Company Procedures (3 month correction period)

3.12.2.4 Follow-up and Corrective Action Procedures Recording System

Corrective Answers and responses are then entered by the responder (being the person responsible for that area of Super Legacy XP Limited using the SMS. The responder will complete the response/corrective action and also tick the appropriate action box:

C – Completed

IT – In complete, further action required

NR – Action Not Required

A follow-up box is provided for the Compliance Monitoring Manager to further enter comments and note the Corrective Response in action box, either Completed, Incomplete or Not Required.

3.12.3 Training

Super Legacy XP Limited shall ensure that all personnel engaged in managing the compliance monitoring function understand the objectives as laid down in the Operations Manual. Super Legacy XP Limited shall ensure that those personnel responsible for managing the compliance monitoring function, i.e. the Compliance Monitoring Manager and his/her team, receive appropriate training for this task. This training shall cover the requirements of compliance monitoring, manuals and procedures related to the task, audit techniques, reporting and recording.

Individual training may be conducted through self-study and will be signed by the department members.

The Compliance Monitoring Manager will be trained in accordance with the Syllabus in OM Part D
2.25

3.12.4 Document Control

The operator SMS system includes an Audit function to record findings, responses and follow ups within the online system. All records will be kept for according to OM A 3.4.8.

3.13 Contracting Services

a. Super Legacy XP Limited may decide to sub-contract certain activities to external organisations.

b. A written agreement will exist between Super Legacy XP Limited and the contracted organisation clearly defining the contracted activities and the applicable requirements.

c. The contracted safety-related activities relevant to the agreement must be included in the Super Legacy XP Limited safety risk management and compliance monitoring programmes.

d. Regardless of the approval status of the contracted organisation, the contracting Super Legacy XP Limited is responsible for ensuring that all contracted activities are subject to hazard identification and risk management, and include compliance monitoring.

e. When the contracted organisation is itself certified or authorised to carry out the contracted activities, the Super Legacy XP Limited compliance monitoring will at least check that the approval effectively covers the contracted activities and that it is still valid.

3.14 Safety Promotion

All Super Legacy XP Limited staff will work carefully to ensure that a positive safety culture prevails throughout the organisation. In order to achieve that objective open communication up and down the organisation chain will be encouraged and safety information will be shared, through the Safety Awareness Programme. This is achieved by

a. Holding regular workshops to ensure that all personnel are fully conversant with the SMS and their role.

b. Proactively and Reactively Identifying hazards, associated risks and mitigation as necessary;

c. Procedures and processes including reporting systems and related requirements; and

d. Feedback to all Personnel through regular communication on Safety

3.15 SMS Training

Correct and thorough training is essential to optimise compliance. In order to achieve significant and beneficial outcome of such training, Super Legacy XP Limited ensures that all personnel understand the objectives as laid down in the operator's SMS

The SMS training syllabus is included in Part D 2.14 Safety Management Training, for all company personnel and new employees.

3.16 SMS Procedures for Risk Management for flights into regions with Forecast Volcanic Ash Contamination

3.16.1 Responsibilities

Super Legacy XP Limited is responsible for the safety of its operations, including within an area with known or forecast volcanic ash contamination. Super Legacy XP Limited shall complete an assessment of safety risks related to known or forecast volcanic ash contamination as part of its management system before initiating operations into airspace forecast to be or aerodromes known to be contaminated with volcanic ash.

This process is intended to ensure Super Legacy XP Limited takes account of the likely accuracy and quality of the information sources it uses in its management system and to demonstrate its own competence and capability to interpret data from different sources in order to achieve the necessary level of data integrity reliably and correctly resolve any conflicts among data sources that may arise.

In order to decide whether or not to operate into airspace forecast to be or aerodromes known to be contaminated with volcanic ash, Super Legacy XP Limited shall make use of the safety risk assessment within its management system.

Super Legacy XP Limited safety risk assessment takes into account all relevant data including data from the Type Certificate Holders (TCHs) (see Cessna Volcanic Ash Recommendations) regarding the susceptibility of the aircraft they operate to volcanic cloud-related airworthiness effects, the nature and severity of these effects and the related pre-flight, in-flight and post-flight precautions to be observed by Super Legacy XP Limited.

All personnel are required to be familiar with the details of the safety risk assessments and will receive all relevant information (both pre-flight and in-flight) in order to be in a position to apply appropriate mitigation measures as specified by the safety risk assessments.

3.16.2 Procedures

Super Legacy XP Limited procedures for the management of operations into airspace forecast to be or aerodromes known to be contaminated with volcanic ash are in section 8.12.3.5 Volcanic Ash.

These procedures ensure that, at all times, flight operations remain within the accepted safety boundaries as established through the management system allowing for any variations in information sources, equipment, operational experience or organisation. Procedures include those for flight crew; flight operations & despatch; continuing airworthiness personnel such that they are in a position to evaluate correctly the risk of flights into airspace forecast to be contaminated by volcanic ash and to plan accordingly.

Continuing airworthiness personnel are provided with procedures allowing them to correctly assess the need for and to execute relevant continuing airworthiness interventions.

Super Legacy XP Limited retains sufficient qualified and competent staff to generate well supported operational risk management decisions and ensure that its staff are appropriately trained and current to the syllabus in Part D 2.15 Flights into Regions with known or forecast Volcanic Ash Training.

Where and when possible, Super Legacy XP Limited will endeavour to make the necessary arrangements for its relevant staff to take up opportunities to be involved in volcanic ash exercises conducted in their areas of operation.

3.16.3 Volcanic activity information

Before and during operations, information is generated by various volcano agencies worldwide. Super Legacy XP Limited risk assessment and mitigating actions will take account of, and respond appropriately to, the information likely to be available during each phase of the eruptive sequence from pre-eruption through to end of eruptive activity. It is nevertheless noted that eruptions rarely follow a deterministic pattern of behaviour.

3.16.3.1 Pre-eruption

Super Legacy XP Limited monitor and are vigilant for any alerts of pre-eruption volcanic activity in areas relevant to its operations. All staff have received training to understand the threat to safe operations that such alerts represent. See Part D 2.15 Flights into Regions with known or forecast Volcanic Ash Training.

3.16.3.2 Start of an eruption

Given the likely uncertainty regarding the status of the eruption during the early stages of an event and regarding the associated volcanic cloud, Super Legacy XP Limited crews shall be instructed to initiate re-routes to avoid the affected airspace.

3.16.3.3 General Requirements

Super Legacy XP Limited flights will be planned to remain clear of the affected areas and consideration will be given to available aerodromes and fuel requirements.

The following initial actions will be taken by Super legacy XP Limited:

a. Determine if any aircraft in flight could be affected, alert the crew and provide advice on re- routing and available aerodromes as required;

b. For flight departures, brief flight crew and revise flight and fuel planning in accordance with the safety risk assessment;

c. Alert flight crew and operations staff to the need for increased monitoring of information (e.g. special air report (AIREP), volcanic activity report (VAR), significant weather information (SIGMET), NOTAMs and company messages);

d. Initiate the gathering of all data relevant to determining the risk; and apply mitigations identified in the safety risk assessment.

3.16.3.4 On-going eruption

As the eruptive event develops, Super Legacy XP Limited can expect the responsible Volcanic Ash Advisory Centre (VAAC) to provide volcanic ash advisory messages (VAA/VAGs) defining, as accurately as possible, the vertical and horizontal extent of areas and layers of volcanic clouds. As a minimum, Super Legacy XP Limited shall monitor, and take account of, this VAAC information as well as of relevant SIGMETs and NOTAMs.

Other sources of information are likely to be available such as VAR/AIREPs, satellite imagery and a range of other information from State and commercial organisations. Super Legacy XP Limited shall plan its operations in accordance with its safety risk assessment taking into account the information that it considers accurate and relevant from these additional sources.

Super Legacy XP Limited shall carefully consider and resolve differences or conflicts among the information sources, notably between published information and observations (pilot reports, airborne measurements, etc.).

Given the dynamic nature of the volcanic hazards, Super Legacy XP Limited shall ensure that the situation is monitored closely and operations adjusted to suit changing conditions.

Super Legacy XP Limited is aware that the affected or danger areas may be established and presented in a different way than the one currently used in Europe, as described in EUR Doc 019-NAT Doc 006.

Super Legacy XP Limited crews will immediately report any encounters with volcanic emissions. These reports shall be passed without delay to the appropriate air traffic services (ATS) unit and to Super Legacy XP Limited competent authority.

For the purpose of flight planning, Super Legacy XP Limited shall treat the horizontal and vertical limits of the temporary danger area (TDA) or airspace forecast to be contaminated by volcanic ash as applicable, to be over-flown as it would mountainous terrain, modified in accordance with its safety risk assessment. Super Legacy XP Limited pilots shall take account of the risk of cabin depressurisation or engine failure resulting in the inability to maintain level flight above a volcanic cloud.

Additionally, minimum equipment list (MEL) provisions shall be considered in consultation with the TCHs.

Flying below volcanic ash contaminated airspace shall be considered on a case-by-case basis. It shall only be planned to reach or leave an aerodrome close to the boundary of this airspace or where the ash contamination is very high and stable.

The establishment of Minimum Sector Altitude (MSA) and the availability of aerodromes shall be considered.

3.16.4 Volcanic Risk - Safety risk assessment

If considering flights into airspace forecast to be or aerodromes known to be contaminated with volcanic ash, the process shall initially involve identifying the hazards.

The generic hazard, in the context of this document, is airspace forecast to be or aerodromes known to be contaminated with volcanic ash, and whose characteristics are harmful to the airworthiness and operation of the aircraft.

Volcanic ash contamination is the most significant hazard for flight operations in the context of a volcanic eruption. Nevertheless, it might not be the only hazard and therefore Super Legacy XP Limited shall consider additional hazards which could have an adverse effect on aircraft structure or passengers safety such as gases.

With its specific knowledge of the aircraft type, experience, knowledge and type of operation, and any other relevant data stemming from previous eruptions, Super Legacy XP Limited will consider:

a. Considering the severity and consequences of the hazard occurring (i.e. the nature and actual level of damage expected to be inflicted on the particular aircraft from exposure to that volcanic ash cloud).

b. Evaluating the likelihood of encountering volcanic ash clouds with characteristics harmful to the safe operation of the aircraft.

For each specific hazard within the generic hazard, the likelihood of adverse consequences shall be assessed, either qualitatively or quantitatively.

c. Determining whether the consequent risk is acceptable and within Super Legacy XP Limited risk performance criteria.

At this stage of the process, the safety risks shall be classified as acceptable or unacceptable. The assessment of tolerability will be subjective, based on qualitative data and expert judgement, until specific quantitative data are available in respect of a range of parameters.

d. Taking action to reduce the safety risk to a level that is acceptable to Super Legacy XP Limited management.

Appropriate mitigation for each unacceptable risk identified shall then be considered in order to reduce the risk to a level acceptable to Super Legacy XP Limited management.

3.16.5 Procedures to be considered when identifying possible mitigations actions

When conducting a volcanic ash safety risk assessment, Super Legacy XP Limited will consider the following non-exhaustive list of procedures and processes as mitigation:

a. Type certificate holders. The aircraft manufacturer publishes guidelines (see Cessna Volcanic Ash Recommendations) for operations in potentially contaminated airspace and/or aerodromes contaminated by volcanic ash.

This advice sets out:

i. The features of the aircraft that are susceptible to airworthiness effects related to volcanic ash;

ii. The nature and severity of these effects;

iii. The effect of volcanic ash on operations to/from contaminated aerodromes, including the effect on take-off and landing aircraft performance;

iv. The related pre-flight, in-flight and post-flight precautions to be observed by Super Legacy XP Limited including any necessary amendments to aircraft operating manuals, aircraft maintenance manuals, master minimum equipment list/dispatch deviation or equivalents; and

v. The recommended inspections associated with operations in volcanic ash potentially contaminated airspace and operations to/from volcanic ash contaminated aerodromes; this may take the form of instructions for continuing airworthiness or other advice.

b. Super Legacy XP Limited/contracted organisations' procedures are as follows:

i. The Operations Manager is to evaluate the risk of encountering volcanic ash contaminated airspace, or aerodromes, and can plan accordingly;

ii. Operations are provide operational information to enable the crew to avoid areas and aerodromes with unacceptable volcanic ash contamination;

iii. Flight crew must ensure that the are vigilant for the possible signs of entry into a volcanic ash cloud and execute the associated procedures;

iv. Continuing airworthiness personnel to be informed by Operations and are to ensure they execute any necessary maintenance or other required interventions; and

v. Crews are to check the latest manufacturer procedures (Cessna Volcanic Ash Recommendations) all appropriate aircraft performance data when operating to/from aerodromes contaminated with volcanic ash.

c. Enhanced flight watch will be provided by Operations to ensure:

i. Close and continuous monitoring of VAA, VAR/AIREP, SIGMET, NOTAM, ASHTAM and other relevant information, and information from crews, concerning the volcanic ash cloud hazard;

ii. Access to plots of the affected areas from SIGMETs, NOTAMs and relevant company information for crews and personnel responsible for the management and the supervision of the flight operations; and

iii. Communication of the latest information to crews and personnel responsible for the management and the supervision of the flight operations in a timely fashion.

d. Flight planning

Crew/Operations are to keep flexible to allow for re-planning at short notice if conditions change.

e. Departure, destination and alternate aerodromes
For the airspace to be traversed, or the aerodromes in use, parameters to evaluate and take account of include:

i. The probability of contamination;

ii. Any additional aircraft performance requirements;

iii. Required maintenance considerations;

iv. Fuel requirements for re-routeing and extended holding.

f. Routing policy

Parameters to evaluate and take account of:

i. The shortest period in and over the forecast contaminated area;
ii. The hazards associated with flying over the contaminated area;
iii. Drift down and emergency descent considerations;
iv. The policy for flying below the contaminated airspace and the associated hazards.

g. Diversion policy

Parameters to evaluate and take account of:

i. Maximum allowed distance from a suitable aerodrome;

ii. Availability of aerodromes outside the forecast contaminated area;

iii. Diversion policy after a volcanic ash encounter.

h. Minimum equipment list (MEL)
Additional provisions (as required) in the MEL for dispatching aircraft with unserviceabilities that might affect the following non-exhaustive list of systems:

i. Air conditioning packs;

ii. Engine bleeds;

iii. Pressurisation system;

iv. Electrical power distribution system;

v. Air data system;

vi. Standby instruments;

vii. Navigation systems;

viii. De-icing systems;

ix. Engine-driven generators;

x. Auxiliary power unit (APU);

xi. Airborne collision avoidance system (ACAS);

xii. Terrain awareness warning system (TAWS

xiii. Autoland systems;

xiv. Provision of crew oxygen;

xv. Supplemental oxygen for passengers.

h. Standard operating procedures

Normal and abnormal operating procedures are contained in section 8.12.3.5 Volcanic Ash and the manufacturer guidelines in Cessna Volcanic Ash Recommendations.

j. Crew are to ensure that they enter in the aircraft technical log:

i. Any actual or suspected volcanic ash encounter whether in-flight or at an aerodrome; and

ii. Check, prior to flight, of the completion of maintenance actions related to an entry in the aircraft technical log for a volcanic ash cloud encounter on a previous flight.

k. Incident reporting: Crew are responsible for:

i. Reporting an airborne volcanic ash cloud encounter (VAR) (see 3.16.6 below);

ii. Post-flight volcanic ash cloud reporting (VAR) (see 3.16.6. below);

iii. Reporting non-encounters in airspace forecast to be contaminated (see 3.16.6. below); and

iv. Filing a mandatory occurrence report (see12.3 Accident – Incident Reporting).

l. Continuing airworthiness procedures

Procedures when aircraft have been operating in or near areas of volcanic ash cloud contamination

i. Enhancement of vigilance during inspections and regular maintenance and appropriate adjustments to maintenance practices;

ii. Follow the post Volcanic Ash encounter procedure when a volcanic ash cloud encounter has been reported or suspected;

iii. Thorough investigation for any sign of unusual or accelerated abrasions or corrosion or of volcanic ash accumulation;

iv. Reporting to TCHs and the relevant authorities observations and experiences from operations in areas of volcanic ash cloud contamination;

v. Completion of any additional maintenance recommended by the TCH or by the Competent Authority.

3.16.6 Reporting

The PIC shall ensure that reports are immediately submitted to the nearest ATS unit using the VAR/AIREP procedures followed up by a more detailed VAR on landing together with, as applicable, a report, as defined in Commission Regulation (EU) No 996/2010 and Directive 2003/42/EC, and an aircraft technical log entry for:

a. Any incident related to volcanic clouds;

b. Any observation of volcanic ash activity; and

c. Any time that volcanic ash is not encountered in an area where it was forecast to be.

3.16.7 References

Further guidance on volcanic ash safety risk assessment is given in ICAO Doc. 9974 (Flight safety and volcanic ash — Risk management of flight operations with known or forecast volcanic ash contamination).

Appendix A

Flight Risk Assessment Tool

The Flight Risk Assessment Tool used by Super Legacy XP Limited is the FAAST FRAT Tool published by the FAA at

https://www.faasafety.gov/gslac/ALC/lib_categoryview.aspx?categoryId=31

An example form is shown below

Appendix B

Compliance Monitoring Schedule

Audit Areas	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Operational Control & Supervision												
Operations Manuals					X						X	
Review contractor arrangements					X							
Emergency Response Plan					X							
Security Procedures					X							
Approvals certificate					X							
SMS												
SMS tracking/analysis & follow up procedures			X						X			
SMS Evaluation			X						X			
Incident reports evaluated			X						X			
Dangerous goods occurrences			X						X			
Flight Operations												
Use of a/c checklists and QRH				X						X		
All weather operating procedures				X						X		
Use of the MEL				X						X		
Application of SOPs				X						X		
Performance				X						X		
Communications and Navigation equipment and procedures				X						X		
Instruments and Safety equipment				X						X		
Ground Operations												
Flight Planning facilities, manuals, docs and flight information	X						X					
Catering arrangements	X						X					
De-icing instructions	X						X					
Fuelling arrangements and Aircraft Inspection	X						X					
Dangerous goods instructions	X						X					
Mass & Balance												
Load sheets						X					X	

Weight & balance report						X					X	
Aircraft check for correct loading						X					X	
Training												
Training material		X						X				
Training records		X						X				
Crew licences, currency, rating and medical		X						X				
Training arrangements		X						X				
Training facilities and instructor approval		X						X				
Documentation												
Flight plans Correct info and fuel recording					X						X	
Flight & Duty Time Limitations, rest, rostering and scheduling					X						X	
Flight Records & Tech Log					X						X	
Compliance monitoring records					X						X	
Aircraft Maintenance												
Maintenance Contract arrangements	X						X					
Maintenance co-ordination arrangements	X						X					
History and Documentation of maintenance action	X						X					

PILOT FRAT (Flight Risk Assessment Tool)

Pilot Name	Williams
Aircraft	Z-HTF
Date	07 Jan 19
Departure Airport	EGKB
Arrival Airport	EGKB

Pilot	Yes	Your Value
Less than 50 Hours in Aircraft or Avionics Type		5
Less than 15 hours in last 90 days		0
Flight will occur after work		0
Less than 8 hours sleep prior to flight		0
Dual Instruction Received in last 90 days		-1
WINGS Phase Completion in last 6 months		0
Instrument Rating current and proficient		-3

Flight Conditions	Yes	Your Value
Twilight or Night		0
Surface wind greater than 15 Knots		4
Cross wind greater than 7 Knots		4
Mountainous Terrain		0

Airport	Yes	Your Value
Non-towered Airport or tower closed at ETD or ETA		0
Runway length less than 3,000 Feet		0
Wet or soft field Runway		0
Obstacles on Approach and/or departure		0

VFR Flight Plan	Yes	Your Value
Ceiling less than 3,000 feet AGL		0
Visibility less than 5 SM		0
No Weather Reporting at destination		0
Flight Plan filed and activated		0
ATC Flight Following used		0

IFR Flight Plan	Yes	Your Value
Ceiling less than 1000 feet AGL		7
Visibility less than 3 SM		0
No Weather Reporting at destination		0

Approaches - Instrument Pilots	Yes	Your Value
Best Available Approach		
Precision Approach		2
Non precision Approach		0
No Instrument Approach		0
Circling Approach		0

Total Risk Value 9

Pilot	Experience	Low Risk	Moderate Risk	High Risk
VFR	<100 In Type	5 to 15	15 to 20	>20
VFR	>100 In Type	15 to 20	20 to 25	>25
IFR	<100 In Type	20 to 25	25 to 30	>30
IFR	>100 In Type	25 to 30	30 to 35	>35

Instructions: Check the Yes box opposite each statement that applies to your flight.
Then compare your total risk value to the Risk Matrix Chart.

Crew Composition

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4 CREW COMPOSITION

Super Legacy XP Limited aircraft will not be dispatched for flight unless there is on board at least the minimum number of crew members indicated in the aircraft flight manual or operating limitations prescribed for the aircraft. The flight crew shall include additional flight crew members when required by the type of operation and shall not be reduced below the minimum number specified in the Operations Manual. All aircraft crew members shall meet the licensing, training and proficiency requirements as specified by the relevant licensing authority and as validated by the Bailiwick of Guernsey Regulatory Authority for each particular aircraft and this Operations Manual. Cabin Attendants are not carried by Super Legacy XP Limited.

4.1 Designation of the PIC

Super Legacy XP Limited shall designate and record on the Operational Flight Plan a Pilot-in-Command (PIC) for each flight

Super Legacy XP Limited shall only designate a flight crew member to act as PIC if he/she has:

a. The minimum level of experience specified in the section 5;

b. Adequate knowledge of the route or area to be flown and of the aerodromes, including alternate aerodromes, facilities and procedures to be used;

c. Completed an operator's command course if upgrading from SIC to PIC.

The flight crew member may be relieved in flight of his/her duties at the controls by another suitably qualified flight crew member.

One crew member shall designated by the PIC as the handling pilot, i.e. Pilot Flying (PF) and one as the non-handling pilot i.e. Pilot Non Flying (PNF).

4.2 Operation on More than One Type

Aircraft crew members shall complete initial and recurrent training and meet proficiency requirements as specified in Part D 2.2 Initial and Recurrent Flight Crew Training for each type of aircraft. For variations within types they shall complete differences training.

When engaging the services of flight crew members who are working on a freelance or part-time basis, the operator shall verify that all applicable requirements, including the requirements on recent experience, are complied with, taking into account all services rendered by the flight crew member to other operator(s) to determine in particular:

a. The total number of aircraft types or variants operated; and

b. The applicable flight and duty time limitations and rest requirements.

4.3 Operational Multi-Pilot Limitation (OML)

Super Legacy XP Limited shall ensure that pilots with an OML on their medical certificate only operate aircraft in multi-pilot operations when the other pilot is fully qualified on the relevant type of aircraft, is not subject to an OML and has not attained the age of 60 years.

Qualification Requirements

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5 QUALIFICATION REQUIREMENTS

Super Legacy XP Limited must 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.

5.1 Flight Crew Licences and Ratings

General Requirements for Pilots

Pilots must hold a valid medical certificate appropriate to the licence held. Pilots must hold a valid aeronautical radiotelephone licence. Pilots shall demonstrate the ability to communicate effectively in the English language.

Flight crew shall meet the minimum qualifications as required by the relevant licensing state as well as aircraft insurance requirements:

The aircraft must be operate by a crew of at least one pilot.

Pilot-in-Command (PIC)

To act as Pilot-in-Command (PIC) the PIC must hold a Licence with a type or class rating for that aircraft and an instrument rating valid for that aircraft group.

Second-in-Command (SIC)

To act a Second-in-Command (SIC) the pilot must hold a valid Licence with a type or class rating for that type of aircraft and an instrument rating valid for that aircraft group.

All licences shall be issued in accordance with relevant licensing authority regulations and validated by 2-Reg.

Insurance Minimum Flying Hours Experience

Position	Total Time	Turbine
Pilot in Command	1500	500

5.2 Flight Crew Qualifications and Competency

5.2.1 Crew Training

As well as holding current licences and medical certificates, Super Legacy XP Limited flight crew must have successfully completed the training programmes and competency checks as prescribed in this section. That training shall include:

a. initial or annual recurrent training in:

- i. Procedures, including passenger briefings, use of the MEL and Security procedures;
- ii. Aircraft Type, including Emergency Procedures and use of Safety Equipment
- iii. Aircraft Systems;
- iv. Right Hand Seat check (if the pilot is handling from the RHS);
- v. TAWS;
- vi. ACAS;
- vii. Safety Management Systems.

b. Initial and every two years thereafter, training in:

- i. Emergency procedures;
- ii. Aircraft surface contamination;
- iii. Crew Resource Management;
- iv. Dangerous goods training;
- v. Airspace requirements, such as RVSM, HLA(MNPS), RNP.

5.2.2 Crew Currency

In addition in order to operate an aircraft, pilots must have made within the previous 90 days, a minimum of 3 take-offs and landings as pilot flying in the aircraft type or a flight simulator representing the type that is approved by the State civil aviation authority for take-off and landing qualifications

Flight crew members are not required to meet the above qualifications for ferry, training or positioning flights.

5.3 Cabin Crew Qualifications and Competency

Not-Applicable.

5.4 Aircraft Maintenance Personnel Qualifications and Competence

Super Legacy XP Limited will only use aircraft maintenance personnel approved by the Bailiwick of Guernsey Regulatory Authority to undertake work on its specific aircraft types.

5.5 Training, Checking and Supervisory Personnel

Super Legacy XP Limited shall maintain a summary of training for each crew member showing completion of each stage of training and checking which is held electronically in Operations, see example at Form 11 Personnel Training Record).

5.5.1 Ground Instructor Qualifications

All ground instructors shall have relevant technical expertise and have successfully completed an instructor course or other training programme covering:

a. The teaching and learning process;

b. Instructional techniques; and

c. Student/Instructor relationships.

5.5.2 Training Conducted on a Contract Basis

All individuals and training schools providing training to Super Legacy XP Limited company personnel shall:

a. Be conducted in accordance with the Super Legacy XP Limited training programmes;

b. Be conducted using the manuals, publications, check lists and other relevant documents used by Super Legacy XP Limited and

c. Be given on the same type and model aircraft or approved Level “D” flight simulator of the same type and similar cockpit layout, as that used by Super Legacy XP Limited .

Aircraft flight training is the responsibility of the Lead Captain. He/she shall ensure that any person designated to conduct aircraft flight or simulator training is competent to do so.

5.5.3 Proficiency Certification Checks

At the completion of initial and recurrent aircraft type flight training, pilots will be certified as proficient by one of the following approved signatories:

a. The Lead Captain;

b. Super Legacy XP Limited Check Pilot, if applicable;

c. An examiner in the flight training school that Super Legacy XP Limited has contracted with to provide pilot aircraft type simulator flight training; or

d. A civil aviation examiner approved by the applicable civil aviation authority.

The proficiency certification will be done to the standard specified in the following schedule, which must be assessed as "Satisfactory" in order to constitute a completion of training. An example Check Form is included in Part D Form 7 Pilot Proficiency Form. The form will then be retained in the individual's Training Record for a minimum of five years.

5.6 Other Operations Personnel

All other operations personnel shall meet the licensing, training and competency requirements specified in part D.

Operator Personnel and Passenger Health

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6. OPERATOR PERSONNEL AND PASSENGER HEALTH

6.1 Use of Alcohol and Other Psychoactive Substances

It is extremely important that all persons involved in aviation activities not be impaired in any manner. Therefore, a crew member must not perform 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. Without prejudice to more restrictive national regulations, nor may they consume alcohol while on duty or less than 8 hours prior to the commencement of duties, nor commence a flight duty period with a blood alcohol level in excess of 0.2 per thousand.

Furthermore, crew member shall bit return to fly if they have been involved in certain activities for the time indicated below.

a. Deep water diving – Less than 2 hours total in the last 48 hours - 12 hours surface interval.

b. Deep water diving – Multi-day unlimited diving - 24 hours surface interval.

c. Diving that requires decompression stops – 24-48 hours.

d. Blood donation – 24 hours.

6.2 Health Risk Management

When planning flights to destinations outside of the national borders and especially to destinations not frequently served, crew and passenger health issues shall be assessed. Operations will consult the World Health Organisation web site at www.who.int/en/ for latest information. In the case where significant health risks prevail at the destination specialist advice shall be obtained on appropriate precautions.

In the event a passenger becomes ill onboard the aircraft the procedures specified in section 12.5 In-Flight Passenger Illness shall be followed.

6.3 Disabled Passengers

The Pilot in Command has the authority to decline the carriage of passengers who have special needs that cannot be provided on the aircraft. In order to pre-empt any issues, planning and communication needs to occur between planning, the crew and operations.

Disabled passengers include those who are less mobile or require use of a wheelchair, including passengers who become incapacitated in flight, or have difficulty walking or climbing stairs.

Assisting disabled passengers and persons with reduced mobility (PRMs) and handling heavy equipment such as wheelchairs can pose significant risks to the health and safety of personnel and passengers. These include the risk of back injuries, sprains and strains (MSDs) and risks of slips, trips and falls when carrying heavy or awkward loads.

Risk assessment and planning should ensure that passengers are assisted and transported to and from the airport in the safest possible way.

When planning assistance, operations should make an assessment of the unique characteristics of the passenger. This will involve talking to the individual to ascertain if they have any particular needs such specific mobility needs and information such as weight to ensure that equipment and lifting aids provided are adequate.

Operations should research the facilities at the airport for assisting disabled passengers and PRMs includes handling of passengers throughout the airport, transfer of the passenger between wheelchairs and from wheelchair to aircraft seat, assistance with luggage, and handling and loading of equipment such as wheelchairs.

Equipment must be suitable for the task and suitably maintained. All persons using the equipment must be trained in how to use it safely including its limitations. Where it is necessary to transfer to or from wheelchairs, lifting aids such as hoists may be necessary. Lifting with a Boarding Chair requires two handlers.

All of these may present manual handling and other risks and should be part of the risk assessment and training procedures where necessary.

It is important to plan the process. There should be good organisation to enable the handlers and the correct equipment to be available, to ensure the planned route is clear, and to ensure that the
'set down' area is suitable for further passenger transfer.

Only when the Risk Assessment is made and reduced to Acceptable or Tolerable should Operations agree that the passenger is carried on the flight.

Fatigue Risk Management System

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7. FATIGUE RISK MANAGEMENT SYSTEM

7.1 Fatigue Risk Management Policy

Super Legacy XP Limited operations include extended duty rosters, occasionally 24 hour operations and a need for immediate response in all weather conditions, and many flights landing at unprepared locations. These challenges require our flight crews to perform at the highest levels of competence and professionalism at all times. They also mean that we are exposed on a regular basis to elevated fatigue risks, which are best managed through a Fatigue Risk Management System (FRMS). Super Legacy XP Limited manage these risks carefully in order to make consistently sound decisions, particularly to balance the demands and needs of aircraft owners with the requirement for safe operations. This can only be achieved through the shared responsibility and commitment of management, crew members and our support staff (e.g. operations) to ensure our fatigue risks remain acceptable.

Super Legacy XP Limited will ensure that management, crew and operations, and all other relevant personnel are aware of:

a. the potential consequences of fatigue within our company;
b. the unique challenges and fatigue risks confronting our staff due to the nature of our operations;
c. the importance of reporting fatigue-related hazards; and
d. how to best manage fatigue.

To achieve this we have developed specific policies and procedures within our Safety Management System (SMS) for the management of fatigue risks.

Management are responsible for:

a. appropriately resourcing the SMS;
b. providing adequate crewing levels to support rosters that minimise fatigue risk;
c. providing crew with adequate opportunity for recovery sleep between duties;
d. creating an environment that promotes open and honest reporting of fatigue related hazards and incidents;
e. providing fatigue risk management training to crew and other support staff;
f. demonstrating active involvement in and understanding of our fatigue risks;
g. regularly consulting with crew regarding the effectiveness of fatigue management; and
h. demonstrating continuous improvement and providing annual review of fatigue management. Crew and Operations staff are required to:
    a. make appropriate use of their rest periods (between shifts or periods of duty) to sleep;
    b. participate in fatigue risk management education and training;
    c. report fatigue-related hazards and incidents;
    d. comply with the Fatigue Risk Management Policy and Practices as contained within our SMS;
    e. inform their manager or supervisor immediately prior to or during work if:
        i. they know or suspect they or another crew member are suffering from unacceptable levels of fatigue; or
        ii. they have any doubt about their or another crew members capability to accomplish their duties.
f. seek external support in accordance with our company policies and procedures to ensure, whenever possible, that third parties (e.g. Lead Pilots, Operations Manager) who are

not part of your crew are used to support crew decision making. Whenever crewmembers have doubts about their fatigue risk they are requested to contact Operations.

The effective management of fatigue is critical to ensuring that our company can deliver a safe service to the passengers of the aircraft.

Policy authorised by: *Accountable Manager*

Stephen Williams
Accountable Manager

Super Legacy XP Limited

7.2 General

Super Legacy XP Limited pilots shall not act as a member of the crew of an aircraft if he/she knows or suspects that he/she is suffering from, or, having regard to the circumstances of the flight to be undertaken, is likely to suffer from, such fatigue as may endanger the safety of the aircraft or of its occupants.

7.2.1 Definitions

Window of Circadian Low	The window of circadian low is best estimated by the hours between 0200 and 0600 for individuals adapted to a usual day-wake/night-sleep schedule. This estimate is calculated from scientific data on the circadian low of performance, alertness, subjective report (i.e., peak fatigue) and body temperature. For duty periods that cross three or fewer time zones, the window of circadian low is estimated to be 0200 to 0600 home-base/domicile time. For duty periods that cross four or more time zones, the window of circadian low is estimated to be 0200 to 0600 home-base/domicile time for the first 48 hours only. After a crew member remains more than 48 hours away from home-base/domicile, the window of circadian low is estimated to be 0200 to 0600 local time at the point of departure. Recommended guidelines related to the window of circadian low will be applied when any of the following operations occur: landing within the window; flight through both sides of the window; or duty period that starts at 0400 or earlier within the window
Off Duty	is a continuous, predefined period of uninterrupted time during which a crew member is free of all duties.
Duty	is any task a crew member is required to perform by the operator, including flight time, administrative work, managerial duties, training and deadheading.
Duty period	is a continuous period of time during which tasks are performed for the operator, determined from report time until free from all required tasks.
Flight time	is the sum of all flight time, calculated from block to block for each flight segment.
Standby	A flight crew member is on 'standby' when he/she is required to be available to an operator (away from the airport) for assignment to a flight duty period.

7.2.2 Fatigue Safety Action Group

7.2.2.1 Purpose

The Fatigue Safety Action Group (FSAG) is responsible for coordinating all fatigue risk management activities at Super Legacy XP Limited. This includes responsibility for gathering, analyzing, and reporting on data that facilitates the assessment of fatigue-related risk among flight crewmembers. The FSAG is also responsible for ensuring that the FRMS meets the safety objectives defined in the FRMS Policy, and that it meets regulatory requirements. The FSAG exists to improve safety, and does not get involved in industrial issues.

7.2.2.2 Terms of Reference

The FSAG is directly responsible to the Accountable Manager. Its membership will include at least one representative of each of the following groups: management, operations, and crewmembers, with other specialists as required. The tasks of the FSAG are to:

a. develop, implement, and monitor processes for the identification of fatigue hazards;
b. ensure that comprehensive risk assessment is undertaken for fatigue hazards;
c. develop, implement, and monitor controls and mitigations as needed to manage identified fatigue hazards;
d. develop, implement, and monitor effective FRMS performance metrics;
e. cooperate with the Safety Manager to develop, implement and monitor FRMS safety assurance processes, based on agreed safety performance indicators and targets;
f. be responsible for the design, analysis, and reporting of studies that measure crewmember fatigue, when such studies are needed for the identification of hazards, or for monitoring the effectiveness of controls and mitigations (such studies may be contracted out but the FSAG is responsible for ensuring that they are conducted with the highest ethical standards, meet the requirements of the FRMS, and are cost-effective);
g. be responsible for the development, updating, and delivery of FRMS education and training materials (these activities may be contracted out but the FSAG is responsible for ensuring that they meet the requirements of the FRMS and are cost-effective);
h. ensure that all relevant personnel receive appropriate FRMS education and training, and that training records are kept as part of the FRMS documentation;
i. develop and maintain strategies for effective communication with all stakeholders;
j. ensure that crewmembers and others receive response to their fatigue reports;

k. communicate fatigue risks and the performance of the FRMS to senior management;
l. develop and maintain the FRMS documentation;
m. ensure that it has adequate access to scientific and medical expertise as needed, and that it documents recommendations made by these specialist advisors and the corresponding actions taken;
n. keeps informed of scientific and operational advances in fatigue risk management principles and practice;
o. cooperate fully with the regulator in relation to FRMS auditing; and
p. manage effectively and be accountable for FRMS resources.

7.3 Flight Times

Super Legacy XP Limited has established guidelines for maximum values for flight times and/or flight duty periods(s) and duty period(s), and minimum values for rest periods, which are shown overleaf. These values will not be exceeded unless operating within the parameters of the FRMS system detailed below, which may dictate:

a. a decrease in maximum values and an increase in minimum values in the event that the operator's data indicates these values are too high or too low, respectively; and

b. approve an increase in maximum values or decrease in minimum values only after providing a risk assessment for such changes, based on accumulated FRMS experience and fatigue- related data.

7.3.1 Regulatory Limits

In no event will any person act as a member of the flight crew if at the beginning of the flight the aggregate of all previous flight times.

a. During the period of 28 consecutive days expiring at the end of the day on which the flight begins exceeds 100 hours: or

b. During the period of twelve months expiring at the end of the previous month exceeds 900 hours.

7.3.2 Flight Duty Records

All crew members will maintain Flight Time Duty Records. The crew member who undertakes duties for more than one operator shall:

a. Maintain his/her individual records regarding flight and duty times and rest periods as referred to in Annex III (Part-ORO), Subpart FTL to Regulation (EU) No 965/2012; and

b. Provide each operator with the data needed to schedule activities in accordance with the applicable FTL requirements.

7.3.3 Other Crew Duties

Super Legacy XP Limited recognises that some aircraft owners expect significant amounts of ancillary pre- flight duties to be completed by the crews. If these requested duties fall within the pre- flight rest period then the Accountable Manager shall be contacted for guidance.

7.4 Fatigue Risk Management Process

FRM safety risk management processes are very similar to SMS safety risk management processes. The main difference is that SMS processes are designed to address all types of risks whereas FRMS are specifically designed to manage the risks related to crew fatigue.

FRM processes are one part of the day-to-day operations of the FRMS. They are designed to enable the operator to achieve the safety objectives defined in its FRMS Policy, and are managed by the Fatigue Safety Action Group.

Super Legacy XP Limited has developed and maintains three fundamental and documented processes for fatigue hazard identification:

7.4.1 Predictive

The predictive process shall identify fatigue hazards by examining crew scheduling and taking into account factors known to affect sleep and fatigue and their effects on performance. Methods of examination may include but are not limited to:

a. operator or industry operational experience and data collected on similar types of operations;

b. evidence-based scheduling practices;

c. bio-mathematical model

7.4.2 Proactive

The proactive process shall identify fatigue hazards within current flight operations. Methods of examination may include but are not limited to:

a. self-reporting of fatigue risks;

b. crew fatigue surveys;

c. relevant flight, performance data;

d. available safety databases and scientific studies; and

e. analysis of planned versus actual time worked

7.4.3 Reactive

a. The reactive process shall identify the contribution of fatigue hazards to reports and events associated with potential negative safety consequences in order to determine how the impact of fatigue could have been minimised. At a minimum, the process may be triggered by any of the following:

b. fatigue reports;

c. confidential reports;

d. audit reports;

e. incidents; and

f. flight data analysis events

7.4.4 Risk Assessment

Once a fatigue hazard has been identified, the level of risk that it poses has to be assessed and a decision made about whether or not that risk needs to be mitigated. Fatigue risk assessment follows SMS principles (combining risk probability and risk severity).

7.4.5 Risk Mitigation

A PIC will not continue a flight beyond the nearest weather-permissible aerodrome or operating site, when the capacity of any flight crew member to perform duties is significantly reduced from causes such as fatigue, sickness or lack of oxygen; unless additional crew members are available or controlled rest has been used during the flight.

The effectiveness of implemented controls and mitigations must be assessed, which requires setting safety performance indicators such as the following

a. Number of crew duty day exceedances into allowable excesses (as determined through risk assessment. For example, longer than 14 hours.)
b. Number of flight times more than a specified number of minutes longer than planned (e.g., 30 or 60 minutes)
c. Number of flight duty periods starting within window of circadian low (WOCL).
d. Number of landings within the WOCL.
e. Number of duty periods with more than a specified number of flight sectors.
f. Number of successive early wakeups, especially combined with long 'sits' between flights or long duty days.
g. Measured data outside acceptable thresholds (e.g., sleepiness ratings, or inadequate layover sleep duration).
h. Numbers of fatigue reports.
i. Number of fatigue-related incidents.
j. The implications of such safety performance indicators need to be considered within the context of the entire operation, to distinguish between acceptable and unacceptable risk.
k. If the controls and mitigations perform to an acceptable standard (i.e., they bring the risk into the tolerable region) they become part of normal operations and are monitored by the FRMS safety assurance processes. If the controls and mitigations do not perform to an acceptable standard, then it will be necessary to re-enter the FRM processes at the appropriate step. This could require: gathering of additional information and data; and/or re-evaluation of the fatigue hazard and the associated risks; and / or identification, implementation, and evaluation of new or revised controls and mitigations.

7.5 Fatigue Safety Assurance

The assurance processes form another layer in an operator's defenses against fatigue-related risk. FRMS safety assurance processes are also part of the routine operation of the FRMS, and they monitor how well the entire FRMS is functioning. They:

a. check that the FRMS is functioning as intended;

b. check that it is meeting the safety objectives defined in the FRMS policy;

c. check that it is meeting regulatory requirements;

d. identify where changes in the operating environment have the potential to increase fatigue risk; and

e. identify areas for improvement in the management of fatigue risk (continuous improvement of the FRMS).

FRMS safety assurance processes use a variety of data and information as safety performance indicators that can be measured and monitored over time. Having a variety of safety performance indicators, plus a safety target for each, is expected to give better insight into the overall performance of the FRMS than having a single measure.

Safety performance targets must fall in the tolerable region defined in the risk assessment process and they may need to be revised as operational circumstances change.

The information, data, and safety performance indicators from the FRM processes provide a source of information for the FRMS safety assurance processes. In addition, the FRMS safety assurance processes:

a. use information and expertise from other sources, both from within the operator's organisation and external to it, to evaluate the functioning of the FRMS; and

b. evaluate trends in safety performance indicators to identify emerging or changed hazards and refer these back to the FRM processes; and

c. identify changes in the operating environment that could affect fatigue risk and refer these back to the FRM processes; and

d. provide input about ways to improve the operation of the FRMS.

7.6 FRMS promotion processes

FRMS promotion processes support the ongoing development of the FRMS, the continuous improvement of its overall performance, and attainment of optimum safety levels. The following shall be established and implemented by the operator as part of its FRMS:

a. training programs to ensure competency commensurate with the roles and responsibilities of management, flight and all other involved personnel under the planned FRMS; and

b. an effective FRMS communication plan that explains FRMS policies, procedures and responsibilities to all relevant stakeholders; and describes communication channels used to gather and disseminate FRMS-related information.

Communications from crewmembers are vital for fatigue hazard identification, for feedback on the effectiveness of controls and mitigations, and in providing information for FRMS safety performance indicators (for example, by participating in surveys and fatigue monitoring studies).

For these communications to be open and honest, all FRMS stakeholders need to have a clear understanding of the policies governing data confidentiality and the ethical use of information provided by crewmembers. There also needs to be clarity about the thresholds that separate non- culpable fatigue-related safety events from deliberate violations that could attract penalties.

Timely feedback to crewmembers who submit fatigue reports is vital. Feedback does not require completion of a full investigation. Every crewmember will receive a timely response to their report with some indication of the planned follow- up activity.

Table 1

Flight and Duty Guidelines

	Off Duty			Duty Period		Flight Time			
	Per 24-hour Period	Per Week	Other	Per 24-hour Period	Weekly, Monthly, Annually	Per 24-hour Period	Per Week	Monthly, Annually	
Two Pilots or Single Pilot	10 hours	Minimum 36 continuous hours, including two consecutive recovery nights, in a seven-day period (calculated on a seven-day or 168-hour rolling basis) … or … minimum 48 continuous hours in a 10-day period	48 continuous hours on return home following duty period across more than 2 time zones	14 hours	There is not sufficient scientific data to provide specific guidance in this area; nevertheless, maximum cumulative duty periods will be adjusted downward over increasing time frames.	10 hours	There is not sufficient scientific data to provide specific guidance in this area; nevertheless, maximum cumulative flight time will be adjusted downward over increasing time frames.		**Standard**
	12 hours (following extended flight time)			14 hours		Up to 12 hours (requires that landings, maximum cumulative hours be restricted, with compensatory off-duty time)	Maximum of four cumulative hours of extension		**Extended ***
	Off Duty			Duty Period		Flight Time			
Three Pilots (Augmented)	12 hours	Same as above	Same as above	Reclining seat 18 hours	Same as above	16 hours **	Same as above		
	12 hours			Supine bunk 20 hours		18 hours **			

* Extended operations can involve duty/rest cycles longer than 24 hours.

** Each flight crew gets maximum sleep opportunity with minimum four hours total; maximum two consecutive duty periods with 18 hours off duty.

Table 2

Flight and Duty Guidelines during the Window of Circadian Low

The 'window of circadian low' is best estimated to be the hours between 0200 and 0600 for individuals adapted to a usual day-wake/night-sleep schedule. These limitations apply to the following operations within this window of circadian low:

1. Landing,
2. Flight through both sides of the window of circadian low, or
3. Duty period that starts at 0400 or earlier in the window of circadian low.

	Off Duty			Duty Period		Flight Time			
	Per 24-hour Period	Per Week	Other	Per 24-hour Period	Weekly, Monthly, Annually	Per 24-hour Period	Per Week	Monthly, Annually	
Two Pilots or Single Pilot	12 hours	48 continuous hours in seven-day period following multiple duty periods in circadian low (calcu-ated on a seven-day or 168-hour rolling basis)	48 continuous hours on return home following duty period across multiple time zones	14 hours	There is not sufficient scientific data to provide specific limitations in this area; nevertheless, maximum cumulative duty periods will be adjusted downward over increasing time frames.	10 hours	There is not sufficient scientific data to provide specific limitations in this area; nevertheless, maximum cumulative flight time will be adjusted downward over increasing time frames.		**Standard**
Two Pilots or Single Pilot	**No two pilot extensions recommended**								**Extended ***
	Off Duty			**Duty Period**		**Flight Time**			**Extended ***
Three Pilots (Augmente	12 hours	Same as above	Same as above	Reclining seat 18 hours	Same as above	16 hours **	Same as above		**Extended ***
Three Pilots (Augmente	12 hours	Same as above	Same as above	Supine bunk 20 hours	Same as above	18 hours **	Same as above		**Extended ***

* Extended operations can involve duty/rest cycles longer than 24 hours.

** Each flight crew gets maximum sleep opportunity with minimum four hours total; maximum two consecutive duty periods with 18 hours off duty.

Operating Procedures

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8 OPERATING PROCEDURES

Super Legacy XP Limited general operating procedures are detailed in this chapter. If a procedure is not detailed, please refer to the Aircraft Flight Manual and Pilot Operating Handbook (i.e. Aircraft Operations Manual) and Jeppesen trip kit as required.

8.1 Oxygen Requirements

8.1.1 General

Supplemental oxygen must be provided when operating a pressurized aircraft at altitudes over
10'000 feet.

Specific requirements for carriage of Oxygen are detailed in 2.1.5.7 Oxygen Supply Requirements.

8.1.1.1 Time of Useful Consciousness

The time of useful consciousness after a depressurisation and without oxygen varies and depends on altitude. Therefore, in case of a depressurisation, immediate reaction and use of oxygen is of the utmost importance for safety. The following table indicates the time of useful consciousness (only guideline):

Altitude in ft	Elapsed time
22,000	5 min
25,000	2 min
28,000	1 min
30,000	35 sec
35,000	20 sec
40,000	12 sec
45,000	9 sec

8.2 Safe Fuelling Procedures

Pilots will supervise the fuelling of their aircraft to ensure that it is properly bonded and that the fuel is free of contamination.

Ground servicing activities and work inside the aircraft, such as catering and cleaning, shall be conducted in such a manner that they do not create a hazard and do allow emergency evacuation to take place through those aisles and exits intended for emergency evacuation.

Further provisions concerning aircraft refuelling are contained in Volume I (Aerodrome Design and Operations) of ICAO Annex 14 (Aerodromes), and guidance on safe refuelling practices is contained in Parts 1 and 8 of the ICAO Airport Services Manual (Doc 9137).

8.2.1 Fuel Contamination Precautions

If fuel is obtained from an unknown source or there is any reason to question the quality of the fuel, it shall be checked during the pre-flight check. A reasonable quantity of fuel shall be drawn from the lowest point in the fuel system into a clear glass jar. A “clear and bright” visual test shall be made to establish that the fuel is completely free of visible solid contamination and water (including any resting on the bottom or sides of the container) and that the fuel possesses an inherent brilliance and sparkle in the presence of light.

8.2.2 Bonding Requirements

The aircraft and the fuelling equipment through which fuel passes all require bonding during the fuelling procedure. The hose nozzle must be bonded to the aircraft before the tank cap is removed. All funnels or filters used in fuelling are to be bonded together with the aircraft. Grounding of the fuel service vehicle and bonding of the service vehicle and hose nozzle to the aircraft, before fuelling begins, shall safely dissipate any static or stray electricity that has built up in the aircraft or service vehicle. Bonding prevents sparks by equalising or draining the electric potentials.

8.2.3 Fuelling With Passengers on Board

Aircraft may be fuelled with passengers on board, embarking or disembarking, under the following conditions:

a. One qualified person shall remain at a specified location during fuelling operations with passengers on board. This qualified person shall be capable of handling emergency procedures concerning fire protection and fire-fighting, handling communications and initiating and directing an evacuation;

b. Two-way communication shall be established and shall remain available by the aircraft’s inter- communication system or other suitable means between the ground crew supervising the refuelling and the qualified personnel on board the aircraft; the involved personnel shall remain within easy reach of the system of communication;

c. Crew members, personnel and passengers shall be warned that refuelling will take place;

d. ‘Fasten seat belts’ signs shall be off;

e. ‘No smoking’ signs shall be on, together with interior lighting to enable emergency exits to be identified;

f. Passengers shall be instructed to unfasten their seat belts and refrain from smoking;

g. If the presence of fuel vapour is detected inside the aircraft, or any other hazard arises during refuelling, fuelling shall be stopped immediately;

h. The ground area beneath the exits intended for emergency evacuation shall be kept clear at doors where stairs are not in position for use in the event of evacuation; and

i. Provision shall be made for a safe and rapid evacuation.

Note: The deployment of integral aircraft stairs or the opening of emergency exits as a prerequisite to refuelling is not necessarily required.

8.3 Departure, Destination and Alternate Aerodrome Requirements

8.3.1 Take-Off Mass

8.3.1.1 When determining the maximum take-off mass, the PIC shall take the following into account:

a. The calculated take-off distance shall not exceed the take-off distance available with a clearway distance not exceeding half of the take-off run available;

b. The calculated take-off run shall not exceed the take-off run available;

c. A single value of V 1 shall be used for the rejected and continued take-off, where a V 1 is specified in the AFM; and

d. On a wet or contaminated runway, the take-off mass shall not exceed that permitted for a take- off on a dry runway under the same conditions.

8.3.1.2 In the event of an engine failure during take-off, the PIC shall ensure that:

a. The aircraft shall be able to discontinue the take-off and stop within the accelerate-stop distance available; and
b. The aircraft shall be able to clear all obstacles along the flight path by an adequate margin until the aircraft is in a position, to safely maneuver the aircraft to a landing site (this may be an off-airport landing site).

8.3.1.3 The maximum take-off mass shall never exceed the maximum take-off mass specified in the AFM for the pressure altitude appropriate to the elevation of the aerodrome and if used as a parameter to determine the maximum take-off mass, any other local atmospheric condition; and

8.3.1.4 The estimated mass for the expected time of landing at the aerodrome or operating site of intended landing and at any destination alternate aerodrome shall never exceed the maximum landing mass specified in the AFM for the pressure altitude appropriate to the elevation of those aerodromes, and if used as a parameter to determine the maximum landing mass, any other local atmospheric condition.

8.3.1.5 The following shall be considered for determining the maximum take-off mass:

a. The pressure altitude at the aerodrome;

b. The ambient temperature at the aerodrome;

c. The runway surface condition and the type of runway surface;

d. The runway slope in the direction of take-off;

e. Not more than 50 % of the reported head-wind component or not less than 150 % of the reported tailwind component; and

f. The loss, if any, of runway length due to alignment of the aircraft prior to take-off.

8.3.2 Contaminated Runway Performance Data

Wet and contaminated runway performance data, if made available by the manufacturer, shall be taken into account. If such data is not made available, Super Legacy XP Limited shall account for wet and contaminated runway conditions by using the best information available.

8.3.3. Runway Surface Condition

Operation on runways contaminated with water, slush, snow or ice implies uncertainties with regard to runway friction and contaminant drag and therefore to the achievable performance and control of the aircraft during take-off or landing, since the actual conditions may not completely match the assumptions on which the performance information is based. In the case of a contaminated runway, the first option for the PIC is to wait until the runway is cleared. If this is impracticable, he/she may consider a take-off or landing, provided that he/she has applied the applicable performance adjustments, and any further safety measures he/she considers justified under the prevailing conditions. The excess runway length available including the criticality of the overrun area shall also be considered.

8.3.4 Landing - General

The following shall be considered to ensure that an aircraft is able to land and stop within the landing distance available:

a. the pressure altitude at the aerodrome;

b. the runway surface condition and the type of runway surface;

c. the runway slope in the direction of landing;

d. not more than 50 % of the reported head-wind component or not less than 150 % of the reported tailwind component; and

e. use of the most favourable runway, in still air;

Use of the runway most likely to be assigned considering the probable wind speed and direction and the ground handling characteristics of the aircraft, and considering other conditions such as landing aids and terrain.

8.3.5 Landing Distance - Allowances

The PIC shall not conduct a take-off at a weight that, considering fuel consumption for the duration of the flight to the destination and alternate, after clearing all obstacles in the approach path by a safe margin, would result in a required landing distance greater than the total landing distance available using the anticipated runway at the time of arrival at the destination or the alternate. The in-flight determination of the landing distance/FATO suitability shall be based on the latest available meteorological report.

8.3.5.1 Dry Runway

In calculating the landing distance requirement, the PIC shall calculate the landing safety factor using a minimum safety factor of 1.25 which shall be added to the published un-factored Landing Distance Required on dry runways. Super Legacy XP Limited performance software produces landing performance data for each runway in their database, see Part D Form 4 Runway Performance Analysis and this includes numbers for the 1.25 safety factor.

The Lead Captain may add an additional safety margin to crew who are new to type and/or outside 90 day recency.

Subject to a satisfactory Risk Assessment the Lead Captain may reduce the minimum safety factor of 1.25 but at no time may operate below the manufacturers minimum performance figures in the AFM.

8.3.5.2 Wet and Contaminated Runways

The wet runway requirements shall be calculated according to the landing distances in the Aircraft Performance Manual for the runway conditions, using 1.67 X published un-factored Dry Landing Distance Required.

Subject to a satisfactory Risk Assessment the Lead Captain may reduce the minimum safety factor of 1.67 but at no time may operate below the manufacturers minimum performance figures in the AFM.

For contaminated runway landings the Aircraft Flight Manual data and procedures must be used for landing calculations, if a satisfactory safety margin is not achieved a diversion to an alternative runway shall always be considered.

8.3.5.3 Emergency or Abnormal situations

The Aircraft Flight Manual specifies additional corrections to be made to un-factored landing distance in an emergency or abnormal situation. If no specific guidance is available then the published un-factored landing distance x the appropriate safety factor shall be used.

8.4 Flight Crew Compartment Procedures

8.4.1 Flight crew activities

All flight crew must recognise and appreciate the objective and importance of the sterile flight crew compartment.

Flight crew shall adopt sterile flight crew compartment procedures and ensure that all flight crew activities are restricted to essential operational activities during the following phases of flight:

During critical phases of flight;

During taxiing (aircraft);

Below 10 000 feet above the aerodrome of departure after take-off and the aerodrome of destination before landing, except for cruise flight; and

During any other phases of flight as determined by the PIC.

All crew members shall be trained on sterile flight crew compartment procedures established by Super Legacy XP Limited, as appropriate to their duties.

When sterile flight crew compartment procedures are applied, flight crew members must be focused on their essential operational activities without being disturbed by non-safety related matters.

Examples of activities that will not be performed are:

Radio calls concerning passenger connections, fuel loads, catering, etc.;

Non-critical paperwork; and

Mass and balance corrections and performance calculations, unless required for safety reasons.

8.4.2 Simulated Emergencies or IMC Conditions during Passenger Transportation Flights

Emergencies or IMC Conditions shall not be simulated during passenger transportation flights. Notwithstanding (a), when training flights are conducted by an approved training organisation, such situations may be simulated with student pilots on-board.

8.5 Pilot Incapacitation

Flight crews will use the “two communication” rule as a means of detecting and responding to suspected subtle incapacitation. Any time the pilot flying the aircraft does not respond appropriately to two communications associated with a significant deviation from a standard operating procedure or a standard flight profile, the pilot not flying will announce “I have control” and assume command of the flight.

As a guideline, the following call-outs may be useful in detecting subtle incapacitation:

a. “Airspeed” - when the IAS is below Vref or exceeds Vref +10 knots, Vref +5 knots, when below 300 ft, AGL.
b. “Localizer” - when localizer deviation reaches one dot from centre. 1/3 dot deviation when below 300 ft, AGL.
c. “Glide Slope” - when glide slope deviation reaches one dot from centre. ½ dot when below 300 ft, AGL.
d. “Sink” - when sink rate exceeds 1,000 ft per minute.

Below 300' a "one communication rule" shall be adopted for no response/deviation.

Flight crews must understand the necessity for the communication rules to avoid difficulties in the transfer of command responsibilities, and that compliance is MANDATORY.

8.6 Use of Standard Operating Procedures (SOPs)

Manufacturer Checklists are available for all Super Legacy XP Limited aircraft. Each checklist contains the date of the last revision. The checklists prescribe the normal abnormal and emergency procedures to be followed for each aircraft type. Every aircraft crew member shall follow the checklist in the performance of their assigned duties.

Standard Operating Procedures have been established for all Super Legacy XP Limited aircraft. Every aircraft crew member shall follow the Standard Operating Procedures in the performance of their assigned duties. Crews will conduct interactive briefings for both take-off and landing phases of flight.

During critical phases of flight or whenever deemed necessary by the PIC in the interest of safety, crew members shall be seated at their assigned station and shall not perform any activities other than those required for the safe operation of the aircraft.

During flight, all crew members shall keep their seat belt fastened while at their station.

During flight, at least one qualified flight crew member shall remain at the controls of the aircraft at all times.

8.6.1 Taxiing

Super Legacy XP Limited shall ensure that an Aircraft is only taxied on the movement area of an aerodrome if the person at the controls is an appropriately qualified pilot; or has been designated by Super Legacy XP Limited and:

Crew shall use standard Procedures for taxiing including:

a. Adopting a sterile flight crew compartment;

b. The use of standard radio-telephony (RTF) phraseology.

c. Use of Anti Collision and Navigation lights and positioning of the aircraft to ensure safety when starting engines;

d. Use of enhanced situational awareness procedures.

    1. The use of the MFD to display the taxiway chart or alternatively for each flight crew member to have the necessary aerodrome layout charts available;
    2. The pilot taxiing the aircraft shall announce in advance his/her intentions to the PNF;
    3. All taxi clearances shall be heard, and shall be understood by each flight crew member;

4. All taxi clearances shall be cross-checked against the aerodrome chart and aerodrome surface markings, signs, and lights;

5. An aircraft taxiing on the manoeuvring area shall stop and hold at all lighted stop bars, and may proceed further when an explicit clearance to enter or cross the runway has been issued by the aerodrome control tower, and when the stop bar lights are switched off;

6. If the crew are unsure of their position, they shall stop the aircraft and contact air traffic control;

7. The PNF shall monitor the taxi progress and adherence to the clearances, and shall assist the pilot taxiing;

8. Any action which may disturb the crew from the taxi activity shall be avoided or done with the parking brake set (e.g. announcements by public address);

8.6.1.1 Safety-Critical Activity

a. Taxiing shall be treated as a safety-critical activity due to the risks related to the movement of the aircraft and the potential for a catastrophic event on the ground.

b. Taxiing is a high-workload phase of flight that requires the full attention of the flight crew

8.6.2 Take-Off Briefing

Before every take-off a briefing, which is essential to a safe departure, will be given by the PF to cover all the relevant aspects of that particular take-off. It is the responsibility of the Pilot in Command to ensure that the flight crew is familiar with the pertinent take-off and departure procedures and any emergency which may arise.

The following items will be briefed:

a. Weather condition with possible consequences for operation.
b. Technical Status of the Aircraft
c. Type of take-off required for actual existing weather and runway conditions
d. Thrust setting and speeds.
e. Airspeed call-outs
f. Rejected take-off considerations and procedures
g. Engine failure procedures after V1
h. Emergency plan and any other condition which may alter the normal take-off profile including Level flight acceleration altitude, with following initial climb altitude (MSA).
i. Tracking of required Nav-aids.
j. Landing runway / take-off alternate
k. SID or departure procedures as per clearance
l. Obstacle clearance requirements

m. FMS/NAV-setting
n. Any questions, clarifications or other pertinent details (e.g. any additional R/T calls if LVP in force).
o. Proposed emergency landing sites to be used in the event of an engine failure on take-off

8.6.3 Line-up & Take-Off

After receiving a Line-Up or a Line-Up and Take-Off clearance, both pilots will check and confirm the approach sector (particularly noting TCAS) and runway to be clear.

Before take-off both pilots must verify that the Aircraft is lined up at the correct position and check the Aircraft heading after line-up. This is especially important in darkness and reduced visibility, as well as at aerodromes with complex runway systems.

Line-up will be made as closely as possible to the runway centreline.

8.6.4 Climb

No turn shall be initiated below 400ft height, notwithstanding that at aerodromes where SID, obstacles or noise abatement procedures necessitate a turn, such a turn may be started upon passing a height of 200 ft.

Turns up to 400ft altitude shall be made with not more than 15° bank angle.

Turns higher than 400ft altitude shall be made with not more than 25° bank angle.

8.6.5 Cruise

The PIC shall record on the OFP the fuel quantity at each waypoint and compare that against the amount of usable fuel remaining in flight to ensure it is not less than the fuel required to proceed to a weather-permissible aerodrome and the planned reserve fuel as required by 2.1.5.6.

8.6.6 Approach Briefing

The PF will perform an approach briefing, preferably before reaching the Top of Descent (TOD). The approach briefing covers all the relevant aspects of a particular approach, landing, taxiing and go- around procedures. It is the responsibility of the Pilot in Command to ensure that the flight crew are familiar with the planned approach procedures.

The approach briefing shall cover at least the following items:

a. Weather and NOTAM review
b. Technical Status of the Aircraft
c. Fuel contents check, available holding time calculation
d. Aerodrome name, country and expected runway for approach and landing
e. Any aerodrome special briefing
f. Aircraft operation covering flap setting, anti-icing, approach speed and wind increment, continuous ignition, wipers, landing lights, reverse thrust and wheel brake settings, if applicable;
g. The STAR or arrival route including transition level, holding facility, minimum holding altitude and speed restrictions;
h. Descent planning;
i. Sector Safety altitudes from approach plate and Minimum Safe Altitude (MSA) from the computer flight plan.
j. The Instrument Approach Plate (Chart) covering procedures, radio aids, approach minima, go around procedures and associated required performance.
k. The aerodrome chart covering expected visual cues on contact, runway lightings, runway conditions and expected runway exit;
l. Expected taxi route and parking position
m. Planned alternate aerodrome and fuel requirement, if required;
n. Any additional items (e.g. additional R/T calls required if LVP in force); and
o. Any questions, clarifications or other pertinent details

8.6.7 Descent for Approach

An Aircraft must not descend below the appropriate safe altitude except:

a. By using an approved Instrument Approach procedure; or
b. When under positive radar control and the Aircraft Pilot in Command is satisfied with the flight profile; or
c. When in continuing visual contact with the ground and able to ensure adequate clearance from all obstacles affecting the intended flight path.

Descent when using ILS glide slope information as the sole means of vertical guidance must not be made below the relevant safe altitude until the Aircraft is established on the ILS Localiser and is within 10 nm of touchdown.

The position of the Aircraft must be positively established prior to commencing descent and reconfirmed prior to descending below the relevant safe altitude.

8.6.8 Approach

During all descents and approaches the Aircraft's descent path must be carefully monitored. both pilots will note when the Aircraft descends below the minimum safe altitude and also when indications first appear on the radio altimeter, if fitted. This is of particular relevance when conducting non-precision approaches where altitude/height versus range/fix checks are to be strictly observed.

The Aircraft shall be established in landing configuration, speed not exceeding Vref +10, maximum
1200ft/min ROD and the thrust levers above flight idle latest when:

a. Passing 1000 ft AGL in IMC conditions
b. Passing 500ft in VMC conditions or when ATC requires higher than usual approach speeds in IMC conditions

8.6.9 Post Flight Procedures

The PIC shall record in the Tech Log the great circle distance, fuel used and payload that must be filled in after each flight to enable calculation of ETS charges, where aplicable. ETS charges are Market Based Measures regulations (e.g. Emissions Trading Schemes) and associated requirements have been complied with.

The PIC will ensure that all flight paperwork is returned to Operations including the Operational Flight Plan, Load Manifest Calculation and Performance Calculations.

8.7 Operating Weather Minima

All Super Legacy XP Limited aircraft shall be operated in accordance with the weather minima specified in the State civil aviation regulations in which the aircraft is being operated, however, the aircraft shall not be operated to minima less than those specified in the applicable Aircraft Bailiwick of Guernsey Regulatory Authority civil aviation regulations.

Before commencing an approach to land, the PIC shall be satisfied that, according to the information available, the weather at the aerodrome or the operating site and the condition of the runway intended to be used would not prevent a safe approach, landing or missed approach.

8.7.1 VFR Day

The aircraft shall be operated with visual reference to the surface. In order to ensure adherence to VFR procedures visual navigation charts and flight information for the route of flight and airports shall be used.

A VFR flight shall not be commenced unless current weather reports and forecasts if available indicate that weather conditions along the route and at destination will be such that the flight can be conducted in compliance with VFR.

Except for take-off and landing, the aircraft shall not be operated in VFR flight during the day, at less than 500 ft AGL or at a horizontal distance of less than 500 ft from any obstacle.

8.7.2 VFR Night and IFR

All night VFR and IFR flights shall be conducted along airways or air routes. Super Legacy XP Limited IFR or night VFR routes may be established for use in uncontrolled airspace using the following criteria: No VFR flight at night is permitted in UK airspace.

a. A minimum obstruction clearance altitude (MOCA) shall be established for each route segment by the use of aeronautical charts and the State AIP for updating of significant obstructions as follows:

   1. For flight under IFR a minimum altitude of 2,000 ft above the highest obstacle located within a horizontal distance of 10 miles from the centre-line of route;

   2. For flight at night in VFR conditions a minimum altitude of 1,000 ft above the highest obstacle located within 3 miles from the centre-line of the route.

b. For each route segment a minimum en-route altitude (MEA) shall be established which meets or exceeds the minimum obstruction clearance altitude and assure navigational signal coverage. For line of sight navigation aid reception distance, for ground installed aids the minimum reception altitude may be calculated by calculating the square root of an altitude above the navigation aid and multiplying the result by 1.25 (Sq. root 3,000 ft. is 54.7 x 1.25 = 68 miles). The MEA will be established to the nearest higher 100-foot increment.

c. Each route shall include:

   i. The FROM/TO route segment;
   ii. Track;
   iii. MOCA;
   iv. MEA;
   v. Distance between fixes or waypoints; and
   vi. Navigation aids.

d. To assist pilots in flight planning on such routes, crew may use the minimum obstacle clearance altitude on the published charts for the route.

e. The flight visibility shall not be less than 3 miles for flights in VFR at night.

8.8 IFR Procedures

8.8.1 Aerodrome operating minima - General

a. Super Legacy XP Limited has established aerodrome operating minima for each departure, destination and alternate aerodrome to be used. The minima will not be less than the minimum established by Bailiwick of Guernsey Regulatory Authority, or as calculated in accordance with the procedures below being whichever minima are the more restrictive, and when undertaking low visibility operations, must be approved by the Bailiwick of Guernsey Regulatory Authority and in accordance with Annex V (Part SPA), Subpart E to Regulation (EU) No 965/2012.

b. When establishing aerodrome operating minima, Super Legacy XP Limited has taken account of the following:

i. The type, performance and handling characteristics of the aircraft;

ii. The composition, competence and experience of the flight crew;

iii. The dimensions and characteristics of the runways and final approach and take-off areas (FATOs) that may be selected for use;

iv. The adequacy and performance of the available visual and non-visual ground aids;

v. The equipment available on the aircraft for the purpose of navigation and/or control of the flight path, during the take-off, the Approach, the flare, the landing, the rollout and the missed approach;

vi. The obstacles in the approach, the missed approach and the climb-out areas necessary for the execution of contingency procedures;

vii. The obstacle clearance altitude/height for the instrument approach procedures;

viii. The means to determine and report meteorological conditions; and

ix. The flight technique to be used during the final approach.

c. The minima for a specific type of approach and landing procedure shall only be used if all the following conditions are met:
   i. The ground equipment required for the intended procedure is operative;
   ii. The aircraft systems required for the type of approach are operative;
   iii. The required aircraft performance criteria are met; and
   iv. The crew are qualified appropriately.

8.8.1.1 Aircraft Categories

The Aircraft Category defined for a given aeroplane is a permanent value and thus independent of the changing conditions of day to day operations.

a. Aircraft categories shall be based on the indicated airspeed at threshold (VAT), which is equal to the stalling speed (VSO) multiplied by 1.3 or where published 1-g (gravity) stall speed (VS1g) multiplied by 1.23 in the landing configuration at the maximum certified landing mass. If both VSO and VS1g are available, the higher resulting VAT shall be used.

b. The aircraft categories specified in the following table shall be used.

Aircraft categories corresponding to VAT values

Aircraft category	Category	VAT

Pilatus PC-12	Cat A	Less than 91kt

8.8.1.2 Take-Off Operations

a. General:

i. Take-off minima shall be expressed as visibility (VIS) or Runway Visual Range (RVR) limits, taking into account all relevant factors for each aerodrome planned to be used and aircraft characteristics. Where there is a specific need to see and avoid obstacles on departure and/or for a forced landing, additional conditions, e.g. ceiling, shall be specified.

ii. The PIC shall not commence take-off unless the weather conditions at the aerodrome of departure are equal to or better than applicable minima for landing at that aerodrome, unless a weather-permissible take-off alternate aerodrome is available.

iii. When the reported meteorological visibility is below that required for take-off and RVR is not reported, a take-off shall only be commenced if the PIC can determine that the visibility along the take-off runway/area is equal to or better than the required minimum.

iv. When no reported meteorological visibility or RVR is available, a take-off shall only be commenced if the PIC can determine that the RVR/VIS along the take-off runway/area is equal to or better than the required minimum.

b. Visual reference:

i. The take-off minima shall be selected to ensure sufficient guidance to control the aircraft in the event of both a rejected take-off in adverse circumstances and a continued take-off after failure of the critical engine.

ii. For night operations, ground lights shall be available to illuminate the runway/final approach and take-off area (FATO) and any obstacles.

c. Required RVR/visibility: The take-off minima specified by Super Legacy XP Limited shall be expressed as RVR/VIS values not lower than those specified below

8.8.1.3 Minimum RVR for take-off

Without low visibility take-off (LVTO) approval) the minimum RVR/VIS is as follows:

Runway marking/lighting RVR/VIS	RVR/Vis Required (m*)
Day Only NIL (**)	500 meters
Day: at least runway edge lights or runway centreline markings Night: at least runway edge lights or runway centreline lights and runway end lights	400 meters

*: The reported RVR/VIS value representative of the initial part of the take-off run can be replaced by pilot assessment.

**: The pilot is able to continuously identify the take-off surface and maintain directional control.

All take-offs with an RVR less than 400m are considered LVTOs. LVTO minima are determined by the facilities at the aerodrome in terms of the runway lighting system and scope of the RVR measurement equipment as per section 8.9.2.

Super Legacy XP does not have a LVTO Approval. Minimum RVR for TO 400m

8.8.1.4 Minima for Approaches

The Decision Height (DH) to be used for a non-precision approach (NPA) flown with the continuous descent final approach (CDFA) technique, approach procedure with vertical guidance (APV) or category I (CAT I) operation shall not be lower than the highest of:

a. The Obstacle Clearance Altitude (OCA) or Height (OCH) for the category of aircraft. This is the lowest altitude or height above the elevation of the relevant runway threshold or above the aerodrome elevation used in establishing compliance with appropriate obstacle clearance criteria.

b. The Jeppesen Airway Manual approach procedure DH where applicable and/or the state's AIP;

c. The system minimum specified below.

The Minimum Descent Height (MDH) for an NPA operation flown without the CDFA technique shall not be lower than the highest of:

a. The OCH for the category of aircraft;
b.
c. The minimum MDH specified in the AFM, if stated or c. The system minimum specified below.

System Minima	Lowest DH/MDH (ft)
Instrument Landing System (ILS)	200
Global Navigation System/SBAS – Lateral Precision with vertical guidance (LPV)	200
GNSS (Lateral Navigation (LNAV)	250
GNSS (Baro-vertical navigation) (LNAV/VNAV)	250
Localiser (LOC) with or without Distance Measuring Equipment (DME)	250
Surveillance Radar Approach (SRA) terminating at 1/2 nm	250
Surveillance Radar Approach (SRA) terminating at 1 nm	300
Surveillance Radar Approach (SRA) terminating at 2 nm or more	350
VHF omni-directional radio range (VOR)	300
VOR/DME	250
Non-Directional beacon (NDB)	350
NDB/DME	300
VHF direction finder (VDF)	350

8.8.2 Departure and approach procedures

a. The PIC shall use the departure and approach procedures established by the State of the aerodrome, if such procedures have been published for the runway to be used.

Notwithstanding (a), the PIC shall only accept an ATC clearance to deviate from a published procedure

1. Provided that obstacle clearance criteria are observed and full account is taken of the operating conditions; or
2. When being radar-vectored by an ATC unit.

b. In any case, the final approach segment shall be flown visually or in accordance with the published approach procedures.

8.8.2.1 Approach & Landing - General

a. The aerodrome operating minima shall not be lower than the values given in this section.

b. Whenever practical approaches shall be flown as stabilised approaches (SAp). Different procedures may be used for a particular approach to a particular runway.

c. Whenever practical, non-precision approaches shall be flown using the continuous descent final approach (CDFA) technique. Different procedures may be used for a particular approach to a particular runway.

d. For approaches not flown using the CDFA technique: when calculating the minima in accordance with 8.8.2.2 Determination of RVR/CMV/VIS Minima for NPA, APV, CAT I, the applicable minimum Runway Visual Range (RVR) shall be increased by 200 m for Category A and aircrafts and by 400 m for Category C and D aircrafts, provided the resulting RVR/Converted Meteorological Visibility (CMV) value does not exceed 5 000 m. SAp or CDFA shall be used as soon as facilities are improved to allow these techniques.

e. In the case of a visual approach operation the RVR shall not be less than 800 m.

8.8.2.2 Determination of RVR/CMV/VIS Minima for NPA, APV, CAT I

a. The minimum RVR/CMV/VIS shall be the highest of the values specified in 8.8.2.4 and 8.8.2.5 but not greater than the maximum values specified in 8.8.2.5, where applicable.

b. If the approach is flown with a level flight segment at or above MDA/H, 200 m shall be added for Category A and B aircrafts and 400 m for Category C and D aircrafts to the minimum RVR/CMV/VIS value resulting from the application of 8.8.2.4 and 8.8.2.5.

c. An RVR of less than 750 m as indicated in 8.8.2.4 may be used

For CAT I operations to runways with full approach lighting system (FALS), runway touchdown zone lights (RTZL) and runway centreline lights (RCLL);

For CAT I operations to runways when conducting a coupled approach or flight-director- flown approach to a DH. The ILS shall not be published as a restricted facility;

d. The visual aids shall comprise standard runway day markings and approach and runway lights as specified in 8.87. The Bailiwick of Guernsey Regulatory Authority may approve that RVR values relevant to a basic approach lighting system (BALS) are used on runways where the approach lights are restricted in length below 210 m due to terrain or water, but where at least one cross-bar is available.

e. For night operations or for any operation where credit for runway and approach lights is required, the lights shall be on and serviceable, except as provided for in 8.8.3.1

8.8.2.3 Approach lighting systems

Class of lighting facility	Length, configuration and intensity of approach lights
Full (FALS)	CAT I lighting system (HIALS ≥ 720 m) distance coded centreline, Barrette centreline
Intermediate (IALS)	Simple approach lighting system (HIALS 420 – 719 m) single source, Barrette
Basic (BALS)	Any other approach lighting system (HIALS, MIALS or ALS 210 – 419 m)
Nil (NALS)	Any other approach lighting system (HIALS, MIALS or ALS < 210 m) or no approach lights

Note: HIALS: high intensity approach lighting system; MIALS: medium intensity approach lighting system; ALS: approach lighting system.

8.8.2.4 RVR/CMV vs. DH/MDH

DH or MDH			Class of lighting facility (ALS)			
			Full	**Intermediate**	**Basic**	**Nil.**
			See d., e., (h) above for RVR < 750/800 m			
ft			**RVR/CMV (m)**			
200	-	210	550	750	1 000	1 200
211	-	220	550	800	1 000	1 200
221	-	230	550	800	1 000	1 200
231	-	240	550	800	1 000	1 200
241	-	250	550	800	1 000	1 300
251	-	260	600	800	1 100	1 300
261	-	280	600	900	1 100	1 300
281	-	300	650	900	1 200	1 400
301	-	320	700	1 000	1 200	1 400
321	-	340	800	1 100	1 300	1 500
341	-	360	900	1 200	1 400	1 600
361	-	380	1 000	1 300	1 500	1 700
381	-	400	1 100	1 400	1 600	1 800
401	-	420	1 200	1 500	1 700	1 900
421	-	440	1 300	1 600	1 800	2 000
441	-	460	1 400	1 700	1 900	2 100
461	-	480	1 500	1 800	2 000	2 200
481	-	500	1 500	1 800	2 100	2 300
501	-	520	1 600	1 900	2 100	2 400
521	-	540	1 700	2 000	2 200	2 400
541	-	560	1 800	2 100	2 300	2 500
561	-	580	1 900	2 200	2 400	2 600
581	-	600	2 000	2 300	2 500	2 700
601	-	620	2 100	2 400	2 600	2 800
621	-	640	2 200	2 500	2 700	2 900
641	-	660	2 300	2 600	2 800	3 000
661	-	680	2 400	2 700	2 900	3 100
681	-	700	2 500	2 800	3 000	3 200
701	-	720	2 600	2 900	3 100	3 300
721	-	740	2 700	3 000	3 200	3 400
741	-	760	2 700	3 000	3 300	3 500
761	-	800	2 900	3 200	3 400	3 600

801	-	850	3 100	3 400	3 600	3 800
851	-	900	3 300	3 600	3 800	4 000
901	-	950	3 600	3 900	4 100	4 300
951	-	1 000	3 800	4 100	4 300	4 500
1,001	-	1 100	4 100	4 400	4 600	4 900
1,101	-	1 200	4 600	4 900	5 000	5 000
1,201 and above	-	5 000	5 000	5 000	5 000	5 000

Note the values above were derived from the formula:

Required RVR/VIS (m) = [(DH/MDH (ft) x 0.3048) / tanα] – length of approach lights (m);

where α is the calculation angle, being a default value of 3.00° increasing in steps of 0.10° for each line in 8.8.2.4 up to 3.77° and then remaining constant.

8.8.2.5 CAT I, APV, NPA Minimum and Maximum applicable RVR/CMV (lower and upper cut-off limits)

a. In order to qualify for the lowest allowable values of RVR/CMV specified in the table below, the instrument approach will meet at least the following facility requirements and associated conditions:

1. Instrument approaches with designated vertical profile up to and including 4.5° for Category A and B aircraft, or 3.77° for Category C and D aircraft, where the facilities are:

   i. instrument landing system (ILS)/microwave landing system (MLS)/GBAS landing system (GLS)/precision approach radar (PAR); or

   ii. approach procedure with vertical guidance (APV); and where the final approach track is offset by not more than 15° for Category A and B aircraft or by not more than 5° for Category C and D aircraft.

2. Instrument approach operations flown using the CDFA technique with a nominal vertical profile, up to and including 4.5° for Category A and B aircraft, or 3.77° for Category C and D aircraft, where the facilities are non-directional beacon (NDB), NDB/distance measuring equipment (DME), VHF omnidirectional radio range (VOR), VOR/DME, localiser (LOC), LOC/DME, VHF direction finder (VDF), surveillance radar approach (SRA) or global navigation satellite system (GNSS)/lateral navigation (LNAV), with a final approach segment of at least 3 NM, which also fulfil the following criteria:

   i. the final approach track is offset by not more than 15° for Category A and B aircraft or by not more than 5° for Category C and D aircraft

   ii. the final approach fix (FAF) or another appropriate fix where descent is initiated is available, or distance to threshold (THR) is available by flight management system (FMS)/area navigation (NDB/DME) or DME; and

iii. the missed approach point (MAPt) is determined by timing, the distance from FAF to THR is ≤ 8 NM.

3. Instrument approaches where the facilities are NDB, NDB/DME, VOR, VOR/DME, LOC, LOC/DME, VDF, SRA or GNSS/LNAV, not fulfilling the criteria in (a.)(2), or with a minimum descent height (MDH) ≥ 1 200 ft.

b. The missed approach operation, after an approach operation has been flown using the CDFA technique, will be executed when reaching the decision height/altitude (DH/A) or the MAPt, whichever occurs first. The lateral part of the missed approach procedure will be flown via the MAPt unless otherwise stated on the approach chart.

Facility/conditions	**RVR/CMV (m)**	**Aircraft category**			
		A	**B**	**C**	**D**
ILS, MLS, GLS, PAR, GNSS/SBAS, GNSS/VNAV	Min	According to 8.8.2.4			
	Max	1 500	1 500	2 400	2 400
NDB, NDB/DME, VOR, VOR/DME, LOC, LOC/DME, VDF, SRA, GNSS/LNAV with a procedure that fulfils the criteria in AMC4 NCC.OP.110 a(2).	Min	750	750	750	750
	Max	1 500	1 500	2 400	2 400
For NDB, NDB/DME, VOR, VOR/DME, LOC, LOC/DME, VDF, SRA, GNSS/LNAV: — not fulfilling the criteria in AMC4 NCC.OP.110 a.(2)., or — with a DH or MDH ≥ 1 200 ft	Min	1 000	1 000	1 200	1 200
	Max	According to 8.8.2.4 if flown using the CDFA technique, otherwise an add-on of 200/400 m applies to the values in 8.8.2.4 but not to result in a value exceeding 5 000 m.			

8.8.2.6 Conversion of Reported Meteorological Visibility to RVR/CMV

a. A conversion from meteorological visibility to RVR/CMV shall not be used:

i. When reported RVR is available;

ii. For calculating take-off minima; and

iii. For other RVR minima less than 800 m.

b. If the RVR is reported as being above the maximum value assessed by the aerodrome operator, e.g. ‘RVR more than 1 500 m’, it shall not be considered as a reported value for a(i).

c. When converting meteorological visibility to RVR in circumstances other than those in a., the following conversion factors specified shall be used.

Conversion of reported meteorological visibility to RVR/CMV

Light elements in operation	RVR/CMV = reported meteorological visibility x	
	Day	Night
HI approach and runway lights	1.5	2.0
Any type of light installation other than above	1.0	1.5
No lights	1.0	not applicable

8.8.3 Effect on Landing Minima of Temporarily Failed or Downgraded Ground Equipment

a. General

These instructions are intended for both pre-flight and in-flight use. It is, however, not expected that the PIC would consult such instructions after passing 1 000 ft above the aerodrome. If failures of ground aids are announced at such a late stage, the approach could be continued at the PIC's discretion. If failures are announced before such a late stage in the approach, their effect on the approach shall be considered as described in 8.8.3.1 and, if considered necessary, the approach shall be abandoned.

b. Conditions applicable to 8.8.3.1:

i. Multiple failures of runway/FATO lights other than indicated in 8.8.3.1 shall not be acceptable;

ii. Deficiencies of approach and runway/FATO lights are treated separately; and

iii. Failures other than ILS, MLS affect RVR only and not DH.

8.8.3.1 Failed or downgraded equipment — effect on landing minima

Failed or downgraded equipment	Effect on landing minima	
	CAT I	APV, NPA
ILS/MLS standby transmitter	No effect	
Outer marker	No effect if replaced by height check at 1,000ft	APV — not applicable NPA with FAF: no effect If the FAF cannot be identified (e.g. no method available for timing of descent), non-
Middle marker	No effect	No effect unless used as
RVR Assessment Systems	No effect	
Approach lights	Minima as for NALS	
Approach lights except the last	Minima as for BALS	
Approach lights except the last	Minima as for IALS	
Standby power for approach	No effect	
Edge lights, threshold lights and	Day — no effect Night — not allowed	
Centreline lights	No effect if flight director (F/D); otherwise RVR 750 m	No effect
Centreline lights spacing	No effect	
Touchdown zone lights	No effect if F/D; otherwise	No effect
Taxiway lighting system	No effect	

8.8.4 Commencement of the Approach

a. The PIC may commence an instrument approach regardless of the reported Runway Visual Range/Visibility (RVR/VIS).

b. If the reported RVR/VIS is less than the applicable minimum the approach shall not be continued:

i. Below 1,000 ft above the aerodrome; or

ii. Into the final approach segment in the case where the decision altitude/height (DA/H) or minimum descent altitude/height (MDA/H) is more than 1,000 ft above the aerodrome.

c. Where the RVR is not available, RVR values may be derived by converting the reported visibility.

d. If, after passing 1,000 ft above the aerodrome, the reported RVR/VIS falls below the applicable minimum, the approach may be continued to DA/H or MDA/H.

e. The approach may be continued below DA/H or MDA/H and the landing may be completed provided that the visual reference adequate for the type of approach operation and for the intended runway is established at the DA/H or MDA/H and is maintained.

f. The touchdown zone TDZ RVR shall always be controlling. If reported and relevant, the MID and STP RVR values are also controlling

8.8.5 Continuous Descent Final Approach (CDFA)

a. Introduction

i. Controlled flight into terrain (CFIT) is a major hazard in aviation. Most CFIT accidents occur in the final approach segment of non-precision approaches; the use of stabilised-approach criteria on a continuous descent with a constant, predetermined vertical path is seen as a major improvement in safety during the conduct of such approaches.

ii. The elimination of level flight segments at MDA close to the ground during approaches, and the avoidance of major changes in attitude and power/thrust close to the runway that can destabilise approaches, are seen as ways to reduce operational risks significantly.

iii. The term CDFA has been selected to cover a flight technique for any type of NPA operation.

b. The advantages of CDFA are as follows:

i. The technique enhances safe approach operations by the utilisation of standard operating practices;

ii. The technique is similar to that used when flying an ILS approach, including when executing the missed approach and the associated missed approach procedure manoeuvre;

iii. The aircraft attitude may enable better acquisition of visual cues;

iv. The technique may reduce pilot workload;

v. The approach profile is fuel-efficient;

vi. The approach profile affords reduced noise levels;

vii. The technique affords procedural integration with APV operations; and

viii. When used and the approach is flown in a stabilised manner, CDFA is the safest approach technique for all NPA operations.

c. CDFA

i. Continuous descent final approach means a technique, consistent with stabilised approach procedures, for flying the final-approach segment of a non-precision instrument approach procedure as a continuous descent, without level off, from an altitude/height at or above the final approach fix altitude/height to a point approximately 15 m (50 ft) above the landing runway threshold or the point where the flare manoeuvre shall begin for the type of aircraft flown.

ii. An approach is only suitable for application of a CDFA technique when it is flown along a nominal vertical profile; a nominal vertical profile is not forming part of the approach procedure design, but can be flown as a continuous descent. The nominal vertical profile information may be published or displayed on the approach chart to the pilot by depicting the nominal slope or range/distance vs. height. Approaches with a nominal vertical profile are considered to be:

1. NDB, NDB/DME (non-directional beacon/distance measuring equipment);

2. VOR (VHF omnidirectional radio range), VOR/DME;

3. LOC (localiser), LOC/DME;

4. VDF (VHF direction finder), SRA (surveillance radar approach); or

5. GNSS/LNAV (global navigation satellite system/lateral navigation);

d. Stabilised approach (SAp) means an approach that is flown in a controlled and appropriate manner in terms of configuration, energy and control of the flight path from a pre-determined point or altitude/height down to a point 50 ft above the threshold or the point where the flare manoeuvre is initiated if higher.

i. The control of the descent path is not the only consideration when using the CDFA technique. Control of the aircraft's configuration and energy is also vital to the safe conduct of an approach.

ii. The control of the flight path, described above as one of the requirements for conducting a SAp, shall not be confused with the path requirements for using the CDFA technique. The predetermined path requirements for conducting a SAp are established by Super Legacy XP Limited and published in the Operations Manual part B.

iii. The predetermined approach slope requirements for applying the CDFA technique are established by the following:

1. The published 'nominal' slope information when the approach has a nominal vertical profile; and

2. The designated final approach segment minimum of 3 NM, and maximum, when using timing techniques, of 8 NM.

iv. A SAp will never have any level segment of flight at DA/H or MDA/H, as applicable. This enhances safety by mandating a prompt missed approach procedure manoeuvre at DA/H or MDA/H.

v. An approach using the CDFA technique will always be flown as a SAp, since this is a requirement for applying CDFA. However, a SAp does not have to be flown using the CDFA technique, for example a visual approach.

e. When using a CDFA technique, the Pilot in Command will add 50ft to the specified MDA/MDH

8.8.6 Circling operations

Visual manoeuvring (circling) is the term used to describe the visual phase of an instrument approach required to position an Aircraft for landing on a runway which is not suitably located for a straight-in approach.

a. The MDH for a circling operation with aircrafts shall not be lower than the highest of:

i. The published circling OCH for the aircraft category;

ii. The minimum circling height derived from the table below; or

iii. The DH/MDH of the preceding instrument approach procedure.

b. The minimum visibility for a circling operation with aircrafts shall be the highest of:

i. The circling visibility for the aircraft category, if published;

ii. The minimum visibility derived from the table below; or

iii. The runway visual range/converted meteorological visibility (RVR/CMV) of the preceding instrument approach procedure.

The aircraft is designated as a Cat A aircraft, however, Captains may elect to use higher speeds/altitudes for circling.

	CAT A	CAT B	CAT C	CAT D
Circling Minima based on Vref speeds	Speed less than 91 knots	Speed 91 knots or more but less than 121 knots	Speed 121 knots or more but less than 141 knots	Speed 141 knots or more but less than 166 knots
MDH (ft)	400	500	600	700
Min. Met Vis (m)	1,500	1,600	2,400	3,600

c. Conduct of flight — general:

   i. The MDH and obstacle clearance height (OCH) included in the procedure are referenced to aerodrome elevation;

   ii. The MDA is referenced to mean sea level;

   iii. For these procedures, the applicable visibility is the meteorological visibility.

d. Instrument approach followed by visual manoeuvring (circling) without prescribed tracks:

   i. When the aircraft is on the initial instrument approach, before visual reference is stabilised, but not below MDA/H — the aircraft shall follow the corresponding instrument approach procedure until the appropriate instrument MAPt is reached.

   ii. At the beginning of the level flight phase at or above the MDA/H, the instrument approach track determined by the radio navigation aids, RNAV, RNP, ILS, MLS or GLS shall be maintained until the pilot:

      1. Estimates that, in all probability, visual contact with the runway of intended landing or the runway environment will be maintained during the entire circling procedure;

      2. Estimates that the aircraft is within the circling area before commencing circling; and

      3. Is able to determine the aircraft's position in relation to the runway of intended landing with the aid of the appropriate external references.

   iii. When reaching the published instrument MAPt and the conditions stipulated in d(ii) are unable to be established by the pilot, a missed approach shall be carried out in accordance with that instrument approach procedure.

   iv. After the aircraft has left the track of the initial instrument approach, the flight phase outbound from the runway shall be limited to an appropriate distance, which is required to align the aircraft onto the final approach. Such manoeuvres shall be conducted to enable the aircraft:

1. To attain a controlled and stable descent path to the intended landing runway; and

2. To remain within the circling area and in such way that visual contact with the runway of intended landing or runway environment is maintained at all times.

v. Flight manoeuvres shall be carried out at an altitude/height that is not less than the circling MDA/H.

vi. Descent below MDA/H shall not be initiated until the threshold of the runway to be used has been appropriately identified. The aircraft shall be in a position to continue with a normal rate of descent and land within the touchdown zone.

e. Instrument approach followed by a visual manoeuvring (circling) with prescribed track.

i. The aircraft shall remain on the initial instrument approach procedure until one of the following is reached:

1. The prescribed divergence point to commence circling on the prescribed track; or

2. The MAPt.

ii. The aircraft shall be established on the instrument approach track determined by the radio navigation aids, RNAV, RNP, ILS, MLS or GLS in level flight at or above the MDA/H at or by the circling manoeuvre divergence point.

iii. If the divergence point is reached before the required visual reference is acquired, a missed approach shall be initiated not later than the MAPt and completed in accordance with the initial instrument approach procedure.

iv. When commencing the prescribed circling manoeuvre at the published divergence point, the subsequent manoeuvres shall be conducted to comply with the published routing and published heights/altitudes.

v. Unless otherwise specified, once the aircraft is established on the prescribed track(s), the published visual reference does not need to be maintained unless:

1. Required by the State of the aerodrome; or
2. The circling MAPt (if published) is reached.

vi. If the prescribed circling manoeuvre has a published MAPt and the required visual reference has not been obtained by that point, a missed approach shall be executed in accordance with e(ii) and e(iii).

vii. Subsequent further descent below MDA/H shall only commence when the required visual reference has been obtained.

viii. Unless otherwise specified in the procedure, final descent shall not be commenced from MDA/H until the threshold of the intended landing runway has been identified and the aircraft is in a position to continue with a normal rate of descent to land within the touchdown zone.

f. Missed approach

i. Missed approach during the instrument procedure prior to circling:

1. If the missed approach procedure is required to be flown when the aircraft is positioned on the instrument approach track defined by radio navigation aids; RNAV, RNP, ILS, MLS or GLS, and before commencing the circling manoeuvre, the published missed approach for the instrument approach shall be followed; or
2. If the instrument approach procedure is carried out with the aid of an ILS, MLS or a stabilised approach (SAp), the MAPt associated with an ILS or MLS procedure without glide path (GP-out procedure) or the SAp, where applicable, shall be used.

ii. If a prescribed missed approach is published for the circling manoeuvre, this overrides the manoeuvres prescribed below.

iii. If visual reference is lost while circling to land after the aircraft has departed from the initial instrument approach track, the missed approach specified for that particular instrument approach shall be followed. It is expected that the pilot will make an initial climbing turn toward the intended landing runway to a position overhead of the aerodrome where the pilot will establish the aircraft in a climb on the instrument missed approach segment.

iv. The aircraft shall not leave the visual manoeuvring (circling) area, which is obstacle protected, unless:

1. Established on the appropriate missed approach procedure; or
2. At minimum sector altitude (MSA).

v. All turns shall be made in the same direction and the aircraft shall remain within the circling protected area while climbing either:

1. To the altitude assigned to any published circling missed approach manoeuvre if applicable;

2. To the altitude assigned to the missed approach of the initial instrument approach;
3. To the MSA;
4. 4.To the minimum holding altitude (MHA) applicable for transition to a holding facility or fix, or continue to climb to an MSA; or
5. As directed by ATS.

   When the missed approach procedure is commenced on the ‘downwind’ leg of the circling manoeuvre, an ‘S’ turn may be undertaken to align the aircraft on the initial instrument approach missed approach path, provided the aircraft remains within the protected circling area.

   The PIC shall be responsible for ensuring adequate terrain clearance during the above- stipulated manoeuvres, particularly during the execution of a missed approach initiated by ATS.

vi. Because the circling manoeuvre may be accomplished in more than one direction, different patterns will be required to establish the aircraft on the prescribed missed approach course depending on its position at the time visual reference is lost. In particular, all turns are to be in the prescribed direction if this is restricted, e.g. to the west/east (left or right hand) to remain within the protected circling area.

vii. If a missed approach procedure is published for a particular runway onto which the aircraft is conducting a circling approach and the aircraft has commenced a manoeuvre to align with the runway, the missed approach for this direction may be accomplished. The ATS unit shall be informed of the intention to fly the published missed approach procedure for that particular runway.

viii. The PIC shall advise ATS when any missed approach procedure has been commenced, the height/altitude the aircraft is climbing to and the position the aircraft is proceeding towards and/or heading the aircraft is established on.

8.8.7 Commencement and continuation of approach – Required Visual References for Instrument Approach Operations

a. NPA, APV and CAT I operations

   At DH or MDH, at least one of the Required Visual References specified below shall be distinctly visible and identifiable to the pilot:

   i. elements of the approach lighting system;

ii. the threshold;

iii. the threshold markings;

iv. the threshold lights;

v. the threshold identification lights;

vi. the visual glide slope indicator;

vii. the touchdown zone or touchdown zone markings;

viii. the touchdown zone lights;

ix. FATO/runway edge lights.

b. Lower than Standard Category I (LTS CAT I) operations

   The Operator is not approved for Lower Than Standard operations.

c. CAT II operations

   The Operator is not approved for CAT II operations.

d. Approach operations utilising EVS – CAT I operations

   The Operator is not approved for EVS operations.

e. Approach operations utilising EVS – APV and NPA operations flown with the CDFA technique

   The Operator is not approved for EVS operations.

8.8.8 Use of autopilot

Full use of all aircraft automatics shall be used where available to reduce pilot work load and prevent excursions from the required aircraft profile. Super Legacy XP Limited recognise the need to maintain manual flying skills and crews are authorised to fly “manual approaches” and “manual departures” if both pilots agree, the weather and traffic situation allows and the 'manual' duties are included in the relevant brief.

8.8.9 Altimeter Temperature Correction

When aerodrome temperature is colder than 0 C the following correction must be added to DA/MDA and any step-down fixes inside the FAF. Where the aircraft configuration automatically calculates the temperature correction and in such cases the following table can be ignored.

Aerodrome Temperature (°C)		**Altitude Correction Factor**												
0	20	20	30	30	40	40	50	50	60	90	120	170	230	290
-10	20	30	40	50	60	70	80	90	100	150	200	290	390	490
-20	30	50	60	70	100	100	120	130	140	210	280	430	570	710
-30	40	60	80	100	130	130	150	170	190	280	380	570	760	950
-40	50	80	100	120	170	170	190	220	240	360	480	720	970	1210
-50	60	90	120	150	180	210	240	270	300	450	600	890	1190	1500
Height above Aerodrome-	200	300	400	500	600	700	800	900	1000	1500	2000	3000	4000	5000

8.9 Low Visibility Operations

Super Legacy XP Limited shall only conduct the following low visibility operations (LVO) when approved by the competent authority.

Definitions

General Information – Meteorology, Aerodrome and Aircraft	
Meteorological	
Visibility	For aeronautical purposes, Visibility is the greater of: a. the greatest distance at which a black object of suitable dimensions, situated near the ground, can be seen and recognized when observed against a bright background; and b. the greatest distance at which lights in the vicinity of 1,000 candelas can be seen and identified against an unlit background. *Note 1:* The two distances have different values in air of a given extinction coefficient. The latter, (b) varies with the background illumination. The former, (a) is represented by the Meteorological Optical Range (MOR).

Visual Segment	The visual part of the Approach & Runway lighting system that is visible to the crew at a specific RVR/Visibility
Aerodrome	
Limitation on Glide Path Angle	Applicable to CAT II/III only. (See AFM limitations regarding Glide Path angle restrictions)
Terrain Characteristics	Applicable to CAT II/III only. Automatic landing systems may be affected by the profile of the terrain in an area 3000m (10,000ft) long by 60m (200ft) wide, centred on the extended runway centreline immediately prior to the threshold. Within this area: (a). The mean profile of the terrain will be essentially flat, except that gentle undulations of ground height of plus or minus 1.5m (5ft) from the mean are acceptable. (b). A change in contour height or an object causing a single isolated pulse is acceptable provided that the feature or the object causing the pulse is less than 3 metres (10ft) in height/depth and the distance between the leading and the final edges of the feature or object is less than 15m (50ft) measured parallel to the runway centreline. (c). A single step change in height caused by a feature or object can be accepted provided the change does not exceed 1m (3ft). (d). There should be no features or objects which could cause repetitive changes in radio altimeter height. Since the effect of terrain profile irregularities on landing performance varies with the characteristics of an automatic landing system, special account will need to be taken in the safety assessment of runways whose approach terrain characteristics do not satisfy conditions (a) to (d) above.

ILS critical areas	An area of defined dimensions around the localiser and glide path antennas where vehicles, including aircraft, are excluded during all ILS operations. The critical area is protected because the presence of vehicles and/or aircraft inside its boundaries will cause unacceptable disturbance to the ILS signal in space.
ILS sensitive areas	An area extending beyond the critical area where the parking and/or movements of vehicles, including aircraft, are controlled, to prevent the possibility of unacceptable interference to the ILS signal during ILS operations. The sensitive area is protected to provide protection against interference caused by large
Visual Aids	The visual aids comprise standard runway day markings and approach and runway lighting (runway edge lights, threshold lights, runway end lights and in some cases also touch-down zone and/or runway centre line lights). The approach light configurations acceptable are classified and listed in 8.8.2.3 Approach Lighting Systems
Low Visibility Procedures (LVPs)	Procedures applied at an aerodrome for the purpose of ensuring safe operations during Lower than Standard Category I, Other than Standard Category II, Category II and III approaches and Low Visibility Take-Offs. See 8.9.7.1
Runway Visual Range & and Measuring Devices	State-of-the-art technology Transmissometers measure and present the RVR at airports with ‘All Weather Operations’ (AWOPS) capability. The units are mounted at the side of the runway, at each end and mid-way, giving an instantaneous electronic measurement for ATC and hence Flight Crew use.
Aircraft	
Types of Operation Approved	See 8.9.1
Minimum Equipment List (MEL) Requirements	See 8.9.9
Approach Category Status	Any deficiencies in aircraft equipment that affect approach approval status must added to the Aircraft Technical Log defect page until cleared.

Approach Category Status following maintenance	See 8.9.3/8.9.4./8.9.5 as applicable
Maintenance Requirements and Procedures	Crew will ensure that at arrival at the aircraft, the Maintenance Log does not include any 'ADDs' that might preclude the anticipate approach category equipment requirements.
AWOPS Terminology & Definitions	
Aircraft Category	See 8.8.1.1

Cloud Base/ Ceiling	See 8.12.4.1
Category II (CAT II) operation	A Category II (CAT II) means a precision instrument approach and landing operation using ILS or MLS with: DH below 200 ft but not lower than 100 ft; and RVR of not less than 300. Super Legacy XP Limited is not approved for Cat II Operations.
Decision Height (DH)	A specified altitude/height in the precision approach at which a missed approach must be initiated if the required visual reference to continue the approach has not been established. Notes: Decision altitude (DA) is referenced to mean sea level (MSL) and decision height (DH) is referenced to the threshold elevation. The Required Visual Reference means that section of the visual aids or of the approach area which has to be in view for sufficient time so the pilot is able to make an assessment of the aircraft's position and rate of change of position, in relation to the desired flight path.
Enhanced Vision System (EVS)	An electronic means of displaying a real-time image of the external scene, through the use of imaging sensors.
Fail-Passive Flight Control System (CAT III only)	A flight control system is fail-passive if, in the event of a failure, there is no significant out-of-trim condition or deviation of flight path or attitude but the landing will not be completed in automatic mode. For a fail-passive automatic flight control system the pilot assumes control of the aircraft after a failure. Not applicable to Super Legacy XP Limited

Fail-Operational Flight Control System (CAT III only)	A flight control system is fail-operational if, in the event of a failure below alert height, the approach, flare and landing can be completed automatically. In the event of a failure, the automatic landing system will operate as a fail-passive system. Not applicable to Super Legacy XP Limited
Final Approach	That part of an instrument approach procedure which commences at the specified final approach fix or point, or where such a fix or point is not specified: at the end of the last procedure turn, base turn or inbound turn of a racetrack procedure, if specified; or at the point of interception of the last track specified in the approach procedure; and ends at a point in the vicinity of an aerodrome from which a landing can be made; or a missed approach procedure is initiated.
Flight Control System	A system which includes an automatic landing system and/or a hybrid landing system. Not applicable to Super Legacy XP Limited
Head-up display (HUD)	A display system which presents flight information into the pilot's forward external field of view and which does not significantly restrict the external view. Not applicable to Super Legacy XP Limited.
Low Visibility Procedures (LVP)	(LVP) means procedures applied at an aerodrome for the purpose of ensuring safe operations during Category II and EVS approaches and low visibility take-offs. LVP apply during Category II and Low Visibility Take-Offs when the cloud ceiling is 200ft or lower or the RVR has dropped to 600m or less. See also 8.9.7.1

Low Visibility Take-Off (LVTO)	A take-off where the Runway Visual Range (RVR) is less than 400m. See 8.9.2
Lower than standard category I (LTS CAT I) operation	Means a category I instrument approach and landing operation using category I DH, with an RVR lower than would normally be associated with the applicable DH but not lower than 400 m. Not applicable to Super Legacy XP Limited

Obstacle Clearance Altitude/Height (OCA(H))	The lowest height above the elevation of the relevant runway threshold used in establishing compliance with appropriate obstacle clearance criteria when calculating AOM. See 8.8.1.4
Obstacle Clearance Limit (OCL)	Published height for certain aerodromes used when calculating Aerodrome Operating Minima where OCH and OCA is not available
Precision Approach and Landing Operation	An instrument approach and landing using precision azimuth and glide path guidance with minima as determined by the category of operation.
Required Visual Reference	The range over which the pilot of an aircraft on the centreline of a runway can see the runway surface markings or the lights delineating the runway or identifying its centreline. When the Meteorological Visibility is below 1500m, RVR is reported instead; in metres rounded down to: a. the nearest 25 metres for RVR below 400m b the nearest 50 metres for RVR between 400m and 800m. c. the nearest 100 metres for RVR above 800m See 8.8.7.
Reported RVR	The RVR communicated to the Commander of an aircraft, by or on behalf of the person in charge at the aerodrome. See 8.12.4.1.

8.9.1 Approval

Super Legacy XP Limited aircraft have approval for

Type of Approval/Authorisation	Approved
Low Visibility Take-Off (LVTO) Operation	No
Lower than Standard (CAT I) Operation	No
Standard Category II (CAT II) Operation	No
Approach Operation Utilising Enhanced Vision Systems (EVS) With Reduced RVR	No

8.9.2 Low Visibility Take-Off (LVTO)

All take-offs with an RVR less than 400m are considered LVTOs. LVTO minima are determined by the facilities at the aerodrome in terms of the runway lighting system and scope of the RVR measurement equipment.

For a low visibility take-off (LVTO) the following provisions apply:

Low Visibility Procedures are in force;

Flight Crew are trained in accordance with Part D

The Operating minima for LVTO will be shown on the Jeppesen Aerodrome Chart for any aerodrome where such take-offs are available. The take-off minima may not be less than those given in the Table below:

LVTO RVR vs. facilities	
Facilities	**RVR (m)**
Nil - Day Only	500
Day: runway edge lights and runway centre line markings Night: runway edge lights and runway end lights or runway centre line lights and runway end lights	300
Runway edge lights and runway centre line lights	200
Runway edge lights and runway centre line lights with Multiple RVR readings for TDZ, MID and Rollout (***)	150
High intensity runway centre line lights spaced 15 m or less and high intensity edge lights spaced 60 m or less are in operation with Multiple RVR readings for TDZ, MID and Rollout; and a 90m visual segment is available from the cockpit at the start of the take-off run(***)	125

* The reported RVR value representative of the initial part of the take-off run can be replaced by pilot assessment, but a take-off is not permitted if the reported RVR is less than that assessed by the flight crew

*** The required RVR value to be achieved for all relevant RVRs.

TDZ: touchdown zone, equivalent to the initial part of the take-off run

MID: midpoint

8.9.3 LTS CAT I

Not Applicable.

8.9.4 CAT II

Not Applicable

8.9.5 Enhanced Vision System (EVS)

Not Applicable

8.9.6 Aerodrome Requirements

Super Legacy XP Limited shall not use an aerodrome for LVOs below a visibility of 800 m unless the aerodrome has been approved for such operations by the State of the aerodrome; and low visibility procedures (LVP) have been established.

The Pilot in Command shall ensure that they adhere to the published requirements of LVP at the aerodrome. Appropriate LVPs are advised by air traffic services (ATS).

For runways with irregular pre-threshold terrain or other foreseeable or known deficiencies, each aircraft type/runway combination shall be verified by operations in CAT I or better conditions, prior to commencing LTS CAT I operations.

8.9.7 Operating procedures – General

During LVO all PEDs must be switched off and during take-off and landing.

Crew will be aware of the operating limitations resulting from airworthiness certification.

8.9.7.1 Low Visibility Procedures

a. Prior to commencing a LVTO the Pilot in Command must satisfy himself that:

b. A suitable take-off alternate aerodrome is available according to the Departure Minima (RVR/lighting) requirements in Section 2.1.5.4;

c. The flight crewmembers are qualified for Low Visibility Operations in accordance with Part D 2.16

d. Low Visibility Procedures (LVP) are in force.

When the reported visibility is below that required for take-off and RVR is not reported, or neither reported visibility nor RVR is available, then a take-off may only be commenced if the Pilot in Command (PIC) can determine that the RVR along the take-off runway is equal to, or better than the required minimum. This may require a runway visit to assess the actual visibility.

The required RVR values for take-off must be available and above minimum for a take-off runway part of at least the length of the Accelerate Stop Distance (ASD). The RVR for the initial part of the take-off run may be based on pilot's assessment, provided that a take-off is not permitted if the reported RVR is less than that assessed by the Flight crew. The touchdown zone TDZ RVR shall always be controlling. If reported and relevant, the MID and STP RVR values are also controlling

The handling pilot will be the Left Hand Seat pilot for all LVTO.

LVP are ground procedures at the aerodrome designed to prevent the entry of ground vehicles and taxiing aircraft into areas protected for take-off and landing. In addition they protect the sensitive areas of the aerodromes ILS or MLS transmissions and regulate the flow of air traffic on the approach. ATC at the aerodrome will ensure these procedures have been implemented by the time. Although local criteria may be higher, LVP will be in force when:

a. The cloud ceiling is 200 ft or less; or

b. The RVR has dropped to 600m or less.

At aerodromes which are not approved for Cat II or III operations, the following is considered to be sufficient to fulfil the requirements relating Low Visibility Procedures (LVP) for take-off:

a. The Pilot in Command shall make every reasonable effort to verify that LVP are established at aerodromes where operations with RVR less than 400m may take place.

b. At such aerodromes it is accepted that these procedures ensure that only one aeroplane at a time is allowed on the manoeuvring area and that vehicle traffic on the manoeuvring area is controlled and restricted to the absolute minimum.

Before leaving the parking position and when preparing for a landing, the PIC will brief the highlights concerning the expected taxi route.

Close communication between the pilots is essential whilst taxiing. The PIC will concentrate on steering the aeroplane, while the SIC concentrates on navigation, giving advice from the taxi chart including heading information and visual cues to be expected. If there is any doubt about the aeroplane’s position, the aeroplane shall be stopped immediately and ATC or apron control contacted for assistance.

Surface markings are to be strictly followed. Lighted stop bars must not be crossed. To be visible to other traffic, the use of the aeroplane’s external lights is recommended unless the pilots’ own vision is impaired. Bright lights may disturb other traffic when in close proximity.

8.9.7.2 Low Visibility Take-Off Procedures

8.9.7.2.1 Before Entering the Runway

The crew will ensure that their seat is adjusted to the correct eye position, which is especially important in Low Visibility Operations.

Before entering the runway, consider the runway state and braking action and check that the appropriate RVRs are above minima before crossing the holding point stop bar.

TCAS may be used to enhance situational awareness of the approach and runway environment, but must not be allowed to distract the crew from vigilant monitoring of the ATC frequency in use.

8.9.7.2.2 Runway Line-Up

As the aeroplane is lined up on the runway, confirm that it is aligned on the runway centreline lights and not on the edge lights. The ILS or MLS localiser will be used to confirm the correct runway (for parallels) and centreline.

Check that the number of visible centreline lights is consistent with the reported TDZ RVR. The flight crew's visual assessment of the RVR immediately before take-off will override the reported RVR if, in their view, the RVR as assessed is less than that reported. Crew will ensure that minima has not been effected by changes in the status of the ground installations and airborne equipment;

CAUTION: Take-off is NOT permitted if the reported RVR is LESS than that assessed by the flight crew. The touchdown zone TDZ RVR shall always be controlling. If reported and relevant, the MID and STP RVR values are also controlling

8.9.7.2.3 Normal Take-Off

The centreline lights and/or markings are to be used as the primary source of directional guidance and this becomes easier with the streaming effect as speed increases. The noise of the nose wheels running over the centreline lights provides confirmation that the take-off run is straight.

8.9.7.2.4 Rejected Take-off

In conditions of reduced visibility, the inherent swing that results from an engine failure can cause problems with directional control that is referenced to the centreline lights. This can become more of a problem as the streaming effect of the lights reduces and is eventually lost as speed reduces. Early corrections to maintain the centreline are required.

Apply full braking to ensure that the aeroplane comes to a stop before the end of the runway. For runways with colour coded lighting, at 900m remaining the white centreline lights change to alternating red/white and at 300m remaining the lights change to all red.

Determining the aeroplane position after stopping can be difficult and the emergency services, if required, may have problems locating the aeroplane, so the maximum use of aeroplane lights can be beneficial.

8.9.8 Training

Super Legacy XP Limited shall ensure that each flight crew member complies with the training and checking requirements prescribed in Part D 2.16 and is qualified in accordance with the standards prescribed.

The PIC, and the SIC have been checked within the preceding 12 months in an approved flight simulator device by the Lead Captain, a company check pilot or an approved examiner, in accordance with State civil aviation regulations, and have been certified as competent to conduct. LVTO Operations .

8.9.9 Maintenance & Minimum equipment

The PIC shall be satisfied that the status of the aircraft and of the relevant airborne systems are appropriate for the specific operation to be conducted.

8.10 Noise Abatement Procedures

All aircraft shall be operated so as to adhere to all published noise abatement procedures within the safe operating limitations of the aircraft. Non-standard aircraft configurations, such as late gear selection, will not be adopted to meet published noise abatement procedures.

8.10.2 and 8.10.3 describe two different Noise Abatement Departure Procedures NADP 1 (Close in Noise Reduction) and NADP 2 (Distant Noise Reduction). NADP 1 shall be used whenever possible. Only if the aerodrome requires a different Noise Abatement Departure Procedure than described in 8.10.2, NADP 2 can be used instead. The preferred departure procedure of the aerodrome can be found in the Jeppesen Airway Manual. Both noise abatement departure procedure climb profiles only have one sequence of actions.

8.10.1 Policy

Noise abatement procedures shall be used to protect the environment as much as possible, however, safety has always the first priority. Further information is contained in the Aircraft Flight Manual for each aircraft.

8.10.2 Noise Abatement Departure Procedure One (NADP 1)

This procedure involves a power reduction at or above the prescribed minimum altitude and the delay of flap/slat retraction until the prescribed maximum altitude is attained. At the prescribed maximum altitude, accelerate and retract flaps/slats on schedule while maintaining a positive rate of climb, and complete the transition to normal enroute climb speed.

a. The noise abatement procedure is not to be initiated at less than 800 ft above aerodrome elevation.

b. The initial climbing speed to the noise abatement initiation point shall not be less than V2 + 10kts.

c. On reaching an altitude at or above 800 ft above aerodrome elevation, adjust and maintain engine power/thrust in accordance with the noise abatement power/thrust schedule provided in the aircraft operating manual.

d. Maintain a climb speed of V2 + 10 to 20kts with flaps (/slats if applicable) in the take-off configuration.

e. at no more than an altitude equivalent to 3 000 ft above aerodrome elevation, while Maintaining a positive rate of climb, accelerate and retract flaps/slats on schedule.

f. At 3000 ft above aerodrome elevation, accelerate to en-route climb speed.

8.10.3 Noise Abatement Departure Procedure Two (NADP 2)

This procedure involves initiation of flap/slat retraction on reaching the minimum prescribed altitude. The flaps/slats are to be retracted on schedule while maintaining a positive rate of climb. The power reduction is to be performed with the initiation of the first flap/slat retraction or when the zero flap/slat configuration is attained. At the prescribed altitude, complete the transition to normal en-route climb procedures.

a. The noise abatement procedure is not to be initiated at less than 800 ft above aerodrome elevation.

b. The initial climbing speed to the noise abatement initiation point is V2 + 10 to 20kts.

c. on reaching an altitude equivalent to at least 800 ft above aerodrome elevation, decrease aircraft body angle/angle of pitch while maintaining a positive rate of climb, accelerate towards Flap Retract Speed (VFZ) and either:

d. Reduce power with the initiation of the first flap/slat retraction; or

e. Reduce power after flap/slat retraction.

f. Maintain a positive rate of climb, and accelerate to and maintain a climb speed of VFZ + 10 to 20kts to 3000 ft above aerodrome elevation.

g. On reaching 3000 ft above aerodrome elevation, transition to normal en-route climb speed.

8.11 Aircraft Equipment

For aircraft being operated under European air traffic control, the applicable airspace requirements include the Single European Sky legislation.

a. Instruments and equipment required must be approved in accordance with the applicable airworthiness requirements if they are:

   i. Used by the flight crew to control the flight path;

ii. Used to comply with the applicable airspace requirements of the Single European Sky legislation;

iii. Used to comply with the Radio Communication Requirements below in Section 8.11.2 Note 5; or

iv. Installed in the Aircraft.

b. The following items, do not need an equipment approval:

i. Spare fuses (replaceable fuse, not automatic circuit breaker);
ii. Independent portable lights;
iii. An accurate time piece;
iv. Chart holder;
v. First-aid kits;
vi. Survival and signaling equipment;
vii. Sea anchor and equipment for mooring; and
viii. Child restraint device.

c. Instruments and equipment not required as well as any other equipment which is not required by other applicable Annexes, but is carried on a flight, shall comply with the following:

i. The information provided by these instruments, equipment or accessories shall not be used by the flight crew to comply any legal requirements.
ii. The instruments and equipment shall not affect the airworthiness of the Aircraft, even in the case of failures or malfunction.

d. Instruments and equipment shall be readily operable or accessible from the station where the flight crew member that needs to use it is seated. Whenever a single instrument is required in an Aircraft operated in a multi-crew environment, the instrument needs to be visible from each flight crew station.

e. Those instruments that are used by a flight crew member must be so arranged as to permit the flight crew member to see the indications readily from his/her station, with the minimum practicable deviation from the position and line of vision which he/she normally assumes when looking forward along the flight path.

f. All required emergency equipment must be easily accessible for immediate use.

g. Aircraft must be equipped with spare electrical fuses, of the ratings required for complete circuit protection, for replacement of those fuses that are allowed to be replaced in flight. A spare electrical fuse means a replaceable fuse in the flight crew compartment, not an automatic circuit breaker or circuit breakers in the electric compartments.

h. Aircraft is equipped with a safety harness for every pilot's seat and for any seat situated alongside a pilot's seat, or with the permission of the Bailiwick of Guernsey Regulatory Authority a safety belt with one diagonal shoulder strap which permission may be granted if the Bailiwick of Guernsey Regulatory Authority is satisfied that it is not reasonably practicable to fit a safety harness. For every seat in use a safety belt with or without one diagonal shoulder strap or a safety harness.

8.11.1 Lighting

Aircraft operated at night must be equipped with:

a. An anti-collision light system;

b. Navigation/position lights;

c. A landing light (with dual filaments or two single filaments);

d. Lighting supplied from the aircraft's electrical system to provide adequate illumination for all instruments and equipment essential to the safe operation of the Aircraft;

e. Lighting supplied from the aircraft's electrical system to provide illumination in all passenger compartments; and

f. An independent portable light for each crew member station.

8.11.2 Minimum Equipment Requirements

The Minimum Equipment Requirements are met by Aircraft Certification and as per the Approved Minimum Equipment List. In the case of the Pilatus PC-12, the requirements are met by a combination of instruments and parameters on electronic displays. The information so available to each required pilot will not be less than that required in the applicable operational requirements, and the equivalent safety of the installation has been approved during type certification of the Aircraft for the intended type of operation.

A list is available in Section 2 of the AFM

a. Aircraft shall have sufficient navigation equipment to ensure that, in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment shall allow safe navigation in accordance with (a), or an appropriate contingency action, to be completed safely.

b. Aircraft operated on flights in which it is intended to land in IMC must be equipped with suitable equipment capable of providing guidance to a point from which a visual landing can be performed. This equipment must be capable of providing such guidance for each aerodrome at which it is intended to land in IMC and for any designated alternate aerodromes.

8.11.3 Autopilot

The Pilatus PC-12 is equipped with an autopilot with at least altitude hold and heading mode. The aircraft also has an altitude alerter capable of alerting the Crew on approaching a preselected altitude in either ascent or descent, by a sequence of visual and aural signals.

8.11.4 GPWS or TAWS

All turbine-powered Aircraft with a Max Certified Take-Off Weight of more than 5 700 kg or a passenger seating configuration of more than 9 persons must be equipped with a TAWS.

The Pilatus PC-12 has a Terrain Awareness Warning System (TAWS) which meets the requirements of the European technical standards order (ETSO).

The TAWS provides a warning to the flight crew for excessive downwards glideslope deviation should apply to all final approach glideslopes with angular vertical navigation (VNAV) guidance, whether provided by the instrument landing system (ILS), microwave landing system (MLS), satellite-based augmentation system approach procedure with vertical guidance (SBAS APV (localiser performance with vertical guidance approach LPV)), ground-based augmentation system (GBAS (GPS landing system, GLS)) or any other systems providing similar guidance. The same requirement does not apply to systems providing vertical guidance based on barometric VNAV.

Ground Proximity Warning Systems (GPWS) or Terrain Avoidance Warning Systems (TAWS) must be checked in accordance with the manufacturer's instructions before the first flight of the day.

Flight crews will immediately respond to a GPWS or TAWS warning when terrain proximity cannot be instantly verified by visual observation. Maximum available thrust will be applied and the aircraft rotated to achieve best angle of climb without delay in accordance with the aircraft manufacturer's
recommended procedures.

The GPWS/TAWS shall not be deactivated unless there is an obvious electrical malfunction

Crews receive training in accordance with Part D 2.12 TAWS Training

8.11.5 Cockpit Voice Recorder (CVR)

The Pilatus PC-12 is not fitted with a CVR

8.11.5.1 Use of CVR Recordings for Maintaining of Improving Safety

The Pilatus PC-12 is not fitted with a CVR

8.11.6 Flight Data Recorder (FDR)

8.11.6.1 Flight data recorder

The Pilatus PC-12 is not fitted with FDR

8.11.6.2 Flight data and cockpit voice combination recorder

The Pilatus PC-12 is not fitted with FDR

8.11.6.3 Operational Inspections and Checks of Recordings

The Pilatus PC-12 is not fitted with FDR

8.11.6.4 Inspection of the Flight Recorders Recordings

The Pilatus PC-12 is not fitted with FDR

8.11.6.5 Explanation of Terms

The Pilatus PC-12 is not fitted with FDR

8.11.7 ACAS II

The Pilatus PC-12 is equipped with ACAS II TCAS7.1. The ACAS system is checked in accordance with the manufacturer's instructions before the first flight of the day. Compliance with Traffic Advisories (TAs) and Resolutions Advisories (RAs) is mandatory unless there is clear evidence that in complying the aircraft will be placed in collision with the ground or another object.

The ACAS shall not be deactivated unless there is an obvious electrical malfunction. Crews will be trained in accordance with Part D 2.13 ACAS Training.

8.11.8 Protective Breathing Equipment

The Pilatus PC-12 does not carry portable breathing equipment. In the event of smoke, goggles and oxygen mask shall be donned at the first sign of smoke in the aircraft, before any other action is taken to identify or isolate the source of the smoke.

8.11.9 Navigation and Communication Equipment

Navigation and communication equipment shall be checked in accordance with the Aircraft Flight Manual

8.11.10 Intercom & Headsets

The Pilatus PC-12 is equipped with a flight crew intercom system, including headsets and microphones for use by all flight crew members. The Pilatus PC-12 is equipped with a transmit button on the manual pitch and roll control for each required flight crew member.

The term 'headset' includes any aviation helmet incorporating headphones and microphone worn by a flight crew member.

a. A headset consists of a communication device that includes two earphones to receive and a microphone to transmit audio signals to the aircraft's communication system. To comply with the minimum performance requirements, the earphones and microphone shall match the communication system's characteristics and the flight crew compartment environment. The headset shall be adequately adjustable in order to fit the flight crew's head. Headset boom microphones shall be of the noise cancelling type.

b. If the intention is to utilise noise cancelling earphones, Super Legacy XP Limited shall ensure that the earphones do not attenuate any aural warnings or sounds necessary for alerting the flight crew on matters related to the safe operation of the aircraft.

c. Each flight crew member required to be on duty in the flight crew compartment shall wear a headset with boom microphone or equivalent. The headset shall be used as the primary device for voice communications with ATS:

    i. When on the ground:
        i. when receiving the ATC departure clearance via voice communication; and
        ii. when engines are running;

    ii. When in flight:
        i. below transition altitude; or
        ii. 10 000 ft, whichever is higher; and

    iii. Whenever deemed necessary by the pilot in command.

d. In the conditions of (c), the boom microphone or equivalent shall be in a position that permits its use for two-way radio communications.

8.11.11 Transponders

Aircraft are equipped with a pressure altitude reporting secondary surveillance radar (SSR) transponder. The secondary surveillance radar (SSR) transponders of aircrafts that are operated under European air traffic control do comply with any applicable Single European Sky legislation and operate in Mode A, C, S, Enhanced & Diversity.

8.11.12 Electronic Flight Bags (EFB's)

8.11.12.1 General

An electronic display system, intended primarily for flight deck or cabin use. EFB devices can display a variety of aviation data or perform basic calculations (e.g., performance data, fuel calculations, etc.). In the past, some of these functions were traditionally accomplished by using paper references or they were based on data provided to the flight crew by an operator's 'flight dispatch' organisation. The scope of the EFB system functionality may also include various other hosted databases and applications.

The EFB class, and the approved software can be found in the EFB approval document in the aircraft documents folder and laptop bag.

Class 1 Approved	Yes	iPad
Class 2 Approved	No	N/A
Class 3 Approved	Yes	Garmin GTN 750

Super Legacy XP Limited pilot crewmembers may replace traditional on-board paper-based aeronautical information with an approved Electronic Flight Bag (EFB) system. Unless otherwise authorised by the EFB administrator, the aircrew will have current paper High and Low Altitude Enroute charts on board the aircraft for all flights.

There are 3 hardware classes of EFB systems. Crewmembers shall become familiar with the class of EFB utilised. If the equipment should become inoperative, procedures may vary depending on if the EFB is considered 'baggage' or loose equipment' or if it has been 'installed' in the aircraft.

Class 1. These EFBs are portable, commercial-off-the-shelf, devices. Class 1 EFBs are a portable part of the pilot's flight kit and are not attached to the aircraft. Class 1 EFBs that have Type B applications must be secured (e.g. with a kneepad) and viewable during critical phases of flight and must not interfere with flight control movement.

Class 1 EFB units are not required to be deferred per the MEL, however the operational guidance contained in this section still applies. In the absence of 2 authorised and operative EFB units, paper aeronautical data will be utilised. This information may be printed prior to dispatch (see related guidance further in this section).

Class 2. These EFBs are typically attached to the aircraft by a mounting device, and may be connected to a data source, a hard-wired power source, or an installed antenna. Class

2 EFB hardware must be accessible to the flight crew and must be removable without the use of tools. Any EFB hardware not portable, located on the flight deck, or not accessible by the flight crew is typically certified installation via TC, amended TC, or STC.

In the event that one of the EFB units becomes inoperative, it is required to be deferred per the MEL. In the absence of 2 authorised and operative EFB units, paper aeronautical data will be utilised. This information may be printed prior to dispatch (see related guidance further in this section).

NOTE: In order to be considered portable, tools must not be required to remove an EFB from the flight deck and a flight crewmember must be able to perform the task. Portable EFBs must be located on the flight deck and controlled by the flight crew during all flight operations.

Class 3. These EFBs employing any type software application must be approved by TC, amended TC, STC. Special operational suitability requirements exist of Class 3 EFBs, and are addressed in the authorisation application process. If elements of the Class 3 system become inoperative, it is required to be deferred per the approved aircraft MEL. In the absence of the required electronic charts, paper aeronautical data will be utilised. This information may be printed prior to dispatch (see related guidance further in this section pertaining to guidance for those crewmembers printing data prior to dispatch).

8.11.12.2 Policy

The aircraft is equipped with a Class I iPad system. The aircraft is equipped with a Garmin GTN 750 system. All EFB systems shall be used if available.

Any access to the internet is strictly as directed by the EFB administrator.

If the EFB is used for calculations, the second pilot has to verify independently if the calculated values are possible in order to detect possible system failures or input errors.

The crewmembers shall check for the proper operation and stability of the iPad and chart software prior to flight. Ensure appropriate paper en route charts are available for the route to be flown.

Minimum equipment list administrative procedures do not apply to inoperative portable devices, however company procedures require a pre-flight review to determine that any installed elements have been deferred (if required) and that any electronic information that is not available is either not required, or is available in an appropriate format, with appropriate redundancy.

There are two simple ways you can preserve battery life — no matter how you use your device: adjust your screen brightness and switch to Airplane Mode (disable WIFI). Swipe up to open Control Centre and tap the Airplane mode icon. Note that you cannot make or receive calls while in Airplane mode.

Dim the screen or turn on Auto-Brightness to extend battery life. To dim, swipe up from the bottom of any screen to open Control Centre and drag the Brightness slider to the left.

Auto-Brightness adjusts your screen to lighting conditions automatically. To activate it, go to Settings
> Display & Brightness and set Auto-Brightness to On.

Introduced with iOS 9, Low Power Mode is an easy way to extend the battery life of your iPad when it starts to get low. You can enable it by going to Settings > Battery. Low Power Mode reduces display brightness, optimises device performance, and minimises system animations. Apps including Mail will not download content in the background, and features like AirDrop, iCloud sync, and Continuity will be disabled. When your iPad charges up again, Low Power Mode automatically switches off.

Make sure your computer is plugged in and powered on when you're using it to charge your iOS device via USB. If your device is connected to a computer that's turned off or is in sleep or standby mode, your device's battery may drain. Note that iPad 3G cannot be charged with a FireWire power adapter or FireWire-based car charger.

1. Pilots are responsible to ensure that any other installed apps or custom settings do not affect the intended function of authorised applications.

2. 'Jailbreaking', or any modification of the hardware, software or installed apps is prohibited.

If an EFB user discovers an anomaly that affects the operation of the device hardware or software, the user must report it immediately to the EFB administrator.

8.11.12.3 Procedures

8.11.12.3.1 Operations Procedures

Normal Cockpit Procedures

a. The EFBs, accessories, and other aeronautical information, such as High, Low and Area Enroute charts must be immediately available to crewmembers during flight in a central, secure location accessible to the crew without either pilot leaving their station.

b. The Class I EFB in use must be secured to kneepad and viewable during critical phases of flight.

c. The PIC will ensure the current software revision is loaded on the EFBs intended for use prior to flight.

d. Ensure that the required batteries are fully charged prior to departure. Ensure the spare battery if required, is fully charged prior to flight and stored in a location accessible to either pilot while seated on the flight deck.

e. Perform an operational check of EFBs and intended functions prior to departure.

f. Reference the 'Phase of Flight Checklist' for EFB standard operating procedures.

INOP EFB Contingency Procedures / Emergency Procedures

In the event of an en-route change of intended landing airport, either by passenger request, weather or maintenance divert, emergency reaction, or other initiating event, the following procedures will apply when paper-based charts are not available:

a. Should the EFB in use fail, or otherwise prove insufficient for the intended operations, the second authorised chart source will be utilised for the intended divert flight operations.

b. If all authorised chart sources fail, and any on-board fax capability fail, utilise the 'Back-Up Approach Procedures - Voice Communication Checklist', to obtain required information to complete the approach to the diversion airport.

c. If an EFB fails between legs of a trip –

   i. Observe MEL deferral procedures, if applicable (see previous guidance related to EFB installation and hardware class).
   ii. If there is only one operational EFB on board the aircraft, the trip may be continued provided the required redundancy for any Type B application is obtained prior to departure. Electronic terminal charts are Type B applications, and as such must be printed or obtained prior to departure. Similarly, redundancy or equivalent printed paper must be provided for any other critical application or electronic manual.
   iii. Repair / exchange the EFB as soon as possible, or as directed by the aircraft MEL.

Post-Flight Procedures

a. Comply with EFB storage and security procedures, below.

b. Post any new revisions upon receipt.

c. Report and record any discrepancies with the EFB hardware or software as previously described.

EFB Storage and Security Procedures

a. The EFBs will be stored between flights either on board the aircraft or in a central, secure location accessible to assigned pilots. Pilot crewmembers are responsible for the security of the EFBs for the duration of assigned trip.

b. Ensure that EFB computers are not exposed to temperatures less than 0 Deg C (32 degrees F) or greater than 38 degrees C (100 degrees F), or as directed by the EFB administrator.

Unauthorised Use of Primary EFB

a. To preclude contamination, an EFB will not be utilised for personal use.

b. To prevent contamination, the EFB will not be connected to the internet, nor will any data be downloaded onto the internal hard drive, unless otherwise directed by the EFB administrator.

Unintended, Contingent, or Emergency Use Reporting

Unintended, Contingent, or Emergency Use Reporting – Any equipment or software problems or failures, any electronic interference with or by aircraft or other systems, or any other type of unusual event shall be reported using the av8sms safety management system. There is a specific form for PED interference.

Training will be accomplished in accordance with the Super Legacy XP Limited approved EFB Training Program.

Using an EFB to Print Airport Information:

The Operations Manager authorises crews to utilise an EFB to print the necessary airport information prior to dispatch. However, the following Super Legacy XP Limited requirements, limitations and recommendations apply:

a. A single authorised EFB may be used. Print the required airport information prior to dispatch. Two devices are recommended, but not required.

b. The required printed information includes, but is not limited to: departure, arrival, approach, and alternate airport information, and the necessary airport surface diagrams. Information pertaining to potential diversionary airports along the route of flight may be printed at the PIC's discretion provided that the EFB is readily available to the crew.

c. Published current High and Low altitude en route charts are required.

8.12.11.3.2 EFB Cockpit Procedures Checklists

Phase of Flight Checklist

EFB Pre-flight Checks

-Battery Life: Adequate for duration of flight to primary and alternate destinations. Spare batteries or charging capability must be available as required.

-Software Function: Check proper operation of intended applications.

-System Settings: Appropriate for the intended function, including but not limited to:

AUTOLOCK________________ NEVER
PASSCODE LOCK__________ OFF
DATE & TIME______________ _CORRECT
BRIGHTNESS/DIMMING____ CHECK
DATABASE________________CURRENT (update database only on the ground)
BACKGROUND APPS________CLOSE BACKGROUND APPS BEFORE FLIGHT

Airplane Mode ON (i.e. WIFI OFF)

EFB Operations per Phase of Flight

Ground Operation

- PNF display and monitor taxi progress on the Airport Diagram

- PNF will select and display the appropriate chart for the procedure to be flown.

__ Take-off Operation: From 'Line Up' on the runway until completion of the second segment, the

EFB(s) shall be stored powered-on and the appropriate chart displayed.

__ Terminal Departure Operation: PNF display Departure Procedure and monitor progress

__ Enroute Operation: EFB(s) may remain stored. Flight crews shall select and review the anticipated arrival and approach procedures for the destination airport, leaving the next needed chart displayed. Above 10,000 feet, only one EFB will be on at any one time unless both units have been decompression tested while operational.

__ Terminal Arrival Operation: PNF display and monitor the Arrival Procedure on the primary EFB.

__ Approach Procedure: PNF display Approach Procedure to be flown on primary EFB prior to approach clearance and approach progress monitored by the PNF. Consideration will be given to displaying the Airport Diagram on the Secondary EFB. If an instrument approach procedure is not available for the runway in use, the Airport Diagram will be displayed on the primary EFB.

__ Landing Operation: Once landing is assured and / or prior to 400 feet AGL, the EFB(s) shall be secured with power on and the appropriate chart displayed.
__ After Landing: Follow the procedure in the Ground Operation section above.

__ EFB system Checks: EFB will be powered up and all primary EFB programs will be started and run simultaneous to check for error messages. If any messages occur, they should be noted on the flight and maintenance log and their resolution prior to use in flight.

__ Abnormal Operation: Should the primary and secondary EFB utilise the 'Back-Up Approach Procedures – Voice Communication Checklist' below:

Back-Up Approach Procedures – Voice Communication Checklist (To be used in the event of loss of all electronic terminal chart information)

Back-Up Approach Procedures – Voice Communication Checklist	
Airport:	
Active Runway	
Runway Length & Width	
Approach Procedure	
ATIS Frequency	
Weather Required for Approach Category	
Minimum Sector Altitude and Bearing to Field	
Approach Control Frequency	
Tower Frequency	
Ground Frequency	
Navigation Frequency Approach Procedures	
Additional Navigation Frequency & ID / Posit	
Additional Navigation Frequency & ID / Posit	
Final Approach Course	
Minimum Altitude @ Location	
Glide Slope Intercept Altitude	
Step-down Altitude / Distance	
Step-down Altitude / Distance	
MDA	

Missed Approach Point DME	
Missed Approach Point Timing @ Approach Airspeed	
Airport Elevation	
Runway Elevation	
Missed Approach Procedures:	
Notes:	

8.11.12.4 Update

a. Software revisions are to be performed in accordance with the software provider's recommended practices. An operational check of EFB hardware and software function will be performed after each update.

b. Annotate the software revision on the 'Electronic Flight Bag Record of Revisions' and retain this form in the aircraft.

8.11.13 Weather Radar

The Pilatus PC-12 is equipped with airborne weather detecting equipment which must be serviceable when operated at night or in IMC in areas where thunderstorms or other potentially hazardous weather conditions, regarded as detectable with airborne weather detecting equipment, may be expected to exist along the route.

8.11.14 Additional equipment for operations in Icing Conditions at Night

a. Aircraft operated in expected or actual icing conditions at night must be equipped with a means to illuminate or detect the formation of ice.

b. The means to illuminate the formation of ice shall not cause glare or reflection that would handicap flight crew members in the performance of their duties.

8.11.15 Datalink

The Pilatus PC-12 is not equipped with Datalink.

8.11.16 Fire Extinguishers

The Pilatus PC-12 is equipped with one fire extinguishers.

8.11.17 Crash Axe

The Pilatus PC-12 is equipped with a crash axes and crowbars which is not be visible to passengers.

8.11.18 Break-In Markings

Not Applicable.

8.11.19 Emergency Locator Transmitter (ELT)

The Pilatus PC-12 is equipped an Automatic fixed ELT which is capable of transmitting simultaneously on 121.5 MHz and 406 MHz which has been registered with the national agency responsible for initiating search and rescue. Batteries used in the ELTs are replaced (or recharged, if the battery is rechargeable) when the equipment has been in use for more than 1 cumulative hour, and also when 50 % of their useful life (or for rechargeable, 50 % of their useful life of charge), as established by the equipment manufacturer, has expired. The new expiry date for the replacement (or recharged) battery is clearly marked on the outside of the equipment. The battery useful life (or useful life of charge) requirements of this paragraph do not apply to batteries (such as water-activated batteries) that are essentially unaffected during probable storage intervals.

An Automatic Portable ELT or ELT(AP) may be used to replace one required ELT(S) provided that it meets the ELT(S) requirements. A water-activated ELT(S) is not an ELT(AP).

See OM A 12.7.1. for Emergency Equipment requirements.

8.11.20 Electronic navigation data management

a. Super Legacy XP Limited uses electronic navigation data products that support a navigation application meeting standards of integrity that are adequate for the intended use of the data. The navigation database supplier holds a Type Letter of Acceptance (LoA).

b. When the electronic navigation data products support a navigation application needed for an operation for which Annex V (Part-SPA) to Regulation (EU) No 965/2012 requires an approval, Super Legacy XP Limited has demonstrated to the competent authority that the process applied and the delivered products meet standards of integrity that are adequate for the intended use of the data.

c. Super Legacy XP Limited continuously monitors both the process and the products, either directly or by monitoring the compliance of third party providers.

d. Super Legacy XP Limited ensures the timely distribution and insertion of current and unaltered electronic navigation data to all Aircraft that require it (see section 2.5 Distribution of Operational Information).

8.12 Weather Considerations

8.12.1 Severe or Hazardous Weather

Severe weather constitutes a significant hazard to the safe operation of all aircraft. It is the duty of all flight crewmembers to reduce the danger of severe weather during general operations through an understanding of the basic principles of weather, as well as the employment of all information available to assist in avoiding dangerous situations. In all cases, the Captain will adopt a conservative philosophy regarding operations in areas of severe weather in order to ensure the safe operation of the aircraft.

No flights shall depart into or, if in flight, proceed into an area of *reported* severe turbulence or severe icing. Weather *forecasts* of severe ice or turbulence will be carefully considered and an election to not depart will always be supported. However, the difference between *forecast* and *reported* conditions can vary.

8.12.1.1 Pre-flight Planning

Weather information may be derived from contract or commercial sources, which online flight planning services.

The following information would be used only as a cross-check we might use to make a decision on

A trip that we have not already made a “go” decision on.

Consider all weather information pertinent to the route. Weather information should consist of at least the following when available:

a. Weather Depiction Charts,

b. Radar Summary Charts,

c. Prognosis Charts,

d. High Level Significant Weather Prognosis,

e. Severe Weather Outlook,

f. Pilot Reports

Keep current on enroute weather developments through regular use of the following sources of weather information:

a. Enroute Flight Advisory Service,

b. Transcribed Weather Broadcasts,

c. Scheduled Weather Broadcasts,

d. In-flight Weather Advisories (Sigmets and Airmets),

e. Pilot Weather Reports,

f. Air Route Traffic Control.

8.12.1.2 Weather Reports and Forecasts

Weather reports and forecasts used to conduct RVSM flight operations shall come from one of the following sources:

a. The national Met Office or

b. A met office that conforms to the standards and practices of ICAO conventions. These will be located in the ICAO Regional Air Navigation Plans MET tables or the AIP's of individual states.

8.12.1.3 VFR Operations

For VFR operations the Captain may, if regular reporting is not available, use weather information based on personal observations or on those of other persons competent to supply appropriate observations.

8.12.1.4 IFR Operations

Weather observations made and furnished to pilots to conduct IFR operations at an airport will be observed at the airport where IFR operations are to be conducted. There are many cases where the issuing entity may pass along weather that is not reported from the airport site, but this to be used only for VFR operations.

If in doubt about the validity of the site location, ask the entity or check with the Operations Manager in advance to be able to make a determination of the suitability of the weather report. It may be that another operator, such as commuter, does have Operations Specifications that allow off-site reports under certain conditions. The fact they may be operating legally would not mean we could.

8.12.1.5 FINO

The term FINO is included at the end of a weather report to indicate there is no longer anyone available to make a special observation or to observe the weather has changed since the last scheduled report. Thus, a report with FINO in it cannot be used for IFR operations as it no longer meets the criteria of "current weather." Therefore, the actual weather conditions may not be known.

8.12.1.6 Reporting Hazardous Meteorological Conditions

Whenever a flight encounters a meteorological condition considered hazardous to the safety of other flights, crewmembers shall notify ATC as soon as practical.

Such reports will be made whenever any of the following conditions are encountered or observed:

a. severe turbulence;
b. severe icing;
c. severe mountain wave;
d. thunderstorms, with or without hail, that are obscured, embedded, widespread or in squall lines;
e. heavy dust storm or heavy sandstorm;
f. volcanic ash cloud; and

g. unusual and/or increasing volcanic activity or a volcanic eruption;
h. when other meteorological conditions not listed above, e.g. wind shear, are encountered that, in the opinion of the pilot-in-command, may affect the safety or the efficiency of other aircraft operations, the pilot-in-command will advise the appropriate air traffic services (ATS) unit as soon as practicable.

8.12.2 Ice & Other Contaminants

The PIC shall only commence take-off if the aircraft is clear of any deposit that might adversely affect the performance or controllability of the aircraft, except as permitted under the procedures referred to below and in accordance with the AFM.

The PIC shall only commence a flight or intentionally fly into expected or actual icing conditions if the aircraft is certified and equipped to cope with such conditions as referred to in 2.a.5 of Annex IV to Regulation (EC) No 216/2008.

The PIC shall not commence a flight in or continue a flight into known or expected icing condition where the formation of ice on the aircraft may adversely affect the safety of the flight.

In all cases, the PIC will have the total responsibility in deciding whether or not a flight can operate in conditions of icing. However, it will be noted that aircraft may not operate under the following conditions:

i. When moderate or heavy freezing rain, or heavy freezing drizzle is falling at the airport.
ii. When frost, sticking snow, or ice is coating the wings, control surfaces of the airplane, or is adhering to any other part of the airplane structure.

Aircraft may operate when light freezing rain, light or moderate freezing drizzle, or light or moderate, provided the aircraft is prepared in accordance with the following anti-icing procedures.

8.12.2.1. Ice and other contaminants — Ground Procedures

8.12.2.1.1 Terminology

Terms used in the context of de-icing/anti-icing have the meaning defined in the following subparagraphs.

‘Anti-icing fluid’ includes, but is not limited to, the following:

i. Type 1 fluid if heated to min 60 °C at the nozzle;

ii. Mixture of water and Type I fluid if heated to min 60 °C at the nozzle;

iii. Type II fluid;

iv. Mixture of water and Type II fluid;

v. Type III fluid;

vi. Mixture of water and Type III fluid;

vii. Type IV fluid;

viii. Mixture of water and Type IV fluid.

On uncontaminated aircraft surfaces Type II, III and IV anti-icing fluids are normally applied unheated.

'Clear ice': a coating of ice, generally clear and smooth, but with some air pockets. It forms on exposed objects, the temperatures of which are at, below or slightly above the freezing temperature, by the freezing of super-cooled drizzle, droplets or raindrops.

'Conditions conducive to aircraft icing on the ground' (e.g. freezing fog, freezing precipitation, frost,
rain or high humidity (on cold soaked wings), snow or mixed rain and snow).

'Contamination', in this context, is understood as being all forms of frozen or semi-frozen moisture, such as frost, snow, slush or ice.
'Contamination check': a check of aircraft for contamination to establish the need for de-icing.

'De-icing fluid': such fluid includes, but is not limited to, the following:

i. Heated water;

ii. Type 1 fluid;

iii. Mixture of water and Type I fluid;

iv. Type II fluid;

v. Mixture of water and Type II fluid;

vi. Type III fluid;

vii. Mixture of water and Type III fluid;

viii. Type IV fluid;

ix. Mixture of water and Type IV fluid.

De-icing fluid is normally applied heated to ensure maximum efficiency.

'De-icing/anti-icing': this is the combination of de-icing and anti-icing performed in either one or two steps.

‘Ice Accumulation’: When ice accumulation develops, increased thrust rather than increased angle of attack will be used to maintain altitude and air speed. However, if large or continual increases of thrust are required, take alternative action.

‘Light Ice’: An icing condition, which can be handled safely by the normal functioning of the aircraft's de-icing or anti-icing equipment. On encountering light ice, the pilot can assume that the aircraft can be flown indefinitely provided de-icing or anti-icing equipment is used.

‘Lowest operational use temperature (LOUT)’: the lowest temperature at which a fluid has been tested and certified as acceptable in accordance with the appropriate aerodynamic acceptance test whilst still maintaining a freezing point buffer of not less than:

a) 10 °C for a Type I de-icing/anti-icing fluid; or

b) 7 °C for Type II, III or IV de-icing/anti-icing fluids.

‘Mix Ice’: A mixture of rime and clear.

‘Moderate Ice’: An icing condition approaching adverse, which the aircraft's de-icing/anti-icing equipment will safely handle but which for practicable purposes can be considered a signal to the pilot that it is time to alter the flight path so as to avoid operation in that condition.

‘Post-treatment check’: an external check of the aircraft after de-icing and/or anti-icing treatment accomplished from suitably elevated observation points (e.g. from the de-icing/anti-icing equipment itself or other elevated equipment) to ensure that the aircraft is free from any frost, ice, snow or slush.

‘Pre-take-off check’: an assessment normally performed by the flight crew, to validate the applied
hold-over time (HoT).

‘Pre-take-off contamination check’: a check of the treated surfaces for contamination, performed when the HoT has been exceeded or if any doubt exists regarding the continued effectiveness of the applied anti-icing treatment. It is normally accomplished externally, just before commencement of the take-off run.

‘Rime Ice’: Pure rime, hard porous, whitish opaque ice consisting of small grains, air space, and frost-like crystals.

‘Severe Ice’: An adverse icing condition which de-icing or anti-icing equipment cannot safely handle. Upon encountering heavy ice, the pilot will change altitude or course or return to a suitable airport and land, inasmuch as to continue under these conditions of icing would render the aircraft un-airworthy.

‘Trace of Ice’: An ice accumulation of no consequences, which does not affect the performance of the aircraft but will be reported by pilots for meteorological purposes. (For dispatch purposes considered as a non-icing condition.)

8.12.2.1.2 Anti-Icing Codes

The following are examples of anti-icing codes:

‘Type I’ at (start time) — to be used if anti-icing treatment has been performed with a Type I fluid;

‘Type II/100’ at (start time) — to be used if anti-icing treatment has been performed with undiluted Type II fluid;

‘Type II/75’ at (start time) — to be used if anti-icing treatment has been performed with a mixture of 75 % Type II fluid and 25 % water; and

‘Type IV/50’ at (start time) — to be used if anti-icing treatment has been performed with a mixture of 50 % Type IV fluid and 50 % water.

When a two-step de-icing/anti-icing operation has been carried out, the anti-icing code shall be determined by the second step fluid. Fluid brand names may be included, if desired.

8.12.2.2 De-Icing/Anti-Icing — Background Information

Further guidance material on this issue is given in the ICAO Manual of Aircraft Ground De-icing/Anti- icing Operations (Doc 9640) (hereinafter referred to as the ICAO Manual of Aircraft Ground De- icing/Anti-icing Operations).

a. General

i. Any deposit of frost, ice, snow or slush on the external surfaces of an aircraft may drastically affect its flying qualities because of reduced aerodynamic lift, increased drag modified stability and control characteristics. Furthermore, freezing deposits may cause moving parts, such as elevators, ailerons, flap actuating mechanism, etc., to jam and create a potentially hazardous condition. Propeller/engine/APU/systems performance may deteriorate due to the presence of frozen contaminants on blades, intakes and components. Also, engine operation may be seriously affected by the ingestion of snow or ice, thereby causing engine stall or compressor damage. In addition, ice/frost may form on certain external surfaces (e.g. wing upper and lower surfaces, etc.) due to the effects of cold fuel/structures, even in ambient temperatures well above 0 °C.

ii. Crew must refer to the AFM Section VII - Advisory Information to ensure that the aircraft is clear of contamination so that degradation of aerodynamic characteristics or mechanical interference will not occur and, following anti-icing, to maintain the airframe in that condition during the appropriate HoT.

iii. Under certain meteorological conditions, de-icing and/or anti-icing procedures may be ineffective in providing sufficient protection for continued operations. Examples of these conditions are freezing rain, ice pellets and hail, heavy snow, high wind velocity, fast dropping OAT or any time when freezing precipitation with high water content is present. No HoT guidelines exist for these conditions.

b. Fluids

i. Type I fluid: Due to its properties, Type I fluid forms a thin, liquid-wetting film on surfaces to which it is applied which, under certain weather conditions, gives a very limited HoT. With this type of fluid, increasing the concentration of fluid in the fluid/water mix does not provide any extension in HoT.

ii. Type II and Type IV fluids contain thickeners that enable the fluid to form a thicker liquid- wetting film on surfaces to which it is applied. Generally, this fluid provides a longer HoT than Type I fluids in similar conditions. With this type of fluid, the HoT can be extended by increasing the ratio of fluid in the fluid/water mix. iii. Type III fluid is a thickened fluid especially intended for use on aircraft with low rotation speeds. iv. Fluids used for de-icing and/or anti-icing shall be only in accordance with AFM Section VII - Advisory Information. These fluids normally conform to specifications such as SAE AMS1424, SAE AMS1428 or equivalent. Use of non-conforming fluids is not recommended due to their characteristics being unknown. The anti-icing and aerodynamic properties of thickened fluids may be seriously degraded by, for example, inappropriate storage, treatment, application, application equipment and age.

c. Hold-over protection

i. Hold-over protection is achieved by a layer of anti-icing fluid remaining on and protecting aircraft surfaces for a period of time. With a one-step de-icing/anti-icing procedure, the HoT begins at the commencement of de-icing/anti-icing. With a two-step procedure, the HoT begins at the commencement of the second (anti-icing) step. The hold-over protection runs out:

1) At the commencement of the take-off roll (due to aerodynamic shedding of fluid); or

2) When frozen deposits start to form or accumulate on treated aircraft surfaces, thereby indicating the loss of effectiveness of the fluid.

ii. The duration of hold-over protection may vary depending on the influence of factors other than those specified in the HoT tables. Guidance shall be provided by Super Legacy XP Limited to take account of such factors, which may include:

1) atmospheric conditions, e.g. exact type and rate of precipitation, wind direction and velocity, relative humidity and solar radiation; and

2) the aircraft and its surroundings, such as aircraft component inclination angle, contour and surface roughness, surface temperature, operation in close proximity to other aircraft (jet or propeller blast) and ground equipment and structures.

iii. HoTs are not meant to imply that flight is safe in the prevailing conditions if the specified HoT has not been exceeded. Certain meteorological conditions, such as freezing drizzle or freezing rain, may be beyond the certification envelope of the aircraft.

iv. References to usable HoT tables may be found in the AEA ‘Recommendations for de- icing/anti-icing of aircraft on the ground’.

8.12.2.3 De-Icing/Anti-Icing — Ground Procedures

Where frost, ice or snow exists, the PIC shall not commence a flight unless the aircraft has been inspected to determine whether any frost, ice or snow is adhering to the critical surfaces as defined. Such inspection shall be carried out by:

a. The PIC;

b. A crew member designated by the PIC; or c. A person other than a crew member, who:

i. Is authorised by Super Legacy XP Limited and
ii. Has received training concerning surface contamination in accordance with Part D 2.11.

When any frost, ice, and/or snow are found adhering to any critical surface, the contaminant will be removed completely before any flight is attempted.

The methods for removing of frozen contaminant include:

a. The application of heat; i.e. warm hangar, solar heat (the sun), or the use of a heater; or

b. The application of a de-icing/anti-icing fluid (hold over times for the fluid type and the environmental conditions shall be consulted).

If a clean aircraft for departure cannot be assured, the only acceptable alternative is to cancel or postpone the flight until conditions are acceptable.

a. De-icing and/or anti-icing procedures are contained within the aircraft AFM and cover:

i. Contamination checks, including detection of clear ice and under-wing frost; limits on the thickness/area of contamination as published in the AFM or other manufacturers' documentation shall be followed;

ii. Procedures to be followed if de-icing and/or anti-icing procedures are interrupted or unsuccessful;

iii. Post-treatment checks;

iv. Pre-take-off checks;

i. Pre-take-off contamination checks;

ii. The recording of any incidents relating to de-icing and/or anti-icing; and iii. The responsibilities of all personnel involved in de-icing and/or anti-icing.
b. The PIC shall ensure the following:

i. When aircraft surfaces are contaminated by ice, frost, slush or snow, they are de-iced prior to take-off, according to the prevailing conditions. Removal of contaminants may be performed with mechanical tools, fluids (including hot water), infrared heat or forced air, taking account of aircraft type-specific provisions.

ii. Account is taken of the wing skin temperature versus outside air temperature (OAT), as this may affect:

A). A need to carry out aircraft de-icing and/or anti-icing; and/or

B). Performance of the de-icing/anti-icing fluids.

iii. When freezing precipitation occurs or there is a risk of freezing precipitation occurring that would contaminate the surfaces at the time of take-off, aircraft surfaces shall be anti-iced. If both de-icing and anti-icing are required, the procedure may be performed in a one or two-step process, depending upon weather conditions, available equipment, available fluids and the desired hold-over time (HoT). One-step de-icing/anti-icing means that de- icing and anti-icing are carried out at the same time, using a mixture of de-icing/anti-icing fluid and water. Two-step de-icing/anti-icing means that de-icing and anti-icing are carried out in two separate steps. The aircraft is first de-iced using heated water only or a heated mixture of de-icing/anti-icing fluid and water. After completion of the de-icing operation a layer of a mixture of de-icing/anti-icing fluid and water, or of de-icing/anti-icing fluid only, is sprayed over the aircraft surfaces. The second step will be applied before the first-step fluid freezes, typically within three minutes and, if necessary, area by area.

iv. When an aircraft is anti-iced and a longer HoT is needed/desired, the use of a less diluted
Type II or Type IV fluid shall be considered.

v. All restrictions relative to OAT and fluid application (including, but not necessarily limited to temperature and pressure) published by the fluid manufacturer and/or aircraft manufacturer, are followed and procedures, limitations and recommendations to prevent the formation of fluid residues are followed.

vi. During conditions conducive to aircraft icing on the ground or after de-icing and/or anti- icing, an aircraft is not dispatched for departure unless it has been given a contamination check or a post-treatment check by a trained and qualified person. This check shall cover all treated surfaces of the aircraft and be performed from points offering sufficient accessibility to these parts. To ensure that there is no clear ice on suspect areas, it may be necessary to make a physical check (e.g. tactile).

vii. The required record is made in the technical log (see Communication below).

viii. The PIC continually monitors the environmental situation after the performed treatment.
Prior to take-off he/she performs a pre-take-off check, which is an assessment of whether the applied HoT is still appropriate. This pre-take-off check includes, but is not limited to, factors such as precipitation, wind and OAT.

ix. If any doubt exists as to whether a deposit may adversely affect the aircraft's performance and/or controllability characteristics, the PIC shall arrange for a pre-take-off contamination check to be performed in order to verify that the aircraft's surfaces are free of contamination. Special methods and/or equipment may be necessary to perform this check, especially at night time or in extremely adverse weather conditions. If this check cannot be performed just before take-off, re-treatment shall be applied.

x. When retreatment is necessary, any residue of the previous treatment shall be removed and a completely new de-icing/anti-icing treatment shall be applied.

c. Special operational considerations

i. When using thickened de-icing/anti-icing fluids, Super Legacy XP Limited shall consider a two-step de-icing/anti-icing procedure, the first step preferably with hot water and/or un-thickened fluids.

ii. The use of de-icing/anti-icing fluids shall be in accordance with the aircraft manufacturer's documentation. This is particularly important for thickened fluids to assure sufficient flow- off during take-off.

iii. The PIC shall comply with any type-specific operational requirement(s), such as an aircraft mass decrease and/or a take-off speed increase associated with a fluid application.

iv. The PIC shall take note of any flight handling procedures (stick force, rotation speed and rate, take-off speed, aircraft attitude, etc.) issued by the aircraft manufacturer when associated with a fluid application.

xi. The limitations or handling procedures resulting from c(iii) and/or c(iv) shall be part of the flight crew pre-take-off briefing.

d. Communications

i. Before aircraft treatment. When the aircraft is to be treated with the flight crew on board, the flight and personnel involved in the operation shall confirm the fluid to be used, the extent of treatment required and any aircraft type-specific procedure(s) to be used. Any other information needed to apply the HoT tables shall be exchanged.

ii. De-icing code. Super Legacy XP Limited procedures shall include an anti-icing code, which indicates the treatment the aircraft has received. This code confirms that the aircraft is free of contamination and includes the following information referring to the last step of the fluid treatment procedure in the following sequence:

a) the fluid type - Type 1 Fluid, Type 2 Fluid, Type 3 Fluid or Type 4 Fluid

b) the fluid concentration within the fluid/water mixture, expressed as a percentage by volume (this is not required for Type 1 Fluid)

c) the local time in hours and minutes at the beginning of the final (or only) de-icing/anti- icing step

d) (optionally, for Type 2 and 4 Fluids only) the complete name of the anti-icing fluid (the "brand name")

e) the statement "post de-icing/anti-icing check completed".

By Example: A de-icing/anti-icing procedure in which the last step was the use of a mixture of 75% of a type 2 fluid and 25% water which commenced at 1335 local time is communicated as follows:

“TYPE 2/75 1335 [optional complete name of anti-icing fluid] post de-icing/anti-icing check completed. Communication of the anti-icing code and any related supplementary information can be by R/T, intercom or message board display.

e. Hold-over protection The times of protection shown in these tables are to be used as guidelines only and are normally used in conjunction with the pre-take-off check. *(refer to http://www.aea.be/news-media-room- media-centre/publications/9-recommendations-for-de-icing-anti-icing-of-aircraft-on-the- ground.html for current version updated annually)*

Table 1 - Guidelines for holdover times anticipated for Type I, II, III and IV fluid mixtures in Active Frost Conditions as a function of OAT (Valid for metallic and composite surfaces)

Approximate Holdover Time (hours/minutes) **Active Frost**	**OAT**		**Type II, III, and IV Fluid** Concentration Neat Fluid/Water Vol %/Vol %	**Approximate Holdover Times** (hours/minutes) **Active Frost**		
Type I (1) (2)	**°C**	°F		**Type II (3)**	**Type III (3)(4)**	**Type IV (3)**
0:35	-1 and above	30 and above	100/0	8:00	2:00	12:00
			75/25	5:00	1:00	5:00
			50/50	3:00	0:30	3:00
	below -1 to -3	below 30 to 27	100/0	8:00	2:00	12:00
			75/25	5:00	1:00	5:00
			50/50	1:30	0:30	3:00
	below -3 to -10	below 27 to 14	100/0	8:00	2:00	10:00
			75/25	5:00	1:00	5:00
	below -10 to -14	below 14 to 7	100/00	6:00	2:00	6:00
			75/25	1:00	1:00	1:00
	below -14 to -21	below 7 to -6	100/0	6:00	2:00	6:00
	below -21 to LOUT or -whichever warmer	below -6 to LOUT or -whichever warmer	100/0	2:00	2:00	4:00
	Below – 25 LOUT	Below – 13 LOUT	No holdover time guidelines exist			

(1) Type I fluid/water mixture is selected so that the freezing point of the mixture is at least 10 °C (18 °F) below the OAT.

(2) Type 1 fluids may be used below -25 °C (-13 °F) down to their LOUT (fluid specific, fluid name must be known).

(3) Type II, III, IV fluids may not be used below -25 °C (-13 °F) in active frost conditions.

(4) To use the Type III fluid frost holdover times, the name of the fluid used must be known and the fluid must be applied as required since the holdover times for Type III fluids are fluid application specific (heated or unheated). See FAA and/or Transport Canada Holdover time guidelines on their websites for details.

De-icing/anti-icing fluids used during ground de-icing/anti-icing are not intended for - and do not provide - protection during flight.

Holdover times in the table above can only be used when de-icing/anti-icing has been done with flaps/slats retracted.

Table 2 - Guidelines for holdover times anticipated for Type I fluid mixtures as a function of weather conditions and OAT (Valid for metallic and composite surfaces)

OAT (1)		**Approximate Holdover Times under various weather conditions** (hours/minutes)					
°C	°F	Freezing Fog	Snow/ Snow Grains/ Snow Pellets **(2)**	Freezing Drizzle **(3)**	Light Freezing Rain	Rain on Cold Soaked Wing	Other **(4) (5)**
-3 and above	27 and above	00:09 - 0:16	0:03 - 0:06	0:08 - 0:13	0:02 - 0:05	0:01 - 0:05 **(6)**	
below -3 to -6	below 27 to 21	0:06 - 0:08	0:02 - 0:05	0:05 - 0:09	0:02 - 0:05	**CAUTION:** No Holdover Time Guidelines exist	
below -6 to -10	below 21 to 14	0:04 - 0:08	0:02 - 0:05	0:04 - 0:07	0:02 - 0:05		
below -10 to LOUT	below 14 to LOUT	0:04- 0:07	0:02 - 0:04				

(1) Type 1 fluids may be used below -10 degrees C (14 F) down to their LOUT (fluid specific, fluid name must be known).

(2) In light "Rain and Snow" conditions use "Light Freezing Rain" holdover times

(3) If positive identification of "Freezing Drizzle" is not possible use "Light Freezing Rain" holdover times **(4)** Other conditions are: Heavy snow, ice pellets, hail, moderate freezing rain and heavy freezing rain **(5)** For holdover times under active frost conditions see the separate frost table (Table 1)

(6) No holdover time guidelines exist for this condition for 0 °C (32 °F) and below

Type I Fluid/water Mixture is selected so that the Freezing Point of the mixture is at least 10 °C (18 °F) below actual OAT/

CAUTION: The time of protection will be shortened in heavy weather conditions. Heavy precipitation rates or high moisture content, high wind velocity or jet blast may reduce holdover time below the lowest time stated in the range.

Holdover time may also be reduced when the Aircraft skin temperature is lower than OAT. Therefore, the indicated times will be used only in conjunction with a pre-takeoff check. De-icing/anti-icing fluids used during ground de-icing/anti-icing are not intended for - and do not provide - protection during flight. Holdover times in the table above can only be used when de- icing/anti-icing has been done with flaps/slats retracted.

Table 3 - Guidelines for holdover times anticipated for Type II fluid mixtures as a function of weather conditions and OAT (Valid for metallic and composite surfaces)

OAT (1)		**Type II Fluid Concentration** Neat-Fluid/ Water	**Approximate Holdover Times under various weather conditions** (hours : minutes)					
°C	**°F**	**(Vol %/Vol %)**	**Freezing Fog**	**Snow/Snow Grains/Snow Pellets (2)**	**Freezing Drizzle (3)**	**Light Freezing Rain**	**Rain on Cold Soaked Wing**	**Other (4) (5)**
-3 and above	27 and above	100/0	0:35 - 1:30	0:20 - 0:45	0:30 - 0:55	0:15 - 0:30	0:08 - 0:40 (6)	
		75/25	0:25 – 0:55	0:15 – 0:25	0:15 - 0:40	0:10 - 0:20	0:04 - 0:25 (6)	
		50/50	0:15 - 0:25	0:05 - 0:10	0:08 - 0:15	0:05 - 0:09	**CAUTION:** No Holdover Time Guidelines exist	
below -3 to -14	below 27 to 7	100/0	0:20 - 1:05	0:15 - 0:30	0:20 - 0:45 (7)	0:10 - 0:20 (7)		
		75/25	0:25 - 0:50	0:10 - 0:20	0:15 - 0:25 (7)	0:08 - 0:15 (7)		
below -14 to -22.5 or LOUT	below 7 to -8.5 or LOUT	100/0	0:20 - 0:35	0:08 - 0:10				

(1) Type II fluids may be used below -22.5 °C (-8.5 °F) down to their LOUT (fluid specific, fluid name must be known). Consider the use of Type I fluid when Type II fluid cannot be used.

(2) In light "Rain and Snow" conditions use "Light Freezing Rain" holdover times

(3) If positive identification of "Freezing Drizzle" is not possible use "Light Freezing Rain" holdover times

(4) Other conditions are: Heavy snow, ice pellets, moderate and heavy freezing rain, hail **(5)** For holdover times under Active Frost conditions see the separate frost table (Table 1) **(6)** No holdover time guidelines exist for this condition for 0 °C (32 °F) and below

(7) No holdover time guidelines exist for this condition below -10 °C (14 °F)

Table 4 - Guidelines for holdover times anticipated for Type III fluid mixtures as a function of weather conditions and OAT (Valid for metallic and composite surfaces)

The Guidelines for holdover times of Type III fluids have been removed (except for active frost) as these are no longer “generic”, but fluid specific (heated or unheated and different temperature ranges). Refer to the FAA and/or Transport Canada Holdover Time Guidelines on their websites.

Table 5 - Guidelines for holdover times anticipated for Type IV fluid mixtures as a function of weather conditions and OAT (Valid for metallic and composite surfaces)

OAT (1)		Type IV Fluid Concentration Neat Fluid/ Water (Vol %/Vol %)	Approximate Holdover Times under various weather conditions (hours/minutes)					
°C	°F		Freezing Fog	Snow/ Snow Grains/ Snow Pellets (2)	Freezing Drizzle (3)	Light Freezing Rain	Rain on Cold Soaked Wing	Other (4) (5)
-3 and above	27 and above	100/0	1:15 - 2:40	0:35 - 1:10	0:40 – 1:30	0:35 - 0:40	0:08 - 1:15 (6)	
		75/25	1:05 - 1:45	0:45 – 1:15	0:45 – 1:20	0:30 – 0:45	0:09 - 0:50 (6)	
		50/50	0:20 - 0:50	0:15 - 0:25	0:15 - 0:30	0:08 - 0:10	**CAUTION:** No Holdover Time Guidelines exist	
below -3 to -14	below 27 to 7	100/0	0:20 - 1:35	0:25 - 0:45	0:20 - 1:20 (7)	0:20 - 0:25 (7)		
		75/25	0:30 – 1:10	0:20 - 0:45	0:15 – 1:05 (7)	0:10 - 0:25 (7)		
below -14 to -22.5 or LOUT	below 7 to – 8.5 or LOUT	100/0	0:20 - 0:40	0:08 - 0:10				

(1) Type IV fluids may be used below -22.5 °C (-8.5 °F) down to their LOUT (fluid specific, fluid name must be known). Consider the use of Type I fluid when Type IV fluid cannot be used.

(2) In light "Rain and Snow" conditions use "Light Freezing Rain" holdover times

(3) If positive identification of "Freezing Drizzle" is not possible use "Light Freezing Rain" holdover times

(4) Other conditions are: Heavy snow, ice pellets, moderate and heavy freezing rain, hail

(5) For holdover times under Active Frost conditions see the separate frost table (Table 1)

(6) No holdover time guidelines exist for this condition for 0 °C (32 °F) and below

(7) No holdover time guidelines exist for this condition below -10 °C (14 °F)

CAUTION: The time of protection will be shortened in heavy weather conditions. Heavy precipitation rates or high moisture content, high wind velocity or jet blast may reduce holdover time below the lowest time stated in the range.
Holdover time may also be reduced when the Aircraft skin temperature is lower than OAT. Therefore, the indicated times will be used only in conjunction with a pre-takeoff check.

De-icing/anti-icing fluids used during ground de-icing/anti-icing are not intended for - and do not provide - protection during flight. Holdover times in the table above can only be used when de- icing/anti-icing has been done with flaps/slats retracted.

De-icing/anti-icing fluids used during ground de-icing/anti-icing are not intended for and do not provide protection during flight. Holdover times in the table above can only be used when de- icing/anti-icing has been done with flaps/slats retracted.

f. Training

All Super Legacy XP Limited crew undergo during initial and recurrent courses a de-icing and/or anti-icing training programme. These are included in Part D 2.11 Aircraft Critical Contaminated Surface & Inflight De-icing Procedures Training.

g. Contracting

When Super Legacy XP Limited contracts training on de-icing/anti-icing, Super Legacy XP Limited will ensure that the contractor complies with Super Legacy XP Limited training/qualification procedures, together with any specific procedures in respect of:

i. De-icing and/or anti-icing methods and procedures;

ii. Fluids to be used, including precautions for storage and preparation for use;

iii. Specific aircraft requirements (e.g. no-spray areas, propeller/engine de-icing, auxiliary power unit (APU) operation etc.) as contained within AFM Section VII - Advisory Information; and

iv. Checking and communications procedures.

h. Special maintenance considerations i. General
Super Legacy XP Limited shall take proper account of the possible side effects of fluid use. Such effects may include, but are not necessarily limited to, dried and/or re-hydrated residues, corrosion and the removal of lubricants. Through cleaning of the airframe will take place as soon as practical after the flight.

ii. Special considerations regarding residues of dried fluids

Super Legacy XP Limited shall establish procedures to prevent or detect and remove residues of dried fluid. The PIC will ensure they refer to the AFM Section VII - Advisory Information for specific instructions for their aircraft.

iii. Dried fluid residues

Dried fluid residues could occur when surfaces have been treated and the aircraft has not subsequently been flown and has not been subject to precipitation. The fluid may then have dried on the surfaces.

iv. Re-hydrated fluid residues

Repetitive application of thickened de-icing/anti-icing fluids may lead to the subsequent formation/build-up of a dried residue in aerodynamically quiet areas, such as cavities and gaps. This residue may re-hydrate if exposed to high humidity conditions, precipitation, washing, etc., and increase to many times its original size/volume. This residue will freeze if exposed to conditions at or below 0 °C. This may cause moving parts, such as elevators, ailerons, and flap actuating mechanisms to stiffen or jam in-flight. Re-hydrated residues may also form on exterior surfaces, which can reduce lift, increase drag and stall speed. Re- hydrated residues may also collect inside control surface structures and cause clogging of drain holes or imbalances to flight controls. Residues may also collect in hidden areas, such as around flight control hinges, pulleys, grommets, on cables and in gaps.

Crew are strongly recommended to obtain information about the fluid dry-out and re-hydration characteristics from the aircraft de-icing team prior to application.

Additional information from fluid manufacturers for handling, storage, application and testing of their products shall be applied.

i. Post Flight Procedures

Normally, the aircraft will require a wash after application of de-icing fluid, but subject to inspection this may be extended to 3 applications if conducted over a few days. The PIC will record in the Aircraft Technical Log and also inform Operations of the requirement for an aircraft wash.

8.12.2.4 Ice and other contaminants — Flight Procedures

The Pilatus PC-12 is not approved for flight in Freezing Rain, Freezing Drizzle and mixed icing conditions (e.g. Supercooled Droplets & Ice Crystals). Should the PIC encounter these conditions outside those specified the AFM limitations they shall exit the icing conditions without delay, by a change of level and/or route, and if necessary by declaring an emergency to ATC.

a. Crew will be aware that different Aircraft have a different de-icing procedure and care will be taken to de-ice in accordance with the published instructions in the AFM Section VII - Advisory Information. In every case, the relevant limitations are those that are defined by the manufacturer.

b. PIC is to ensure:

i. That the Aircraft De-icing Systems and indication systems are serviceable prior to flight in icing conditions;

ii. The limitations on flight in icing conditions for each phase of flight are observed. These limitations may be imposed by the aircraft's de-icing or anti-icing equipment or the necessary performance corrections that have to be made;

iii. The AFM criteria is used to assess the effect of icing on the performance and/or controllability of the aircraft;

iv. Use of the visual cues and/or use of the aircraft's ice detection system, so that the crew are aware that the flight is entering icing conditions; and

v. In the event of a deteriorating situation resulting in an adverse effect on the performance and/or controllability of the aircraft, due to the failure of the aircraft's anti-icing or de-icing equipment to control a build-up of ice; and/or ice build-up on unprotected areas

Then the PIC shall immediately:

1) Declare to ATC the nature of urgency and extent of the Icing.
2) Request an immediate descent (subject to MSA); climb or diversion

8.12.3 Avoiding Severe Weather

8.12.3.1 Thunderstorms

No flight will be initiated under IFR or night VFR conditions when current weather reports indicate thunderstorms or other potentially hazardous weather conditions that can be detected with airborne thunderstorm detection equipment for the expected route to be flown, unless the airborne thunderstorm detection equipment is in satisfactory operating condition.

Departures in the vicinity of thunderstorms must be considered with regard to cell location and movement, severity, and flight path intentions. If departure is elected, careful consideration must be given to wind shear and turbulence possibilities in the takeoff zone.

The crew will discuss their intentions concerning technique to be used under the prevailing circumstances and the planned alternatives should the flight be unable to proceed as planned.

Do not intentionally fly into, nor accept vectors from ATC, within 20 nm of the edge of a moderate or greater thunderstorm cell. The intensity level varies with the type of radar in use.

8.12.3.1.2 Weather Radar

In accordance with the Minimum Equipment List the Aircraft may depart with an inoperative weather radar if the weather report or forecasts available to the PIC indicate that Cumulo-Nimbus clouds or other potentially hazardous weather conditions, which can be detected by the set when in working order, are unlikely to be encountered on the intended route or any planned diversion from the route.

If the weather radar is inoperative and thunderstorms are in the route of flight, the crew shall remain in VMC conditions, and ask for assistance from ATC. ATC radar shall not be substituted for aircraft radar due to the uncertain positioning and blind spots of the ATC system. If unable to proceed under these conditions, the flight shall either divert around the weather, return to the departure airport, or land short of the troublesome weather.

Radar Terminology

a. Strong Echo

An echo, which the scope indicates is beyond 50 miles, is considered a strong echo. At shorter ranges, the edges of a strong echo are sharp and well defined and when contoured, the echo has a well-defined black core. On a color radar, a strong echo will always display a pronounced yellow area and additionally, in many cases, a red area.

b. Weak Echo

A weak echo does not have a well-defined edge, and is fuzzy throughout. No black areas appear in the echo in contour position. A weak echo is not normally visible beyond 50 nautical miles. On colour radar, in addition to the above, a weak echo will not show red or yellow, only green.

c. Moderate Echo

A moderate echo on the color scopes is between the two classifications (strong and weak) and is considered a transition stage.

d. Steep Rainfall Gradient

Rainfall gradient is the rate of change of rain intensity per unit of distance. A steep rainfall gradient is a rapid change in the intensity of rain over a short distance. It is indicated by a sharp edge on the echo, and is usually associated with maximum turbulence. Rainfall gradient can be determined by a steep rainfall gradient is indicated when the distance between the edge of the echo (green) and a yellow area is one mile or less. With a weak rainfall gradient, the distance normally will be three or more miles.

e. Echo Avoidance

When a flight detects thunderstorm conditions, it is desirable that the area be detoured. Early detours of storms, considering trip length and position of storms, are considered a good operating procedure. If in the opinion of the PIC, this does not fulfil the requirements of good operating practice, apply the following:

i. If the weather radar is operative, fly no closer than 20 miles to any Level 3 or higher radar return. If the aircraft radar has no level indicators, use the red band as the determining factor;

ii. Do not fly between thunderstorm cells, unless there is at least 40 miles between the cells;

iii. Avoid the downwind anvil of all thunderstorms;

iv. Do not accept a radar vector or routing into thunderstorm activity that can otherwise be avoided;

v. When using the shorter range settings to circumnavigate echoes, monitor the longer ranges *fre*quently to determine the extent of the area and to watch for additional developments;

vi. Navigable corridors between echoes should be reasonably straight;

vii. Avoid flying under a cumulonimbus overhang when possible. If it is not possible, use upward tilt of the antenna to avoid possible encounter with hail;

viii. Above 23,000 feet, avoid all echoes by 20 nautical miles;

ix. Below 23,000 feet:

Avoid steep rainfall gradients by at least 5 nautical miles or more when the static air temperature is 0°C or warmer;

Avoid steep rainfall gradients i.e., moderate echoes, by at least 10 nautical miles or more when the static air temperature is less than 0°C;

Avoid all strong echoes by at least 20 nautical miles i.e., those with sharply defined edges and/or contour indications of heavy precipitation;

Increase the distances indicated above by *50%* or more for echoes which are rapidly increasing in size or intensity, changing shape rapidly, exhibiting hooks, fingers, scalloped edges, or other forms of protrusions. For a color radar, in addition to the above, distances should also be increased for an echo displaying a well defined red area;

Weak echoes may be flown near (or through), if this seems the best alternative.

When “IN THE CLEAR” on top, cloud tops should be cleared vertically by 5,000 feet. Flight above any thunderstorm will not be attempted unless flight crewmembers are assured of vertical clearance from the clouds.

When taking off in thunderstorm areas, the radar should be operated on the ground using some upward antenna tilt to determine the best possible climb-out path. During ground operation the OFF- STANDBY-RANGE control shall be left in the STANDBY position until the aircraft is clear of all large reflective surfaces by 100 feet.

A majority of hail echoes appear on the scope with characteristic fingers, hooks or scallops protruding from the main thunderstorm echoes. On color radar, there is also a high correlation between hail and red echoes. Tornado identification is less reliable but it is known that some tornadoes produce a protrusion similar in shape to a figure six. Other tornadoes have no such characteristic identification.

Terrain Mapping

In a terminal area with thunderstorms present and unable to obtain sufficient clearance and the safe completion of the flight is threatened according to the PIC, it is appropriate to declare an emergency and advise ATC turning to a heading that will take the aircraft clear of the storm. It is most important that this decision to detour on an emergency basis be made early enough to provide adequate time to safely avoid the storm. The possibility of less than adequate separation from the other aircraft exists, and mandates early planning and immediate communication to ATC. The very fact of having to declare an emergency points to the seriousness of this action, and highlights the need for early planning.

The radar is not to be used as a terrain echo avoidance tool

8.12.3.2 Severe Turbulence and Mountain Wave Activity (MWA)

This information emphasizes the importance of taking appropriate action in RVSM airspace when aircraft experience severe turbulence and/or MWA that is of sufficient magnitude to significantly affect altitude-keeping.

8.12.3.2.1 Severe Turbulence

Severe turbulence causes large, abrupt changes in altitude and/or attitude usually accompanied by large variations in indicated airspeed. Aircraft may be momentarily out of control. Encounters with severe turbulence must be remedied immediately in any phase of flight. Severe turbulence may be associated with MWA.

8.12.3.2.2 Mountain Wave Activity (MWA)

Significant MWA occurs both below and above the floor of RVSM airspace, FL 290. MWA often occurs in the vicinity of mountain ranges. It may occur when strong winds blow perpendicular to mountain ranges resulting in up and down or wave motions in the atmosphere. Wave action can produce altitude excursions and airspeed fluctuations accompanied by only light turbulence. With sufficient amplitude, however, wave action can induce altitude and airspeed fluctuations accompanied by severe turbulence. MWA is difficult to forecast and can be highly localized and short lived.

Wave activity is not necessarily limited to the vicinity of mountain ranges. Pilots experiencing wave activity anywhere that significantly affects altitude keeping can follow the guidance provided below.

In-flight MWA Indicators (Including Turbulence). Indicators that the aircraft is being subjected to MWA
are:

a. Altitude excursions and/or airspeed fluctuations with or without associated turbulence

b. Pitch and trim changes required to maintain altitude with accompanying airspeed fluctuations.

c. Light-to-Severe Turbulence depending on the magnitude of the MWA.

8.12.3.2.3 TCAS Sensitivity

For both MWA and severe turbulence encounters in RVSM airspace, an additional concern is the sensitivity of collision avoidance systems when one or both aircraft operating in close proximity receive TCAS advisories in response to disruptions in altitude hold capability.

8.12.3.2.4 Preflight Tools

Sources of observed and forecast information that can help the pilot ascertain the possibility of MWA
or severe turbulence are:

a. Forecast Winds and Temperatures Aloft (FD)

b. Area Forecast (FA)

c. SIGMETS, and

d. PIREPS.

8.12.3.2.5 Pilot Actions When Encountering Weather (e.g. Severe Turbulence or MWA)

Weather Encounters Inducing Altitude Deviations of Approximately 200 Feet:

When the pilot experiences weather induced altitude deviations of approximately 200 feet, the pilot will contact ATC and state “Unable RVSM Due (state reason) (e.g., turbulence, mountain wave). See the RVSM contingency actions references shown later in this document.

Severe Turbulence (Including that Associated with MWA):

When pilots encounter severe turbulence, they shall contact ATC and report the situation. Until the pilot reports clear of severe turbulence, the controller will apply merging target vectors to one or both passing aircraft to prevent their targets from merging:

Pilot*: 2-FLYT, FL300, unable RVSM due severe turbulence.*

Controller*: 2-FLYT, fly heading 300; traffic twelve o'clock, 10 miles, opposite direction; eastbound Citation at FL 290; (or the controller may issue a vector to the Citation traffic to avoid 2-FLYT)*

8.12.3.2.6 Pilot Reports

When pilots encounter MWA, they shall contact ATC and report the magnitude and location of the wave activity. When a controller makes a merging targets traffic call, the pilot may request a vector to avoid flying directly over or under the traffic. In situations where the pilot is experiencing altitude deviations of 200 feet or greater, the pilot will request a vector to avoid traffic. Until the pilot reports clear of MWA, the controller will apply merging target vectors to one or both passing aircraft to prevent their targets from merging:

Pilot: 2-FLYT, FL300, unable RVSM due mountain wave.

Controller: M-AKAL, fly heading 290; traffic twelve o'clock, 10 miles, opposite direction; eastbound Citation at FL290; (or the controller may issue a vector to the Citation traffic to avoid 2-FLYT)

8.12.3.2.7 FL Change or Re-Route

To leave airspace where MWA or severe turbulence is being encountered, the pilot may request a FL change and/or reroute, if necessary.

8.12.3.3 Wake Turbulence

Pilots shall be aware of the potential for wake turbulence encounters in RVSM airspace. Experience gained has shown that such encounters in RVSM airspace are generally moderate or less in magnitude.

8.12.3.3.1 Pilot Action to Mitigate Wake Turbulence Encounters

Pilots shall be alert for wake turbulence when operating:

a. In the vicinity of aircraft climbing or descending through their altitude.

b. Approximately 12-15 miles after passing 1,000 feet below opposite direction traffic.

c. Approximately 12-15 miles behind and 1,000 below same-direction traffic.

Pilots encountering or anticipating wake turbulence in RVSM airspace have the option of requesting a vector, FL change or if capable, a lateral offset.

NOTE 1. Offsets of approximately a wingspan upwind generally can move the aircraft out of the
immediate vicinity of another aircraft's wake vortex.

NOTE 2. Pilots must request clearance to fly a lateral offset. Strategic lateral offsets flown in oceanic airspace do not apply.

8.12.3.3.2 Turbulence

Make every effort to avoid areas of lenticular clouds over mountainous areas. Be alert to descending into a narrow valley when strong winds have created mountain wave effect over the valley edges. It is possible the entire valley may hold violent disturbed air.

Avoid flight into areas of known severe turbulence. If severe turbulence is encountered, fly the attitude of the aircraft. Do not try to turn back out of the area as the flight may have already gone through the worst of the turbulence.

Anticipate possible clear air turbulence (CAT) at the Tropopause boundary, especially during winter months and in the vicinity of the jet stream.

8.12.3.3.3 Turbulent Air Penetration

a. Every reasonable effort will be made by flight crews to avoid areas of forecast turbulence. If turbulence is encountered, observe the following procedures:

b. Check that the SEATBELT sign is illuminated.

c. Adjust speed and power setting as necessary for turbulent air penetration.

d. Fly attitude-do not change airspeed or altitude.

e. Utilize anti-icing as required.

f. Report the turbulence area to the controlling authority and request an altitude block if severe turbulence is encountered.

g. Perform a careful post-flight inspection of the aircraft.

8.12.3.3.4 TURBULENCE DEFINITIONS

Intensity of Report	Aircraft Reaction	Reaction Inside Aircraft
Light Chop	No appreciable changes in altitude or attitude. Slight, rapid and somewhat rhythmic bumping occurs.	Occupants may feel slight strain against seat belts.
Light Turbulence	Momentary, slight erratic changes in altitude and/or attitude occur.	Objects may be displaced slightly. No difficulty in walking.
Moderate Chop	Rapid bumps or jolts without appreciable changes in altitude or attitude.	Occupants feel definite strain against seat belts. Unsecured objects are dislodged.
Moderate Turbulence	Changes in altitude and/or attitude occur, but the aircraft remains in positive control. Airspeed fluctuations occur.	Walking is difficult. Drinks spill from containers.
Severe Turbulence	Large, abrupt changes in altitude and/or attitude occur. Usually large airspeed fluctuations occur. Aircraft may be momentarily out of control.	Occupants forced violently against seat belts. Unsecured objects tossed about. Walking is impossible.
Extreme Turbulence	Aircraft violently tossed about; practically impossible to control. May cause structural damage.	Same as severe.

8.12.3.3.5 Report by Radio

Report by radio will be made to ATC when turbulence is encountered. The Pilot in Command shall notify the appropriate ground station as soon as possible regarding any potentially hazardous meteorological conditions or irregularities regarding ground navigational facilities.

8.12.3.3 Turbulence Duration Criteria

a. Occasional - Less than 1/3
b. Intermittent - 1/3 to 2/3

c. Continuous - More than 2/3.

8.12.3.3.1 Clear Air Turbulence

Clear Air Turbulence not associated with convection cloudiness will be reported as Clear Air Turbulence (CAT).

8.12.3.3.7 Severe Turbulence

Do not intentionally conduct flight through areas of severe turbulence. The best airspeed and flight configuration to use in severe turbulence is that which affords ample protection from stall and high- speed buffet and which also provides structural integrity.

8.12.3.3.8 Structural

Flap extension in an area of known turbulence will be delayed as long as possible because the airplane can withstand higher gust loads in the clean configuration.

8.12.3.3.9 Power Plant

Flying in turbulence or hail may cause engine inlet overflow distortion. This distortion, along with engine icing, angle of attack changes and high altitude engine surge margins can result in engine surge and flameout. Ignition switches will be placed on as soon as turbulence is encountered.

8.12.3.3.10 Auto Flight in Severe Turbulence

When encountering severe turbulence, the autopilot should remain engaged with altitude hold disengaged. If sustained trimming occurs, disengage the autopilot.

8.12.3.3.11 Inoperative Autopilot in Severe Turbulence

Trim the airplane for penetration speed; then do not change stabilizer position. Control the airplane pitch attitude with the elevators using the attitude indicator as the primary instrument. In severe turbulence large attitude changes may occur. Do not make sudden large elevator control inputs. Corrective actions to regain the desired attitude should be smooth and deliberate. Altitude variations are probable in severe turbulence and should be allowed to occur, if terrain clearance is adequate. Control airplane attitude first; then make corrections for airspeed, altitude and heading.

8.12.3.3.12 Reporting Severe Turbulence

A report by radio is required when severe turbulence is encountered. An *Aircraft Maintenance Log* book entry is also required and the aircraft shall be thoroughly inspected before the next flight leg.

8.12.3.4 Severe Precipitation

Avoidance of severe weather areas will minimize exposure to abnormally heavy precipitation and reduce the possibility of engine damage due to water induced compressor stalls.

If extremely heavy precipitation is inadvertently encountered, follow turbulent air penetration procedures.

Do not make thrust changes in extremely heavy precipitation unless excessive airspeed variations occur. If thrust changes are necessary, move thrust levers very slowly. Rapid thrust lever
movements during flight in extremely heavy precipitation may cause engine stall and damage. Avoid changing thrust lever direction until engines have stabilized at a selected setting.

8.12.3.4.1 Static Discharges

8.12.3.4.2 Conditions

Static discharges occur most frequently in shower type clouds where the temperature is close to freezing. Discharges are preceded by St. Elmo's fire and sharp increases in radio static. Imminent static discharges may sometimes be avoided by changing altitude or by reducing air speed.

8.12.3.4.3 Precautions

When in an area where considerable lightning is occurring or where a static discharge is probable:

a. Turn up instrument lights.
b. Avoid looking out of cockpit as much as practicable.
c. Set up autopilot for use if blinded temporarily.

8.12.3.5 Volcanic Ash

8.12.3.5.1 General Procedures

Flight in areas of known volcanic activity will be avoided. This is particularly important during hours of darkness or during periods of instrument meteorological conditions when ash clouds may not be seen. Airborne weather radar systems are not designed to detect ash and dust clouds.

Flight operations in the vicinity of an actively erupting volcano can be hazardous if the aircraft is allowed to penetrate the ash cloud.

When a flight is planned into an area with a known potential for volcanic dust cloud formation, it is important that flight crewmembers check all NOTAMS and air traffic control advisories for current status of volcanic activity. Refer to section 3.16, for SMS Procedures for Risk Management.

Flights shall be well planned clear of volcanic activity. If possible, stay upwind of volcanic dust or ash.

Volcanic dust may be difficult to detect at night or during flight in clouds; however, the following symptoms have been reported by flight crewmembers:

a. Smoke or dust appearing in the cockpit;

b. An acrid odor similar to electrical smoke;

c. Multiple engine malfunctions such as compressor stalls, decrease of N1, N2, and fuel flow, in- crease in EGT, flameout, etc.;

d. At night, St. Elmo's fire/static discharges may be observed around the windshield accompanied
by a bright orange glow in the engine inlets.

Volcanic dust may extend for several hundred miles. If a volcanic dust cloud is encountered, exit as quickly as possible.

Volcanic dust can cause rapid erosion and damage to the internal components of the engines. Initial engine indications when encountering volcanic ash will be a decrease of N1, N2, and fuel flow, and an increase in EGT. Engine surges, torching from tailpipe and flameout may also occur. Retarding thrust to idle will lower the EGT, which in turn, will reduce debris buildup on the turbine blades. If volcanic dust is encountered, the engine manufacturers recommend the following:

a. Reduce thrust to minimum altitude permitting;

b. Turn on all available air bleed systems, wing and engine anti-ice, air conditioning, and pneumatic systems;

c. Turn on continuous ignition;

d. Request a change of altitude or routing as needed;

e. Land at the nearest suitable airport.

It may become necessary to shut down and then restart engines to prevent exceeding EGT limits. If an engine fails to start, repeated attempts should be made immediately. A successful engine start may not be possible until the aircraft is out of the volcanic dust and the airspeed and altitude are within the air start envelope. Remember, engines are very slow to accelerate at high altitude, which may be interpreted as a failure to start or as an engine malfunction. If engine restart has been successful, avoid rapid throttle movement.

Volcanic dust may block the pitot system and result in unreliable airspeed indications. If unreliable or loss of airspeed indications occur, establish the appropriate pitch attitude as shown in the applicable manual for flight with unreliable airspeed.

Volcanic dust is very abrasive and can cause serious damage to the aircraft engines, wing and tail leading edge surfaces, windshields, landing lights, etc. Volcanic dust can cause all of the windshields to become translucent.

Report all encounters/observations of volcanic ash clouds to ATC as soon as possible after the event. If an encounter actually takes place, enter the encounter within the discrepancy area of the Aircraft Maintenance Log.
NOTE: An inspection shall be performed before the aircraft is released for a subsequent flight. Provide ATC with as much information as possible concerning location, altitude, and drift direction of
the ash cloud.

8.12.3.5.2. Ground Operations

During ground operation in volcanic ash or dust conditions: If a departure is necessary:

a. Prior to takeoff, allow the ash and dust to settle. A rolling takeoff will be used. Avoid setting high thrust at low speed. Do not take off with the bleeds on. Do not take off into an ash cloud;

b. Do not use the windshield wipers for ash or dust removal. Ash deposits on the windshield will be hosed off with water and the residue wiped with a clean cloth;

c. Verify that the pitot and static ports are ash and dust free;

d. Verify that all ventilation inlets and scoops are clear of ash or dust accumulation;

e. Use of the APU will be limited to engine start;

f. Limit thrust to the minimum required to taxi. Use all engines to taxi. Taxi at low speeds. When possible, avoid operating the engines above idle. Visibility may also be impaired;

g. Due to the fine grains involved, ash can reduce traction significantly. If wet conditions prevail, an ash-coated surface can approximate icy conditions. Therefore, taxi operations should be conducted using extreme caution;

h. Brakes should be used sparingly, as the ash will cause greater brake wear than normal;

i. Separation distances when following other aircraft should be increased, both to allow for greater stopping distances than normal and to avoid blowing dust;

j. Avoid the use of air conditioning on the ground. If air conditioning is deemed necessary, operate at full cold setting if dust is visible;

k. Following parking of the aircraft, special attention to securing of engine plugs/covers, pitot/static port covers, including covering of other ports and openings shall be made.

Further information can be found in Cessna Volcanic Ash Recommendations.

8.12.3.6 Ozone Irritation

The total amount of ozone in the atmosphere and its distribution with altitude is widely variable. It generally increases with altitude (most pronounced at or above the tropopause), will change with the seasons, and is different in the northern and southern hemispheres.

Above normal concentrations of ozone will cause irritation to the eyes, nose, mouth and throat. The irritation is temporary, but it is recommended that exposure to ozone be minimized. If ozone irritation is suspected, the PIC should first check other more serious possibilities that can cause the same symptoms. If ozone is determined as the probable cause, then the PIC should consider:

a. Requesting a lower altitude if possible,

b. Using 100% oxygen before approach and landing.

8.12.3.7 Wind shear

Wind shear is defined as a sudden change of wind velocity and/or direction.

Windshear may be vertical or horizontal, or a mixture of both types. ICAO defines the vertical and horizontal components of wind shear as follows:

Vertical wind shear is defined as change of horizontal wind direction and/or speed with height, as would be determined by means of two or more anemometers mounted at different heights on a single mast.

Horizontal wind shear is defined as change of horizontal wind direction and/or speed with horizontal distance, as would be determined by two or more anemometers mounted at the same height along a runway.

Low Level Turbulence which may be associated with a frontal surface, with thunderstorms or convective clouds, with microbursts, or with the surrounding terrain, is particularly hazardous to aircraft departing or arriving at an aerodrome. Wind shear is usually associated with one of the following weather phenomena:

a. Frontal surfaces;
b. Jet streams;
c. Thunderstorms or convective clouds especially cumulonimbus or towering cumulus;
d. Mountain Waves;
e. Microbursts.

The main effects of wind shear are:

a. Turbulence
b. Violent air movement (up- or down-draughts or swirling or rotating air patterns)
c. Sudden increase or reduction of airspeed
d. Sudden increase or decrease of groundspeed and/or drift.
e. Clear Air Turbulence (CAT), which may be very severe, is often associated with jet streams.
f. Rotor action or down-draughts in the lee of mountain waves can create difficult flying conditions and may even lead to loss of control.

8.12.3.7.1 Typical Scenarios

An aircraft on initial climb encounters a microburst with strong down-drafts, which prevent the aircraft from climbing away, even though the pilot immediately recognises the wind shear and takes correct action.

An aircraft on approach in head-wind conditions encounters horizontal wind shear resulting in a change of wind component to tail-wind; the aircraft touches down late and fast and overshoots the runway.

8.12.3.7.2 Wind Shear Recognition and Avoidance

Flight crew awareness and alertness are key factors in the successful application of wind shear avoidance techniques and recovery techniques.

Whenever wind shear conditions are forecast, or reported by other aircraft, pilots will include discussion of wind shear recognition and response in the takeoff or approach brief.

Whether or not wind shear conditions are expected, the pilot must be able to recognise quickly when wind shear is affecting the aircraft. He/she may be aided in this by airport based warning systems (e.g. LLWAS and TDWR) or by onboard equipment, such as Ground Proximity Warning System or Airborne Wind Shear Warning Systems.

The following indications of a suspected wind shear condition:

a. Indicated airspeed variations in excess of 15kts

b. Groundspeed variations (decreasing head wind or increasing tail wind, or a shift from head wind to tail wind)
c. Vertical-speed excursions of 500 fpm or more
d. Pitch attitude excursions of five degrees or more e. Glideslope deviation of one dot or more
f. Heading variations of 10 degrees or more and,
g. Unusual auto-throttle (if fitted) activity or throttle lever position.

8.12.3.7.3 Wind Shear on Takeoff and Initial Climb

Horizontal and/or vertical Wind Shear on take-off result in sudden loss of airspeed and/or reduction in climb rate, with potentially disastrous consequences. It is vital that such conditions be quickly recognised if they are encountered, and that pilot response should be immediate and correct.

Before Departure

Whenever wind shear conditions are forecast or reported for take-off, crew will include in their departure briefing the following wind shear awareness items:

a. Assessment of the conditions for a safe takeoff based on:
b. Most recent weather reports and forecasts;

c. Visual observations; and,

d. Crew experience with the airport environment and the prevailing weather conditions; and

e. Consideration to delaying the takeoff until conditions improve.

If wind shear conditions are expected, the crew will:

a. Select the most favorable runway, considering the location of the likely wind shear/downburst condition;
b. Select the minimum flaps configuration compatible with takeoff requirements, to maximize climb- gradient capability;
c. Use the weather radar (or the predictive wind shear system, if available) before beginning the takeoff to ensure that the flight path is clear of hazards;
d. Select maximum takeoff thrust;
e. After selecting the takeoff/go-around (TOGA) mode, select the flight-path-vector display, as available, to obtain a visual reference of the climb flight path angle; and,
f. Closely monitor the airspeed and airspeed trend during the takeoff roll to detect any evidence of impending wind shear.

Wind Shear Recovery

If wind shear is encountered during the takeoff roll or during initial climb, the following actions will be taken without delay:

Before V_1:

The takeoff will be rejected if unacceptable airspeed variations occur (not exceeding the target V_1) and if there is sufficient runway remaining to stop the airplane; After V_1:

a. Disconnect the auto-throttles, if available, and maintain or set the throttle levers to maximum takeoff thrust;

b. Rotate normally at V_r; and,

c. Follow the FD pitch command if the FD provides wind shear recovery guidance, or set the required pitch attitude (as recommended in the aircraft operating manual (AOM)/quick reference handbook (QRH));

d. During initial climb:

e. Disconnect the A/THR, if available, and maintain or set the throttle levers to maximum takeoff thrust;

f. If the autopilot (AP) is engaged and if the FD provides wind shear recovery guidance, keep the AP engaged; or,

g. Follow the FD pitch command, if the FD provides wind shear recovery guidance; or,

h. Set the required pitch attitude (as recommended in the AOM/QRH);

i. Level the wings to maximize the climb gradient, unless a turn is required for obstacle clearance;

j. Closely monitor the airspeed, airspeed trend and flight-path angle (as available);

k. Allow airspeed to decrease to stick shaker onset (intermittent stick shaker activation) while monitoring the airspeed trend;

l. Do not change the flaps or landing-gear configurations until out of the wind shear condition; and,

m. When out of the wind shear condition, increase airspeed when a positive climb is confirmed, retract the landing gear, flaps and slats, then establish a normal climb profile.

8.12.3.7.4 Wind Shear on the Approach and Landing

Horizontal and/or vertical wind shear during the approach can result in sudden loss of airspeed and apparent loss of power, with potentially disastrous consequences. A sudden change of wind component or drift prior to landing can make the approach unstable at a point where go-around is not possible or would be extremely hazardous. It is vital that such conditions be quickly recognised if they are encountered, and that pilot response be immediate and correct.

Descent Briefing

Whenever wind shear conditions are forecast or reported for approach and landing, the approach briefing will include the following:

a. Runway in use (type of approach)

b. Expected arrival route (standard terminal arrival (STAR) or radar vectors)

c. Prevailing weather and,

d. Reports of potential low-level wind shear (LLWAS warnings, TDWR data) and,

e. The intended use of automation for vertical navigation and lateral navigation as a function of the suspected or forecasted wind shear conditions.

Recovery During Approach and Landing

If wind shear is encountered during the approach or landing, the following recovery actions will be taken without delay:

a. Select the takeoff/go-around (TOGA) mode and set and maintain maximum go-around thrust

b. Follow the Flight Director pitch command (if the FD provides wind shear recovery guidance) or set the pitch-attitude target recommended in the AOM/QRH

c. If the AP is engaged and if the FD provides wind shear recovery guidance, keep the AP engaged;
otherwise, disconnect the AP and set and maintain the recommended pitch attitude

d. Do not change the flap configuration or landing-gear configuration until out of the wind shear

e. Level the wings to maximize climb gradient, unless a turn is required for obstacle clearance

f. Allow airspeed to decrease to stick-shaker onset (intermittent stick-shaker activation) while monitoring airspeed trend

g. Closely monitor airspeed, airspeed trend and flight path angle and,

h. When out of the wind shear, retract the landing gear, flaps and slats, then increase the airspeed when a positive climb is confirmed and establish a normal climb profile.

8.12.3.7.5 Reporting Procedure

If significant wind shear is encountered during the takeoff and initial climb, or on approach and landing, it will be reported to air traffic control immediately. If the effects on aircraft control are exceptional and/or beyond the effects typically encountered, then an appropriate SMS report will be raised after flight completion.

8.12.4 Low Visibility Weather Hazards

8.12.4.1 Definitions

'Ceiling' means a measurement of the cloud base height relative to the ground. Ceiling is reported as part of the METAR (METeorological Aviation Report) used for flight planning by pilots
worldwide.

'Cloud amount' means the fraction of the sky obscured by clouds when observed from a particular location. Okta is the usual unit of measurement of the cloud cover.

'Cloud base' means the cloud base (or the base of the cloud) is the lowest altitude of the visible portion of the cloud. It is traditionally expressed either in m or feet above mean sea level (or planetary surface), or as the corresponding pressure level in hectopascal (hPa, equivalent to millibar).

'Cloud layer' means a continuous or fragmented distribution of clouds all sharing the same cloud base

'Prevailing visibility' means the measurement of the greatest distance visible throughout at least half of the horizon, not necessarily continuously.

'Relative humidity' means the amount of water vapour present in air expressed as a percentage of the amount needed for saturation at the same temperature.

'Runway visual range (RVR)' means runway visual range (RVR) is the distance over which a pilot of an aircraft on the centreline of the runway can see the runway surface markings delineating the runway or identifying its centre line. RVR is normally expressed in feet or meters

'Slant Visibility Range (SVR)' the oblique distance at which you can see landing aids, such as runway lights and markings.

'Temperature-dew point spread' means the difference in temperature between the actual temperature and the "dew point" temperature at that same time. The dew point temperature is the temperature at which the air becomes 100% saturated with moisture (water), so it turns to fog at that temperature. So the dryer the air, the larger the spread between these two temperatures. On the other hand, when the two temperatures are close, it means pilots need to be very careful as visibility can be severely reduce, all the way to complete fog.

8.12.4.2 Meteorological Causes of Low Visibility

a. Visibility is decreased by particles that absorb, scatter, and reflect light. We can separate atmospheric particles into two groups:

i. Those composed of water, such as water droplets and ice crystals (water particles),

ii. Those composed of dry particles, such as those from combustion, wind-borne soil, and volcanoes (solid particles).

b. Fog and Low Stratus Clouds

Fog forms when the difference between air temperature and dew point is generally less than 2.5 °C.

i. Radiation fog/Advection fog – fog forms in stable air

(1) ...that is, it is cooled to saturation by contact with the cold ground

ii. Upslope fog – fog caused by adiabatic cooling of stable air

iii. Steam fog – fog that forms in unstable air (at least in the lowest layers)

(1) water evaporates and saturates a thin layer of colder air, which causes the fog. iv. Ice fog – forms in cold climates
(1) a radiation-type fog which is composed of ice crystals

(A) Forms at low temperatures and may be quite persistent, especially in cities or industrial areas where many combustion particles are present to act as cloud nuclei

(B) At colder temperatures, the sudden addition of moisture and particulates can cause ice fog to rapidly form

c. Precipitation

i. Fractocumulus or fractostratus clouds – sometimes called scud form below the original cloud base, causing the ceiling to lower over time.
ii. Precipitation fog – may develop when rain saturates the layer near the ground
iii. Blowing snow (BLSN) – reported when the wind raises snow particles more than 6 feet above the surface and reduces visibility to 6 s.m. or less.

iv. Blizzard – exists when low temperatures combine with winds that exceed 30 knots and great amounts of snow, either falling or blowing.

v. Weather Systems – fog and low stratus clouds develop under identifiable larger scale weather conditions

(1) IMC conditions may also occur when warm, moist air over runs cold air trapped in valleys

(2) Radiation fog favors clear skies, cold ground and light winds

(3) Radiation fog typically dissipates after the sun rises

(4) Advection fog is common whenever warm, moist air is carried over a cold surface

d. Weather maps have cross sections showing precipitation falling from over running warm air saturating shallow cold air near the ground

i. Low clouds and fog occur in a broad band on the cold-air side of the front e. Smoke and Haze
i. Smoke – is the suspension of combustion particles in the air ii. Haze (HZ) – is a suspension of extremely small, dry particles

iii. Air pollution – as with smoke, some of the worst haze problems occur in large industrial areas and cities where many air pollution sources add gases and more particulates to any naturally occurring haze particles.

f. Dust

i. Dust (DU) – refers to fine particles of soil suspended in the air

ii. Blowing dust (BLDU) – dust raised by the wind to 6 feet (2 m) or more, restricting visibility to 6 statute miles (10 km) or less

iii. Dust storm – visibility less than 5/8 sm (1km)

iv. Severe dust storm – visibility less than 5/16 sm (500 m)

8.13 Flights over Water

8.13.1 Accessibility of Life-jackets

If the aircraft is operated over water at a distance of more than 50 NM from land or taking off or landing at an aerodrome where, in the opinion of the pilot-in-command, the take-off or approach path is so disposed over water that there would be a likelihood of a ditching; then the aircraft Pilatus PC-12 will be equipped with a life-jacket for each person on board or the equivalent individual floatation device for each person on board younger than 24 months, stowed in a position that is readily accessible from the seat or berth of the person for whose use it is provided (with a safety belt or restraint system fastened).

Each life-jacket or equivalent individual flotation device must be equipped with a means of electric illumination for the purpose of facilitating the location of persons and also a whistle (except life-jackets for children under 3 years of age).

For extended flights over water the PIC shall determine the risks to survival of the occupants of the aircraft in the event of ditching. The PIC shall take into account the operating environment and conditions such as, but not limited to:

a. Sea state

b. Sea and air temperatures,

c. The distance from land suitable for making an emergency landing, and
d. The availability of search and rescue facilities.
e. Based upon the assessment of these risks, the Pilot In Command shall, ensure that the aircraft is appropriately equipped with:

i. Life Rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in emergency, provided with such lifesaving equipment, including means of sustaining life, as is appropriate to the flight to be undertaken; and

ii. Equipment for signalling distress.

8.13.2 Life Rafts

a. The following shall be readily available with each life-raft:

i. Means for maintaining buoyancy;

ii. A sea anchor;

iii. Life-lines and means of attaching one life-raft to another;

iv. Paddles for life-rafts with a capacity of six or less;

v. Means of protecting the occupants from the elements;

vi. A water-resistant torch;

vii. Signalling equipment to make the pyrotechnic distress signals described in ICAO Annex 2, Rules of the Air;

viii. 100 g of glucose tablets for each four, or fraction of four, persons that the life-raft is designed to carry:

ix. At least 2 litres of drinkable water provided in durable containers or means of making sea water drinkable or a combination of both; and

x. First-aid equipment.

b. As far as practicable, items listed in a. shall be contained in a pack.

8.14 Passenger and Cabin Safety Procedures

A member of Flight Crew will always be in attendance for the loading of passengers. a. Aircraft are equipped with:

i. A seat or berth for each person on board who is aged 24 months or more;

ii. A seat belt on each passenger seat and restraining belts for each berth;

iii. A child restraint device (CRD) for each person on board younger than 24 months;

iv. 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:

(a) on each flight crew seat and on any seat alongside a pilot's seat; and

(b) on each observer's seat located in the flight crew compartment.

b. A seat belt with upper torso restraint system shall:

i. Have a single point release; and Flight crew seats include two shoulder straps and a seat belt that may be used independently. The Aircraft is equipped has both a "Fasten Seat Belts" and "No Smoking" visual indication in the main cabin, which can be activated by crew, to indicate to all passengers when seat belts must be fastened and when smoking is not allowed.

8.14.1 Passenger Safety Briefing

The PIC shall ensure that passengers are given a safety briefing as appropriate to the passenger's needs; and covers at least the items specified in this section.

Passengers who occupy seats that permit direct access to emergency exits shall appear to be reasonably fit, strong and able to assist the rapid evacuation of the aircraft in an emergency after an appropriate briefing by the crew. 'Direct access' means a seat from which a passenger can proceed directly to the exit without entering an aisle or passing around an obstruction.

a. Passengers are seated where, in the event that an emergency evacuation is required, they are able to assist and not hinder evacuation of the aircraft;

b. Prior to and during taxiing, take-off and landing, and whenever deemed necessary in the interest of safety by the pilot-in-command, each passenger on board occupies a seat or berth and has his/her safety belt or restraint device properly secured; and

c. Multiple occupancy is only allowed on specified aircraft seats occupied by one adult and one infant properly secured by a supplementary loop belt or other restraint device.

8.14.2 Normal Operations

The following briefing will be given by the PIC or the person designated by the PIC:

a. Prior to take-off:

i. When, where, why and how carry-on baggage is required to be stowed;

ii. The fastening, unfastening, tightening and general use of safety belts or safety harnesses;

iii. When seat backs must be secured in the upright position and chair tables must be stowed;

iv. The use and location of the passenger oxygen system including the location and use of oxygen masks;

v. The location and use of the portable oxygen bottle (if fitted);

vi. The location of emergency exits and for passengers seated next to an exit, how that exit operates;

vii. the location, purpose of, and advisability of reading the safety features card;

viii. the requirement to obey crew instructions regarding fasten seat belt signs and no smoking signs and the location of these signs;

ix. The location of any emergency equipment the passenger may have a need for in an emergency situation such as the ELT, fire extinguisher, survival equipment (including the means to access if in a locked compartment), First-aid kit, life preserver or flotation device and life raft;

x. Super Legacy XP Limited procedures regarding the use of portable electronic devices; and

xi. Any other considerations based on the configuration of the aircraft cabin and equipment.

b. After take-off, if not included in the pre take-off briefing:

i. That smoking is not permitted at ANY time on board the aircraft; and

ii. The advisability of using safety belts or safety harnesses during flight.

c. In-flight when the "Fasten Seat Belt" sign has been turned on for reasons of turbulence:

i. When the use of seat belts is required; and
ii. The requirement to stow carry-on baggage.

d. Prior to passenger deplaning, the safest direction and most hazard-free route for passenger movement away from the aircraft following deplaning, and any dangers associated with the aircraft type such as pitot tube locations, propellers, or engine intakes.

The standard safety briefing may be omitted if the Passenger has previously attended a Passenger Safety Training Programme (Part D 2.24) and flown on the aircraft type within the last 90 days.

Where the foregoing safety briefing is insufficient for a passenger because of that passenger's physical, sensory or comprehension limitations or because that passenger is responsible for the care of another person on board the aircraft, the PIC shall ensure that the passenger is given an individual safety briefing that meets their special needs.

8.14.3 Emergency Operations

The PIC shall ensure that, in the event of an emergency and where time and circumstances permit, all passengers are given an emergency briefing covering the following items:

a. Safety belts or safety harnesses;

b. Seat backs and chair tables;

c. Carry-on baggage;

d. Safety features cards;

e. Brace position (when to assume, how long to remain and considerations for side facing seats);

f. If applicable, life preservers; and

g. If applicable, evacuation procedures for an occupant of a child restraint system.

8.14.4 Passenger Safety Briefing Card

A Passenger Safety Briefing Card shall be available for each passenger containing, in printed or pictographic form, information on at least the following safety features of the aircraft:

a. The location of emergency exits;

b. How to open the emergency exits;

c. The location of life-jackets and life rafts; and

d. The location of emergency equipment on board the aircraft.

8.14.5 Child Restraint Device (CRDS)

a. A CRD shall be either:

i. a 'supplementary loop' belt manufactured with the same techniques and the same materials as
the approved safety belts; or ii. or it must comply with b:
b. Provided the CRD can be installed properly on the respective aircraft seat, the following CRDs are considered acceptable:

i. CRDs approved for use in aircraft by the Bailiwick of Guernsey Regulatory Authority on the basis of a technical standard and marked accordingly.

ii. CRDs approved for use in motor vehicles according to the UN standard ECE R 44, -03 or later series of amendments.

iii. CRDs approved for use in motor vehicles and aircraft according to Canadian CMVSS
213/213.1.

iv. CRDs approved for use in motor vehicles and aircraft according to US FMVSS No 213 and manufactured to these standards on or after February 26, 1985. US approved CRDs manufactured after this date shall bear the following labels in red letters:

1) 'THIS CHILD RESTRAINT SYSTEM CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS'; and

2) 'THIS RESTRAINT IS CERTIFIED FOR USE IN MOTOR VEHICLES AND AIRCRAFT';

v. CRDs qualified for use in aircraft according to the German 'Qualification Procedure for Child
Restraint Systems for Use in Aircraft' (TÜV Doc. TÜV/958-01/2001); and

vi. Devices approved for use in cars, manufactured and tested to standards equivalent to those listed above. The device shall be marked with an associated qualification sign, which shows the name of the qualification organisation and a specific identification number, related to the associated qualification project. The qualifying organisation shall be a competent and independent organisation that is acceptable to the competent authority.

c. Location

i. Forward facing CRDs may be installed on both forward and rearward facing passenger seats but only when fitted in the same direction as the passenger seat on which they are positioned. Rearward facing CRDs shall only be installed on forward facing passenger seats. A CRD may not be installed within the radius of action of an airbag, unless it is obvious that the airbag is de- activated or it can be demonstrated that there is no negative impact from the airbag.
ii. An infant in a CRD shall be located as near to a floor level exit as feasible. iii. An infant in a CRD shall not hinder evacuation for any passenger. iv. An infant in a CRD shall neither be located in the row (where rows are existing) leading to an emergency exit nor located in a row immediately forward or aft of an emergency exit. A window passenger seat is the preferred location. An aisle passenger seat or a cross aisle passenger seat that forms part of the evacuation route to exits is not recommended. Other locations may be acceptable provided the access of neighbour passengers to the nearest aisle is not obstructed by the CRD.

v. In general, only one CRD per row segment is recommended. More than one CRD per row segment is allowed if the infants are from the same family or travelling group provided the infants are accompanied by a responsible adult sitting next to them.

vi. A row segment is the fraction of a row separated by two aisles or by one aisle and the aircraft fuselage.

d. Installation

i. CRDs shall only be installed on a suitable aircraft seat with the type of connecting device they are approved or qualified for. E.g., CRDs to be connected by a three point harness only (most rearward facing baby CRDs currently available) shall not be attached to an aircraft seat with a lap belt only; a CRD designed to be attached to a vehicle seat by means of rigid bar lower anchorages (ISO-FIX or US equivalent) only, shall only be used on aircraft seats that are equipped with such connecting devices and shall not be attached by the aircraft seat lap belt. The method of connecting shall be the one shown in the manufacturer's instructions provided with each CRD.

ii. All safety and installation instructions shall be followed carefully by the responsible adult accompanying the infant. Crew members shall prohibit the use of any inadequately installed CRD or not qualified seat.

iii. If a forward facing CRD with a rigid backrest is to be fastened by a lap belt, the restraint device shall be fastened when the backrest of the passenger seat on which it rests is in a reclined position. Thereafter, the backrest is to be positioned upright. This procedure ensures better tightening of the CRD on the aircraft seat if the aircraft seat is recline-able.

iv. The buckle of the adult safety belt shall be easily accessible for both opening and closing, and shall be in line with the seat belt halves (not canted) after tightening.

v. Forward facing restraint devices with an integral harness must not be installed such that the adult safety belt is secured over the infant.

e. Operation

i. Each CRD shall remain secured to a passenger seat during all phases of flight, unless it is properly stowed when not in use.

ii. Where a CRD is adjustable in recline, it shall be in an upright position for all occasions when passenger restraint devices are required.

8.14.6 Stowage of Hand Luggage and Galley Equipment

Immediately prior to take-off and landing, the PIC, or person so designated by the PIC, will visually check that galley equipment is securely stowed and the cabin is secure.

In the event of moderate or worse, in-flight turbulence, the PIC, or person so designated by the PIC, will ensure that hand luggage, galley equipment and other loose articles are securely stowed.

8.14.7 Seats for Cabin Crew

Not Applicable

8.14.8. Smoking on Board

The pilot-in-command shall not allow smoking on board at ANY time

8.15 Portable Electronic Devices

8.15.1 Definitions

a. Definition and categories of PEDs

PEDs are any kind of electronic device, typically but not limited to consumer electronics, brought on board the aircraft by crew members, passengers, or as part of the cargo and that are not included in the approved aircraft configuration. All equipment that is able to consume electrical energy falls under this definition. The electrical energy can be provided from internal sources as batteries (chargeable or non-rechargeable) or the devices may also be connected to specific aircraft power sources. Note: the definition of PED includes both transmitting and non-transmitting devices.

PEDs fall into three categories:

i. Non-intentional transmitters can non-intentionally radiate RF transmissions. This category includes, but is not limited to, computing equipment, cameras, radio receivers, audio and video reproducers, electronic games and toys; when these devices are not equipped with transmitting function.

In addition, portable, non-transmitting devices provided to assist crew members in their duties are included in this category. The category is identified as PED.

ii. Intentional transmitters can radiate RF transmissions on specific frequencies as part of their intended function. In addition, they may radiate non-intentional transmissions like any PED. The term ‘transmitting PED’ (T-PED) is used to identify the transmitting capability of the PED. Intentional transmitters are transmitting devices such as RF-based remote control equipment, which may include some toys, two-way radios (sometimes referred to as private mobile radio), mobile phones of any type; satellite phones; computer with mobile phone data connection; wireless fidelity (WIFI) or Bluetooth capability. After deactivation of the transmitting capability, e.g. by activating the so-called ‘flight mode’ or ‘flight safety mode’, the T-PED remains a PED having non-intentional emissions.

iii. Controlled PED

A controlled PED (C-PED) is subject to administrative control by Super Legacy XP Limited. This will include, inter alia, tracking the location of the devices to specific aircraft or persons and ensuring that no unauthorised changes are made to the hardware, software or databases. A controlled PED will also be subject to procedures to ensure that it is maintained to the latest amendment state. C-PEDs can be assigned to the category of non-intentional transmitters (PEDs) or intentional transmitters (T-PEDs).

c. Definition of the switched-off status

Many PEDs are not completely disconnected from the internal power source when switched off. The switching function may leave some remaining functionality e.g. data storage, timer, clock, etc. These devices can be considered switched off when in the deactivated status. The same applies for devices having no transmit capability and operated by coin cells without further deactivation capability, e.g. wrist watches.

d. Electromagnetic interference (EMI)

The two classes of EMI to be addressed can be described as follows:

i. Front door coupling is the possible disturbance to an aircraft system as received by the antenna of the system and mainly in the frequency band used by the system. Any PED internal oscillation has the potential to radiate low level signals in the aviation frequency bands. Through this disturbance especially the instrument landing system (ILS) and the VHF omni range (VOR) navigation system may indicate erroneous information.

ii. Back door coupling is the possible disturbance of aircraft systems by electromagnetic fields generated by transmitters at a level which could exceed on short distance (i.e. within the aircraft) the electromagnetic field level used for the aircraft system certification. This disturbance may then lead to system malfunction.

e. Airplane mode: A setting available on many mobile phones, smartphones and other electronic devices that, when activated, suspends many of the device's signal transmitting functions, thereby disabling the device's capacity to place or receive calls or use text messaging – while still permitting use of other functions that do not require signal transmission. Other equivalent terms: Flight Mode, Safe Mode, etc.

f. Critical phases of flight: Includes taxi, take-off, climb, descent, approach, and landing;

Category	TPED & CPED	PED
Description	Transmitting Portable Electronic Devices: These are devices that are designed to transmit or receive data through radio frequencies, cellular functions,	Non-transmitting portable electronic device.
Examples	Mobile / smartphones, tablets, laptop computers, radio transmitters/receivers, navigation devices, most e-readers, most media players, most electronic games etc.	Media players*, cameras* electronic games*, e-readers*, etc. * Although most devices are now equipped with a transmitting function, some models are not.

8.15.2 Permitted, Restricted and Prohibited and Devices

List of Permitted, Restricted and Prohibited Portable Electronic Devices

PEDs fall under several categories including: permitted, restricted and prohibited devices. Super Legacy XP Limited permit the unrestricted use of electronic watches, portable voice recorders, hearing aids, heart pacemakers, and electric shavers.

Additionally, the regulations permit the use of “any other portable electronic device which Super Legacy XP Limited has determined “will not cause interference with the navigation or communication system of the aircraft on which it is to be used.” PED tolerance may not address all transmitters so some devices will be prohibited unless additional analysis or testing is completed to permit their use.

a. Permitted at all times

   i. Electronic watches
   ii. Portable voice recorders
   iii. Hearing aids
   iv. Heart pacemakers

b. Approved electronic medical portable electronic devices (MPEDS) as determined by Super Legacy XP Limited. Permitted when aircraft door is open or at the PIC’s discretion during lengthy ground delays; and when fueling is NOT taking place

   i. Mobile phones and smartphones (unless restricted by local regulations)
   ii. Wireless computer/mobile phone accessories
   iii. One-way pagers (capable of receiving signals only)
   iv. All other portable electronic devices

c. Restricted Transmitting Portable Electronic Devices (TPEDS)

   i. Mobile / smartphones
   ii. Tablets
   iii. Bluetooth devices
   iv. E-Readers *when equipped with a transmitting function
   v. Electronic games * when equipped with a transmitting function
   vi. Digital media players *when equipped with a transmitting function

The above are permitted for use during taxi, take-off, cruise, approach and landing with restrictions. The ‘Airplane Mode’ must be enabled once the aircraft door is closed and until the aircraft has left the active runway after landing.

   i. Laptops and notebooks: must be unplugged, switched off and stow securely during taxi, take- off, approach and landing.

   ii. Portable DVD players: must be unplugged, switched off and stowed in a secure place during taxi, take-off, approach and landing.

   iii. Navigation devices must be switched off for taxi, take-off, approach and landing.

d. Permitted during flight, usually prohibited during taxi, takeoff, landing and flight operations below 10,000 feet.

i. Personal Digital Assistants (PDAs), and other two-way communication devices (provided that the transmitting function is disabled – e.g., aircraft mode, hospital mode, wireless system off).

ii. Computers and printers modems connected directly to aircraft satellite phone or via wireless internet (where applicable)

iii. Digital media players

iv. E-readers

v. Electronic compact cameras (film, digital, video)

vi. Customer-owned electronic noise-cancelling/reduction headphones

vii. Electronic calculators

viii. Voice recorders

e. Permitted After Landing *When Aircraft Has Cleared the Active Runway*

i. Mobile phones / Smartphones / Tablets
ii. 2-way pagers

f. Prohibited at all times

i. AM/FM transmitters and receivers (including televisions, radios)

ii. Two-way communication devices (unless the transmitting function is disabled)

iii. Remote-control devices (customer-owned)

iv. Personal air purifiers

v. Electronic simulated smoking devices (cigarettes, pipes, cigars)

vi. Large heavy electronic power devices

vii. Wireless mouse

viii. VHF scanner receivers;

ix. Portable television sets;

x. Radio controlled toys;

xi. Two way transmitters such as walkie-talkies, amateur radios,

xii. Citizen Band (CB) radios

xiii. 49 MHz transmitters

8.15.3 Medical Portable Electronic Devices (MPEDS)

Super Legacy XP Limited has determined that its aircraft are PED tolerant. This is to avoid the evaluation of each specific PED make and model. A determination of aircraft PED tolerance with respect to passenger PEDs does include MPEDs.

Crew members must ensure proper stowage of larger MPEDs and are aware of the inability to turn off certain types of these devices during aircraft operations.

Small MPEDs must be secured during taxi, take-off, descent, approach and landing. Super Legacy XP Limited encourage passengers to secure small MPEDs on their person by placing them in an armband or garment pocket.

8.15.4 Stowage, passenger information and passenger briefing of PEDs

There is an important distinction that needs to be made between “stowing” and “securing” PEDs. If a PED is to be “stowed”, it must be placed into an approved carry-on stowage location. These locations have been designed and certified to comply with the requirements for retention of articles of mass during emergency landings. Approved carryon stowage locations have specific weight and size limitations. When a PED is “secured”, it is restrained by a method which may not have been certified for retention of articles of mass to the emergency landing load limits.

a. Large PEDs (such as full-size laptop computers) must be stowed in an approved carry-on stowage location, and not present an undue hazard in the event of severe turbulence, crash forces or emergency egress. Large PEDs are those that Super Legacy XP Limited has determined have a mass more than 1 kg or are of a size that would impede egress.

b. Small PEDs must be stowed or secured at all times when seat belts are required to be worn. Passengers who do not wish to stow their PEDs will be encouraged to secure them on their person, such as in a garment pocket. Passengers may also secure small PEDs by placing them in seat pockets or holding them in their hands. A PED will not be left unsecured on an empty seat.

c. Seat back pockets are generally designed to hold a maximum of 1½ kg. The passenger safety card, magazines, other literature and air sickness bag account for approximately ½ kg. As a general “rule of thumb”, small PEDs and any other personal items placed in the seat back pocket will not exceed a total mass of 1 kg and will not protrude to the point of impeding egress.

d. PED cords or accessories must not impede emergency egress.

e. PED policy must discourage passengers from getting up from their seats to access the stowage areas at a point in time that would present a hazard to themselves or the passengers around them.

8.15.5 Use of Electrical Power

Where in-seat electrical power supplies are available for passenger use, the following will apply:

a. PEDs will be disconnected from any in-seat electrical power supply during taxiing, take-off, approach, landing, and during abnormal or emergency conditions; and

b. Flight crew will be aware of the proper means to switch-off in-seat power supplies used for PEDs.

8.15.6 Use of Mobile Phones or Smartphones on Board

When on board an aircraft, passengers and crew must not use any device that can adversely affect the performance of the aircraft systems and equipment. The PIC shall require the switching-off and/or deactivation of any device believed to adversely affect the performance of aircraft systems or equipment.

Existing regulations require that all TPEDs be turned off and properly stowed when the aircraft engines are running. Mobile / smartphones and other devices that don’t have an Airplane Mode that turns off just the wireless radio parts of the device, for safe use on an aircraft where radio transmitters are not permitted. Airplane Mode permits the user to safely use other functions of a mobile or smartphone phone (such as music, games or organizer functions) during flight.

Mobile phones must be either switched off or must have Airplane Mode enabled from door-close on departure until vacating the active runway after landing.

On aircraft equipped with either Wi-Fi or an airborne access system, use of devices in Wi-Fi only mode is permitted above 10,000 feet.

8.15.7 Use of Transmitting Portable Electronic Devices (TPEDs)

It is not possible for Crew Members to verify and confirm that each and every device on board is in proper mode at all times. Nevertheless, Crew Members are expected to inform passengers of Super Legacy XP Limited policy on the expanded use of passenger portable electronic devices. During the cabin secure checks for take-off and landing, if a passenger is identified utilizing a TPED, Crew Member will request the passenger to check that the device is in Airplane Mode. If the passenger is unable to confirm whether the device is in the 'Airplane Mode' or if 'Airplane Mode' or the device cannot be enabled, the passenger must be instructed to switch the device OFF. After landing and once the aircraft has vacated the active runway, the Crew Members Member may permit the use of handheld TPEDS.

Flight phase	Airplane Mode - Disabled	Airplane Mode - Enabled
Taxi Out	NO	YES
Take-off	NO	YES
Cruise	NO Exception: Only on aircraft equipped with WI- FI or an airborne access system and only when crew advises of permission of use for WIFI only	YES
Landing	NO	YES
Taxi In	YES	YES

8.15.8 PEDS & Low Visibility Operations

During Low Visibility Operations (LVOs) all PEDs must be switched off and during take-off and landing. The PIC shall advise passengers accordingly.

8.15.9 Suspected Interference Report

Should a PED be suspected of causing interference to aircraft operation, an entry must be recorded in the Technical Log and an SMS Report must be submitted and forwarded to the Competent Authority.

If interference from a device is suspected, the PIC will prohibit the use of the device.

Where interference with the aircraft systems or equipment is suspected from use of a device, crew members must:

i. Instruct passenger(s) to terminate the use of device

ii. Prohibit the use of suspected device

iii. Recheck the aircraft systems and equipment

iv. Photograph the suspected PED, if possible and submit with SMS report

The PIC will report incidents of PED interference and include the following information in the report:

i. Flight Information – aircraft type, registration date and UTC time of incident, aircraft location (VOR bearing/DIST/LAT/LONG), altitude, weather conditions, name and telephone number of the PIC;

ii. The aircraft systems affected and the description of Interference – description of effects on aircraft systems, audio or systems, including radio frequency, identification, duration, severity and other pertinent information; location the device was found, phase of flight and the time the problem occurred, full description of the device, its brand, serial number, if possible the operating system of the device (type and version) and any other peripherals.

8.15.10 Other Considerations

Crew should be alert to the possibility of a PED/Lithium battery catching fire or causing smoke. All Super Legacy XP Limited are fitted with a PED Fire-sock to contain such an event. Crew will thereafter following standard emergency procedures for a fire in cabin.

8.15.11 Training

All Super Legacy XP Limited crew members and ground personnel are trained in accordance with Part D 2.22 Use of Portable Electronic Devices to enforce possible restrictions concerning the use of PEDs, in line with the above procedures.

8.16 Operations in International Airspace (RVSM, HLA, RNP)

8.16.1 General

Super Legacy XP Limited aircraft that operate in RVSM airspace must be approved by the Bailiwick of Guernsey Regulatory Authority. Unless otherwise authorised by the appropriate air traffic control unit, Super Legacy XP Limited aircraft must not fly in Reduced Vertical Separation Minimum airspace unless it is equipped with height keeping systems that enable the aircraft to maintain the required height keeping performance capability. The aircraft must be maintained in accordance with an approved RVSM maintenance program. Prior to flight into RVSM airspace the PIC must confirm that all of these requirements are met.

Crew should operate in accordance with recommended practice described in this Chapter (RVSM/HLA) and Chapter 8.17 for RNAV/RNP. Additionally, crew must adhere to any operational limitations required for the navigation application.

The PIC must check that current copies of the relevant documents below are held on board the aircraft, in copy or electronically, prior to commencing operations in international airspace.

Crew members are reminded that it is incumbent on the individual to remain current on all training procedures as per the OMD and familiarize themselves with, but not limited to the following documents:

8.16.1.1 References:

a. ICAO Procedures for Air Navigation -Air Traffic Management (PANS – ATM), (Doc.4444);

b. ICAO Regional Supplementary Procedures, (Doc.7030);

c. Guidance and Information Material concerning Air Navigation in the North Atlantic Region; RVSM Operations;

d. North Atlantic Airspace & Operations Manual (NAT Doc 007)

e. ICAO Doc 7574 AN/934, Manual on Implementation of a 300m (1000 ft.) Vertical Separation Minimum between Flight Level 290 and Flight Level 410 Inclusive.

f. EUROCONTROL Document ASM ET1.ST.5000 entitled “The ATC Manual for a Reduced Vertical Separation (RVSM) in Europe”

g. Jeppesen Flight Guide

h. RP30 RVSM Manual

8.16.1.2 Approved Navigation Specifications

Super Legacy XP Limited are approved for the following airspace:

Type of Approval/ Authorisation	Approved
RVSM	Yes
MNPS/HLA	No

These authorisations are kept with the aircraft documents file on the aircraft. Without these authorisation documents crews may not operate in these phases of flight even if the Aircraft Flight Manual confirms that the aircraft is approved for such operations.

8.16.2 RVSM

RVSM airspace is any airspace or route between FL 290 and FL 410 inclusive where aircraft are separated vertically by 1,000 ft (300 m).

RVSM Flight Levels generally incorporates all odd flight levels from FL290 to FL410, inclusive, for aircraft on a magnetic course from 000 to 179. The even flight levels from FL300 to FL400, inclusive, are used by aircraft of a magnetic course from 180 to 359. Regional exceptions are noted in ICAO Document 7030.

RVSM has been implemented in most areas of the world above FL290. Differences in altitudes, contingency procedures, offset or other spacing procedures are covered in applicable oceanic en route charts, Jeppesen Airway Manual ATC State pages, the ICAO Document 7030.

Following approval to operate in RVSM airspace, the operator must ensure that height-keeping performance is monitored: -

a) at least once every 2 years; or
b) within intervals of 1000 flight hours per aircraft, whichever is the longer period.

Note: Where an operator has 2 or more aircraft of the same type, the monitoring must be conducted on a minimum of 2 aircraft of each aircraft type grouping.

For further information on how to have an aircraft height monitored as part of the ongoing height- keeping performance monitoring program, can be found on www.natcma.com.

8.16.2.1 Flight Planning

a. Verify that the aircraft is approved for RVSM operations;

b. Annotate the flight plan to be filed with the air traffic service provider to show that the aircraft and Super Legacy XP Limited are approved for RVSM operations. Include in item 10 (Equipment) of the ICAO flight plan the letter “W” to show RVSM approval;

c. Check reported and forecast weather conditions on the route of flight;

d. Check minimum equipment requirements pertaining to height-keeping systems; and

e. If required, for the specific aircraft group, account for any aircraft operating restrictions related to RVSM airworthiness approval.

8.16.2.2 Pre-flight

The following actions shall be accomplished during pre-flight:

a. Review maintenance logs and forms to ascertain the condition of equipment required for flight in the RVSM airspace. Ensure that maintenance action has been taken to correct defects to required equipment;

b. During the external inspection of aircraft, particular attention shall be paid to the condition of static sources and the condition of the fuselage skin in the vicinity of each static source and any other component that affects altimetry system accuracy (this check may be accomplished by a qualified and authorised person other than the pilot, e.g. a flight engineer or maintenance personnel);

c. Before take-off the aircraft altimeters shall be set to the local altimeter (QNH) setting and shall display a known elevation (e.g., field elevation) within the limits specified in aircraft operating manuals. The difference between the known elevation and the elevation displayed on the altimeters shall be within the limits specified in the Aircraft Flight Manual and must not exceed 75 ft. An alternative procedure using QFE may also be used; and

d. Before take-off, equipment required for flight in RVSM airspace shall be operational, and indications of malfunction shall be resolved.

8.16.2.3 Procedures prior to RVSM airspace entry

The following equipment must be installed and fully operational for flight in radar controlled RVSM airspace:

a. Two independent height measuring systems;

b. An automatic altitude control system;

c. An altitude alerter; and

d. One SSR altitude reporting transponder. If only one installed it must be selectable to either air data computer.

To be able to enter North Atlantic and Pacific RVSM non-radar controlled airspace the following equipment must be operating:

a. Two independent height measuring systems;

b. An automatic altitude control system; and c. An altitude alerter.
Each height measuring system has the following components:

a. Cross-coupled static source/system, with ice protection if located in areas subject to ice accretion;

b. Equipment for measuring static pressure sensed by the static source, converting it to pressure altitude and displaying the pressure altitude to the flight crew:

c. Equipment for providing a digitally encoded signal corresponding to the displayed pressure altitude, for automatic altitude reporting purposes;

d. Static source error correction (SSEC), if needed to meet the performance criteria for RVSM flight envelopes; and

e. Signals referenced to a flight crew selected altitude for automatic control and alerting. These signals will need to be derived from an altitude measurement system meeting the performance criteria for RVSM flight envelopes.

8.16.2.4 In-flight Procedures:

a. Flight crews shall comply with aircraft operating restrictions (if required for the specific aircraft group) related to RVSM airworthiness approval;

b. Emphasis shall be placed on promptly setting the sub-scale on all primary and standby altimeters to 29.92 in. Hg/1013.2 (hPa) when passing the transition altitude and rechecking for proper altimeter setting when reaching the initial cleared flight level (CFL);

c. In cruise flight it is essential that the aircraft be flown at the cleared flight level. This requires that particular care be taken to ensure that ATS clearances are fully understood and followed. Except in contingency or emergency situations, the aircraft shall not intentionally depart from the cleared flight level without a positive clearance from ATS;

d. During cleared transition between levels, the aircraft shall not be allowed to overshoot or undershoot the cleared flight level by more than 150 ft (45 m);

e. An automatic altitude-control system shall be operative and engaged during level cruise, except when circumstances such as the need to trim the aircraft or if turbulence requires disengagement. In any event, adherence to cruise altitude shall be done by reference to one of the two primary altimeters;

f. The altitude-alerting system shall be operational;

g. At intervals of approximately one hour, crosschecks between the primary altimeters and the stand- by altimeter shall be made. A minimum of two primary altimeters shall agree within 200 ft (60 m) or a lesser value if specified in the aircraft-operating manual. Failure to meet this condition will require that the altimetry system be reported as defective and ATC notified.

The difference between the primary and stand-by altimeters shall be noted for use in contingency situations:

i. the normal pilot scan of cockpit instruments shall suffice for altimeter cross-checking on most flights,

ii. before entering RVSM airspace, the initial altimeter cross-check of primary and standby altimeters will be recorded;

h. Normally, the altimetry system being used to control the aircraft shall be selected to provide the input to the altitude-reporting transponder that is transmitting information to ATC; and

i. If the pilot is notified by ATC of an Actual Aircraft Deviation error which exceeds 300 ft (90 m) then the pilot shall take action to return to the cleared flight level as quickly as possible.

8.16.2.5 Post Flight

In making maintenance log book entries against malfunctions in height-keeping systems, the pilot shall provide sufficient detail to enable maintenance to effectively troubleshoot and repair the system. The pilot shall detail the actual defect and the crew action taken to try to isolate and rectify the fault. The following information shall be noted when appropriate:

a. Primary and standby altimeter readings;

b. Altitude selector setting;

c. Sub-scale setting on altimeter;

d. Autopilot used to control the aircraft and any differences when the alternate system as selected;

e. Differences in altimeter readings if alternate static ports selected;

f. Use of air data computer selector for fault diagnosis procedure; and

g. Transponder selected to provide altitude information to ATS and any difference if alternate transponder or altitude source is manually selected.

RVSM Height-Keeping Errors are reportable events under 12.3 Accident – Incident Reporting. The PIC shall use the SMS Reporting Tool (which will generate an Altitude Deviation Report (Form 5) for recorded or communicated occurrences of height-keeping errors caused by malfunction of aircraft equipment or of operational nature, equal to or greater than:

a. A total vertical error (TVE) of ± 90 m (± 300 ft);
b. An altimetry system error (ASE) of ± 75 m (± 245 ft); and
c. An assigned altitude deviation (AAD) of ± 90 m (± 300 ft).

8.16.2.6 Contingency Procedures

Do not interpret guidance for contingency procedures in any way that prejudices the final authority and responsibility of the pilot in command (PIC) for the safe operation of the aircraft.

If the pilot is unsure of the vertical or lateral position of the aircraft or the aircraft deviates from its assigned altitude or track for cause without prior ATC clearance, then the pilot must take action to mitigate the potential for collision with aircraft on adjacent routes or flight levels.

NOTE: In this situation, the pilot should alert adjacent aircraft by making maximum use of aircraft lighting and broadcasting position, flight level (FL), and intentions on 121.5 megahertz (MHz) (as a back-up, the appropriate very high frequency (VHF) inter-pilot air-to-air frequency may be used).

a. Unless the nature of the contingency dictates otherwise, the pilot will advise ATC as soon as possible of a contingency situation and if possible, request an ATC clearance before deviating from the assigned route or FL.

b. If a revised ATC clearance cannot be obtained in a timely manner and action is required to avoid potential conflict with other aircraft, then the aircraft will

> i. Acquire and maintain in either direction a track laterally separated by 28 km (15 NM) from the assigned route; and
>
> ii. Once established on the offset track, climb or descend to select a FL which differs from those normally used by 150 m (500 ft);
>
> iii. The pilot may also consider descending below FL 285 or climbing above FL 410. (The vast majority of oceanic traffic operates between FL 290 and 410. Flight above FL 410 or below FL 285 may limit exposure to conflict with other aircraft.)

c. When executing a contingency manoeuvre the pilot should:

> i. Watch for conflicting traffic both visually and by reference to Airborne Collision Avoidance System (ACAS) or Traffic Alert and Collision Avoidance System (TCAS), if equipped.
>
> ii. Continue to alert other aircraft using 121.5 MHz (as a back-up, the VHF inter-pilot air-to-air frequency (VHF 123.45) may be used) and aircraft lights.
>
> iii. Continue to fly offset tracks or altitudes until an ATC clearance is obtained.

iv. Obtain an ATC clearance as soon as possible.

8.16.2.7 Incident Reporting

PIC's must report all altitude exceedances in excess of to report altitude deviations of 300 feet or more which occur above FL 245.

8.16.3 High Level Airspace (MNPS/HLA)

Not Applicable

8.17 RNAV/RNP Airspace Definition and Requirements

Not Applicable

8.18 CONTROLLER PILOT DATA LINK COMMUNICATIONS

Not Applicable

8.19 Automatic Dependent Surveillance – Broadcast (ADS-B)

Not Applicable

8.20 Disposal of International Garbage

Catering waste and garbage that contains, or is suspected of containing, animal products or by- products, that originated outside the country of destination either as food taken on board, or as a result of transportation of animals in an aircraft, shall be bagged in trash bags and disposed of in approved international garbage disposal facilities.

At home base the international garbage bags will be taken directly to the airport international garbage disposal facility and the disposal will be logged in the facility log. If the flight arrives when the disposal facility is closed, the garbage will be stored in a marked closed container and taken to the disposal facility at the earliest opportunity.

9 MAINTENANCE CONTROL MANUAL

Overall responsibility of the maintenance lies with Super Legacy XP Limited and oversight of all maintenance for 2-FLYT serial number 802 is managed by the Technical Co-ordinator (TC).

Maintenance of Super Legacy XP Limited aircraft is done in accordance with the Pilatus Maintenance Manual approved programme.

Super Legacy XP Limited subcontracts to Oriens Maintenance Services Limited (ref: 2-Reg.145.180) at Biggin Hill the management of the Continuing Airworthiness of the Aircraft, the development of a maintenance programme that is approved by the Bailiwick of Guernsey Regulatory Authority, and the organisation of maintenance of the Aircraft in accordance with the approved maintenance programme.

Oriens Maintenance Services Limited Maintenance Control Manual is part of this manual and used to control the airworthiness management and details the methods and procedures to be used in order that Super Legacy XP Limited aircraft meet the applicable airworthiness standard at all times.

Transportation of Dangerous Goods

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10. TRANSPORTATION OF DANGEROUS GOODS

10.1 Policy on the Transport of Dangerous Goods

10.1.1 Approval for the Transport of Dangerous Goods

The transport of dangerous goods by air shall be conducted in accordance with Annex 18 to the Chicago Convention as last amended and amplified by the Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO Doc 9284-AN/905), including its attachments, supplements and any other addenda or corrigenda.

Dangerous goods shall only be transported by Super Legacy XP Limited approved in accordance with Annex
V (Part-SPA), subpart G, to Regulation (EU) No 965/2012 except when:

a. they are not subject to the Technical Instructions in accordance with Part 1 of those Instructions;

b. they are carried by task specialists or crew members or are in baggage which has been separated from its owner, in accordance with Part 8 of the Technical Instructions;

c. required on board the aircraft for specialised purposes in accordance with the Technical Instructions;

d. they are used to facilitate flight safety where carriage aboard the aircraft is reasonable to ensure their timely availability for operational purposes, whether or not such articles and substances are required to be carried or intended to be used in connection with a particular flight.

Super Legacy XP Limited does not hold an Approval for the transport of dangerous goods by air.

10.1.2 Dangerous goods information and documentation

Super Legacy XP Limited will not accept dangerous goods.

10.1.3 General Exceptions

The requirement to transport dangerous goods by air in accordance with the Technical Instructions is irrespective of whether:

a. the flight is wholly or partly within or wholly outside the territory of a State; or
b. an approval to carry dangerous goods in accordance with Bailiwick of Guernsey Regulations is held. The Technical Instructions provide that in certain circumstances dangerous goods, which are normally forbidden on an aircraft, may be carried. These circumstances include cases of extreme urgency or when other forms of transport are inappropriate or when full compliance with the prescribed requirements is contrary to the public interest. In these circumstances all the States concerned may grant exemptions from the provisions of the Technical Instructions provided that an overall level of safety that is at least equivalent to that provided by the Technical Instructions is achieved. Although exemptions are most likely to be granted for the carriage of dangerous goods that are not permitted in normal circumstances, they may also be granted in other circumstances, such as when the packaging to be used is not provided for by the appropriate packing method or the quantity in the packaging is greater than that permitted. The Technical Instructions also make provision for some dangerous goods to be carried when an approval has been granted only by the State of Origin and the competent authority.

When an exemption is required, the States concerned are those of origin, transit, overflight and destination of the consignment and that of Super Legacy XP Limited. For the State of overflight, if none of the criteria for granting an exemption are relevant, an exemption may be granted based solely on whether it is believed that an equivalent level of safety in air transport has been achieved.

The Technical Instructions provide that exemptions and approvals are granted by the ‘appropriate national authority’, which is intended to be the authority responsible for the particular aspect against which the exemption or approval is being sought. Super Legacy XP Limited shall ensure that all relevant conditions on an exemption or approval are met.

10.1.3.1 Airworthiness and Operational Items

An approval is not required for dangerous goods which are required to be aboard the aircraft such as:

a. items for airworthiness or operating reasons or for the health of passengers or crew, such as batteries, fire extinguishers, first-aid kits, insecticides, air fresheners, life rafts, life-saving appliances, portable oxygen supplies, tritium signs, smoke hoods, passenger service units;

b. aerosols, alcoholic beverages, perfumes, colognes, liquefied gas lighters and portable electronic devices containing lithium metal or lithium ion cells or batteries provided that the batteries meet the provisions applicable when carried by passengers and crew) carried aboard an aircraft by Super Legacy XP Limited for use or sale on the aircraft during the flight or series of flights, but excluding non-refillable gas lighters and those lighters liable to leak when exposed to reduced pressure; and

c. dry ice intended for use in food and beverage service aboard the aircraft; and

d. electronic devices such as electronic flight bags, personal entertainment devices, credit card readers, containing lithium metal or lithium ion cells or batteries and spare lithium batteries for such devices carried aboard an aircraft by Super Legacy XP Limited for use on the aircraft during the flight or series of flights, provided that the batteries meet the provisions applicable to the carriage of portable electronic devices containing lithium or lithium ion cells or batteries by passengers (see the entry for 'consumer articles' in the table produced at 10.1.5). Spare lithium batteries must be individually protected so as to prevent short circuits when not in use.

Instructions for Passenger & Crew for the carriage and use of these electronic devices are provided in the section 8.15 Portable Electronic Devices.

Note: Dangerous goods intended as replacements for those referred to in 10.1.2.1 a, b and c above may not be carried without the approval referred to in 10.1.1 and unless consigned and accepted for transport in accordance with the ICAO Technical Instructions.

10.1.3.2 Veterinary Aid

An approval is not required for dangerous goods which are carried for use in flight as veterinary aid or as a humane killer for an animal. Such dangerous goods must be stowed and secured during take-off and landing and at all other times when deemed necessary by the pilot-in-command. The dangerous goods must be under the control of trained personnel during the time when they are in use on the aircraft.

Dangerous goods may be carried on a flight made by the same aircraft before or after a flight for which they are required as veterinary aid or as a humane killer for an animal, when it is impracticable to load or unload the dangerous goods immediately before or after the flight, subject to the following conditions:

a. the dangerous goods must be capable of withstanding the normal conditions of air transport;

b. the dangerous goods must be appropriately identified (e.g. by marking or labelling);
c. the dangerous goods may only be carried with the approval of Super Legacy XP Limited ;
d. the dangerous goods must be inspected for damage or leakage prior to loading;
e. loading must be supervised by Super Legacy XP Limited ;
f. the dangerous goods must be stowed and secured in the aircraft in a manner that will prevent any movement in flight which would change their orientation;
g. the pilot-in-command must be notified of the dangerous goods loaded on board the aircraft and their loading location. In the event of a crew change, this information must be passed to the next crew;
h. all personnel must be trained commensurate with their responsibilities; and
i. the provisions of 10.5.1 (Dangerous Goods Accident and Incident Reports) apply.

10.1.3.3 Medical Aid for a Patient

An approval is not required for dangerous goods which:

a. are placed on board an aircraft with the approval of Super Legacy XP Limited ; or

b. form part of the permanent equipment of the aircraft when it has been adapted for specialised use, to provide, during flight, medical aid for a patient, such as gas cylinders, drugs, medicines, other medical material (e.g. sterilising wipes) and wet cell or lithium batteries, providing:

    1. the gas cylinders have been manufactured specifically for the purpose of containing and transporting that particular gas;
    2. the drugs and medicines and other medical matter are under the control of trained personnel during the time when they are in use;
    3. the equipment containing wet cell batteries is kept, and when necessary secured, in an upright position to prevent spillage of the electrolyte; and
    4. proper provision is made to stow and secure all the equipment during take-off and landing and at all other times when deemed necessary by the PIC in the interests of safety.

These dangerous goods may also be carried on a flight made by the same aircraft to collect a patient or after that patient has been delivered when it is impracticable to load or unload the goods at the time of the flight on which the patient is carried.

Note: The dangerous goods carried may differ from those identified above due to the needs of the patient. These provisions apply both to dedicated air ambulances and to temporarily modified aircraft.

10.1.4 Items That May Be Carried by Passengers and Crew

International standards permit the carriage of the dangerous goods listed below by passengers or crew members either as or in carry-on baggage or hold baggage or on their person. Additional restrictions implemented by countries in the interests of aviation security may, however, limit or forbid the carriage of some of these items.

Certain items listed are permitted only with Super Legacy XP Limited approval. Requirements apply to some items regarding the means by which they are prepared for transport (e.g. wheelchairs and battery- powered mobility devices) or the professional status of the passenger (e.g. Chemical Agent Monitoring Equipment).

Due to the nature of Super Legacy XP Limited operations it is normal for Passengers to request the transport of usual items through the either the Operations Manager or PIC. In either event, on a case by case basis the Operations Manager & PIC must discuss and agree that the items may be carried and the proper preparation of the items confirmed. The Operations team will pass on these details to the ground handlers (as required). The basis upon which approvals will be granted will be recorded by the Operations Manager.

An approval is not required for those dangerous goods which, according to the Technical Instructions, can be carried by passengers or crew members as per the following table:

Note: Should it be necessary to transfer carry-on baggage to an unpressurised baggage hold (e.g. due to the size of the baggage preventing proper stowage in the cabin) it is necessary for crew to verify that the baggage contains no dangerous goods that are permitted for carriage in carry-on baggage only (e.g. spare lithium batteries, heat producing articles etc.).

Items or articles	Location: Checked baggage	Location: Carry-on baggage	Location: On the person	Approval of the Company is required	The pilot-in-command must be informed	Restrictions
Medical necessities						
1) Small gaseous oxygen or air cylinders required for medical use	Yes	Yes	Yes	Yes	Yes	a) no more than 5 kg gross mass per cylinder; b) cylinders, valves and regulators, where fitted, must be protected from damage which could cause inadvertent release of the contents; and c) the pilot-in-command must be informed of the number of oxygen or air cylinders loaded on board the aircraft and their loading location(s).
Devices containing liquid oxygen	No	No	No	n/a	n/a	Devices containing liquid oxygen are forbidden in carry-on baggage, checked baggage or on the person.
Empty air cylinders for other purposes, such as scuba diving	Yes	Yes	n/a	No	No	May only be carried if at a pressure less than 200 kPa at 20° (2 Bar or 29 PSI) empty.
2) Cylinders of a non-flammable, non-toxic gas worn for the operation of mechanical limbs	Yes	Yes	Yes	No	No	Spare cylinders of a similar size are also allowed, if required, to ensure an adequate supply for the duration of the journey.
3) Non-radioactive medicinal articles (including aerosols)	Yes	Yes	Yes	No	No	a) no more than 0.5 kg or 0.5 L total net quantity per single article; b) release valves on aerosols must be protected by a cap or other suitable means to prevent inadvertent release of the contents; and c) no more than 2 kg or 2 L total net quantity of all articles mentioned in 3), 10) and 13) (e.g. four aerosol cans of 500 mL each) per person.
4) Radioisotopic cardiac pacemakers or other devices, including those powered by lithium batteries implanted into a person	n/a	n/a	Yes	No	No	Must be implanted into a person as the result of medical treatment.
Radio-pharmaceuticals contained within the body of a person	n/a	n/a	Yes	No	No	Must be as the result of medical treatment.

Items or articles	Location: Checked baggage	Location: Carry-on baggage	Location: On the person	Approval of the Company is required	The pilot-in-command must be informed	Restrictions
Medical necessities						
5) Mobility aids (e.g. wheelchairs) powered by non-spillable wet batteries or batteries which comply with Special Provision A123, for use by passengers whose mobility is restricted by either a disability, their health or age, or a temporary mobility problem (e.g. broken leg)	Yes	No	No	Yes	(see b, d) iv))	a) non-spillable wet batteries must comply with Special Provision A67 or the vibration and pressure differential tests of Packing Instruction 872; b) the Company must verify that: i) the battery is securely attached to the mobility aid; ii) the battery terminals are protected from short circuits (e.g. by being enclosed within a battery container); and iii) electrical circuits have been isolated; *To do this, place the device into drive mode (i.e. not freewheel mode), see if the mobility aid will power up and if so whether use of the joystick results in the mobility aid moving. It must also be verified that the circuits of supplemental motorised systems such as seating systems have been inhibited to prevent inadvertent operation, e.g. by the separation of cable connectors. If an electric mobility aid has not been made safe for carriage, it must not be loaded.* c) mobility aids must be carried in a manner such that they are protected from being damaged by the movement of baggage, mail, stores or other cargo; d) where the mobility aid is specifically designed to allow its battery(ies) to be removed by the user (e.g. collapsible): i) the battery(ies) must be removed; the mobility aid may then be carried as checked baggage without restriction; ii) the removed battery(ies) must be carried in strong, rigid packagings which must be stowed in the cargo compartment; iii) the battery(ies) must be protected from short circuit; and iv) the pilot-in-command must be informed of the location of the packed battery; e) it is recommended that passengers make advance arrangements with each operator.

Items or articles	Location			Approval of the Company is required	The pilot-in-command must be informed	Restrictions
	Checked baggage	Carry-on baggage	On the person			
Medical necessities						
6) Mobility aids (e.g. wheelchairs) powered by spillable batteries, for use by passengers whose mobility is restricted by either a disability, their health or age, or a temporary mobility problem (e.g. broken leg)	Yes	No	No	Yes	Yes	a) where possible, the mobility aid must be loaded, stowed, secured and unloaded always in an upright position. The Company must verify that: i) the battery is securely attached to the mobility aid; ii) battery terminals are protected from short circuits (e.g. by being enclosed within a battery container); and iii) electrical circuits have been isolated; *To do this, place the device into drive mode (i.e. not freewheel mode), see if the mobility aid will power up and if so whether use of the joystick results in the mobility aid moving. It must also be verified that the circuits of supplemental motorised systems such as seating systems have been inhibited to prevent inadvertent operation, e.g. by the separation of cable connectors. If an electric mobility aid has not been made safe for carriage, it must not be loaded.* b) if the mobility aid cannot be loaded, stowed, secured and unloaded always in an upright position, the battery(ies) must be removed and carried in strong, rigid packagings, as follows: i) packagings must be leak-tight, impervious to battery fluid and be protected against upset by securing them to pallets or by securing them in cargo compartments using appropriate means of securement (other than by bracing with freight or baggage) such as by the use of restraining straps, brackets or holders; ii) batteries must be protected against short circuits, secured upright in these packagings and surrounded by compatible absorbent material sufficient to absorb their total liquid contents; and iii) these packagings must be marked “Battery, wet, with wheelchair” or “Battery, wet, with mobility aid” and be labelled with a “Corrosive” label (Figure 5-22) and with package orientation labels (Figure 5-26) as required by 5;3; The mobility aid may then be carried as checked baggage without restriction; c) mobility aids must be carried in a manner such that they are protected from being damaged by the movement of baggage, mail, stores or other cargo; d) the pilot-in-command must be informed of the location of the mobility aid with an installed battery or the location of a packed battery; e) it is recommended that passengers make advance arrangements with each operator; also, unless batteries are non-spillable they should be fitted, where feasible, with spill-resistant vent caps.

Items or articles	*Location*			*Approval of the Company is required*	*The pilot-in-command must be informed*	*Restrictions*
	Checked baggage	*Carry-on baggage*	*On the person*			
Medical necessities						

Items or articles	*Location* *Checked baggage*	*Carry-on baggage*	*On the person*	*Approval of the Company is required*	*The pilot-in-command must be informed*	*Restrictions*
7) Mobility aids (e.g. wheelchairs) powered by lithium ion batteries, for use by passengers whose mobility is restricted by either a disability, their health or age, or a temporary mobility problem (e.g. broken leg)	Yes	(see 7 d))	No	Yes	Yes	a) the batteries must be of a type which meets the requirements of each test in the UN *Manual of Tests and Criteria*, Part III, subsection 38.3; b) the Company must verify that: i) the battery is securely attached to the mobility aid; ii) the battery terminals are protected from short circuits (e.g. by being enclosed within a battery container); and iii) electrical circuits have been isolated; *To do this, place the device into drive mode (i.e. not freewheel mode), see if the mobility aid will power up and if so whether use of the joystick results in the mobility aid moving. It must also be verified that the circuits of supplemental motorised systems such as seating systems have been inhibited to prevent inadvertent operation, e.g. by the separation of cable connectors. If an electric mobility aid has not been made safe for carriage, it must not be loaded.* c) mobility aids must be carried in a manner such that they are protected from being damaged by the movement of baggage, mail, stores or other cargo; d) where the mobility aid is specifically designed to allow its battery(ies) to be removed by the user (e.g. collapsible): i) the battery(ies) must be removed and carried in the passenger cabin; ii) the battery terminals must be protected from short circuit (by insulating the terminals, e.g. by taping over exposed terminals); iii) the battery must be protected from damage (e.g. by placing each battery in a protective pouch); iv) removal of the battery from the mobility aid must be performed by following the instructions of the manufacturer or device owner; v) the battery must not exceed 300 Wh; and vi) a maximum of one spare battery not exceeding 300 Wh or two spares not exceeding 160 Wh each may be carried; e) the pilot-in-command must be informed of the location of the lithium ion battery(ies); f) it is recommended that passengers make advance arrangements with each operator.

Items or articles	Location: Checked baggage	Location: Carry-on baggage	Location: On the person	Approval of the Company is required	The pilot-in-command must be informed	Restrictions
Medical necessities						
8. Portable medical electronic devices (automated external defibrilators (AED), nebulizer, continuous positive airway pressure (CPAP), etc.) containing lithium metal or lithium ion cells or batteries						
Portable medical electronic devices containing lithium metal cells or batteries not exceeding 2 grams or lithium ion cells or batteries not exceeding 100 Wh	Yes	Yes	Yes	No	No	a) carried by passengers for medical use; b) each installed or spare battery: — must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3; c) spare batteries must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch); and d) no more than two spare batteries exceeding 2 grams lithium content for lithium metal or a watt-hour rating of 100 Wh for lithium ion may be carried by a passenger.
Spare batteries for portable medical electronic devices containing lithium metal cells or batteries not exceeding 2 grams or lithium ion cells or batteries not exceeding 100 Wh	No	Yes	Yes	No	No	a) carried by passengers for medical use; b) batteries or cells must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3; and c) must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch).
Portable medical electronic devices containing lithium metal batteries exceeding 2 grams but not exceeding 8 grams or lithium ion batteries exceeding 100 Wh but not exceeding 160 Wh	Yes	Yes	Yes	Yes	No	a) carried by passengers for medical use; and b) batteries or cells must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3.

	Items or articles	*Location* — *Checked baggage*	*Carry-on baggage*	*On the person*	*Approval of the Company is required*	*The pilot-in-command must be informed*	*Restrictions*
Medical necessities							
	Spare batteries for portable medical electronic devices containing lithium metal batteries exceeding 2 grams but not exceeding 8 grams or lithium ion batteries exceeding 100 Wh but not exceeding 160 Wh	No	Yes	Yes	Yes	No	a) carried by passengers for medical use; b) batteries or cells must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3; and c) must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch). d) no more than two spare batteries exceeding 2 grams lithium content for lithium metal or a watt-hour rating of 100 Wh for lithium ion may be carried by a passenger.
9)	Small medical or clinical thermometer which contains mercury	Yes	Yes / No	Yes / No	No	No	a) no more than one per person; b) must be for personal use; and c) must be in its protective case.
	Articles used in dressing or grooming						
10)	Toiletry articles (including aerosols)	Yes	Yes	Yes	No	NO	a) the term “toiletry articles (including aerosols)” is intended to include such items as hair sprays, perfumes and colognes; b) no more than 0.5 kg or 0.5 L total net quantity per single article; c) release valves on aerosols must be protected by a cap or other suitable means to prevent inadvertent release of the contents; and d) no more than 2 kg or 2 L total net quantity of all articles mentioned in 3), 10) and 13) (e.g. four aerosol cans of 500 mL each) per person.
11)	Hair curlers containing hydrocarbon gas	Yes	Yes	Yes	No	No	a) no more than one per person; b) the safety cover must be securely fitted over the heating element; and c) gas refills for such curlers must not be carried.

Items or articles	Location: Checked baggage	Location: Carry-on baggage	Location: On the person	Approval of the Company is required	The pilot-in-command must be informed	Restrictions
Consumer articles						
12) Alcoholic beverages containing more than 24 per cent but not more than 70 per cent alcohol by volume	Yes	Yes	Yes	No	No	a) must be in retail packagings; b) no more than 5 L per individual receptacle; and c) no more than 5 L total net quantity per person for such beverages. Note.— Alcoholic beverages containing not more than 24 per cent alcohol by volume are not subject to any restrictions.
13) Aerosols (non-flammable, non-toxic), with no subsidiary risk, for sporting or home use	Yes	No	No	No	No	a) no more than 0.5 kg or 0.5 L total net quantity per single article; b) release valves on aerosols must be protected by a cap or other suitable means to prevent inadvertent release of the contents; and c) no more than 2 kg or 2 L total net quantity of all articles mentioned in 3), 10) and 13) (e.g. four aerosol cans of 500 mL each) per person.
14) Securely packaged cartridges in Division 1.4S (UN 0012 or UN 0014 only);	Yes	No	No	Yes	No	a) no more than 5 kg gross mass per person for that person's own use; b) must not include ammunition with explosive or incendiary projectiles; and c) allowances for more than one person must not be combined into one or more packages.
15) Small packet of safety matches	No	No	Yes	No	No	a) no more than one per person; and b) intended for use by an individual.
Strike anywhere matches	No	No	No	n/a	n/a	Forbidden
Small cigarette lighter	No	No	Yes	No	No	a) no more than one per person; b) intended for use by an individual; and c) does not contain unabsorbed liquid fuel (other than liquefied gas).
Lighter fuel and lighter refills	No	No	No	n/a	n/a	Forbidden
Premixing burner lighter (e.g. lighters producing a blue flame) with a means of protection against unintentional activation	No	No	Yes	No	No	a) no more than one per person; b) intended for use by an individual; and c) does not contain unabsorbed liquid fuel (other than liquefied gas).

Items or articles	Location: Checked baggage	Location: Carry-on baggage	Location: On the person	Approval of the Company is required	The pilot-in-command must be informed	Restrictions
Premixing burner lighter (e.g. lighters producing a blue flame) without a means of protection against unintentional activation	No	No	No	n/a	n/a	Forbidden

	Items or articles	Location: Checked baggage	Location: Carry-on baggage	Location: On the person	Approval of the Company is required	The pilot-in-command must be informed	Restrictions
Consumer articles							
16)	Battery-powered equipment capable of generating extreme heat, which could cause a fire if activated (e.g. underwater high intensity lamps)	Yes	Yes	No	Yes	No	a) the heat-producing component and the battery are isolated from each other by the removal of the heat-producing component, the battery or another component (e.g. fuse); and b) any battery which has been removed must be protected against short circuit (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch).
17)	Avalanche rescue backpack containing a cylinder of compressed gas of Division 2.2	Yes	Yes	No	Yes	No	a) no more than one per person; b) may contain a pyrotechnic trigger mechanism which must not contain more than 200 mg net of Division 1.4S; c) the backpack must be packed in such a manner that it cannot be accidentally activated; and d) the airbags within the backpack must be fitted with pressure relief valves.
18)	Small cartridges fitted into a self-inflating personal safety device such as a life-jacket or vest	Yes	Yes	Yes	Yes	No	a) no more than one personal safety device per person; b) the personal safety device must be packed in such a manner that it cannot be accidently activated; c) limited to carbon dioxide or another suitable gas in Division 2.2; d) must be for inflation purposes; e) the device must be fitted with no more than two small cartridges; and f) no more than two spare cartridges.

Items or articles	Location: Checked baggage	Location: Carry-on baggage	Location: On the person	Approval of the Company is required	The pilot-in-command must be informed	Restrictions
Small cartridges for other devices	Yes	Yes	Yes	Yes	No	a) no more than four small cartridges of carbon dioxide or other suitable gas in Division 2.2, without subsidiary risk, per person; and b) the water capacity of each cartridge must not exceed 50 mL. Note.— For carbon dioxide, a gas cartridge with a water capacity of 50 mL is equivalent to a 28 g cartridge.

Items or articles	Location: Checked baggage	Location: Carry-on baggage	Location: On the person	Approval of the Company is required	The pilot-in-command must be informed	Restrictions
Consumer articles						
19) Battery powered portable electronic smoking devices (e.g. e-cigarettes, e-cigs, ecigars, e-pipes, personal vaporizers, electronic nicotine delivery systems)	No	Yes	Yes	No	No	a) carried by passengers or crew for personal use; b) spare batteries must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch); c) each battery must not exceed the following: — for lithium metal batteries, a lithium content of not more than 2 grams; or — for lithium ion batteries, a Watt-hour rating of not more than 100 Wh; d) each lithium battery must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3; and e) recharging of the devices and/or batteries on board the aircraft is not permitted.
1920 Portable electronic devices (such as watches, calculating machines, cameras, cellular phones, laptop computers, camcorders)						

Items or articles	Location: Checked baggage	Location: Carry-on baggage	Location: On the person	Approval of the Company is required	The pilot-in-command must be informed	Restrictions
Portable electronic devices (including medical devices) containing lithium metal or lithium ion cells or batteries (articles containing lithium metal or lithium ion cells or batteries the primary purpose of which is to provide power to another device must carried as spare batteries in accordance with the item below)	Yes	Yes	Yes	No	No	a) carried by passengers or crew for personal use; b) should be carried as carry-on baggage; c) each battery must not exceed the following: — for lithium metal batteries, a lithium content of not more than 2 grams; or — for lithium ion batteries, a Watt-hour rating of not more than 100 Wh; d) if devices are carried in checked baggage, measures must be taken to prevent unintentional activation; and e) batteries and cells must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3.
Spare batteries for portable electronic devices (including medical devices) containing lithium metal or lithium ion cells or batteries	No	Yes	Yes	No	No	a) carried by passengers or crew for personal use; b) must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch); c) each battery must not exceed the following: — for lithium metal batteries, a lithium content of not more than 2 grams; or — for lithium ion batteries, a Watt-hour rating of not more than 100 Wh; and d) batteries and cells must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3.
Consumer articles						
Portable electronic devices containing lithium ion batteries exceeding a Watt-hour rating of 100 Wh but not exceeding 160 Wh	Yes	Yes	Yes	Yes	No	a) carried by passengers or crew for personal use; b) should be carried as carry-on baggage; and c) batteries and cells must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3.

	Items or articles	Location: Checked baggage	Location: Carry-on baggage	Location: On the person	Approval of the Company is required	The pilot-in-command must be informed	Restrictions
	Spare batteries for portable electronic devices containing lithium ion batteries exceeding a Watt-hour rating of 100 Wh but not exceeding 160 Wh	No	Yes	Yes	Yes	No	a) carried by passengers or crew for personal use; b) no more than two individually protected spare batteries per person; c) must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch); and d) batteries and cells must be of a type which meets the requirements of each test in the UN *Manual of Tests and Criteria*, Part III, subsection 38.3.
210	Fuel cells used to power portable electronic devices (for example, cameras, cellular phones, laptop computers and camcorders)	No	Yes	Yes	No	No	a) fuel cell cartridges may only contain flammable liquids, corrosive substances, liquefied flammable gas, water reactive substances or hydrogen in metal hydride; b) refuelling of fuel cells on board an aircraft is not permitted except that the installation of a spare cartridge is allowed; c) the maximum quantity of fuel in any fuel cell or fuel cell cartridge must not exceed: — for liquids 200 mL; — for solids 200 grams; — for liquefied gases, 120 mL for non-metallic fuel cell cartridges or 200 mL for metal fuel cell or fuel cell cartridges; and — for hydrogen in metal hydride, the fuel cell or fuel cell cartridges must have a water capacity of 120 mL or less; d) each fuel cell and each fuel cell cartridge must conform to IEC 62282-6-100 Ed. 1, including Amendment 1and must be marked with a manufacturer's certification that it conforms to the specification. In addition, each fuel cell cartridge must be marked with the maximum quantity and type of fuel in the cartridge; e) fuel cell cartridges containing hydrogen in metal hydride must comply with the requirements in Special Provision A162; f) no more than two spare fuel cell cartridges may be carried by a passenger; g) fuel cells containing fuel are permitted in carry-on baggage only;
	Spare fuel cell cartridges	Yes	Yes	Yes	No	No	

	Items or articles	Location: Checked baggage	Location: Carry-on baggage	Location: On the person	Approval of the Company is required	The pilot-in-command must be informed	Restrictions
Consumer articles							
							h) interaction between fuel cells and integrated batteries in a device must conform to IEC 62282-6-100 Ed. 1 including Amendment 1. Fuel cells whose sole function is to charge a battery in the device are not permitted; i) fuel cells must be of a type that will not charge batteries when the portable electronic device is not in use and must be durably marked by the manufacturer: “APPROVED FOR CARRIAGE IN AIRCRAFT CABIN ONLY” to so indicate; and j) in addition to the languages which may be required by the State of Origin for the markings specified above, English should be used.
2122	Dry Ice	Yes	Yes	No	Yes	No	a) no more than 2.5 kg per person; b) used to pack perishables that are not subject to these Instructions; c) the package must permit the release of carbon dioxide gas; and d) when carried in checked baggage, each package must be marked: — “DRY ICE” or “CARBON DIOXIDE, SOLID”; and — the net weight of dry ice or an indication that the net weight is 2.5 kg or less.
2223	A mercurial barometer or mercurial thermometer	No	Yes	No	Yes	Yes	a) must be carried by a representative of a government weather bureau or similar official agency; and b) must be packed in a strong outer packaging, having a sealed inner liner or a bag of strong leakproof and puncture-resistant material impervious to mercury, which will prevent the escape of mercury from the package irrespective of its position.
2324	Instruments containing radioactive material (i.e. chemical agent monitor (CAM) and/or rapid alarm and identification device monitor (RAID-M))	Yes	Yes	No	Yes	No	a) the instruments must not exceed the activity limits specified in Table 2-15 of these Instructions; b) must be securely packed and without lithium batteries; and c) must be carried by staff members of the Organization for the Prohibition of Chemical Weapons (OPCW) on official travel.
2425	Energy efficient lamps	Yes	Yes	Yes	No	No	a) when in retail packaging; and b) intended for personal or home use.

	Items or articles	Location: Checked baggage	Location: Carry-on baggage	Location: On the person	Approval of the Company is required	The pilot-in-command must be informed	Restrictions
Consumer articles							
2526	Permeation devices for calibrating air quality monitoring equipment	Yes	No	No	No	No	Must comply with Special Provision A41.
2627	Portable electronic equipment containing a non-spillable battery meeting the requirements of Special Provision A67	Yes	Yes	No	No	No	a) the battery must not have a voltage greater than 12 volts and a Watt-hour rating of not greater than 100 Wh; and b) the equipment must be either protected from inadvertent activation, or the battery disconnected and exposed terminals insulated.
	Spare non-spillable batteries meeting the requirements of Special Provision A67	Yes	Yes	No	No	No	a) the battery must not have a voltage greater than 12 volts and a Watt-hour rating of not greater than 100 Wh; b) the battery must be protected from short circuit by the effective insulation of exposed terminals; and c) no more than two individually protected batteries per person.
2728	Internal combustion engines or fuel cell engines	Yes	No	No	No	No	Must comply with Special Provision A70.
2829	Non-infectious specimens	Yes	Yes	No	No	No	Must comply with Special Provision A180.
2930	Insulated packagings containing refrigerated liquid nitrogen	Yes	Yes	No	No	No	Must comply with Special Provision A152.

	Items or articles	Location: Checked baggage	Location: Carry-on baggage	Location: On the person	Approval of the Company is required	The pilot-in-command must be informed	Restrictions
Security-type equipment							
3031	Security-type equipment, such as attaché cases, cash boxes, cash bags, etc., incorporating dangerous goods as part of this equipment, for example, lithium batteries or pyrotechnic material	Yes	No	No	Yes	No	a) the equipment must be equipped with an effective means of preventing accidental activation; b) if the equipment contains an explosive or pyrotechnic substance or an explosive article, this article or substance must be excluded from Class 1 by the appropriate national authority of the State of Manufacture in compliance with Part 2;1.5.2.1; c) if the equipment contains lithium cells or batteries, these cells or batteries must comply with the following restrictions: — for a lithium metal cell, the lithium content is not more than 1 g; — for a lithium metal battery, the aggregate lithium content is not more than 2 g; — for lithium ion cells, the Watt-hour rating (see the Glossary of Terms in Attachment 2) is not more than 20 Wh; — for lithium ion batteries, the Watt-hour rating is not more than 100 Wh; — cell or battery is of the type proven to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3; d) if the equipment contains gases to expel dye or ink: — only gas cartridges and receptacles, small, containing gas with a capacity not exceeding 50 mL, containing no constituents subject to these Instructions other than a Division 2.2 gas, are allowed; — the release of gas must not cause extreme annoyance or discomfort to crew members so as to prevent the correct performance of assigned duties; and — in case of accidental activation, all hazardous effects must be confined within the equipment and must not produce extreme noise; and e) security type equipment that is defective or that has been damaged is forbidden for transport.

10.1.5 Provision of Information to Passengers

Super Legacy XP Limited shall email all passengers the information on the types of dangerous goods which a passenger is forbidden to transport aboard an aircraft is provided in advance of the flight.

Super Legacy XP Limited or the handling agent and the airport operator must ensure that notices warning passengers of the types of dangerous goods which they are forbidden to transport aboard an aircraft are prominently displayed, in sufficient number, at each of the places at an airport where tickets are issued, passengers are checked in and aircraft boarding areas are maintained, and at any other location where passengers arrive. These notices must include visual examples of dangerous goods forbidden from transport aboard an aircraft.

10.1.6 Marking and Labelling of Packages

Articles and substances meeting the dangerous goods classification criteria are assigned a 'UN Number' under the United Nations classification system. This consists a four-digit number preceded by the capital letters 'UN'. Packages of dangerous goods must be marked with the UN Number(s) applicable to their contents.

Packages containing dangerous goods can also be identified by labels indicating the hazard of the goods by their class or division or by the presence of certain handling labels/markings.

Note 1: As no approval for the transport of dangerous goods is held, dangerous goods bearing any UN Number, hazard label; the radioactive material, excepted package handling label; the lithium battery handling label; the environmentally hazardous substances marking; or the excepted or limited quantities marking must not be loaded on an aircraft (except as identified in 10.1.2).

Note 2: When dangerous goods markings or labels are seen on items not declared as dangerous goods it is often an indication that they do contain such goods. Undeclared dangerous goods must not be loaded on an aircraft and reporting procedures must be implemented (see 10.5.1).

CLASS 1 – EXPLOSIVE

* Division and compatibility group

** Compatibility group

CLASS 2 – GASES

Flammable gas (Division 2.1)

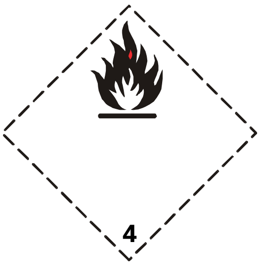
Non-flammable, non-toxic gas (Division 2.2)

Toxic gas (Division 2.3)

CLASS 3 – FLAMMABLE LIQUID

CLASS 4 – FLAMMABLE SOLIDS, SUBSTANCES LIABLE TO SPONTANEOUS COMBUSTION; SUBSTANCES WHICH, IN CONTACT WITH WATER, EMIT FLAMMABLE GASES

Flammable solid (Division 4.1)



Substance liable to spontaneous combustion (Division 4.2)

Substance which, in contact with water, emits flammable gas (Division 4.3)

CLASS 5 – OXIDISING SUBSTANCES AND ORGANIC PEROXIDES

Oxidising substance (Division 5.1)

Organic peroxide (Division 5.2) (flame may be black or white)

CLASS 6 – TOXIC AND INFECTIOUS SUBSTANCES

Toxic substance (Division 6.1)

Infectious substance (Division 6.2)

The bottom part of the label should bear the inscription:

"INFECTIOUS SUBSTANCE — In case of damage or leakage immediately notify public health authority"

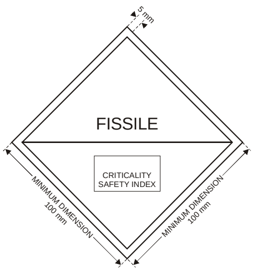
CLASS 7 – RADIOACTIVE MATERIAL

Category I

Category II

Category III

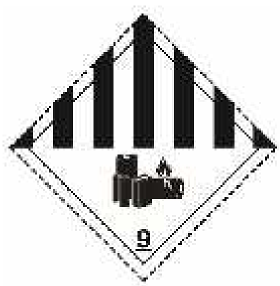
Criticality safety index label



CLASS 8 – CORROSIVE

CLASS 9 – MISCELLANEOUS

Class 9 label for Section IA and IB lithium battery shipments



HANDLING LABELS

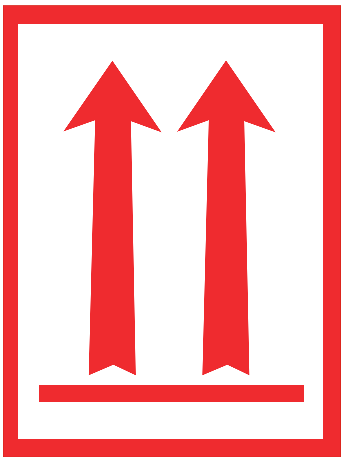
Packages of dangerous goods may also bear labels providing handling information; these are:

Magnetized material

Cargo aircraft only

Cryogenic liquid label

Package orientation



(red or black)

Keep away from heat

LITHIUM BATTERIES MARK

Lithium Battery

Note: *the lithium battery handling label contained in the 2015-2016 Edition of the ICAO Technical Instructions (below) may continue to be used until 31 December 2018:*

Application of the lithium battery mark to a consignment of lithium batteries (of any type) indicates that the Shipper has determined specific requirements have been met. Such consignments do not need to be accompanied by a dangerous goods transport document (Shipper's Declaration) and no acceptance check is required. Consignments bearing the lithium battery label must be accompanied with a document such as an air waybill with:

— an indication that the package contains lithium metal cells or batteries;

— an indication that the package must be handled with care and that a flammability hazard exists if the package is damaged;

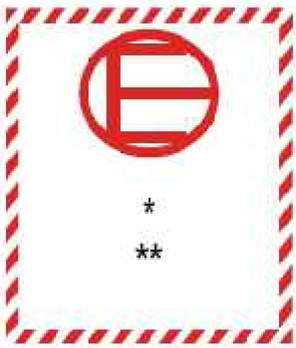
— an indication that special procedures should be followed in the event the package is damaged, to include inspection and repacking if necessary;

— a telephone number for additional information; and

— when an air waybill is issued the applicable Packing Instruction must be stated together with the words 'not restricted'; and 'lithium ion batteries' or 'lithium metal batteries' as applicable.

EXCEPTED QUANTITIES MARK

Packages containing excepted quantities of dangerous goods can be identified from the following:



Hatching and symbol of the same colour, black or red, on white or suitable contrasting background.

* Place for class or, when assigned, the division number(s).

** Place for name of shipper or consignee, if not shown elsewhere on the package.

LIMITED QUANTITIES MARK

Packages containing limited quantities of dangerous goods can be identified from the following:

Many dangerous goods when in reasonably limited quantities present a reduced hazard during transport and can safely be carried in good quality packagings that have not been tested and marked as is required for UN Specification packagings required for larger quantities of dangerous goods. Packages containing limited quantities of dangerous goods must be marked with a diamond shaped mark. When presented for carriage by air, the mark must additionally include a “Y” which indicates compliance with the provisions of the ICAO Technical Instructions, some of which are more stringent than those of the UN Model Regulations and of other modes of transport.

NOTE: The mark depicted here but without the ‘Y’ indicates that the package contains dangerous goods in limited quantities as permitted by surface transport regulations (ADR/IMDG) which may not be acceptable for air transport. A package so marked and offered for transport in the absence of a dangerous goods transport document must be reported to the appropriate authority where the goods are discovered as a discovery of undeclared dangerous goods (the CAA if discovered within the UK).

ENVIRONMENTALLY HAZARDOUS SUBSTANCES MARK

Packages containing environmentally hazardous substances (UN Nos. 3077 and 3082) must be durably marked with the environmentally hazardous substance mark with the exception of single packagings and combination packagings containing inner packagings with contents of 5 L or less for liquids; or contents of 5 kg or less for solids. ALL packages containing environmentally hazardous substances must bear a Class 9 hazard label.

10.2 Duties of all Personnel Involved

10.2.1 Detailed Assignments of Responsibilities

Duties associated with the carriage of dangerous goods for Super Legacy XP Limited not holding approval for their carriage as cargo include:

Operations Manager	Ensuring procedures are implemented to ensure dangerous goods as cargo are not carried. Recognition of undeclared dangerous goods. Ensuring that notices, giving information about the transport of dangerous goods, are displayed in sufficient number and prominence at cargo acceptance points. Ensuring that information is provided with the passenger ticket or in another manner such that prior to or during the check-in process the passenger receives the information. Considering passenger requests for approval of Super Legacy XP Limited for items of dangerous goods requiring such approval.
Other Operations Staff and ground handling staff (as designated by Super Legacy XP Limited) (see note 1)	Recognition of undeclared dangerous goods. Dealing with dangerous goods that are found damaged or leaking during processing for transport. If there is a dangerous goods incident or accident, or if undeclared dangerous goods are detected, a report is made to the appropriate Authority (see 10.5.1).
Crew	Ensuring that the provisions concerning passengers and dangerous goods are complied with. Ensuring that information is available prior to boarding. With the aim of preventing dangerous goods which passengers are not permitted to have from being taken on board an aircraft in their baggage, seeking confirmation from a passenger about the contents of any item where there are suspicions that it may contain dangerous goods. Ensuring that the discovery of prohibited dangerous goods (after a passenger has checked in) is reported to the appropriate Authority (see 10.5.1). Responding to a dangerous goods incident or accident in the cabin.

External Auditors	Monitoring compliance with procedures for dangerous goods, provision of dangerous goods training, etc. Collation and assessment of details of dangerous goods incidents, accidents and the discovery of undeclared dangerous goods within the accident prevention and flight safety programme.

Note 1: In practice, a ground handling agent may carry out some or all of the functions related to the carriage of cargo, passengers and their baggage. Ground handling agents must be provided with sufficient information to enable Super Legacy XP Limited policies and procedures to be followed. Operators should specify whether they utilise suitably qualified personnel of Super Legacy XP Limited or of a handling agent at the various aerodromes of the operation.

10.3 Recognition of Undeclared / Hidden Dangerous Goods

10.3.1 ‘Hidden’ Dangerous Goods

Personnel must be alert to indications that undeclared dangerous goods are present within cargo, mail or stores. Personnel interfacing with passengers must be alert to indications that prohibited dangerous goods are carried by passengers or within their baggage.

NOTE: THE DISCOVERY OF UNDECLARED OR MIS-DECLARED DANGEROUS GOODS OR THE DISCOVERY OF DANGEROUS GOODS FORBIDDEN FOR CARRIAGE BY PASSENGERS (DISCOVERED AFTER THE CHECK-IN PROCESS) MUST BE REPORTED TO THE Bailiwick of Guernsey Regulatory Authority – SEE 10.5.1

The following is a list of general descriptions that are often used for items in cargo or in passengers’ baggage and the types of dangerous goods that may be included in any item bearing that description.

Aircraft on ground (AOG) spares — may contain explosives (flares or other pyrotechnics), chemical oxygen generators, unserviceable tyre assemblies, cylinders of compressed gas (oxygen, carbon dioxide or fire extinguishers), fuel in equipment, wet or lithium batteries, matches.

Automobile parts (car, motor, motorcycle) — may include engines, carburettors or fuel tanks that contain or have contained fuel, wet batteries, compressed gases in tyre inflation devices and fire extinguishers, air bags, etc.

Breathing apparatus — may indicate cylinders of compressed air or oxygen, chemical oxygen generators or refrigerated liquefied oxygen.

Camping equipment — may contain flammable gases (butane, propane, etc.), flammable liquids (kerosene, gasoline, etc.) or flammable solids (hexamine, matches, etc.).

Cars, car parts — see automobile parts, etc.

Chemicals — may contain items meeting any of the criteria for dangerous goods, particularly flammable liquids, flammable solids, oxidisers, organic peroxides, toxic or corrosive substances.

Consolidated consignments (groupages) — may contain any of the defined classes of dangerous goods.

Cryogenic (liquid) — indicates refrigerated liquefied gases such as argon, helium, neon, nitrogen, etc.

Cylinders — may contain compressed or liquefied gas.

Dental apparatus — may contain flammable resins or solvents, compressed or liquefied gas, mercury and radioactive material.

Diagnostic specimens — may contain infectious substances.

Diving equipment — may contain cylinders of compressed gas (e.g. air or oxygen). May also contain high intensity diving lamps that can generate extreme heat when operated in air. In order to be carried safely, the bulb or battery should be disconnected.

Drilling and mining equipment — may contain explosive(s) and/or other dangerous goods.
Dry shipper (vapour shipper) — may contain free liquid nitrogen. Dry shippers are only not subject to these Instructions when they do not permit the release of any free liquid nitrogen irrespective of the orientation of the packaging.

Electrical equipment — may contain magnetised materials, mercury in switch gear, electron tubes or wet batteries.

Electrically-powered apparatus (wheelchairs, lawn mowers, golf carts, etc.) — may contain wet batteries.

Expeditionary equipment — may contain explosives (flares), flammable liquids (gasoline), flammable gas (camping gas) or other dangerous goods.

Film crew and media equipment — may contain explosive pyrotechnic devices, generators incorporating internal combustion engines, wet batteries, fuel, heat-producing items, etc.

Frozen embryos — may be packed in refrigerated liquefied gas or dry ice (solid carbon dioxide).

Frozen fruit, vegetables, etc. — may be packed in dry ice.

Fuel control units — may contain flammable liquids.

Hot-air balloon — may contain cylinders with flammable gas, fire extinguishers, engines (internal combustion), batteries, etc.

Household goods — may contain items meeting any of the criteria for dangerous goods. Examples include flammable liquids such as solvent-based paint, adhesives, polishes, aerosols (for passengers, those not permitted under ICAO Technical Instructions 8;1.1.2), bleach, corrosive oven or drain cleaners, ammunition, matches, etc.

Instruments — may conceal barometers, manometers, mercury switches, rectifier tubes, thermometers, etc. containing mercury.

Laboratory/testing equipment — may contain items meeting any of the criteria for dangerous goods, particularly flammable liquids, flammable solids, oxidisers, organic peroxides, toxic or corrosive substances.

Machinery parts — may contain flammable adhesives, paints, sealants and solvents, wet and lithium batteries, mercury, cylinders of compressed or liquefied gas, etc.

Magnets and other items of similar material — may individually or cumulatively meet the definition of magnetised material.

Medical supplies — may contain items meeting any of the criteria for dangerous goods, particularly flammable liquids, flammable solids, oxidisers, organic peroxides, toxic or corrosive substances.

Metal construction material — may contain ferro-magnetic material which may be subject to special stowage requirements due to the possibility of affecting aircraft instruments.

Metal fencing — may contain ferro-magnetic material which may be subject to special stowage requirements due to the possibility of affecting aircraft instruments.

Metal piping — may contain ferro-magnetic material which may be subject to special stowage requirements due to the possibility of affecting aircraft instruments.

Passengers' baggage — may contain items meeting any of the criteria for dangerous goods. Examples include fireworks, flammable household liquids, corrosive oven or drain cleaners, flammable gas or liquid lighter refills or camping stove cylinders, matches, ammunition, bleach, aerosols not permitted (toxic, etc.).

Pharmaceuticals — may contain items meeting any of the criteria for dangerous goods, particularly radioactive material flammable liquids, flammable solids, oxidisers, organic peroxides, toxic or corrosive substances.

Photographic supplies — may contain items meeting any of the criteria for dangerous goods, particularly heat-producing devices, flammable liquids, flammable solids, oxidisers, organic peroxides, toxic or corrosive substances.

Racing car or motorcycle team equipment — may contain engines, carburettors or fuel tanks that contain fuel or residual fuel, wet batteries, flammable aerosols, nitromethane or other gasoline additives, cylinders of compressed gases, etc.

Refrigerators — may contain liquefied gases or an ammonia solution.

Repair kits — may contain organic peroxides and flammable adhesives, solvent-based paints, resins, etc.

Samples for testing — may contain items meeting any of the criteria for dangerous goods, particularly infectious substances, flammable liquids, flammable solids, oxidisers, organic peroxides, toxic or corrosive substances.

Semen — may be packed with dry ice or refrigerated liquefied gas (see also dry shipper).

Swimming pool chemicals — may contain oxidising or corrosive substances.

Switches in electrical equipment or instruments — may contain mercury.

Tool boxes — may contain explosives (power rivets), compressed gases or aerosols, flammable gases (butane cylinders or torches), flammable adhesives or paints, corrosive liquids, etc.

Torches — micro torches and utility lighters may contain flammable gas and be equipped with an electronic starter. Larger torches may consist of a torch head (often with a self-igniting switch) attached to a container or cylinder of flammable gas.

Unaccompanied passengers' baggage/personal effects — may contain items meeting any of the criteria for dangerous goods. Examples include fireworks, flammable household liquids, corrosive oven or drain cleaners, flammable gas or liquid lighter refills or camping stove cylinders, matches, bleach, aerosols, etc.

Note: Excess baggage carried as cargo may contain certain dangerous goods (see 10.1.3.4). Vaccines — may be packed in dry ice.

10.3.1.1 Identification of Dangerous Goods Through X-Ray Screening

Persons conducting security screening of cargo should be alert to the presence of dangerous goods within packages that are not marked and labelled as dangerous goods and/or not accompanied by a Shipper's Declaration. In particular, items such as aerosols, ammunition, gas cylinders (camping gas, cylinders attached to life-jackets, etc.), cigarette lighters and wet acid batteries can be readily identified from x-ray images. Information provided on an air waybill or marked on a package often indicates that a consignment contains no dangerous goods. In the absence of such annotation by the shipper, should suspicions be raised by the size and shape of the contents of a package, consideration should be given to opening and hand-searching the consignment to verify that no undeclared dangerous goods are present.

10.3.1.2 Safety Data Sheets

REACH (Registration, Evaluation, Authorisation & restriction of Chemicals) is a European Union regulation controlling chemicals in Europe. REACH requires for many substances and mixtures, a Safety Data Sheet (SDS) to be provided either before or at the time of first delivery. Section 14 of the EU format SDS provides basic classification information, i.e. UN number, proper shipping name, Class/Division and Packing Group.

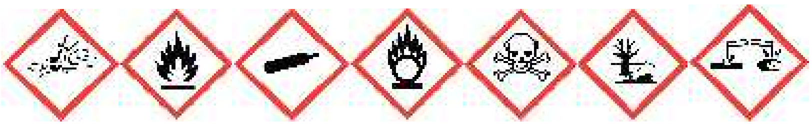
10.3.1.3 Consumer Labelling (Overview)

Some everyday household items bear consumer warning labels which may or may not indicate they are classified as dangerous goods in air transport. All over the world there are different laws on how to identify the hazardous properties of chemicals (called 'classification') and how information about these hazards is then passed to users (through consumer supply labels and safety data sheets for workers). This can be confusing because the same chemical can have different hazard descriptions in different countries. For example, a chemical could be labelled for supply as 'toxic' in one country, but not in another. For this reason, the UN brought together experts from different countries to create the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Within Europe the Regulation on Classification, Labelling and Packaging of Substances and Mixtures (known as the CLP Regulation) provides a transitional period to allow a gradual migration to the GHS regime. The Regulation already applies to the classification of substances and will apply to mixtures from 1 June 2015. In the meantime, suppliers in the UK may continue to label goods according to the Chemicals (Hazard Information and Packaging for Supply) Regulations (CHIP). However, they may as an alternative choose to classify, label and package mixtures according to CLP. There are, therefore, two systems of consumer supply labelling that may indicate the presence of dangerous goods.

10.3.1.4 GHS Labels

Products bearing the following GHS labels ARE classified as dangerous goods:



Note: A product bearing the GHS corrosive label (depicted far right above) is NOT classified as dangerous goods if the signal word 'Danger' and hazard statement 'causes serious eye damage' applies.

Products bearing the following GHS labels (and none of the above) are NOT classified as dangerous goods:

CHIP labels are represented below, together with indications of how goods bearing such labels may be classified for transport purposes. In the event that CHIP labels and associated risk phrases cause suspicion that a particular consignment contains undeclared dangerous goods, it will be necessary to refer to the Safety Data Sheet applicable to the product (see information above).

Physiochemical

Symbol	Abbreviation	Hazard	Description of hazard	Transport classification
	E	explosive	Chemicals that explode.	All substances and preparations classified in Class 1. Organic peroxides of Division 5.2 which require an "EXPLOSIVE" subsidiary risk label.
	O	oxidising	Chemicals that react exothermically with other chemicals.	All substances and preparations classified in Division 5.1. All organic peroxides of Division 5.2 other than those which require an "EXPLOSIVE" subsidiary risk label.
	F+	extremely flammable	Chemicals that have an extremely low flash point and boiling point, and gases that catch fire in contact with air.	Gases of Division 2.1 and Division 2.3 gases with a subsidiary risk of Division 2.1. All substances and preparations classified in Class 3 Packing Group I.
	F	highly flammable	Chemicals that may catch fire in contact with air, only need brief contact with an ignition source, have a very low flash point or evolve highly flammable gases in contact with water.	Most substances and preparations classified as Class 3 Packing Group II. Some solids classified in Division 4.1. All substances and preparations classified in Division 4.2. All substances and preparations classified as Division 4.3.
None	None	flammable	Substances and preparations with a flashpoint equal to or greater than 21°C and less than or equal to 55°C.	Some substances and preparations classified as Class 3 Packing Group II and most substances and preparations classified in Class 3 Packing Group III.

Health

Symbol	Abbreviation	Hazard	Description of hazard	Transport classification
	T+	very toxic	Chemicals that at very low levels cause damage to health.	Substances and preparations classified in Division 6.1 Packing Group I, and some substances and preparations classified in Division 6.1 Packing Group II.

	T	toxic	Chemicals that at low levels cause damage to health.	Substances and preparations classified in Division 6.1 Packing Group II other than those classified above, and <u>some</u> substances and preparations classified in Division 6.1 Packing Group III.

Symbol	Abbreviation	Hazard	Description of hazard	Transport classification
	Carc Cat 1	category 1 carcinogens	Chemicals that may cause cancer or increase its incidence.	Substances and preparations <u>may</u> be classified in any Class or Division of Classes 1 to 9 (**though normally in Division 6.1**) but <u>may</u>, however, be not subject to the Technical Instructions and may not need to be declared as dangerous goods.
	Carc Cat 2	category 2 carcinogens		
	Carc Cat 3	category 3 carcinogens		
	Muta Cat 1	category 1 mutagens	Chemicals that induce heritable genetic defects or increase their incidence.	
	Muta Cat 2	category 2 mutagens		
	Muta Cat 3	category 3 mutagens		
	Repr Cat 1	category 1 reproductive toxins	Chemicals that produce or increase the incidence of birth defects, which may be severe, and/or an impairment in reproductive functions or capacity.	
	Repr Cat 2	category 2 reproductive toxins		
	Repr Cat 3	category 3 reproductive toxins		
	Xn	harmful	Chemicals that may cause damage to health.	Substances and preparations classified in Division 6.1 Packing Group III other than those classified above, and <u>some</u> substances and preparations which are not subject to the Technical Instructions.
	C	corrosive	Chemicals that may destroy living tissue on contact.	The vast majority of substances and preparations which are classified as Class 8.
	Xi	irritant	Chemicals that may cause inflammation to the skin or other mucous membranes.	<u>Some</u> organic peroxides of Division 5.2. Otherwise, substances and preparations are not subject to the Technical Instructions.

Environmental

Symbol	Abbreviation	Hazard	Description of hazard	Transport classification

	N	dangerous for the environment	Chemicals that may present an immediate or delayed danger to one or more components of the environment.	Substances designated as severe marine pollutants[a], marine pollutants[b], and aquatic pollutants[c]. Substances and preparations may be classified in any Class or Division of Classes 1 to 8, and UN 3077 and UN 3082 in Class 9.

Notes:

(a) Substances and preparations designated as "severe marine pollutant" in the International Maritime Dangerous Goods Code.

(b) Substances and preparations designated as "marine pollutant" in the International Maritime Dangerous Goods Code.

(c) Substances and preparations designated as aquatic pollutants in ADR.

(d) The above table does not apply to substances and preparations of Division 6.2 and Class 7 which are not subject to the CHIP Regulations.

(e) CHIP labels for mixtures will be replaced by the Globally Harmonized System (GHS) of labelling on 1 June 2015. Information on CHIP should be removed after 1 June 2017 once transitional arrangements cease to apply.

10.4 Conditions Under Which Weapons, Munitions of War and Sporting Weapons May Be Carried

10.4.1 Need for Approval to Transport Munitions of War

Weapons of war and munitions of war can only be carried provided an approval to do so has been granted by all the States concerned before a flight. They must be carried in the aircraft in a place which is inaccessible to passengers during flight and, in the case of firearms, unloaded, except as specified in 10.6.2 below.

Super Legacy XP Limited does not hold an approval for the transport of Munitions of War by air.

10.4.2 Stowage Requirements for Munitions of War

In exceptional circumstances, weapons of war and munitions of war may be carried other than in an inaccessible place on the aircraft and may be loaded, provided an approval to do so has been granted by all the States concerned before a flight. These exceptional circumstances are intended primarily to permit the carriage of law enforcement officers, protection officers, etc.

UK Police Protection Officers hold an exemption from the UK Air Navigation Order that enables them to carry their weapons on their person when accompanying specific named VIPs. A condition on the exemption requires the police to provide Super Legacy XP Limited with a copy of the relevant exemption in advance of the flight to demonstrate that the exemption applies to them and the person they are accompanying. Official Record Series 4 approves the carriage of weapons by operators in accordance with the exemption issued to UK Police Protection Officers. Should Super Legacy XP Limited be asked to carry protection officers bearing weapons on their person and the Police do not/cannot provide a copy of the relevant exemptions (preferably when booking the flight), then their weapons must be stowed in a location that is inaccessible during flight. When the police officer is not accompanying any of the persons referred to in the exemption, the unloaded arms and ammunition shall be stowed in a location which is inaccessible to passengers on the aircraft. The exemption issued to UK Police Protection Officers and the Official Record Series 4 document each contain additional conditions with which operators must comply.

There are some limited occasions when the Bailiwick of Guernsey Regulatory Authority may grant one-off exemptions for persons not on the two exemptions held by the Police, such as visiting Heads of State, but these will generally only be when accompanied by UK Protection Officers. In such circumstances, or in the event of a request for non-UK protection officers to carry weapons in the cabin, Super Legacy XP Limited must apply to the Bailiwick of Guernsey Regulatory Authority.

10.4.3 Notifying PIC of the Carriage of Munitions of War

The PIC must be notified before a flight if weapons of war or munitions of war are to be carried on the aircraft. If the volume of information provided to the PIC by the operator is such that it would be impracticable to transmit it in the event of an in-flight emergency, an additional summary of the information should also be provided, containing at least the quantities and class or division of the dangerous goods in each cargo compartment.

10.4.4 Carriage of Sporting Weapons When Inaccessible to Passengers During Flight

The Operations Manager shall ensure that all passengers are aware of the requirement to disclose details of any sporting weapons to Super Legacy XP Limited at time of booking the flight. Sporting weapons and ammunition for such weapons may be carried without an approval from an Authority, provided they are stowed in a place on the aircraft which is inaccessible to passengers during flight and, in the case of firearms, unloaded.

Note: Ammunition is subject to the conditions set out in 10.1.3.

10.4.5 Carriage of Sporting Weapons Other Than In An Inaccessible Location

With the agreement of the Bailiwick of Guernsey Regulatory Authority sporting weapons and ammunition may be carried other than in an inaccessible location on an aircraft if it has been accepted that it is impracticable so to do, subject to any conditions stipulated by the Bailiwick of Guernsey Regulatory Authority.

The passenger and Super Legacy XP Limited (or his agent) must observe all regulations applicable to the export, import and transit of weapons and ammunition, applicable in the country of departure, transit and destination. The Operations Manager shall ensure that the relevant authorities are consulted.

10.5 Special Notification Requirements in the Event of an Accident or Occurrence

When Dangerous Goods are Being Carried or Have Been Offered for Air Transport Without Having Been Prepared and Declared in Accordance with the ICAO Technical Instructions

10.5.1 Dangerous Goods Accident and Incident Reports

Definitions:

Dangerous goods accident: An occurrence associated with and related to the transport of dangerous goods by air which results in fatal or serious injury to a person or major property or environmental damage.

Dangerous goods incident: An occurrence other than a dangerous goods accident associated with and related to the transport of dangerous goods by air, not necessarily occurring on board an aircraft, which results in injury to a person, property or environmental damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained. Any occurrence relating to the transport of dangerous goods which seriously jeopardises an aircraft or its occupants is also deemed to be a dangerous goods incident.

Note: A dangerous goods accident or incident may also constitute an aircraft accident or incident as specified in ICAO Annex 13 — Aircraft Accident and Incident Investigation.

Super Legacy XP Limited must report dangerous goods accidents and incidents to the appropriate authorities of the State of Super Legacy XP Limited and the State in which the accident or incident occurred in accordance with the reporting requirements of those appropriate authorities.

Note.— This includes incidents involving dangerous goods that are not subject to all or part of these Instructions through the application of an exception or of a special provision (e.g. an incident involving the short circuiting of a dry cell battery that is required to meet short-circuit prevention conditions in a special provision of 3;3).

Super Legacy XP Limited must report any occasion when dangerous goods that are not permitted are discovered in the baggage or on the person of passengers or crew members. Such a report must be made to the appropriate authority of the State in which this occurred.

In addition to the requirements of the ICAO Technical Instructions for the reporting of dangerous goods occurrences (above), require that any incident which endangers or which, if not corrected, would endanger an aircraft, its occupants or any other person is reported to Bailiwick of Guernsey Regulatory Authority. Dangerous goods occurrences reportable under the Mandatory Occurrence Reporting Scheme include:

a. Dangerous goods found not to have been secured to prevent movement

b. Damage to packages of dangerous goods

c. NOTOC errors where dangerous goods have not been stowed in accordance with loading instructions

d. Failure to prepare electric wheelchairs in order to prevent accidental activation

e. Electric wheelchairs found not to have been stowed and secured correctly

f. Leakage of dangerous goods from passenger baggage

Note: Dangerous goods occurrences meeting the MOR criteria also meet the definition of a dangerous goods accident or incident (above), reportable. Accordingly, the report must be made to Bailiwick of Guernsey Regulatory Authority within 72 hours, unless exceptional circumstances prevent this.

A dangerous goods accident or dangerous goods incident not meeting the MOR criteria must be reported to the Bailiwick of Guernsey Regulatory Authority within 72 hours, unless exceptional circumstances prevent this. If necessary, a subsequent report shall be made as soon as possible giving all the details that were not known at the time the first report was sent. If a report has been made verbally, written confirmation shall be sent as soon as possible. Any type of accident or incident must be reported irrespective of whether the dangerous goods are in cargo, mail, stores, passengers' baggage or crew baggage.

The first and any subsequent reports contain the following data:

1. Date of the incident or accident or the finding of undeclared or misdeclared dangerous goods
2. Location, the flight number and flight date.
3. Description of the goods and the reference number of the air waybill, pouch, baggage tag, ticket, etc.
4. Proper shipping name (including the technical name, if appropriate) and UN/ID number, when known.
5. Class or division and any subsidiary risk.
6. Type of packaging, and the packaging specification marking on it.
7. Quantity of dangerous goods.
8. Name and address of the shipper, passenger, etc.
9. Any other relevant details.
10. Suspected cause of the incident or accident.
11. Action taken.
12. Any other reporting action taken.
13. Name, title, address and telephone number of the person making the report.
14. Copies of relevant documents and any photographs taken should be attached to a report.

NOTE: IF SAFE TO DO SO, THE DANGEROUS GOODS INVOLVED IN THE ACCIDENT OR INCIDENT SHOULD BE HELD PENDING Bailiwick of Guernsey Regulatory Authority INVESTIGATION.

Where applicable, information shall be provided to handling agents so that, as a minimum, they are aware of whom to report any non-MOR events, should this be required.

10.5.2 Removal of Contamination

In the event of a spillage or leakage of undeclared dangerous goods within an aircraft, the position where the dangerous goods or unit load device was stowed on the aircraft must be inspected for damage or contamination and any hazardous contamination removed. Persons responding in the event of damage to or leakage of dangerous goods from packages must:

1. identify the hazards and wear appropriate protective clothing;

2. avoid handling the package or keep handling to a minimum;

3. inspect adjacent packages for contamination and put aside any that may have been contaminated;

4. arrange for decontamination of the aircraft and equipment; and

5. in the case of infectious material, inform the appropriate public health authority or veterinary authority, and provide information to any other countries of transit where persons may have been exposed to danger; and notify the shipper and/or the consignee.

If it is evident that a package containing radioactive material is damaged or leaking, or if it is suspected that the package may have leaked or been damaged, access to the package must be restricted and a qualified person must, as soon as possible, assess the extent of contamination and the resultant radiation level of the package. The scope of the assessment must include the package, the aircraft, the adjacent loading and unloading areas and, if necessary, all other material which has been carried in the aircraft. When necessary, additional steps for the protection of persons, property and the environment must be taken in accordance with provisions established by the relevant competent authority, to overcome and minimise the consequences of such leakage or damage.

10.5.3 Provision Of Information In The Event Of An In-Flight Emergency

If an in-flight emergency occurs the PIC should, as soon as the situation permits, inform the appropriate ATS unit of any dangerous goods carried as cargo on board the aircraft, as specified in the Technical Instructions.

10.6 Training Programmes

Super Legacy XP Limited sub-contracts approved dangerous goods training programmes for personnel as required by the technical instructions. Training programmes are commensurate with the responsibilities of personnel and ensure that the flight crew has received an appropriate training or briefing to enable them to recognise undeclared dangerous goods brought on-board by passengers or as cargo. See Part D 2.17 Dangerous Goods Training.

Security Procedures

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11 SECURITY PROCEDURES

11.1 Assessing the Threat and Vulnerabilities

The first step in the development of an effective security programme is to assess the threat against Super Legacy XP Limited, its personnel, aircraft and facilities and the vulnerabilities of the company. Threats may relate to the nature of business Super Legacy XP Limited conducts, where that business is conducted, the nationality of Super legacy XP Limited, the nationality of Super Legacy XP Limited aircraft, the profile of passengers carried, and the value of goods carried. Information on the various kinds of threats Super Legacy XP Limited is subject to will come from a variety of sources. In developing and maintaining a current threat assessment for areas of operations, the Operations Manager will use the following resources as appropriate:

a. national and local security officials;

b. national and local law enforcement officials;

c. Government Travel Advice websites such as https://www.gov.uk/foreign-travel-advice;

d. national and international trade associations;

e. air security assessment and intelligence service providers;

f. local and foreign media reports; and

Super Legacy XP Limited will conduct an assessment of the company vulnerabilities at least once each year. The results of these assessments will be used to update the security programme.

11.2 Preventive Measures

The focus of preventive security measures will be to:

a. Prevent unauthorised access to Super Legacy XP Limited aircraft and facilities;

b. Prevent the unauthorised introduction of weapons, explosives onto Super Legacy XP Limited aircraft and into Super Legacy XP Limited facilities; and

c. Prevent the use of Super Legacy XP Limited aircraft to commit other unlawful acts, such as the transport of illicit drugs.

Preventive security measures will include:

11.2.1 Global Considerations

a. Whenever possible avoid areas where there is an identified security risk;

b. Have a security arrangements in place subject to the specific location and operation;

c. Ensure that all company personnel receive security programme training;

d. Make security an integral part of all aspects of the company and its operation;

e. Establish a Security Champion role, much like the Safety Manager role;

f. Maintain a security information program; and

g. Develop resource, maintain, exercise, evaluate and update an Emergency Response Plan.

11.2.2 People and Processes

a. Require pre-employment screening of company personnel;

b. Require that crew members display photo IDs at all times;

c. Limit the publication of aircraft itineraries;

d. Establish security threat alerting procedures, such as a code word for use by persons under duress;

e. Ensure that only Super Legacy XP Limited personnel and authorised guests, identified in advance, are allowed to board a Super Legacy XP Limited aircraft;

f. Ensure that passengers or company members maintain positive control of luggage; and

g. Positively identify all luggage and match luggage to specific passengers (colour-coded bag tags can be helpful).

11.2.3 Aircraft

a. check lavatories, baggage compartments and all cavities for unauthorised people or objects prior to every departure;

b. Ensure that a Super Legacy XP Limited member is present at all times when the aircraft is being serviced (fuelling catering, etc.) away from Super Legacy XP Limited facilities;

c. Ensure that an aircraft crewmember is present at all times when the aircraft is being serviced (fuelling, catering, etc.) at locations away from Super Legacy XP Limited facility;

d. Use the aircraft's security system (locks and alarms) whenever it is unattended away from Super Legacy XP Limited facilities;

e. Apply tamper evidence security tape on door, panels, etc.

f. Post a guard at the aircraft when away from Super Legacy XP Limited facilities at locations where security is a concern; and

g. Consider removing Super Legacy XP Limited identification from the aircraft

11.2.4 Facilities

a. Ensure there is a facility perimeter security with effective fencing, lighting, security patrols (as appropriate), gates and limited access areas;

b. Ensure external gates and doors are closed and locked at all times ;

c. Require positive access control for all external gates and doors;

d. Close hangar doors when that area is unattended ;

e. Secure all key storage areas (food and liquor, parts and tools, etc.);

f. Have an access control management system for keys and passes;

g. Confirm the identity and authority of each passenger, vendor and visitor prior to allowing access to facilities and aircraft;

h. Accompany all visitors away from secure areas (visitor lounge, etc.);

i. Require a picture ID of any unfamiliar or unaccompanied visitor or vendor;

j. Post emergency numbers prominently around facility;

k. Ensure easy access to phones or "panic buttons" in various facility locations (break room, hangar bay, etc.); and

l. Confirm security of destination facilities.

11.3 Responsive Measures

In the case of a hijacking, the flight crew must attempt to make an assessment of the intent of the hijacker and follow the emergency procedures set out in 11.5.1 Unlawful Interference. These procedures will include the making of distress radio calls and transponder settings, to indicate that the aircraft has been hijacked and for adherence to the procedures that have been established and promulgated in ICAO Doc 7030 – *Regional Supplementary Procedures* in both the cases where the aircraft continues on the assigned track and cruising level or is forced to deviate there from.

In the case of bomb threats, the first step is to determine the legitimacy of the threat or whether it is likely to be a hoax. If considered to be legitimate, law enforcement officials shall be notified. If the aircraft is in the air, ATS shall be notified and the aircraft shall land to be searched. If on the ground, the aircraft shall be moved, for searching, to the designated isolated parking.

In the case of other unlawful acts, the PIC shall contact the responsible law enforcement agencies.

11.4 Security Checklist

Each destination will be assessed as presenting an insignificant, low, medium, high or critical security risk to travellers. The following guidelines describe the progressive measures that shall be invoked to cater to each of these categories.

THREAT ACTIONS

Low	Door/access panels	-	Locked
	Emergency Exits	-	Secured
	Aircraft Perimeter	-	Marked/Lighted
	Communications	-	Establish lines of communications between crew and passengers.
Medium	Parking	-	Avoid proximity to public 'rights' of way
		-	Non-remote
		-	Well-lighted
	Engine Blanks	-	Fitted
	Physical Guarding	-	Available
	Communications	-	Establish lines of communications between crew and passengers.
	Pre-flight	-	Detailed check of aircraft cavities
High	Risk	-	Refer to local representative for assessment of business risk of not travelling vs. security risk of travelling
	Parking	-	Aircraft hangared
		-	Apply anti-tamper tape to doors/access panels
	Armed Guarding	-	Consider
		-	Local representative approved in accordance with local guidelines on the use of force
	Communications	-	Established lines of communications between crew and pax.

The company will also provide crews with local specialist assessments of the security situation in countries where there is a local presence.

11.5 Emergency Checklist

The following checklist will be used in the event of unlawful interference (hijack) or bomb threats.

11.5.1 Unlawful Interference

THE SAFETY OF PASSENGERS AND CREW IS PARAMOUNT AND THE OBJECTIVE IS TO SECURE THEIR SAFE RELEASE

When possible, carry out the following:

Transponder A7500
ATC .... INFORM
Fasten seat belts .... ON
Cabin Attendant........................... Brief - if possible

GENERAL ADVICE In the air

a. Assess the situation to try to determine the intent of the hijacker and modify response as appropriate.
b. Comply with initial demands without prejudicing safety.
c. Negotiate patiently. Do not antagonise.
d. Avoid actions/movements that might appear hostile.
e. Explain before moving any control, switch, etc.
f. Keep passengers calm. Prevent them from intervening.
g. Consider passing information to controlling authorities.
h. If forced to deviate from the assigned track and cruising level,
    1. follow the procedures as specified in ICAO Doc 7030 *Regional Supplementary Procedures, or*
    2. if no applicable regional procedures have been established, proceed at a level which differs from the cruising levels normally used for IFR flight by:

i...500 feet (150m) in an area where a vertical separation minimum of 1,000 feet (300m) is applied, or
ii..1,000 feet (300m) in an area where a vertical separation minimum of 2,000 feet (600m) is applied.

i. Land at a suitable airfield.

On the ground

a. EXPECT THE AUTHORITIES TO TAKE CONTROL.
b. Be guided by authorities. Do not take independent action.
c. Make the hijacker do his own thinking.
d. Establish endurance of food, water, sanitary supplies, APU and battery. Transfer to a ground power unit as soon as possible. If possible, obtain air conditioning cart.
e. Maintain hygiene. Keep door, galley and aisle clear of rubbish and equipment.
f. Look after passengers' health and comfort.

11.5.2 Bomb Threat on Ground

ATC and operations/handling agent ALERT

a. Confirm parking area.

Cabin attendant (if carried) .... BRIEF

a. Pax NOT to be told.
b. Prepare to disembark on PIC's command (PA).
c. Disembarkation procedures established. Use entry door if practical.
d. Suspicious objects should not be touched.
e. If taxiing, stop and disembark immediately.

Pax ....EVACUATE
PIC............................ENSURE THAT AIRCRAFT IS COMPLETELY VACATED
Pax ....ASSEMBLE CLEAR OF A/C (500m UPWIND)

11.5.3 Bomb Threat in Flight

a. If a suspicious article or explosive device had been found, the aircraft should be flown as normally as possible but in accordance with the following requirements.
   Emergency .... DECLARE

b. Plan to land at the nearest suitable airfield
c. Consider high altitude airfield if appropriate.
   Transponder .... SET A7700 if none assigned
d. Cabin Attendant (if carried) BRIEF

a. Advise that there is a bomb threat and notify Senior Passenger.
b. Organise search of cabin (if bomb found see over).
c. Land as soon as possible.

d. Disembark as soon as possible after landing by fastest means.

Pilots .... SEARCH FLIGHT DECK
Pressure controller .... MAINTAIN CURRENT CABIN ALTITUDE
Descent .... COMMENCE

a. Reduce cabin differential pressure to zero by descending aircraft to cabin altitude. Do not raise cabin altitude.
b. Descend without delay to below FL100 or MSA if higher.
c. Minimize manoeuvres / avoid turbulence

Speed .... REDUCE WHEN PRACTICABLE

Cabin .... DEPRESSURIZE/AIR VALVES CLOSED

a. When at cabin altitude:

    1. Man. Cabin Alt Control FULL INCREASE

    2. Dump Valve OPEN

b. Leave outflow valve open for remainder of flight.

    Landing Configuration .... ESTABLISH EARLY

After Landing:

Engines.............................. SHUT DOWN
Lighting .... ALL ON EXCEPT LANDING LIGHTS

PA "IT IS IMPERATIVE TO LEAVE THE A/C WITHOUT DELAY. KINDLY FOLLOW THE INSTRUCTIONS" (GIVEN BY THE CABIN ATTENDANT OR PILOT)

Pax .... ASSEMBLE CLEAR OF A/C (500m UPWIND) SUSPICIOUS ARTICLE OR BOMB FOUND

a. DO NOT MOVE, TOUCH OR OPEN.
b. Move pax as far away as possible, and instruct them to keep heads below top of seat backs.
c. Obtain expert advice through ATC communications.
d. Remove oxygen bottles and First-aid kits from the immediate vicinity. Have fire extinguishers available.
e. Secure article in place, pack around with pillows, blankets, coats and absorbent materials. Keep article dry but wet surrounding material.

Only consider moving the article if its position poses an immediate threat to the aircraft and expert advice recommends this course of action, in which case, handle gently and keep in same attitude. The article should be fastened using adhesive tape and supported in seat cushions, blankets, etc.

Emergencies and Occurrences

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12 HANDLING OF EMERGENCIES AND OCCURRENCES

12.1 Airborne Emergencies

12.1.1 Airborne Emergency Management

The PIC shall declare an emergency when any abnormal situations affect the safety of flight. Management of the emergency will be in accordance with the procedures in the Aircrafts AFM and well defined as to:

a. Who will fly the aircraft;

b. Who will accomplish the checklist; and

c. Who will navigate and communicate with ATC.

The PIC has the option for cancelling the emergency if later developments so dictate.

12.1.2 Use of Transponder/Radar Assistance

Appropriate transponder codes will be selected for the flight area and situation.

12.1.3 Emergency Landing and Evacuation Procedures

The emergency briefing provided in the event of an emergency, where time and circumstances permit, shall consist of instructions pertaining to:

a. Safety belts or safety harnesses;

    1. Lap belts must be fastened snug around the hips.

    2. If carried, child restraint devices shall be checked to ensure they are secured to the aircraft seat with a seat belt and do not restrict access to emergency exits.

    3. Seat belts must remain fastened until the aircraft comes to a complete stop;

b. Seat backs and tables (as applicable);

Seat backs and tables must be secured in the upright and locked position.

c. Carry-on baggage;

All carry-on baggage including handbags or any other items of mass, must be safely stowed in approved locations. Seat pockets may be used for smaller items.

d. Safety features card;

Advise passengers to review the safety features card and to pay particular attention to exit locations and operation;

Ensure that passengers seated next to emergency exits are willing and able to open that exit.
If not, request the assistance of an able-bodied person;

If possible assign an able-bodied person to assist young or special needs passengers;

Advise passengers of the safest direction and least hazardous route to move away from the aircraft once outside.

e. Brace position (when to assume, how long to remain);

Advise passengers that they will receive two verbal commands:

#1, Prior to Landing.

The command "Brace", will be given prior to impact / landing, at which time the passengers will assume and maintain the brace position illustrated on the safety features card until the aircraft has stopped and;

#2, After Impact / Landing.

If required, the command "Evacuate" will be given after the aircraft has stopped and the engines shut down. Passengers shall then be instructed to immediately "release seat belts" and "get out" of the aircraft using the nearest useable exit.

If an evacuation is not required, the command "Remain Seated" will be given.

f. Life preservers (as applicable):

If an emergency landing is anticipated on water, advise passengers to immediately locate and don life preservers, secure with straps and to inflate only when outside the aircraft.

g. Child restraint system (if applicable):

h. Evacuation procedures for the occupant of a child restraint system.

If possible, crew members shall retrieve the First-aid kit and emergency equipment prior to evacuating the aircraft.

12.1.4 Action in the Event of Air Ground Communication Failure

As soon as it is known that two-way communication has failed, ATC shall maintain separation between the aircraft having the communication failure and other aircraft based on the assumption that the aircraft will operate in accordance with VMC or IMC.

12.1.4.1 Visual Meteorological Conditions

A controlled flight experiencing communication failure in VMC shall:

a. Set transponder to Code 7600;

b. Continue fly in VMC;

c. Land at the nearest suitable aerodrome, and

d. Report its arrival time by the most expeditious means to the appropriate ATS unit.

12.1.4.2 Instrument Meteorological Conditions

A controlled flight experiencing communication failure in IMC, or where it does not appear feasible to continue in VMC shall:

a. Set transponder to code 7600;

b. Maintain for a period of 7 minutes the last assigned speed and level or the minimum flight altitude, if the minimum flight altitude is higher than the assigned level. The period of 7 minutes commences:

i. If operating on a route without compulsory reporting points or if instructions have been received to omit position reports:

- at the time the last assigned level or minimum flight altitude is reached, or
- at the time the transponder is set to Code 7600, whichever is later, or

ii. If operating on a route with compulsory reporting points and no instruction to omit position report has been received:

- at the time the last assigned level or minimum flight altitude is reached, or

- at the previously reported pilot estimate for the compulsory reporting point, or

- at the time of a failed position report over a compulsory reporting point, whichever is later;

NOTE: The period of 7 minutes is to allow the necessary air traffic control and coordination measures.

c. Thereafter, adjust level and speed in accordance with the filed flight plan;

NOTE: With regard to changes to level and speed, the filed flight plan, which is the flight plan as filed with an ATS unit by the pilot or a designated representative without any subsequent changes, will be used.

d. If being radar vectored or proceeding offset according to RNAV without a specified limit, proceed in the most direct manner possible to rejoin the current flight plan route no later than the next significant point, taking into consideration the applicable minimum flight altitude;

NOTE: With regard to the route to be flown or the time to begin descend to the arrival aerodrome the current flight plan, which is the flight plan, including changes, if any, brought about by subsequent clearances, will be used.

e. Proceed according to the current flight plan route to the appropriate designated navigation aid serving the destination airport and, when required to ensure compliance with paragraph f. below, hold over this aid until commencement of descent;

f. Commence descent from the navigational aid specified in paragraph e. above at, or as close as possible to, the expected approach time last received and acknowledged or, if no expected approach time has been received and acknowledged, at or as close as possible to the estimated time of arrival resulting in the current flight plan;

g. Complete a normal instrument approach procedure as specified for the designated navigation aid, and

h. Land, if possible, within 30 minutes after the estimated time of arrival specified in paragraph e. above or the last acknowledged expected approach time, whichever is later.

NOTE: Pilots are reminded that the aircraft may not be in an area of secondary surveillance radar coverage.

Refer to Jeppesen Flight Guide for regional differences for procedures.

12.1.5 Emergency Descent Procedures

When an aircraft operated as a controlled flight experiences sudden decompression or a (similar) malfunction requiring an emergency descent, the aircraft shall, if able:

a. Initiate a turn away from the assigned route or track before commencing the emergency descent;

b. Advise the appropriate air traffic control unit as soon as possible of the emergency descent;

c. Set transponder Code to 7700 and select the Emergency Mode on the automatic dependent surveillance/controller-pilot data link communications (ADS/CPDLC) system, if applicable;

d. Turn on exterior lights;

e. Watch for conflicting traffic both visually and by reference to ACAS (if equipped), and f. Co-ordinate its further intentions with the appropriate ATC unit.

The aircraft shall not descend below the lowest published minimum altitude which will provide a minimum vertical clearance of 300m (1000ft) or in designated mountainous terrain 600m (2000ft) above all obstacles located in the area specified.

12.2 Reporting Aircraft Overdue

30 MINUTES AFTER ETA (Estimated Time of Arrival)

The Responsible Person will:

a. Review the flight itinerary,

b. Begin a communications search,

c. Contact Operations Manager - have flight itinerary available.

d. If Operations Manager unavailable, contact Accountable Manager.

60 MINUTES AFTER ETA

The Operations Manager will initiate the Emergency Response Plan (see 12.4).

12.3 Accident – Incident Reporting

12.3.1 Definitions

'Accident' means an occurrence associated with the operation of an aircraft which takes place between the times any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, 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 adversely affects the structural strength, performance or flight characteristics of the aircraft, and 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 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.

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

'Occurrence' means an operational interruption, defect, fault or other irregular circumstance that has or may have influenced flight safety and that has not resulted in an accident or serious incident, hereinafter referred to as 'accident or serious incident', as defined above,

12.3.2 Occurrence Reporting Requirement

Accident, Serious Incident and Incident

An accident (persons are injured, aircraft is damaged, aircraft suffers structural failure or aircraft is missing), a serious incident (there was a high probability of an accident and it was associated with the operation of an aircraft) or an incident (an event associated with the operation of the aircraft which affects or could affect the safety of operation) involving an Bailiwick of Guernsey Regulatory Authority aircraft will be reported to the UK Air Accident Investigation Branch (AAIB) and to any other organisation required by the State of Occurrence any Accident or serious Incident. .

Mandatory Occurrence Report

An operational interruption, defect, fault or other irregular circumstances that has, or may have, influenced flight safety and that has not resulted in an accident or serious incident, must be reported to the Bailiwick of Guernsey Regulatory Authority within 72 hours of the event. A list of the mandatory reportable accidents/incident occurrences can be found in Form 5 Examples of Events Requiring an Occurrence Report to be filed.

Furthermore, Super Legacy XP Limited will report to the organisation responsible for the design of the aircraft any incident, malfunction, technical defect, exceeding of technical limitations or occurrence that would highlight inaccurate, incomplete or ambiguous information contained in the operational suitability data established in accordance with Regulation (EU) No 748/2012 or other irregular circumstance that has or may have endangered the safe operation of the aircraft and that has not resulted in an accident or serious incident.

Reports shall be made as soon as practicable, but in any case within 72 hours of Super Legacy XP Limited identifying the condition to which the report relates, unless exceptional circumstances prevent this.

Where relevant, Super Legacy XP Limited shall also produce a follow-up report to provide details of actions it intends to take to prevent similar occurrences in the future, as soon as these actions have been identified.

12.3.3 Procedure

All Accidents, Incidents and Occurrences shall be reported by the Pilot in Command or the
Accountable Manager (or Operations Manager in his absence).

The above Occurrence reports shall be made to the Bailiwick of Guernsey Regulatory Authority in accordance with the Mandatory Occurrence Report Form, which contains all pertinent information about the condition known to Super Legacy XP Limited .

Super Legacy XP Limited shall implement:

a. Any safety measures mandated by the competent authority in accordance with; and

b. Any relevant mandatory safety information issued by the Agency, including airworthiness directives.

In the case of an accident, the aircraft, its components and contents shall not be moved or otherwise disturbed, (except to prevent destruction by fire or other cause, or to avoid danger to any person or property) without approval of the UK Air Accident Investigation Branch (AAIB) and to any other organisation required by the State of Occurrence. If required by the State in which the incident occurs, the PIC should submit a report on any such violation to the appropriate authority of such State; in that event, the pilot-in-command should also submit a copy of it to the competent authority.

The Super Legacy XP Limited Emergency Response Plan will be activated in the case of an accident or as otherwise appropriate.

12.3.4 Use of Recorders

Super Legacy XP Limited shall make available any flight recorder recording that has been preserved, if so determined by the competent authority. The need for removal of the recorders from the aircraft is determined by the investigating authority with due regard to the seriousness of an occurrence and the circumstances, including the impact on the operation.

a. Following an accident, a serious incident or an occurrence identified by the investigating authority, the operator of an aircraft shall preserve and retain in custody the original recorded data for a period of 60 days or until otherwise directed by the investigating authority.

b. If, following a serious incident, the aircraft lands away from base and a replacement CVR or FDR, if appropriate, is to be installed before the aircraft flies again, the records installed at the time of the incident are to be returned to base for action. If the crew or engineers attending the incident know or suspect that an incident may be classified as 'serious', they should ensure that any CVR or FDR, if fitted, is disabled after shutdown to prevent any relevant data being overwritten when power is reapplied to the aircraft.

c. The following procedure should be complied with by the crew or engineers person:

(1) de-activate the flight recorders immediately after completion of the flight and inform relevant personnel that the recording of the flight recorders must should be preserved:

On circuit breaker panel, pull circuit breaker marked 'CVR', and gag with CAUTION tag – Specify reason in 'Remark' and identify crew in 'Name'.

(2) the following instructions are to ensure that there is not an inadvertent reactivate the FDR, test, repair or reinstallation of the flight recorders by operator personnel or during maintenance or ground handling activities performed by third parties.

Raise a defect in the Technical Log sector record page, with reference to the incident and "CVR CB pulled and gagged".

For Operation and Serviceability Checks of Recorders refer to OM A 8.11.5 and 8.11.6

12.4 Emergency Response Plan

12.4.1 Introduction

The Super Legacy XP Limited Emergency Response Plan (ERP) is to be activated in an emergency situation involving injury, loss of life, damage to property or abnormal occurrences beyond the scope of Super Legacy XP Limited normal operations. This plan is principally designed to respond to an accident to an aircraft operated or sub chartered/contracted by Super Legacy XP Limited .

The ERP is intended to provide guidance during the first few hours following an aircraft accident or other emergency and to ensure that notification of all involved parties occurs in a timely and appropriate manner. No emergency plan can cover every contingency or likelihood, so personnel initiative and good judgement must be applied as events unfold and dictate.

The ERP is designed to ensure:

a. An orderly and safe transition from normal to emergency operations;

b. Co-ordination with the emergency response plans of other organisations where appropriate;

c. If appropriate, safe continuation of operations or return to normal operations as soon as practicable.

Any Super Legacy XP Limited representative dealing with an emergency shall be guided by the following general priorities:

a. Protect and give comfort to the living. Do whatever can be done to facilitate the treatment of the injured and attend to the emotional needs of family members

b. Protect property. Do whatever can be done to protect Super Legacy XP Limited and client property from further loss

The first few hours following an accident will be the busiest and most trying. After the initial action has been taken, the follow up tasks and priorities will become evident. The response plan will need to be modified to react to the particular situation as needs dictate.

<u>It is important to remember to take notes and record all actions that have been taken.</u>

12.4.2 ERP Duties and Responsibilities

The principle duties of the Emergency Response Plan lie with the Accountable and Operations Managers, however all post holders and personnel will assist, until both Accountable and Operations Managers are in control of the situation, and may continue to ask for assistance as necessary thereafter.

In the event that one of or both the Accountable and Operations Manager are on board the aircraft which is effected, or otherwise uncontactable for any reason (notwithstanding every effort being made to contact them), then the roles in the Emergency Plan will be assumed by the Lead Captain, Safety Manager, Compliance Monitoring Manager and other personnel as necessary.

The recommended actions are contained with the Incident Check List (see 12.4.3.)

12.4.3 Incident Check List.

These checklists may be used, or copied for use in an emergency situation.

STAGE 1

Task Number	TASK		Tick Box Date/Time
1	Advise Handling Agent or Airport Duty Manager contact details	OM	
2	Obtain initial casualty and damage assessment from the handling agent if possible.	OM	
3	Ensure report is made relevant authorities (Police, AAIB, airport authorities) see 12.4.7		
3	In the case of an overseas accident assess the level of support required and arrange for a member of the Super Legacy XP Limited team to be sent to the accident site.	AM	
4	Assess travel requirements and provide aircraft, if required for the positioning of the support team.	AM	
5	If the aircraft is missing or inaccessible maintain close liaison with ATC as appropriate and the appropriate search and rescue authorities.	OM	
6	If hazardous goods, advise Search & Rescue	OM	
7	Agree initial press release in conjunction with the Police and the authority concerned.	AM	

STAGE 2

Task Number	TASK		Tick Box Date/Time
1	The customer/owner's relatives or representatives must be informed as soon as possible of all the information about an accident.	AM	
2	Inform Insurance Company of likely loss	AM	
3	In the case of a missing aircraft continue close liaison with ATC until the aircraft is located and rescue effected.	OM	
4	Continue to monitor casualty and damage assessment.	OM	

5	Maintain close liaison with the handling agent and to ensure that adequate handling agent presence is being maintained in all areas.	OM	
6	Help to arrange on site facilities for the repatriation of hospitalised passengers and crew. This will also apply to any deceased remains.	OM	
7	Ensure that comprehensive records are maintained on the progress of handling the accident (see form 12.4.6)	OM	

8	Co-ordinate the recovery of baggage and personnel effects after release by the appropriate authorities.	OM	
9	In so far as possible make arrangements for the safeguard of the flight data recorder records and cockpit voice recorder records of the aircraft and, if necessary the associated flight recorders and voice recorders;	AM	
10	Establish the names and addresses of all legal next of kin of the injured or deceased.	AM	
11	As soon as the appropriate authorities have been informed, the documents concerning the flight, the passengers, the crew and all baggage must be put in a secure place. The following documents shall be secured: a) Certificate of registration. b) Certificate of airworthiness. c) ATC Flight Plan. d) Operational Flight Plan. e) Passenger manifest with details of: Sex and age Fatalities, including documents and details relating to death certificates and post mortem examinations Nature of non-fatal injuries Name and address of next of kin Hospital or funeral arrangements Copies of any correspondence with passengers or next of kin.	AM	
12	Technical log pre-flight checks from last departure at base, including: Certificate of release Airframe and engine log books Deferred logbook/defects log	AM	
13	Photographs of wreckage or damage to the aircraft	AM	

14	Aircraft serial number, plus the following: Total airframe hours Total landings Date and time of last engineering inspection Engine type/model/serial number/hours Fuel uplift and supplier details prior to last flight	OM	
15	Documents relating to aircraft ownership, the hull, purchase, lease or finance.	AM	
16	Crew details: Full name Age Licence details to include:- Number and type Date of issue/valid to Aircraft type and validations/ratings Personnel flying hours Date of last simulator check Date of last medical and expiry date Flying records for the previous 30 days and length of previous rest period	OM	
17	Assemble all of the information and provide it to the Air Safety Investigation authority as soon as possible, preferably before they depart for the accident site.	AM	
18	Update Insurance Regularly	AM	

12.4.4 Emegency Contact Numbers

CONTACT	TITLE	OFFICE NUMBER	EMAIL
Stephen Williams	Accountable Manager	+447971 192879	williamsflying@gmail.com
	Operations		

	Lead Captain		
	Safety Manager		
	Technical Co-ordinator		
	Flight Operations Representative		
UK Air Accident Investigation Branch (AAIB).		+44 1252 512299.	enquiries@aaib.gov.uk.

12.4.5 Accident Information Sheet

TIME	SOURCE	INFORMATION RECEIVED	REF

12.4.6 Reporting an accident

Inform the local police of the accident, and include the location where it occurred.

Inform the AAIB

- 24 hour Accident Reporting line: +44 (0)1252 512299

All reportable accidents are required to be notified to the AAIB.

The legal responsibility for notification of an accident rests first with the Pilot in Command of the aircraft or, if he be killed or incapacitated, then Super Legacy XP Limited .

If the accident occurs on or adjacent to an aerodrome, then the aerodrome authority is also required to notify the accident.

The notification is required to be passed to the AAIB by the quickest means and giving, as far as possible, the following information:

a. In the case of an accident the identifying abbreviation "ACCID" or, in the case of a serious incident, the identifying abbreviation "INCID";

b. The type, model, nationality and registration marks of the aircraft;

c. The names of the owner and operator of the aircraft;

d. The name of the Pilot in Command of the aircraft;

e. The date and time (UTC) of the accident;

f. The last point of departure and the next point of intended landing of the aircraft involved;

g. The position of the accident in relation to some easily defined geographical location;

h. The number of crew on board and the number killed or seriously injured.

i. Passengers on board and the number killed or seriously injured.

j. Other persons killed or seriously injured as a result of the accident.

k. The nature of the accident as far as is known.

12.4.7 Emergency Calls

When an emergency call is received, the information available is often incomplete. Because most people are not accustomed to taking accident calls, the best procedure is to follow a check list, so that the required information can be obtained in a methodical and organised manner.

Remember no accident will ever go according to plan.

a. Do not hurry

b. Stay calm and resourceful

c. Gather as much information as possible on the initial contact

Once the emergency call has been received and the check list completed, the following steps shall be taken:

a. If there is any possibility that the emergency call is a hoax or just that the information is in some way false. Try to validate the call using the procedures outlined in the check list. NEVER automatically assume the call is a hoax.

b. Once validity of the call has been confirmed, take a few minutes to evaluate the nature of the emergency and then plan the appropriate response. If it is obvious that immediate action is called for, take whatever steps are necessary to prevent further injury or property damage, even if this means a delay in contacting the relevant authorities.

12.5 In-Flight Passenger Illness

If an occupant becomes ill, the SIC will administer First-aid and oxygen as necessary. If the PIC determines that an occupant needs immediate medical assistance, he/she will divert the aircraft to the closest suitable airport. Suitability of an airport, military or civilian, will depend on the nature of the illness and the medical support available.

NOTE: If oxygen is necessary, the "walk-around" bottle or therapeutic oxygen supply will be used so that 100% oxygen is available to the person. (The aircraft's diluter demand oxygen system provides very little oxygen at normal cabin altitudes through a passenger mask.)

The ATC unit may be able to assist in providing information regarding medical services available at airports within their area. ATC shall be utilised to relay requests for medical assistance to the airport of intended landing. Advise ATC of the medical emergency and the nature of support required on landing.

An emergency may be declared if the PIC believes that the situation demands priority handling.

If a passenger is removed from Super Legacy XP Limited aircraft for medical reasons, the passenger shall be accompanied to the hospital by a crew member or other Super Legacy XP Limited employee. The Operations Manager or Lead Captain shall be notified as soon as possible.

If the illness is other than airsickness the PIC shall advise the medical authorities the destination airport of the on-board illness prior to arrival. Such notification will normally be made through the air traffic control agency and shall be done as soon as practical after the illness has been identified in order to facilitate provision for the presence of any special medical personnel and equipment necessary for medical assistance and health procedures on arrival. Upon arrival the relevant information shall be included in the General Declaration Form.

Cases of suspected death shall be handled in a similar manner.

12.6 First-aid Kits

Each aircraft managed by Super Legacy XP Limited will carry an approved First-aid Kit (FAK), which is readily accessible and kept up to date. It is the PICs responsibility to check that the First-aid kit is in date, un-tampered with and on-board the aircraft before each flight commences.

The following shall be included in the FAKs:

a. Equipment:

i. Bandages (assorted sizes);

ii. Burns dressings (unspecified);

iii. Wound dressings (large and small);
iv. Adhesive dressings (assorted sizes);
v. Adhesive tape;
vi. Adhesive wound closures;

vii. Safety pins;

viii. Safety scissors;

ix. Antiseptic wound cleaner;

x. Disposable resuscitation aid;

xi. Disposable gloves;

xii. Tweezers: splinter;

xiii. Thermometers (non-mercury).

c. Medications:

i. Simple analgesic (may include liquid form);

ii. Antiemetic (Anti Sickness);

iii. Nasal decongestant;

iv. Gastrointestinal antacid, in the case of aircrafts carrying more than nine passengers;

v. Anti-diarrhoeal medication, in the case of aircrafts carrying more than nine passengers; and

vi. Antihistamine.

vii. And any other items determined by the Operator due regard to the nature of the operation

c. Other:

i. A list of contents in at least two languages (English and one other). This shall include information on the effects and side effects of medications carried;

ii. First-aid handbook, current edition;

iii. Medical incident report form; and

iv. Biohazard disposal bags.

Note: An eye irrigator, although not required to be carried in the FAK, shall, where possible, be available for use on the ground.

12.6.1 Maintenance of First-Aid Kits

To be kept up to date first-aid kits shall be:

a. Inspected periodically to confirm, to the extent possible, that contents are maintained in the condition necessary for their intended use;

b. Replenished at regular intervals, in accordance with instructions contained on their labels, or as circumstances warrant; and

c. Replenished after use in-flight at the first opportunity where replacement items are available.

12.7 Emergency/Survival Equipment

The standard Emergency/Survival Equipment that Super Legacy XP Limited carries on-board includes:

Emergency. Portable Radio Number	Nil
Emergency Portable Radio Frequency	Nil
Number Life-raft	One
Type Life-raft	Survival Products Inc 1900 B-1
Colour Life-raft	Orange
Number Pyrotechnics	Nil
Details Medical Supplies	Nil
Details Water Supplies	Nil
Other Emergency Equipment carried as standard	Sea Dye Marker, Signal Flag, Mirror and Whistle

12.7.1 Additional Survival Equipment

For flights across land areas which have been so “designated” as an area in which search and rescue would be difficult, or at the pilot’s discretion, survival kits will be carried on Super Legacy XP Limited aircraft so as in the event of forced landing the passengers and crew can be provided with fire, shelter, drinking water and a means of signalling.

a. Aircraft operated over areas in which search and rescue would be especially difficult (see Note below) shall be equipped with:

i. Signalling equipment to make the distress signals;

ii. At least one survival ELT(S) (see OM A 8.11.19); and

iii. Additional survival equipment for the route to be flown taking account of the number of persons on board.

NOTE: In the context of the above paragraph "designated" means (1) areas so designated by the competent authority responsible for managing search and rescue; or (2) areas that are largely uninhabited and where:

i. The authority referred to in (1) has not published any information to confirm whether search and rescue would be or would not be especially difficult; and
ii. The authority referred to in (1) does not, as a matter of policy, designate areas as being especially difficult for search and rescue.

b. The additional survival equipment specified below does not need to be carried when the aircraft:

Remains within a distance from an area where search and rescue is not especially difficult corresponding to 30 minutes at cruising speed for all other aircrafts; or

Remains within a distance no greater than that corresponding to 30 minutes at cruising speed from an area suitable for making an emergency landing, for aircrafts certified in accordance with the applicable airworthiness standard.

c. The following additional survival equipment shall be carried when required:

a. 500 ml of water for each four, or fraction of four, persons on board;

b. One knife;

c. First-aid equipment; and

d. One set of air/ground codes.

d. In addition, when polar conditions are expected, the following shall be carried:

i. A means of melting snow;

ii. One snow shovel and one ice saw;

iii. Sleeping bags for use by 1/3 of all persons on board and space blankets for the remainder or space blankets for all passengers on board; and

iv. One arctic/polar suit for each crew member carried.

e. If any item of equipment contained in the above list is already carried on board the aircraft in accordance with another requirement, there is no need for this to be duplicated.

Rules of the Air

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13. RULES OF THE AIR

Super Legacy XP Limited operate flights on a worldwide basis and the pertinent rules of the air for each particular state shall be followed. Applicable rules can be found in the Jeppesen Flight Guide, State AIPs and for the U.K CAP 393.

For The Rules of the Air as applicable to Guernsey registered aircraft, refer to the Air Navigation (Bailiwick of Guernsey) Law, 2012 Article 34, also Schedule 4 as amended.

The Standardised European Rules of the Air (commonly referred to as SERA) took effect across Europe on 4 December 2014. SERA is slightly different to other European Regulations because it applies to all aircraft in European airspace (not just 'EASA aircraft').

13.1 Interception Signals - General

An aircraft which is intercepted by another aircraft shall immediately: follow the instructions given by the intercepting aircraft, interpreting and responding to visual signals listed: notify, if possible, the appropriate air traffic services unit; attempt to establish radio communication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.5 giving the identity of the intercepted aircraft and the nature of the flight; and if no contact has been established and if practicable, repeating this call on the emergency frequency 243:

If equipped with SSR transponder, select Mode “A” Code 7700, unless otherwise instructed by the appropriate air traffic services unit.

If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual instructions given by the intercepting aircraft.

If any instructions received by radio from any sources conflict with those given by the intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft.

If radio contact with the intercepting aircraft is established but communication in a common language is not possible, attempts shall be made to convey essential information and acknowledgement of instructions by using the following phrases and pronunciations:

Phrases for use by INTERCEPTING aircraft

Phrase	Pronunciation	Meaning
CALLSIGN	KOL–SA–IN	What is your call sign
FOLLOW	FOLL–LO	Follow me
DESCEND	DEE–SEND	Descend for landing
YOU LAND	YOU–LAND	Land at this aerodrome
PROCEED	PRO–SEED	You may proceed

Phrases for use by INTERCEPTED aircraft

Phrase	Pronunciation	Meaning
CALLSIGN	KOL–SA–IN	My callsign is (callsign)
WILCO	VILL–KO	Understood will comply
CANNOT	KANN–NOTT	Unable to comply
REPEAT	REE–PEET	Repeat your instruction
AM LOST	AM–LOSST	Position Unknown
MAYDAY	MAYDAY	I am in distress
HIJACK	HI–JACK	I have been hijacked
LAND (place name)	AAND (place name)	I request to land at (place name)
DESCENT	DEE–SEND	I require descent

Note 1 Circumstances may not always permit, nor make desirable, the use of the phrase "HIJACK".

Note 2 The call-sign required to be given is that used in radiotelephony communication with air traffic services units and corresponding to the aircraft identification in the flight plan.

Interception Procedures & Signals - Basic Procedure

Applicable in most countries unless specific procedures are listed.

INTERCEPTION SIGNALS			
Signals initiated by intercepting aircraft and responses by intercepted aircraft			
Series	INTERCEPTING Aircraft Signals	Meaning	INTERCEPTED Aircraft Responds
1	DAY – Rocking wings from a position slightly above & ahead of, and, normally to the left of, the intercepted aircraft and, after acknowledgement, a slow level turn, normally to the left, on to the desired heading. NIGHT – Same and, in addition, flashing navigational lights at irregular intervals. Note 1 –Meteorological conditions or terrain may require the intercepting aircraft to take up a position slightly above & ahead of, and to the right of, the intercepted aircraft and to make the subsequent turn to the right.	You have been intercepted. Follow me	AIRCRAFTS: DAY – Rocking wings and following. NIGHT – Same and, in addition, flashing navigational lights at irregular intervals.
2	DAY or NIGHT – An abrupt breakaway Manoeuvre from the intercepted aircraft consisting of a climbing turn of 90 degrees or more without crossing the line of flight of the intercepted aircraft.	You may proceed	AIRCRAFTS: DAY or NIGHT – Rocking wings.

3	DAY – Circling aerodrome, lowering landing gear and overflying runway in direction of landing NIGHT – Same and in addition, showing steady landing lights.	Land at this aerodrome.	AIRCRAFTS: DAY – Lowering landing gear, following the intercepting aircraft and, if after overflying the runway landing is considered safe, proceeding to land. NIGHT – Same and, in addition, showing steady landing lights (if carried).
4	AIRCRAFTS: DAY – Raising landing gear while passing over landing runway at a height exceeding 300m (1000ft) but not exceeding 600m (2000ft) above the aerodrome level, and continue to circle the aerodrome. NIGHT – Flashing landing lights while passing over landing runway at a height exceeding 300m (1000ft) but not exceeding 600m (2000ft) above the aerodrome level, and continuing to circle the aerodrome. If unable to flash landing lights, flash any other lights available.	Aerodrome you have designated is inadequate.	DAY or NIGHT – If it is desired that the Intercepted aircraft follow the intercepting aircraft to an alternate aerodrome, the intercepting aircraft Raises its landing gear and uses the Series 1 signals prescribed for intercepting aircraft. If it is decided to release the intercepted aircraft, the intercepting aircraft uses the Series 2 signals prescribed for intercepting aircraft.

5	AIRCRAFTS: DAY or NIGHT – Regular switching on and off all available lights but in such a manner as to be distinct from flashing lights.	Cannot comply	DAY or NIGHT – Use Series 2 signals prescribed for intercepting aircraft.
6	AIRCRAFTS: DAY or NIGHT – Irregular flashing of all available lights.	In Distress	DAY or NIGHT – Use Series 2 signals prescribed for intercepting aircraft.