Gama Aviation

Operations Manual

Part D

Training

(EASA)

Issue 6
Revision 1
July 2019

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[redacted]

OPERATIONS MANUAL - NOTICE OF PROPOSED AMENDMENT (NPA)
Applicable to Air Operator Certificate (AOC) Holders

Operator Name:…Gama Aviation (UK) Limited……

NPA Number:……

AOC No: 1068……

OM Part/ Section	Amdt/ Rev No.	Reason for Amendment	Effective Date	Approval Ref.(Note 5)
D - Training	Issue 6-Rev.1	This revision includes the incorporation of the following NOTACs: • NTA 004/19/T - OM Part D Editorial Amendments • NTA 006/19/T - Amendment of OMD Section 3 *(Re-issue NTA 003/19/T)* • NTA 007/19/T - Winter Operations Training *(Re-issue NTA 005/19/T)* • NTA 008/19/T - Current Training Personnel	July 2019	
Section 1	-	*(paras 1.1.7, 1.1.9, 1.1.9.1, 1.1.10)(NTA 004/19/T, NTA 008/19/T)*		
Section 2	-	*(paras 2.1.1.1, 2.1.6, 2.1.14, 2.1.16.3, 2.1.19, 2.1.23) (NTA 007/19/T, NTA 004/19/T)*		
Section 3	-	*(para 3.1.1)(NTA 006/19/T)*		
Appendix A	-	Rewritten to reflect end of Gama Phased Training & replaced by CAE's & FSI's own programme		

AOC Declaration:(Note 1)

I hereby submit this Operations Manual NPA for approval. I confirm that I am satisfied this submission has been satisfactorily prepared and that I have checked the contents for accuracy.

Name: Paul Milton …… Date: 03 June 2019

Signature: …… Position: Head of Training

Notes:

1) This form should be signed by the person responsible for maintaining the Operations Manual content that this NPA is applicable to.

2) This form is available as a Microsoft Word document to enable it to be filled in electronically and submitted by e-mail.

3) The Operator Name and AOC Number at the top of the table must be completed.

4) Additional rows in the table can be inserted as required, in order to fully summarise the amendment.

5) The 'Approval Ref.' column is to indicate that text has been added/altered in the Operations Manual that directly affects Approvals as listed on the current AOC 'Operations Approval' document or the 'Operations Approval Checklist', which is available on the CAA website. When this is applicable, the Regulatory reference (e.g. SPA.RVSM.100) should be included.

6) Amended or new text must be clearly indicated as such in the Operations Manual.

7) Further guidance on what is required for aeroplane and helicopter AOC holders can be found in Chapter 2 of **CAP 789**, Requirements and Guidance Material for Operators. For balloon AOC holders, further guidance can be found in **CAP 611.**

8) This form should be submitted by email to the following addresses:

- For aeroplane and helicopter AOC holders: **NPA@caa.co.uk**
- For balloon AOC holders: **ga@caa.co.uk**

The assigned Lead Inspector should also be included in email correspondence.

9) Alternatively, this form may be submitted by post to:

- NPA Co-ordinator (FOD)
  Shared Services Centre
  Aviation House, GE
  Gatwick Airport South
  West Sussex
  RH6 0YR

for aeroplane and helicopter AOC holders.

- General Aviation Unit
  Aviation House, 2E
  Gatwick Airport South
  West Sussex
  RH6 0YR

for balloon AOC holders.

This page is for CAA use only. AOC No:

CAA Comment, Acceptance and/or Approval (delete as appropriate).
Applicability: Paragraphs 1 2 3 (circle one or more as applicable).

Paragraph 1 – Not Affecting an Operations Approval

The proposed amendment affects material that **does not** affect the continued validity of the AOC holders Operations Approval.

The amendment is accepted for incorporation into the Operations Manual effective from *(date)*

…22/07/2019……, but may be subject to future comment.

Paragraph 2 – Affecting an Existing Operations Approval

The proposed amendment affects material relating to an **existing Approval**, as listed on the cover page and/or the AOC holders Operations Approval.

The amendment is approved for incorporation into the Operations Manual effective from *(date)*

…… and the Operations Approval has been re-issued / remains effective *(delete as appropriate.)*

Paragraph 3 – Application for a New Operations Approval

The proposed amendment affects material relating to an application for a **new Approval**, as listed on the cover page and/or the master Operations Approval Document.

The amendment is approved for incorporation into the Operations Manual effective from *(date)*

…… and the Operations Approval has been issued / re-issued / remains effective

(delete as appropriate.)

Name: Brian Watt…… Date: 22/07/2019.....

Signature:……..... Position: FO(T)I……

Preface

This manual forms part of the Operations Manual of Gama Aviation (UK) Limited.

The Management responsibilities and supporting procedures referred to in this Manual are approved and must be adhered to.

Nothing in this manual overrides the need to comply with International Air Navigation requirements and Airworthiness Requirements endorsed by the relevant Aviation Authority for the State of Registry.

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REVISION HISTORY

This part of the Operations Manual provides a detailed history of the revisions to the manual. It also specifies the effective revision state of each of the manual's constituent parts. This page is to be kept in the front of the Operations Manual.

1. General

This revision includes the incorporation of the following NOTACs:

- NTA 004/19/T - OM Part D Editorial Amendments
- NTA 006/19/T - Amendment of OMD Section 3 *(Re-issue NTA 003/19/T)*
- NTA 007/19/T - Winter Operations Training *(Re-issue NTA 005/19/T)*

1.1 Part B24 editorial changes and inclusions:

Header	-	Amended to reflect current revision status
LOEP	-	Amended to reflect current revision status
TOC	-	Amended to reflect current content
Section 1	-	*(paras 1.1.7, 1.1.9, 1.1.9.1, 1.1.10)(NTA 004/19/T)*
Section 2	-	*(paras 2.1.1.1, 2.1.6, 2.1.14, 2.1.16.3, 2.1.19, 2.1.23)(NTA 007/19/T, NTA 004/19/T)*
Section 3	-	*(para 3.1.1)(NTA 006/19/T)*

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Operations Manual Part D - Training

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List of Effective Pages

Sections	Revision	Date
Header	**1**	**July 2019**
Preface	Original	October 2018
Rev. Hist	**1**	**July 2019**
LOEP	**1**	**July 2019**
TOC	**1**	**July 2019**
0	Original	October 2018
1	**1**	**July 2019**
2	**1**	**July 2019**
3	**1**	**July 2019**
4	Original	October 2018

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Section 0 – Administration

0.1 Authority of the Manual

Gama Aviation (UK) Limited Company Training Manual is issued in accordance with EASA-OPS; complies with the applicable elements of the United Kingdom Air Navigation Order and with the terms and conditions of the Air Operator's Certificate.

0.1.1 Training Programme Introduction

The following training program and information is produced and controlled by Gama Aviation (UK) Limited, The AOC holder, herein referred to as the Operator.

It is produced in accordance with European Commission (EC) Basic Regulation 216/2008 of the European Parliament, and the Council of 20 Feb 2008 common rules in the field of civil aviation establishing a European Aviation Safety Agency (EASA).

The rules and operational instructions contained in this Operators Training Manual is further compliant with Commission Regulation 965/2012 (Implementing Rules) dated 5th October 2012 and the associated Acceptable Means of Compliance (AMC) where applicable and appropriate.

0.1.2 Company Training Forms

Where the company operates, or intends to operate, different types or variants of aircraft, the individual training requirements and test forms will indicate clearly to which type or variant of aircraft they apply. To achieve this, the approriate Manufacturers Publications and the Operators specfic Part B manual are to be referred to.

0.1.3 Training Programme General

This Training Manual is applicable to all personnel nominated or assigned to duties, in connection with the conduct, preparation and the safe operation of the aircraft. It complies with the terms and conditions of the operators, 'Air Operators Certicate' (AOC) issued by the UK Civil Aviation Authority, (The Competent Authority).

Training manual's will, in addition, be made available to non-company personnel authorised by the Head of Training to carry out training on the operators behalf (e.g. a nominated ATO).

This manual document contains core subjects, together with associated paperwork and forms, to support the operation of the operators Training Department.

Each section outline's in detail the structure and supporting network covering all aspects of the Training Department Protocol.

This document refers to a definitive collection of all forms and paperwork covering both Ground and Flight training. (Example; Reference: AOC TR.002)

The manual suite contains details of the operator's in-house audit and Compliance Monitoring Programme in respect of Training Standards.

0.2 Amendment and Revision

a) This Training Manual, forms Part D of the Operations manual and is issued on the authority of the Operator. The Head of Training will pass all proposed amendments to the Director Flight Operations to be processed in accordance with the procedure detailed in the operations manual, Part A, section 0.2 System of Amendment and Revision, para, (a) (1,2 & 3), which details the procedure to be adopted when an Acceptable Means of Compliance cannot be found.

b) Amendments will be in the form of printed or replacement pages. Manuscript amendments are not permitted except in situations requiring immediate amendment or revision in the interests of safety. Revision pages will be annotated to show the date of issue, the amendment list number, and the portion of the text which has been revised, as indicated by vertical marginal lines adjacent to the change. Each amendment will be accompanied by a revised list of effective pages, with their date of issue, and by a certificate of receipt/incorporation. An amendment list record will be maintained at the front of each manual.

c) The Operator will ensure that access to a copy, printed or electronic, of the Training Manual is available for each appointed member of the training staff and the Competent Authority. The Operator will maintain an up-to-date list of manuals together with their referenced copy numbers and the name/appointment of each copy holder as appropriate.

Details of revisions which may be urgently required in the interests of flight safety, or which are supplementary to the operations manual, will be promulgated as Notices to Air Crew (NOTAC). Those of a temporary nature will be cancelled as soon as they are no longer relevant. Those of long-term application will be incorporated into the manual when it is next amended, or within six months of their effective date, whichever is the sooner.

All intended amendments and revisions must be supplied to the Competent Authority in advance of the effective date. When the amendment/revision concerns any part of the Training Manual which must be approved by means of the Operations Approval document, this approval must be obtained before the amendment or revision becomes effective. When immediate amendment or revisions are required in the interest of safety, they may be published and applied immediately, provided that application for approval has been made.

0.3 FCL.010 Definitions

For the purposes of this Part, the following definitions apply:

'Aeroplane' means an engine-driven fixed-wing aircraft heavier than air which is supported in flight by the dynamic reaction of the air against its wings.

'Aeroplane required to be operated with a co-pilot' means a type of aeroplane which is required to be operated with a co-pilot as specified in the flight manual or by the air operator certificate.

'Aircraft' means any machine which can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

'Airmanship' means the consistent use of good judgement and well-developed knowledge, skills and attitudes to accomplish flight objectives.

'Airship' means a power-driven lighter-than-air aircraft, with the exception of hot-air airships, which, for the purposes of this Part, are included in the definition of balloon.

'Basic Instrument Training Device' (BITD) means a ground-based training device which represents the student pilot's station of a class of aeroplanes. It may use screen-based instrument panels and spring-loaded flight controls, providing a training platform for at least the procedural aspects of instrument flight.

'Category of aircraft' means a categorisation of aircraft according to specified basic characteristics, for example aeroplane, powered-lift, helicopter, airship, sailplane, free balloon.

'Class of aeroplane' means a categorisation of single-pilot aeroplanes not requiring a type rating.

'Commercial air transport' means the transport of passengers, cargo or mail for remuneration or hire.

'Competency' means a combination of skills, knowledge and attitude required to perform a task to the prescribed standard.

'Competency element' means an action which constitutes a task that has a triggering event and a terminating event that clearly defines its limits, and an observable outcome.

'Competency unit' means a discrete function consisting of a number of competency elements.

'Co-pilot' means a pilot operating other than as pilot-in-command, on an aircraft for which more than one pilot is required but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction for a licence or rating.

'Cross-country' means a flight between a point of departure and a point of arrival following a pre-planned route, using standard navigation procedures.

'Cruise relief co-pilot' means a pilot who relieves the co-pilot of his/her duties at the controls during the cruise phase of a flight in multi-pilot operations above FL 200.

'Dual instruction time' means flight time or instrument ground time during which a person is receiving flight instruction from a properly authorised instructor.

'Error' means an action or inaction taken by the flight crew which leads to deviations from organisational or flight intentions or expectations.

'Error management' means the process of detecting and responding to errors with countermeasures which reduce or eliminate the consequences of errors and mitigate the probability of errors or undesired aircraft states.

'Full Flight Simulator' (FFS) means a full-size replica of a specific type or make, model and series aircraft flight deck, including the assemblage of all equipment and computer

programmes necessary to represent the aircraft in ground and flight operations, a visual system providing an out-of-the-flight deck view, and a force cueing motion system.

'Flight time':

- for aeroplanes, touring motor gliders and powered-lift, it means the total time from the moment an aircraft first moves for the purpose of taking off until the moment it finally comes to rest at the end of the flight;
- for helicopters, it means the total time from the moment a helicopter's rotor blades start turning until the moment the helicopter finally comes to rest at the end of the flight, and the rotor blades are stopped;
- for airships, it means the total time from the moment an airship is released from the mast for the purpose of taking off until the moment the airship finally comes to rest at the end of the flight, and is secured on the mast;
- for sailplanes, it means the total time from the moment the sailplane commences the ground run in the process of taking off until the moment the sailplane finally comes to a rest at the end of flight;
- for balloons, it means the total time from the moment the basket leaves the ground for the purpose of taking off until the moment it finally comes to a rest at the end of the flight.

'Flight time under Instrument Flight Rules' (IFR) means all flight time during which the aircraft is being operated under the Instrument Flight Rules.

'Flight Training Device' (FTD) means a full-size replica of a specific aircraft type's instruments, equipment, panels and controls in an open flight deck area or an enclosed aircraft flight deck, including the assemblage of equipment and computer software programmes necessary to represent the aircraft in ground and flight conditions to the extent of the systems installed in the device. It does not require a force cueing motion or visual system, except in the case of helicopter FTD levels 2 and 3, where visual systems are required.

'Flight and Navigation Procedures Trainer' (FNPT) means a training device which represents the flight deck or cockpit environment, including the assemblage of equipment and computer programmes necessary to represent an aircraft type or class in flight operations to the extent that the systems appear to function as in an aircraft.

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

'Instrument flight time' means the time during which a pilot is controlling an aircraft in flight solely by reference to instruments.

'Instrument ground time' means the time during which a pilot is receiving instruction in simulated instrument flight, in flight simulation training devices (FSTD).

'Instrument time' means instrument flight time or instrument ground time.

'Multi-pilot operation':

- for aeroplanes, it means an operation requiring at least 2 pilots using multi-crew cooperation in either multi-pilot or single-pilot aeroplanes;
- for helicopters, it means an operation requiring at least 2 pilots using multi-crew cooperation on multi-pilot helicopters.

'Multi-crew cooperation' (MCC) means the functioning of the flight crew as a team of cooperating members led by the pilot-in-command.

'Multi-pilot aircraft':

- for aeroplanes, it means aeroplanes certificated for operation with a minimum crew of at least two pilots;
- for helicopters, airships and powered-lift aircraft, it means the type of aircraft which is required to be operated with a co-pilot as specified in the flight manual or by the air operator certificate or equivalent document.

'Night' means the period between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise as may be prescribed by the appropriate authority, as defined by the Member State.

'Other training devices' (OTD) means training aids other than flight simulators, flight training devices or flight and navigation procedures trainers which provide means for training where a complete flight deck environment is not necessary.

'Performance criteria' means a simple, evaluative statement on the required outcome of the competency element and a description of the criteria used to judge if the required level of performance has been achieved.

'Pilot-in-command' (PIC) means the pilot designated as being in command and charged with the safe conduct of the flight.

'Pilot-in-command under supervision' (PICUS) means a co-pilot performing, under the supervision of the pilot-in- command, the duties and functions of a pilot-in-command.

'Powered-lift aircraft' means any aircraft deriving vertical lift and in-flight propulsion/lift from variable geometry rotors or engines/propulsive devices attached to or contained within the fuselage or wings.

'Powered sailplane' means an aircraft equipped with one or more engines having, with engines inoperative, the characteristics of a sailplane.

'Private pilot' means a pilot who holds a licence which prohibits the piloting of aircraft in operations for which remuneration is given, with the exclusion of instruction or examination activities, as established in this Part.

'Proficiency check' means the demonstration of skill to revalidate or renew ratings, and including such oral examination as may be required.

'Renewal' (of, e.g. a rating or certificate) means the administrative action taken after a rating or certificate has lapsed for the purpose of renewing the privileges of the rating or certificate for a further specified period consequent upon the fulfilment of specified requirements.

'Revalidation' (of, e.g. a rating or certificate) means the administrative action taken within the period of validity of a rating or certificate which allows the holder to continue to exercise the privileges of a rating or certificate for a further specified period consequent upon the fulfilment of specified requirements.

'Route sector' means a flight comprising take-off, departure, cruise of not less than 15 minutes, arrival, approach and landing phases.

'Sailplane' means a heavier-than-air aircraft which is supported in flight by the dynamic reaction of the air against its fixed lifting surfaces, the free flight of which does not depend on an engine.

'Single-pilot aircraft' means an aircraft certificated for operation by one pilot.

'Skill test' means the demonstration of skill for a licence or rating issue, including such oral examination as may be required.

'Solo flight time' means flight time during which a student pilot is the sole occupant of an aircraft.

'Student pilot-in-command' (SPIC) means a student pilot acting as pilot-in-command on a flight with an instructor where the latter will only observe the student pilot and shall not influence or control the flight of the aircraft.

'Threat' means events or errors which occur beyond the influence of the flight crew, increase operational complexity and which must be managed to maintain the margin of safety.

'Threat management' means the process of detecting and responding to the threats with countermeasures which reduce or eliminate the consequences of threats and mitigate the probability of errors or undesired aircraft states.

'Touring Motor Glider' (TMG) means a specific class of powered sailplane having an integrally mounted, non-retractable engine and a non-retractable propeller. It shall be capable of taking off and climbing under its own power according to its flight manual.

'Type of aircraft' means a categorisation of aircraft requiring a type rating as determined in the operational suitability data established in accordance with Part-21, and which include all aircraft of the same basic design including all modifications the

0.4 Glossary

ACAS	Airborne Collision Avoidance System
AIS	Automated Information Service
AOC	Air Operators Certificate
APU	Auxiliary Power Unit
AMC	Acceptable Means of Compliance
ATC	Air Traffic Control
ATO	Approved Training Organisation
ATPL(A)	Air Transport Pilot Licence (Aeroplane)
AWO	All Weather Operations
CPL(A)	Commercial Pilot Licence (Aeroplane)
CRM	Crew Resource Management
CRMT	CRM Trainer
EFB	Electronic Flight Bag
ETOPS	Extended Range Operations with Two-engine Aeroplanes
FL	Flight Level
FMS	Flight Management System
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
IEM	Interpretative and Explanatory Material
IFR	Instrument Flight Rules
IL20	JAA Information Leaflet N0 20 – ETOPS
ILS	Instrument Landing System
IR	Instrument Rating
LIFUS	Line Flying Under Supervision
LOFT	Line Oriented Flying Training
LPC	Licence Proficiency Check
LT	Line Trainer
LST	Licence Skills Test
LVTO	Low Visibility Take-off
MEL	Minimum Equipment List
MLS	Microwave Landing System
MNPS	Miniumum Navigation Performance Specification
MPA	Multi-Pilot Aeroplanes
OCC	Operators Conversion Course
OFP	Operational Flight Plan
OPC	Operators Proficiency Check

Part FCL	EASA Flight Crew Licensing Requirements
PBN	Performance Based Navigation
PEC	Pressure Error Correction
PIC	Pilot-in-command
RNP	Required Navigation Performance
RVR	Runway Visual Range
RVSM	Reduced Vertical Separation Minimum
SFE	Synthetic Flight Examiner
SFI	Synthetic Flight Instructor
SOP	Standard Operating Procedures
SSEC	Static Source Error Correction
TGL	Temporary Guidance Leaflet
TRE	Type Rating Examiner
TRI	Type Rating Instructor
UPRT	Upset Prevention and Recovery Training
VFR	Visual Flight Rules

Section 1 – Description of Scope

1.1 Introduction

This section is issued in compliance with EASA Part/FCL OPS and associated subparts.

This part of the manual is key in establishing the Operator's specific training and checking programmes for all members of flight crew who embark upon Commercial Air Transport flight under the terms of Gama Aviation (UK) Ltd AOC. The majority of training and checking for licensing purposes must be carried out in accordance with Part FCL under the terms of an Approved Training Organisation (ATO), but limited scope is afforded to an AOC and these must be contained in the Part. All other Part FCL related syllabi and matters are included in this Part.

The Head of Training or his deputy will be responsible for determining the syllabi, contents and timescales for all training courses. He will ensure that sufficient ground training courses and flying training programmes are arranged to accommodate planned operations. He will also be responsible for ensuring that sufficient training and checking staff are available to meet the training requirements.

If a pilot does not hold the appropriate aircraft type rating in Part XII of his licence then a type rating course merged with the operator conversion course syllabus will be completed. This includes CRM, Emergency and Survival Training/Checking and Line training/Checking. At the end of the type related training the candidate is probably well versed in the company SOPs and completes Licence Skills Test (LST) and initial Operator Proficiency Check (OPC). The conversion course then continues into line training and any Command related training if applicable.

It is also commonplace for pilots to move within the industry with a type rating, and maybe related operational experience. Gama Aviation will ensure that its Operator Conversion Course (OCC) material prepares such individuals for operations within the limits and procedures of Gama Aviation's AOC. Even if the previous employer's procedures were very similar in their operational context it will probably be subtly different in a number of ways including culture, SOPs and equipment. Therefore Gama Aviation's OCC places specific emphasise on those differences by establishing additional training in Company SOPs, the use of FMS/GPS systems, EFB, any new area of operations etc.

1.1.1 Crew Resource Management (CRM) Training - General

The objective of CRM training is to enable <u>all</u> flight crew to gain a sound knowledge of human factors in aviation that affect flight safety, thereby reducing the chances of accidents and incidents. A specific modular CRM training programme is established and all major topics of CRM training are covered over a rolling 3 year period. However, in accordance with CAP 737, emphasis will be placed on those areas that are most pertinent to the operation. The current modules and core elements of CRM training are detailed in Section 2.1.1

CRM Trainers (Line & Ground)

To satisfy the requirements of the regulations and in support of company training standards, the Operator has appointed certain members of staff to be responsible for initial and recurrent CRM training.

CRM Trainers – Ground / Classroom

Specifically nominated (CRMT (Ground)) will be responsible for the approved modular CRM ground training programme The training and assessment of all CRMT (Ground) will be achieved using company personnel or third party training providers appointed by the Head of Training. All CRMT (Ground) will be assessed when conducting their first CRM training course by company personnel nominated for the purpose by the Head of training.

All CRM training personnel will be qualified in compliance with AMC3 ORO.FC.115. The assessment framework will be as detailed in *CAP737 Part B, Part 3, Chapter 22 and CAA Standards Document 29.*

Qualification will be valid for a period of 36 months from the date of first satisfactory assessment in addition to the end of the month of qualification.

CRM Trainers – Line Flying

All Line Training Commanders (LTC) are responsible for the delivery of initial and recurrent line training and checking which includes training and evaluation of CRM skills. To meet this requirement, all LTC shall also be qualified as CRMT for the purposes of line training (CRMT (Line)). These training positions are required to be renewed every three years by company personnel nominated for the purpose by the Head of training.

CRMT Revalidation and Renewal (Ground & Line)

To maintain 3-year validity all CRMT should conduct at least 2 CRM training events in any 12-month period and either;

1. Be assessed within the last 12 months of the 3-year validity period by the operator;
2. Complete CRMT refresher training within the 3-year validity period (See NOTE).

NOTE: For all LTC the CRMT refresher training requirement above shall be met by attendance at a one-day company internal CRMT Training Seminar. For training and recurrency of the separate LTC qualification itself, see section 1.1.11.

The new 3-year validity period will start at the end of the previous period.

The assessment framework will be as detailed in *CAP737 Part B, Part 3, Chapter 22 and CAA Standards Document 29.*

For renewal, i.e. when a flight crew CRM trainer does not fulfil the provisions above he/she should, complete the elements detailed in *AMC3 ORO.FC.115 (e) (3)* before resuming as flight crew CRM trainer.

Initial Operators CRM Training

All new flight crew who have not previously undertaken initial CRM training will be required to do so before flying unsupervised. The syllabus is shown at Section 2. Initial training is conducted either in-house or by qualified third party training providers appointed and overseen by the Head of Training.

Flight crew are assessed on their CRM skills at initial training and at least during every modular recurrent training event. Elements of CRM training will be included in all conversion *(change of operator and change of type)* and command training and will be conducted by company appointed personnel. The core elements are listed in Section 2

CRM skills will be assessed during all LPC's, OPC's, line checks and command assessments All CRM assessments are to be recorded on the applicable check forms *(Ref: GAL101(A,B or C) / GAL118)*

1.1.2 Recurrent CRM Training

Elements of CRM are integrated into all phases of the recurrent training programme. Each flight crew member will undergo specific modular CRM Ground training. All major topics of the initial CRM ground training syllabus will be covered by distributing modular training sessions as evenly as possible over each three-year period. For the syllabus see Section 2.1.1.

1.1.3 Operator Conversion Training and Checking - CRM

Where flight crew members have not previously received theoretical training in human factors to the ATPL level, they shall complete, before or combined with the initial CRM training, a theoretical course provided by the operator or their approved training provider, based on the human performance and limitations syllabus for the ATPL as established in Annex I to regulation (EU) No: 1178/2011 (Part-FCL).

- Flight Crew members will complete the major elements of the full-length CRM course over a three-year recurrent training cycle.
- Prior to completing the operator's conversion course, and before unsupervised line flying, a flight crew member must have undertaken an initial CRM course.
- If the flight crew member then undertakes a recurrent course they shall complete the appropriate elements of the course in sequence every 12 months or all modules within 36 calendar months.

Crew Resource Management (CRM) Training Courses

Full Initial Course	-	Two days
Change of operator	-	One day
Recurrent Modular Course	-	One day
CRMT Initial and Recurrent	-	One day

During a flight crew member's line check or LPC/OPC an overview of the candidates CRM skills will be evaluated.

Combined training of flight crew and ground crew will be undertaken when appropriate.

The successful resolution of aircraft emergencies requires interaction between flight crew and flight attendants. Emphasis will be placed on the importance of effective co-ordination and two-way communication between all crew members in various normal and non-normal situations.

During recurrent training, various emergency scenarios will be discussed and reviewed, leading to discussion and group interaction.

The objective is to improve the non-technical skills (NOTECH) of individuals to facilitate good and pragmatic communication.

As a structure to all recurrent training, elements of CRM are built into all phased modular training as detailed in this Part.

Whilst the modules are based on a three-year rotation, each element lends itself to progressive and evolving scenario training.

1.1.4 Not used

1.1.5 Operator Conversion Training and Checking

The Operator has training agreements with a number of approved ATO's to undertake Initial and recurrent training on the aircraft types nominated in this Operations Manual. All contracted ATO's will be approved by the Competent Authority.

The Operator has the approval of the competent Authority to nominate the ATO's to conduct the Operators Proficiency Checks (OPC's), Licence Proficiency Checks (LPC) or Licence Skill Tests (LST).

The following individual Companies have been audited and have a training agreement with the Operator.

- Tag Aviation Farnborough (Operator);
- Tag Global Training Farnborough (ATO);
- Flight Safety International (ATO);
- CAE Flight Training (ATO)
- Boeing London Gatwick (ATO)
- Glasgow Fire Service
- Aberdeen Fire Service
- Integrated Training Solutions
- London Luton Airport Fire Service
- Medaire
- Blackbushe Airport Fire and Rescue
- Jersey Airport Fire and Rescue

In order to maintain the approval of ATO or third-party training providers the above organisations are included in the operator's annual audit program.

A flight crew member shall not be assigned to flying duties on another type or class of aeroplane until the course is completed or terminated. Crew members operating only performance class B aeroplanes may be assigned to flights on other types of performance class B aeroplanes during the conversion course to the extent as necessary to maintain the operation.

Flight crew members shall complete the operator conversion training course before commencing unsupervised line flying when changing to an aircraft for which a new type rating is required or when new to the Company. This may be combined with a Command upgrade. See section 2.

The amount of training required by the flight crew member for the operator's conversion course shall be determined in accordance with the standards of qualification and experience specified in the operations manual, taking into account his/her previous training and experience.

The flight crew member shall complete an Operator Proficiency Check (OPC) check and Emergency and Safety Equipment training and checking before commencing line flying under supervision (LIFUS); and a line check upon completion of line flying under supervision.

The OCC may be combined with a new type rating training as required. Part FCL concentrates upon the Pilot Flying role for licensing purposes but, when combined with training for operations in the multi-pilot role, specific pilot monitoring training shall be given. This includes monitoring the actions of the Pilot Flying (PF) against company SOPs, deviation/alerting calls, use of checklists, action in the event of incapacitation of the PF and action by PM in the event of an emergency or abnormal situation.

Operator's Conversion course programme will include the following training, preferably in the sequence given:

1. CRM training including Company-specific procedures and behavioural markers
2. Ground training and checking including aircraft systems, and normal, abnormal and emergency procedures;
3. Emergency and safety equipment training and checking, (completed before any flight training in an aircraft commences); This includes training on all equipment installed on the aircraft as relevant to flight crew members' roles.
4. First Aid Training. The Operator may, in some circumstances accept a certificate from an approved training organisation or another EASA-approved AOC operator.
5. Ditching procedures in water ('wet drills'). The Operator may, in some circumstances accept a certificate from an approved training organisation or another EASA-approved AOC operator.

6. Flight training and checking (LST) when new to type. The type rating is a combined type and instrument rating and is carried out in either FFS or aircraft.

7. Operator Proficiency Check carried out in either FFS or aircraft.

8. Line flying under supervision and final line check.

The Syllabi can be found in Section 2

When the flight crew member has not previously completed an operator's conversion course, he/she will undergo general first-aid training appropriate to aircraft operations and the first aid equipment carried. Further first aid and survival training maybe appropriate depending upon the AOC region operated e.g. arctic operations. Ditching procedures training in water, using equipment representative of that available on the aircraft, will be conducted in a pool setting.

When changing from one type or class of aeroplane to another type or class of aeroplane for which a new type or class rating is required. A flight crew member shall complete a Type Conversion course at an appropriate ATO,

The operator proficiency check may be combined with the type or class rating skill test required by Part FCL.

1.1.6 Differences and Familiarisation Training

Differences training will be given:

a) When the company introduces a significant change of equipment and/or procedures on types or variants currently operated or;
b) before commencing operations on another variant of an aeroplane of the same type and licence endorsement currently operated or;
c) where differences training is specified in the EASA type rating and licensing endorsement list or operational suitability data in accordance with Part 21.

The following are considered as separate variants of the same type where differences training is required:

1. CL604 - CL605
2. Hawker 125 Series 800XP – 850/900 XP Series – Bae 125 800/1000 Series
3. Citation XLS - XLS+
4. BD700 Global Express Global Express Vision (GFVD)

Familiarisation training requires only the acquisition of additional knowledge where differences training is not required. Familiarisation should be completed by the pilot prior to operations when:

a) Operating different aircraft of the same type or variant
b) Following introduction of a significant change of equipment and/or procedures on types or variants currently operated.

1.1.7 Operator Checks, Validity and Recency

Qualification	Period of Validity
Crew Resource Management (CRM)	Flight crew members will complete the major elements of the full-length CRM course over a three-year recurrent training cycle. The 3 CRM modules detailed at Section 2.1 may be completed at any time during the three-year validity period. Company CRM training programme will normally deliver one CRM recurrent module in each of the three years.
Ground and Refresher Training	Each flight crew member shall undergo ground and refresher training every twelve, twenty-four or thirty-six calendar months, as required. Refer to Appendix A for syllabus.
Annual Emergency and Safety Equipment Check (SEP)	The period of validity of an annual emergency and safety equipment check shall be twelve calendar months in addition to the remainder of the month of issue. If issued within the final three calendar months of validity of a previous annual emergency and safety equipment check, the period of validity shall extend from the date of issue until twelve calendar months from the expiry date of that previous annual emergency and safety equipment check.
Triennial Emergency and Safety Equipment Check (ESEP)	The period of validity of a triennial emergency and safety equipment check (including the flight crew First Aid and Fire and Smoke training) shall be three calendar years in addition to the remainder of the month of issue. If issued within the final three calendar months of validity of a previous triennial emergency and safety equipment check, the period of validity shall extend from the date of issue until three calendar years from the expiry date of that previous triennial emergency and safety equipment check.
Wet Drill Training	Wet drill training is only required when a new employee joins. The Operator may, in some circumstances accept a certificate from an approved training organisation or another EASA-approved AOC operator.
First Aid Initial Training	Each Flight Crew member shall undergo First Aid initial training. The Operator may, in some circumstances accept a certificate from an approved training organisation or another EASA-approved AOC operator.
First Aid Recurrent Training	The period of validity of the operator's first aid training shall be Three years including the reminder of the month of training. This training will include the use of Defibrillators.

Qualification	Period of Validity
Licence Skills Test	The period of validity of a licence skills test is twelve months.
	When the Licence skills test/Licence **proficiency** Check or Operator Proficiency Check is conducted in an approved synthetic training device, crews shall also demonstrate their proficiency in conducting ILS approaches to Category II/III aerodrome operating minima, when applicable.
	When a suitable simulator is not available these checks may be carried out in the aeroplane with the approval of The Head of Training in conjunction with the Competent Authority.
Licence Proficiency Check (LPC)	The period of validity of a licence proficiency check shall be twelve months in addition to the remainder of the month of issue. If issued within the last three calendar months of validity of a previous LPC the period of validity shall extend from the date of issue until twelve calendar months from the expiry date to the end of the calendar month.
Instrument Rating (Aeroplanes)	The IR is valid for one year to the end of the calendar month.
	The Licence proficiency check includes the instrument rating and has become type specific. On single pilot aeroplanes that are NOT classified as High Performance Complex aeroplanes, the type rating and instrument rating are seperate qualifications, however, they have the same validity periods and are normally completed together.
Operator Proficiency Check	The period of validity of an operator proficiency check shall be six calendar months in addition to the remainder of the month of issue. If issued within the last three calendar months of validity of a previous operator proficiency check, the period of validity shall extend from the date of issue until six calendar months from the expiry date to the end of the calendar month.
Line Check	The period of validity of a line check shall be twelve calendar months in addition to the remainder of the month of issue.
	If issued within the final three calendar months of validity of a previous line check the period of validity shall extend from the date of issue until twelve calendar months from the expiry date of that previous line check. The line check must be conducted on the aeroplane.
Qualification to Operate in either operating seat	A commander whose duties also require him to operate in the right-hand seat shall complete the following additional training and checking, whilst occupying the RHS, concurrent with the OPC:
	a) An engine failure on take-off (take-off continued);
	b) A one engine inoperative approach and go-around;
	c) A one engine inoperative landing

Qualification	Period of Validity
Route and Aerodrome Competence Qualification, All Pilots	Company operations within ECAC airspace is commonplace and line checks are normally performed with at least one sector to or from a European aerodrome. Provided operations on European routes have been undertaken within the preceding 12 months, the route and area competence requirements of ORO.FC.105 will be accepted as having been met.
	For operations outside of ECAC airspace the company has established six further regions of the globe for which route and area familiarisation training shall be completed for those pilots operating in the applicable area(s). These regions are;
	1 Russia and CIS
	2 Africa & Middle East
	3 China (& Far East)
	4 North America & Canada
	5 Mid & South Americas
	6 Australasia
	Any of the above route and area competence qualifications shall be issued, renewed or revalidated by completing the on-line e-Learning course(s) by Flyco or by recency for the applicable area. The period of validity of the route and aerodrome competence qualification shall be twelve calendar months in addition to the remainder of the month of qualification. It is the pilot's responsibility to maintain currency following the Pre Dispatch Clearance procedure outlined in OMC, para 11.2.2 & AOC.OP.022
	If revalidated within the final three calendar months of validity of a current route and aerodrome competence qualification, the new 12-month period should be counted from the original expiry date. .
RVSM, NAT HLA & Other MNPS Airspace	Recurrent training in this topic is required every twenty-four calendar months including the remainder of the month of training
Electronic Flight Bag (EFB)	Initial training or familiarisation in the use of Company EFB is completed immediately prior to line training. EFB training and Initial Operating Experience is recorded on GAL 471. Recurrent checking is completed during annual Line Check.

Qualification	Period of Validity
Steep Approaches	Unless otherwise specified by the applicable aerodrome authority, the Period of validity is 12 months in addition to the remainder of the month of issue.
	(Ref. AMC1 ORO.FC.105(c))
	(a) The 12-month period should be counted from the last day of the month:
	(1) when the familiarisation training was undertaken; or
	(2) of the latest operation on the route or area to be flown and of the aerodromes, facilities and procedures to be used.
	(b) When the operation is undertaken within the last 3 calendar months of that period, the new 12-month period should be counted from the original expiry date.
Dangerous Goods Training	The Period of Validity of dangerous goods training shall be twenty-four calendar months including the reminder of the month of training
Security Training	The Period of Validity of security training shall be twelve calendar months including the reminder of the month.
Winter Operations Training	Training for cold weather operations, including anti-icing and de-icing procedures, shall be accomplished annually by completing the on-line e-learning course(s) provided by Flyco. This qualification will expire on 30th November each year, regardless of when the training was completed. When revalidated within the period from 1st September to 30th November, the qualification will normally expire on 30th November the following year.
Recent Experience – Commander multi-pilot operations	A pilot or co-pilot shall not operate an aeroplane for commercial air transportation or for the carriage of passengers unless he/she has carried out at least three take-offs and three landings as pilot flying in an aeroplane or an approved flight simulator, of the type to be used, in the preceding ninety days.
	For the purposes of commercial air transport operations, the ninety-day period may be extended up to a maximum of one hundred and twenty days by line flying under the supervision of a TRI or TRE.

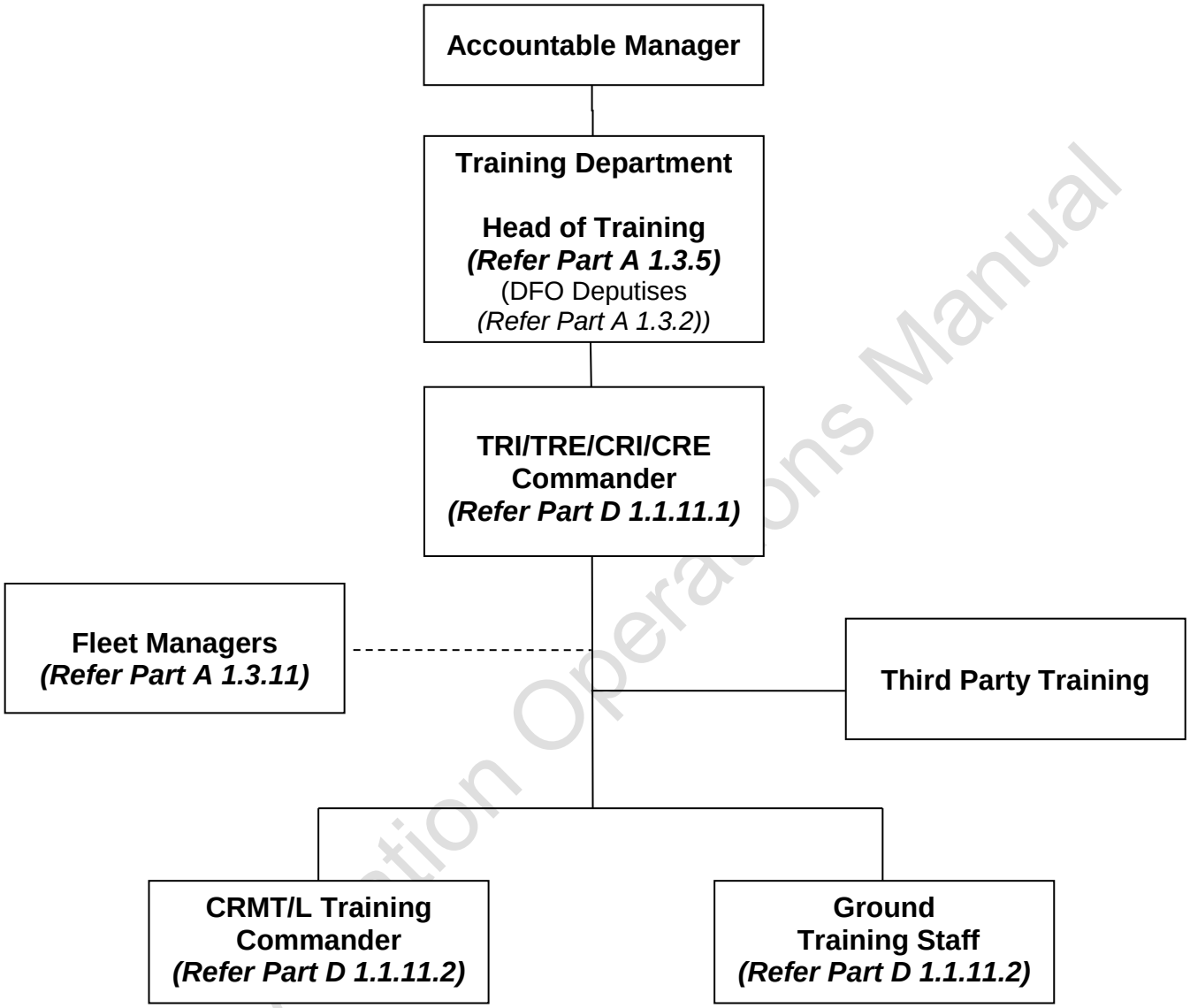
1.1.8 Operators Minimum Experience Levels for nomination as a Commander – Multi-pilot aeroplanes

Applicants for upgrade from First Officer/Co-pilot to Commander shall have at least:

(a) A valid ATPL(A) (or CPL(A) for SPA);
(b) A valid and appropriate type or class rating; and
(c) Flying hours as stated in table below:

	Jet	Turbine	Piston
Total Hours	3000	1700	1000
PIC Hours	1000	600	500
Jet Hours	500	N/A	N/A

1.1.9 Organisational Structure



1.1.9.1 Company Training and Checking Staff

The Head of Training will be responsible for the appointment of flight crew training staff. Some appointments may require the prior acceptance by the Competent Authority.

The following appointments to conduct flight training and testing duties for the company are made by Head of Training.

- Type Rating Instructor (TRI) / Examiner (TRE)
- Simulated Flight Instructor (SFI) / Examiner (SFE)
- Class Rating Instructor (CRI) / Examiner (CRE)
- Line Training Commander (LTC)

TRE/TRI – CRE/CRI				
Name	**Crew Code**	**Aircraft type**	**Qualification**	**Organisation**
P Scott	PSCO	BE20	CRI/A/CRE/A	Gama
H Ross	HROS	CL604/605	TRI/A/TRE/A	Freelance
A Whitehead	AWHI	BE20	TRI/ TRE	Freelance
J Telling	JTEL	BE20	TRI/TRE	Freelance
M Farmer	MFAR	Falcon 2000	TRI/TRE	Freelance
C Angelis	CANG	C560 XLS	TRI/TRE	Freelance
Line Trainers/ Line Checker BE200				
P Scott	PSCO	BE20	CRMI L	Gama
A Whitehead	AWHI	BE20	CRMI L	Freelance
A Rose	AROS	BE20	CRMI L	Gama
E Rex	EREX	BE20	CRMI L	Gama
M Goodwin	MGOO	BE20	CRMI L	Gama
S Sully	SSUL	BE20	CRMI L	Gama
Line Trainers/ Line Checker BE350i				
A Whitehead	AWHI	BE350i	CRML	Freelance
Line Trainers/ Line Checker CL601/CL604/605				
S Woodfine	SWOO	CL604/605	CRMI L	Gama
H Ross	HROS	CL604/605	CRMI L	Freelance
N Campbell	NCAM	CL604/605	CRMI L	Gama
R Looms	RLOO	CL604/605	CRMI L	Gama
Line Trainers/ Line Checker BAE 125				
Line Trainers/ Line Checker GV/550				
A House	AHOU	GV/G550	CRMI L	Gama
G Brain	GBRA	GV/G550	CRMI L	Gama *(DFO)*

Line Trainers/ Line Checker Global Express				
J Hanafin	JHFN	BD700	CRMI L	Gama
L Roach	LROA	BD700	CRMI L	Gama
Line Trainers/ Line Checker C560XLS				
A Lewis	ALEW	C560XLS	CRMI L	Gama
S Haydon	SHAY	C560XLS/XLS+	CRMI L	Gama
D Carr	DCAR	C560XLS/XLS+	CRMI L	Gama
Line Trainers/ Line Checker C510 Mustang				
A Lewis	ALEW	C510	CRMI L	Gama
Line Trainers/ Line Checker Falcon 900				
D Hamilton	DHAM	Falcon 900	CRMI L NonAOC	Gama *(Non AOC)*
Ground Trainers				
G Pollard	GPOL	CRMI (G) /Dangerous Goods/Aircrew Security/ Aviation First Aid/ RVSM/MNPS/ Winter Ops/ SEPs	All Fleets	Freelance
P Milverton	PMIL	CRMI (G) /SEP's/ Dangerous Goods/ Aircrew Security/ Aviation First Aid	All Fleets	Gama
K Willmett	KWIL	Dangerous Goods		Gama
A Whitehead	AWHI	CRMI (G)	All Fleets	Freelance
Third Party Training Suppliers Authorized to conduct Gama OPC's				
BE200				
R Johnson	RJOH	BE20	TCE / TRE	FSI (Wichita)
A Klein	AKLE	BE20	TRI/ TRE	FSI (Farnborough)
A Walker	AWAL	BE20	TRI/ TRE	Freelance
J Holliday	JHOL	BE20	TRI/ TRE	FSI (Farnborough)
C Sargeant	CSAR	BE20	TRI/TRE	Sargeant Aviation Services Ltd
S Hale	SHAL	BE20	TRI/TRE	Freelance
J Fontanals Solves	JFON	BE20	SFI/SFE	FSI (Farnborough)
D Bucknall	DBUC	BE20	SFI/SFE	FSI (Farnborough)
R Fernandez	RFER	BE20	SFI/SFE	FSI (Farnborough)
D Kilgariff	DKIL	BE20	SFI/SFE	FSI (Farnborough)
M Simpson	MSIM	BE20	SFI/SFE	FSI (Farnborough)
D Jones	DJOE	BE20	TRI/TRE	Freelance
BE350i				
M Wallace	MWAL	BE350I	TRI/TRE	FSI (Wichita)
L Haynes	LHAY	BE350I	TRI/TRE	FSI (Wichita)
D Jones	DJON	BE350I	TRI/TRE	Examinair

C Sargeant	CSAR	BE350I	TRI/TRE	Sargeant Aviation Services Ltd
CL604/605				
R Peace	RPEA	CL604/605	TRI/TRE	FSI (Wilmington)
D Aubrey	DAUB	CL604/605	TRI/TRE	FSI (Wilmington)
M Albert	MALB	CL604/605	TRI/TRE	FSI (Wilmington)
E Barbee	EBAR	CL604/605	SFI/SFE	FSI (Wilmington)
T Keenam	TKEE	CL604/605	SFI/SFE	FSI (Wilmington)
G Logue	GLOG	CL604/605	SFI/SFE	FSI (Wilmington)
M Franceschi	GLOG	CL604/605	SFI/SFE	FSI (Wilmington)
Gerrit-Jan Kulper	GKUL	CL604/605	TRI/TRE	CAE (Amsterdam)
M Vliertstra	MVLI	CL604/605	TRI/TRE	CAE (Amsterdam)
J van Geenen	JVAN	CL604/605	TRI/TRE	CAE (Amsterdam)
C Mau	CMAU	CL604/605	SFI/SFE	CAE (Amsterdam)
T van der Grijp	TVDG	CL604/605	SFI/SFE	CAE (Amsterdam)
S Nash	SNAS	CL604/605	TRI/TRE	CAE (Dubai)
P Tiefbunner	PTIE	CL604/605	TRI/TRE	CAE (Dubai)
J Stech	JSTE	CL604/605	TRI/TRE	CAE (Dubai)
D Evans	DEVA	CL604/605	SFI/ SFE	CAE (Dubai)
A Strumpl	ASTR	CL604/605	TRI/TRE	CAE (Dubai)
R Sulzer	RSUL	CL604/605	TRI/TRE	CAE (Dubai)
A Pyykkonen	APYY	CL604/605	TRI/TRE	CAE (Dubai)
G Gruber	GGRU	CL604/605	TRI/TRE	CAE (Dubai)
D Evans	DEVA	CL604/605	SFI/ SFE	CAE (Dubai)
K Kaveity	KKAV	CL604/605	SFI/ SFE	CAE (Dubai)
BAE 125 (Hawker 800XP, 850XP, 900XP, 1000)				
K Jones	KJON	BAE 125	SFI/SFE	FSI (Farnborough)
A Barnett-Leigh	ABAN	BAE 125	SFI/SFE	FSI (Farnborough)
A Salton	ASAL	BAE 125	SFI/ SFE	FSI (Farnborough)
D Kilgariff	DKIL	BAE 125	TRI/ TRE	FSI (Farnborough)
K Strocchi	KSTR	BAE 125	TRI/ TRE	FSI (Farnborough)
M Lowery	MLOW	BAE 125	TRI/ TRE	FSI (Farnborough)
M Craske	MCRA	BAE 125	SFI/ SFE	FSI (Farnborough)
M Sapper	MSAP	BAE 125	SFI/ SFE	FSI (Farnborough)
P Burgess	PBUR	BAE 125	SFI/ SFE	FSI (Farnborough)
W Gevaux	WGEV	BAE125	SFI/ SFE	FSI (Farnborough)
K Kiely	KKIE	BAE125	SFI/ SFE	FSI (Farnborough)
R Spickett	RSPI	BAE125	SFI/ SFE	FSI (Farnborough)
N Oommen	NOOM	BAE 125	SFI/SFE	CAE (Dubai)
E Chabwera	ECHA	BAE 125	SFI/SFE	CAE (Dubai)
J Harker	JHAR	BAE 125	SFI/SFE	CAE (Dubai)
M Hertle	MHER	BAE 125	SFI/ SFE	CAE (Dubai)
Gulfstream GV/550/ GVI				
D Goodey	DGOO	GV/550/GVI	SFI/SFE	FSI (Farnborough)
B Gevaux	BGEV	G550	SFI/SFE	FSI (Farnborough)
R Dannhauser	RDAN	G550 / GVI	SFI/SFE	FSI (Farnborough)
A Akinjobi	AAKI	GV	SFI/SFE	FSI (Farnborough)
S Brice	SBRI	GV / GVI	SFI/SFE	FSI (Farnborough)

I Cuddihy	ICUD	GV	SFI/TRI/SFE/TRE	FSI (Farnborough)
D Harrison	DHAR	GV	SFI/SFE	FSI (Farnborough)
E Hamill	EHAM	GV	SFI/SFE	FSI (Farnborough)
C Hemshall	CHEM	GVI	SFI/SFE	FSI (Farnborough)
M Lowery	MLOW	GV	SFI/SFE	FSI (Farnborough)
R Molloy	RMOL	GVI	SFI/SFE	FSI (Farnborough)
M Sapper	MSAP	GV / GVI	SFI/SFE	FSI (Farnborough)
M Simpson	MSIM	GV	SFI/SFE	FSI (Farnborough)
S Stevenson	SSTE	GV	SFI/SFE	FSI (Farnborough)
D Wooledge	DWOO	GVI	SI/SFE	FSI (Farnbroough)
M Schacher	MSCH	GV/550	TRI/TRE	CAE (Dubai)
G Haller	GHAL	GV/550	TRI/TRE	CAE (Dubai)
T Vasileios	TVAS	GV/550	TRI/TRE	CAE (Dubai)
F Fowler	FFOW	GV/550	TRI/TRE	CAE (Dubai)
H Koncilia	HKON	GV/550	TRI/TRE	CAE (Dubai)
M Heinicke	MHEI	GV/550	TRI/TRE	CAE (Dubai)
J Leslie	JLES	GV/550	SFI/SFE	CAE (Burgess Hill)
J McGivern	JMCG	GV/550	SFI/SFE	CAE (Burgess Hill)
R Lascelles	LAS	GV/550	SFI/SFE	CAE (Burgess Hill)
S Norman	SNOR	GV/550	SFI/SFE	CAE (Burgess Hill)
I Lechowicz	ILEC	GV/550	SFI/SFE	CAE (Burgess Hill)
T Neale	TNEA	GV/550	SFI/SFE	CAE (Burgess Hill)
Gulfstream 650				
B Ramspott	BRAM	G650	SFI/SFE	FSI (Savannah)
B Devore	BDEV	G650	SFI/SFE	FSI (Savannah)
M Allman	MALL	G650	SFI/SFE	FSI (Savannah)
N Kemble	NKEM	G650	SFI/SFE	FSI (Savannah)
R Marshall	RMAR	G650	SFI/SFE	FSI (Savannah)
R Donica	RDON	G650	SFI/SFE	FSI (Savannah)
R Walters	RWAL	G650	SFI/SFE	FSI (Savannah)
Global Express				
G Valderrama	GVAL	BD700	SFI/SFE	Bombardier (Montreal)
Y Huberdeau	YHUB	BD700	SFI/SFE	Bombardier (Montreal)
S Desbiens	SDES	BD700	SFI/SFE	Bombardier (Montreal)
R Lascelles	RLAS	BD700	TRE	CAE (Burgess Hill)
D Pelling	DPEL	BD700	SFI/SFE	CAE (Burgess Hill)
C Angelis	CANG	BD700	TRE	CAE (Burgess Hill)
A White	AWHI	BD700	SFI/SFE	CAE (Burgess Hill)
J Mills	JMIL	BD700	SFI/SFE	CAE (Burgess Hill)
M Coutsoftides	MCOU	BD700	SFI/SFE	CAE (Burgess Hill)
M Reaveley	MREA	BD700	SFI/SFE	CAE (Burgess Hill)
S Bernon	SBER	BD700	SFI/SFE	CAE (Burgess Hill)
D Zimmerman	DZIM	BD700	SFI/ SFE	CAE (Dubai)
P Walmsley	PWAL	BD700	SFI/ SFE	CAE (Burgess Hill)
P Seel	PSEE	BD700	SFI/SFE	CAE (Burgess Hill)
M Vliestra	VLI	BD700	SFI/SFE	CAE (Amsterdam)
A Bretveld	ABRE	BD700	SFI/SFE	CAE (Amsterdam)
D van der Eijk	DVDE	BD700	SFI/SFE	CAE (Amsterdam)
E Akkerman	EAKK	BD700	SFI/SFE	CAE (Amsterdam)
J van Geenen	VAN	BD700	TRI/TRE	CAE (Amsterdam)

J van den Berg	JVDB	BD700	SFI/SFE	CAE (Amsterdam)
C Gitchenko	CGIT	BD700	TRE	CAE (Dubai)
G Carrard	GCAR	BD700	TRE	CAE (Dubai)
H Marti	HMAR	BD700	TRE	CAE (Dubai)
M Gubza	MGUB	BD700	TRE	CAE (Dubai)
K Avramidis	KAVR	BD700	TRE	CAE (Dubai)
S Piechotta	SPIE	BD700	TRE	CAE (Dubai)
Boeing BBJ Aircraft off AOC				
R Thomas	RTHO	Boeing BBJ	TRI/TRE	Bermuda Validation
Falcon 7X				
A Craig	ACRA	Falcon 7X	SFI/ SFE	CAE (Burgess Hill)
E Daffin	EDAF	Falcon 7X	TRE	CAE (Burgess Hill)
G Nituf	GNIT	Falcon 7X	TRE	CAE (Dubai)
K Gavin	KGAV	Falcon 7X	SFI/ SFE	CAE (Dubai)
H Ziegler	HZIE	Falcon 7X	SFI/ SFE	CAE (Dubai)
B Meikle	BMEI	Falcon 7X	SFI/ SFE	CAE (Burgess Hill)
C560XLS				
T Hughes	THUG	C560XLS	TRI/ TRE	CAE (Burgess Hill)
C Angelis	CANG	C560XLS	TRI/ TRE	CAE (Burgess Hill) / C Angelis (Freelance)
B Meikle	BMEI	C560XLS	SFI/ SFE	CAE (Burgess Hill)
S Haydon	SHAY	C560XLS	TRI	Gama
C Angelis	CANG	C560XLS	TRI/ TRE	C Angelis (Freelance)
C510 Mustang				
A Klein	AKLE	C510	TRI/ TRE	FSI (Farnborough)
B Boschini	BBOS	C510	TRI/ TRE	FSI (Farnborough)
F Sanchez Gonzales	FSAN	C510	SFE/SFI	FSI (Farnborough)
A Walker	AWAL	C510	SFE/SFI	FSI (Farnborough)
C Hemshall	CHEM	C510	SFE/TRE	FSI (Farnborough)

1.1.10 Training Flight Crew - General

Persons nominated as Examiners (TRE, SFE, CRE) and those nominated as instructors (TRI, SFI, CRI, IRI) must satisfy the requirements of Part FCL as detailed below.

Examiners

The Head of Training shall be responsible for the appointment of all training personnel. Flight crew nominated to conduct Licensing Skill Tests / Licence Proficiency Checks (LST/LPC), LPC for Instrument Rating Renewal and revalidation must hold a valid examiner's Licensing Certificate issued by the competent authority of licence issue. This qualification permits the holder to conduct tests checks as detailed in the certificate. Head of Training will be responsible for nominating individuals for the conduct of Operators' Proficiency Checks (OPC). These will normally be persons qualified as TRE or SFE on the applicable aircraft type.

A copy of the examiner's Licensing Certificate shall be retained in the examiner's file in the company crew records.

Instructors

Flight crew nominated to conduct training for the issue, revalidation and/or renewal of a licence or rating shall be qualified in accordance with Part FCL and have the applicable instructor privileges detailed in their licence or, in the case of instruction in a simulator, hold the privileges to instruct in the simulator. For the purposes of line training and the conduct of line checks, confirmation of the aircraft type(s) for which line training and checking may be conducted by the instructor for Gama flight crews, will be detailed in this manual at paragraph 1.1.9 as amended by NOTAC from time to time.

Confirmation of which privileges, and the tests and checks that may be conducted by the instructors and examiners for Gama flight crews, is detailed in this manual at paragraph 1.1.9 and as amended by NOTAC from time to time.

Where training and check personnel are required to occupy either pilot's seat, it is essential that they are additionally qualified in both seats.

1.1.10.1 Training Appointments Minimum Experience

The Director Flight Operations and Head of Training will select and appoint all Training Positions.

The nominated Candidate will undertake an assessment of their overall performance. They will be required to demonstrate their knowledge of the operators approved procedures and policies. The Candidate must satisfy they have adequate technical knowledge of aircraft systems and operational techniques.

Training Commanders are to set a high standard of behaviour whether on or off duty and to be capable of demonstrating operational procedures above the normal standard.

The minimum experience required by the operator for Training Commanders on type are as follows:

	TRI/TRE	Line Trainers
Turbo Prop	Minimum 1500 hours Command on all Types	150 hours or 50 sectors P1
Jet	Minimum 1500 hours Command on all Types	150 hours or 50 sectors P1

1.1.10.2 INSTRUCTORS

Type Rating Instructor (TRI) – Minimum Requirements

An applicant for the initial issue of a TRI MPA *(Multi Pilot & Single Pilot High-Performance Complex Aeroplanes)* certificate shall have:

(a) successfully completed an approved TRI course for the applcable type;

(b) completed at least 1,500 hours flight time in multi-pilot operations;

(c) completed within the 12 months preceding the application at least 15 route sectors, to include take-offs and landings as pilot-in-command or co-pilot on the applicable aeroplane type, or a similar type as agreed by the competent authority, of which not more than 7 sectors may be completed in an approved flight simulator; and

(d) conducted on a complete type rating course at least one part related to the duties of a TRI on the applicable type of aeroplane under the supervision of a TRI notified by the competent authority for this purpose.

Synthetic Flight Instructor (SFI) – Minimum Requirements

An applicant for a SFI authorisation shall:

(a) hold or have held a professional pilot licence;
(b) have completed the approved flight simulator content of the applicable type rating course;
(c) have at least 1,500 hours flying experience as pilot on multi-pilot aeroplanes;
(d) have completed an approved TRI(A) course.
(e) have conducted on a complete type rating course at least 3 hours of flight instruction related to the duties of a TRI on the applicable type of aeroplane under the supervision of a TRI notified by the competent authority for this purpose; and

In the year preceding exercise of privileges:

- Shall have successfully completed a proficiency check on type in an approved flight simulator; and
- Shall have carried out 3 route sectors on type as supernumerary crew.

TRI Certificates - Revalidation and Renewal *(Ref EASA Part – FCL Subpart J)*

For revalidation of a TRI (MPA or SPHPCA) certificate an applicant shall have conducted within the last twelve months preceding the expiry date of the rating, one of the following 3 requirements:

(a) One of the following parts of a complete type rating/refresher/recurrent training;

(i) one simulator session of at least 3 hours or,
(ii) one air exercise of at least 1 hour comprising a minimum of 2 take-offs and landings.

(b) Receive instructor refresher training as a TRI at an ATO.

(c) Pass the Assessment of Competence in accordance with FCL.935

For at least each alternate revalidation of the certificate the applicant shall pass the assessment of Competence in accordance with FCL.935.

If the rating has lapsed the applicant shall have:

(a) completed within the 12 months preceding the application for renewal, at least 30 route sectors, to include take-offs and landings as pilot-in-command or co-pilot on the applicable aeroplane type, or a similar type as agreed by the competent authority, of which not more than 15 sectors may be completed in an approved flight simulator;

(b) successfully completed the relevant parts of an approved TRI course, at an approved ATO.

(c) conducted on a complete type rating course at least at least 3 hours of flilght instruction on the applicable type of aeroplane under the supervision of a TRI.

SFI Certificates - Revalidation and Renewal *(Ref EASA Part – FCL Subpart J)*

(a) For revalidation of an SFI certificate the applicant shall, within the validity period of the SFI certificate, fulfil 2 of the following 3 requirements:

1. complete 50 hours as an instructor or an examiner in FSTDs, of which at least 15 hours shall be within the 12 months preceding the expiry date of the SFI certificate;
2. receive instructor refresher training as an SFI at an ATO;
3. pass the relevant sections of the assessment of competence in accordance with FCL.935.

(b) Additionally, the applicant shall have completed, on an FFS, the proficiency checks for the issue of the specific aircraft type ratings representing the types for which privileges are held.

(c) For at least each alternate revalidation of an SFI certificate, the holder shall have to comply with the requirement of (a)(3).

(d) Renewal. If the SFI certificate has lapsed, the applicant shall, within the 12 months preceding the application:
1. complete the simulator content of the SFI training course;
2. fulfil the requirements specified in (a)(2) and (3).

1.1.10.3 EXAMINERS

Type Rating Examiner (TRE) – Minimum Requirements *(Ref Part FCL Subpart K)*

The minimum requirements for authorisation as a TRE are as follows:

(a) Hold a CPL(A) or ATPL(A) including a current type rating on the applicable type
(b) Hold a valid TRI certificate and be qualified as PIC for the applicable type
(c) For multi-pilot aeroplanes, have completed not less than 1,500 hours as pilot of aeroplanes including 500 hours as PIC.
(d) For single-pilot high performance aeroplanes, have completed not less than 500 hrs as pilot of aeroplanes including 200 hours as PIC
(e) (h) for the initial issue of an TRE certificate, have completed at least 50 hours of flight instruction as a TRI or SFI in the applicable type or an FSTD representing that type.

Synthetic Flight Examiner (SFE) – Minimum Requirements

An applicant for a SFE certificate shall:

(f) hold or have held an ATPL(A), a class or type rating and an SFI(A) certificate for the applicable type of aeroplane;
(g) have at least 1,500 hours of flight time as a pilot on multi-pilot aeroplanes;
(h) for the initial issue of an SFE certificate, have completed at least 50 hours of synthetic flight instruction as an SFI(A) on the applicable type.

TRE/SFE Certificates - Validity, Revalidation and Renewal

All examiners must comply with the requirements of Part FCL Subpart K.

(a) Validity. An examiner certificate shall be valid for 3 years
(b) Revalidation. An examiner certificate shall be revalidated when the holder has, during the validity period of the certificate:

(1) conducted at least 2 skill tests, proficiency checks or assessments of competence every year;

(2) attended an examiner refresher seminar provided by the competent authority or by an ATO and approved by the competent authority, during the last year of the validity period.

(3) One of the skill tests or proficiency checks completed during the last year of the validity period in accordance with (1) shall have been assessed by an inspector from the competent authority or by a senior examiner specifically authorised to do so by the competent authority responsible for the examiner's certificate.

(4) When the applicant for the revalidation holds privileges for more than one category of examiner, combined revalidation of all examiner privileges may be achieved when the applicant complies with the requirements in (b)(1) and (2) and FCL.1020 for one of the categories of examiner certificate held, in agreement with the competent authority.

(c) Renewal. If the certificate has expired, applicants shall comply with the requirements of (b)(2) and FCL.1020 before they can resume the exercise of the privileges.

(d) An examiner certificate shall only be revalidated or renewed if the applicant demonstrates continued compliance with the requirements in FCL.1010 and FCL.1030.

1.1.11 Training

Training – Line Training Commanders

Personnel selected as Line Training Commanders will be required to be familiar with the concepts of CRM and the assessment of CRM skills and carry out additional training as follows:

- Familiarisation with the relevant legislation, record keeping and documentation;

- Flight simulator training, if available, including the Operator Proficiency Check or test items flown from the right-hand seat;

Training – TRI / TRE and CRI / CRE

Personnel selected as TRI/TRE and CRI/CRE Aircraft/Simulator will be trained in accordance with the following sequence shown below.

- Successfully complete the appropriate TRI/TRE Standardisation course provided by the authority or by an ATO and approved by the authority in order to become an authorised examiner;

- Be familiar with the Operators Operations Manuals and Procedures including the operation of the flight simulator, where applicable.
- Witness and participate under supervision, training on the flight simulator, if applicable, and aeroplane as appropriate.

- Witness and conduct Licence and Operator Proficiency Checks under the supervision of a suitably qualified person.

Training – Ground Instructors

Personnel selected as Ground Instructors will be trained in accordance with the following sequence shown below.

- Successfully complete the appropriate course in order to become an authorised Trainer/Examiner;

- Be familiar with the Operators Operations Manuals and Procedures

- As part of the instructor's appointment, the Operator will provide adequate mentoring, observe presentations and make assessment of course subject knowledge to be presented ensuring they meet the operator's high standards.

Training Crew Resource Management (CRM) Instructors/Examiners

The following qualifications and experience are acceptable for a CRM trainer:

- a flight crew member holding a recent qualification as a CRM trainer may continue to be a CRM trainer even after the cessation of active flying duties;

- an experienced non-flight crew CRM trainer having a knowledge of HPL; and

- a former flight crew member having knowledge of HPL may become a CRM trainer if he/she maintains adequate knowledge of the operation and aircraft type and meets the provisions of AMC1 ORO.FC.115 &.215, (b)(2)(i),(ii),(iii), (iv), (v) and (vi).

1.1.12 Duties and Responsibilities

Fleet Manager's Responsibilities
(Refer to OM Part A 1.3.11)

Training Commanders Responsibilities
(Refer also to OM Part A 1.3.12)

Line Trainer's Responsibilities

The Head of Training will also appoint the Operators Line Training Commanders (LTC). These appointments will be based on the individual's experience on the specific aircraft type, and be acceptable to the competent authority. They should have an instructional background or have already demonstrated line training capability with a former Operator. Commanders without an instructional background may be considered if they have over 1000hrs on type or, at the discretion of the Head of Training, have sufficiently wide experience of the operation and have demonstrated the appropriate capability.
All LTC must have successfully completed a CRM Trainers' (CRMT (Line)) course (In-house training course) and comply with the requirements of AMC1 ORO.FC.115 & 215
All LTC shall;

- Report to the Head of Training;
- Demonstrate familiarity with Part D of the Operations Manual;
- Demonstrate a competent technical knowledge;
- Be fully familiar with the theatre of operations;
- Review latest relevant legislation;
- Complete pilot training records;
- Ensure the highest possible training standards;
- Liaise with the Flight Safety Officer;
- Be fully familiar with all SOP, aircraft performance and handling.

Training and Line Check Commanders - Responsibilities

Training and Line Check Commanders shall be given a clear statement of their individual duties and responsibilities. Each appointee shall be responsible for:

(a) carrying out training or conducting a check as directed on flight crew;

(b) correcting any procedure not in accordance with the Flight Crew Training Manual, Operations Manual or the Requirements;

(c) supervising ground and en-route training;

(d) familiarising flight crew with the latest operational procedures;

(e) where so qualified, carrying out LST and LPC as required

(f) Where so qualified and authorised by Head of training, conduct OPC and Line Checks on behalf of the Operator;

(g) making proposals for improving safety standards and efficiency in training and line operations;

(h) completing training and check forms promptly on completion of the training or check and for forwarding the completed forms to the appropriate office;

(i) where so qualified, validating Flight Crew Licences as appropriate on satisfactory completion of a test or check.

Senior Line Training Commander

Senior Line Training Commanders (Senior LTC) will be appointed by the HoT and given a clear statement of responsibilities in addition to those of the LTC. Each Senior LTC shall be further responsible for;

(a) Conducting Line Checks on all fleets at the direction of Head of Training (HoT).

(b) Assisting HoT in the standardisation of the Line Training Commanders and oversight of line training standards. This will include the arrangement of annual briefings.

1.1.13 Operation on more than one type or variant
(Note: Competent Authority Approval Required)

When a flight crew member operates multi-pilot aeroplanes:

(a) The flight crew member shall not operate more than two aeroplane types or variants for which a separate type rating is required;

(b) Before exercising the privileges of two licence endorsements;

(i) Flight crew members must have completed two consecutive OPCs and must have 500 hours in the relevant crew position (or 100 hours or 100 sectors for aeroplanes in class B) with the same operator.

(ii) In the case of a pilot having experience with an operator and exercising the privileges of two licence endorsements and then being promoted to command with the same operator on those types, the required minimum experience as commander is six months and 300 hours, and the pilot must have completed two OPCs before again being eligible to exercise the privileges of two licence endorsements;

(c) a minimum of three months and 150 hours experience within the first type rating shall be achieved before the flight crew member commences the conversion course for the second type rating;

(d) twenty sectors or 50 hours flying shall then be achieved exclusively on aeroplanes of the second type rating.

In the case of all other aeroplanes or, in the case of operating a combination of a SPA and MPA refer to OMA Section 4.4.

Section 2 – Content: Training Syllabi and Checking Programmes

2.1 Flight Crew

2.1.1 Operator's Crew Resource Management (CRM) training *(ORO.FC.115/215)*

a) If the flight crew member has not previously received theoretical training in human factors to the ATPL level, he/she shall complete, before or combined with the initial CRM training, a theoretical course provided by the operator and based on the human performance and limitations syllabus for the ATPL as established in Annex I (Part-FCL) to Regulation (EU) No 1178/2011.

b) Before operating, the flight crew member shall have received CRM training, appropriate to his/her role, as specified in the operations manual.

c) Elements of CRM training shall be included in the aircraft type or class training and recurrent training as well as in the command course.

2.1.1.1 INITIAL CRM – Course Duration: 2 days *(ORO.FC.115 & 215)*

a) The flight crew member shall have completed an initial CRM training course before commencing unsupervised line flying.

b) Initial CRM training shall be conducted by at least one suitably qualified CRM trainer who may be assisted by experts in order to address specific areas.

Course Content

- Human factors in aviation;
- General instructions on CRM principles and objectives;
- Human performance and limitations;
- Threat and error management.
- Personality awareness,
- Assertiveness,
- Human error and reliability,
- Attitudes and behaviours,
- Self-assessment and self-critique;
- Stress and stress management;
- Fatigue and vigilance;
- Situation awareness, Shared situation awareness,
- Information acquisition and processing, Shared information acquisition and processing;
- Automation and philosophy on the use of automation
- Specific type-related differences
- Monitoring and intervention
- Workload management;
- Effective communication and coordination inside and outside the flight crew compartment; and with other operational personnel and ground services.
- Leadership, cooperation,
- Synergy, delegation,

- Decision-making, actions;
- Resilience development;
- Surprise and startle effect;
- Cultural differences
- Operator's safety culture and company culture,
- Standard operating procedures (sops),
- Organisational factors & Factors linked to the type of operations;
- Case studies

Additionally - for Flight Attendants

- Effective communication and coordination between all crew members including the flight crew as well as inexperienced cabin crew members
- Identification and management of the passenger human factors: crowd control, passenger stress, conflict management, medical factors
- Specifics related to aircraft types (narrow-/wide-bodied, single-/multi-deck), flight crew and cabin crew composition and number of passengers
- Participation in cabin safety incident and accident reporting

2.1.1.2 Recurrent CRM - Course Duration: 1 Day

All flight crew shall complete the Gama CRM modular training programme, completing all 3 modules within a rolling 3-year period. All modules should contain a practical review of given case studies.

Course Content

Module 1 (2018, 2021)

- Human factors in aviation;
- General instructions on CRM principles and objectives;
- Human performance and limitations
- Effective communication and coordination inside and outside the flight crew compartment; and with other operational personnel and ground services.
- Human error and reliability, Threat and error management
- Standard Operating Procedures
- Decision Making, actions

Module 2 (2019, 2022)

- Human factors in aviation;
- General instructions on CRM principles and objectives;
- Human performance and limitations
- Leadership, cooperation,
- Synergy, delegation
- Operator's safety culture and company culture,
- Personality awareness,
- Assertiveness,
- Attitudes and behaviours,

- Self-assessment and self-critique
- Cultural differences
- Surprise and startle effect
- Resilience development;
- Stress and stress management;

Module 3 (2020, 2023)

- Human factors in aviation
- General instructions on CRM principles and objectives
- Human performance and limitations
- Fatigue and vigilance
- Workload management
- Organisational factors & Factors linked to the type of operations
- Information acquisition and processing, Shared information acquisition and processing
- Monitoring and intervention
- Situation awareness, Shared situation awareness
- Automation and philosophy on the use of automation
- Specific type-related differences

2.1.1.3 Change of Operator / Change of Aircraft Type CRM

Course Duration: 1 Day

When the flight crew member holds a current CRM qualification with another EASA AOC operator, he/she must undergo at least the follwing CRM training prior to unsupervised line flying with Gama. Attending a CRM Initial course may take the place of this training.

- Human factors in aviation;
- Review of CRM principles and objectives;
- Human performance and limitations;
- Threat and error management;
- Automation and philosophy on the use of automation
- Monitoring and intervention
- Shared situation awareness,
- Shared information acquisition and processing;
- Workload management;
- Effective communication and coordination inside and outside the flight crew compartment
- Leadership, cooperation,
- Synergy, delegation,
- Decision-making, actions;
- Resilience development;
- Surprise and startle effect;
- Cultural differences
- Gama Significant 10 and company culture,
- Standard operating procedures (sops),
- Organisational factors & Factors linked to the type of operations;

- Effective communication and co-ordination with other operational personnel
- Case studies

2.1.1.4 Initial and Recurrent CRM Trainers Course

Course Duration: 1 Day

All Line Training Commanders (LTC) shall complete the following CRM Trainers' course prior to appointment as LTC. The qualification shall be valid for 3 years unless revoked and may be revalidated by completeing this course at any time within the final year of validity.

Course Content

- Learning Types
- Stages of Learning
- Standards Document 29 and CAP737
- Facilitation v Instruction
- Language and Communication
- Behavioural Markers
  - Communication
  - Leadership and Teamwork
  - Workload Management
  - Situational Awareness
  - Problem Solving and Decision Making
- SOPs
- Company Paperwork
- Line Checking
- Feedback
- Briefing/Debriefing Skills and Exercise

2.1.2 Ground Training

(Refer Appendix A – Syllabus for Normal-Abnormal Operations)

All flight crew will attend a course of ground training by an approved ATO. Flight crew who join the operator with a class or type rating will receive refesher training during the conversion course.

The course of ground instruction will incorporate formal tests on aeroplane systems, performance and flight planning, where applicable.

Flight Crew will receive initial instruction on the contents and use of the Operations Manual including the Company Approved Flight Time limitations scheme and will have thereafter 12 monthly reviews on changes of contents and procedures and this will be recorded on the Operators Air Ops Computer database system.

The syllabus for ground training is contained in this manual and will be issued to Instructors and students at the appropriate time.

2.1.2.1 Annual Recurrent Ground Training

The ground and refresher training shall include:

a) Aeroplane systems;
b) Operational procedures and requirements; and
c) Accident/Incident and Occurrence review.

Refer to appendix A for ground and refresher syllabus.
Refer to appendix A for aeroplane technical subjects *(Phase A,B, and C ref).*
Also refer Appendix I – Conversion Training Syllabus.

Knowledge of the ground and refresher training shall be verified by a questionnaire or other suitable method

2.1.3 Emergency and Safety Equipment Training (ESET) *(ref; AMC1 ORO.FC.230 (2))*

General

The emergency and safety equipment training programme may be combined with emergency and safety equipment checking and shall be conducted in an aeroplane or a suitable alternative training device.

Initial, Annual and Triennial Training

At initial and every three years thereafter the programme of training should include all triennial and annual items.

2.1.3.1 Initial & Triennial Items

At initial and every three years thereafter the programme of training should include the following items:

a) actual operation of all types of exits
b) A comprehensive drill to cover all ditching procedures will be practised where flotation equipment is carried. This will include practice of the actual donning and inflation of a lifejacket, together with a demonstration or film of the inflation of life-rafts and/or slide-rafts and associated equipment. This practice will, on an initial conversion course, be conducted using the equipment in water, although previous certificated training with another operator or the use of similar equipment will be accepted in lieu of further wet-drill training;
c) demonstration of the method used to operate a slide where fitted
d) Evacuation of the aeroplane (or a representative training device) by use of a slide where fitted shall be included when the Operations Manual procedure requires the early evacuation of flight crew to assist on the ground.
e) demonstration in the use of the life-rafts where fitted
f) actual handling of pyrotechnics, real or simulated, where applicable

2.1.3.2 Annual Items

At initial and annually thereafter the programme of training should include at least the following items:

a) Actual donning of a life-jacket, where fitted

b) actual donning of protective breathing equipment, where fitted

c) actual handling of fire extinguishers of the type used

d) instruction on the location and use of all emergency and safety equipment carried on the aircraft

e) instruction on the location and use of all types of exits

f) security procedures

g) Instruction on the location of emergency and safety equipment, correct use of all appropriate drills, and procedures that could be required of flight crew in different emergency situations.

h) safety equipment location diagram (GAL105 XXX)

i) ESET Questionnaire (GAL102)

2.1.4 Fire and Smoke Training

(Ref AMC1 ORO.FC.220 (C))

a) Actual fire-fighting using equipment representative of that carried in the aircraft on an actual or simulated fire except that, with Halon extinguishers, an alternative extinguisher may be used.

b) the effects of smoke in an enclosed area and actual use of all relevant equipment in a simulated smoke-filled environment

2.1.4.1 Course Content

Classroom Theory: -

- Introduction to fire and smoke
- Chemistry/ classification of fire
- Combustion
- Methods of heat transmission
- Fuels
- Triangle of fire
- Hazard of smoke in an aircraft fuselage; moving safely and correctly in smoke and
- Effective communication
- Operation of fire extinguishers (halon extinguisher not permitted), understanding the advantages and disadvantages
- Discuss the types of in-flight fires including internal baggage hold fires and techniques for dealing with them
- Crews initial action on the discovery of fire and/or smoke in-flight

- Actions to be taken in an emergency on board an aircraft
- Fire prevention
- Crew awareness when evacuating an aircraft
- Ground based emergency services including initiation of the ERP
- Demonstration of relevant types of PBE using training models. Note 1

Practical

- Use of a corporate jet-representative fire training rig
- Experience of fire drill in a smoke-filled fuselage wearing a representative PBE Note 1 or goggles;
- In-flight fire scenarios; crews to demonstrate the techniques learned whilst carrying out a practical exercise addressing fire situations likely to be encountered on an aircraft:
- Written assessment paper.
- If applicable; the use of interphone communications and second crew member responsibilities as applicable to trainee's aircraft type.
- Flight crew Checklist for Fire involving Personal Electronic devices PEDs in the Passenger Cabin during Flight.

NOTE 1 - Relevant types of PBE include: Essex, Drager, Oxycrew, L'air liquide, Puritan Benett and Axox-Scott.

2.1.5 First Aid Training

Aeromedical aspects and first aid including

i) Instruction in first aid on board, the use of first aid kits and equipment carried and;
j) The physiological aspects of flying

For detailed first aid training course content refer to OMD Appendix O

On the initial conversion course and on subsequent conversion courses as applicable, the following items shall be addressed:

a. Instruction on first aid in general (Initial conversion course only); instruction on first aid as relevant to the aeroplane type of operation and crew complement including where no cabin crew are required to be carried (Initial and subsequent courses);
b. Aeromedical topics including:
c. hypoxia;
d. hyperventilation;
e. contamination of the skin/eyes by aviation fuel or hydraulic or other fluids;
f. hygiene and food poisoning;
g. malaria; and
h. incapacitation of flight crew members.
i. The operational procedures of security, rescue and emergency services;
j. Survival information appropriate to the areas of operation (e.g. polar, desert, jungle or sea) and training in the use of any survival equipment required to be carried;

2.1.6 Operator's Conversion Course (OCC) & Flight Training General

Operator Conversion Course & Initial Flight Training

The OCC is deemed to have started when the flight training has begun. The theoretical element of the course may be undertaken ahead of the practical element. In certain circumstances the course may have started and reached a stage where, for unforeseen reasons, it is not possible to complete it without a delay. In these circumstances the Operator may allow the pilot to revert to an aircraft type previously operated.

Before the resumption of the OCC, the Head of Training will evaluate how much of the course needs to be repeated before continuing with the remainder of the course.

Flying training will be structured and sufficiently comprehensive to familiarise the flight crew member thoroughly with all aspects of limitations and normal operation of the aircraft, including the use of all cockpit equipment and with all emergency procedures and should be carried out by a third party contracted ATO or, in certain circumstances as applicable, a suitably qualified TRI / TRE or LTC.

Unless the training programme has been carried out in a flight simulator under a Zero Flight Time Training (ZFTT) approval, the training required must include an element of proficiency training on an aircraft, including at least three take-offs, circuits and landings or, where all training and the Skills Test have been completed in the simulator, additional landings training in the aircraft in accordance with AMC2 ORA.ATO.125.and OMD Appendix T.

All pilots must successfully complete a company Operator Proficiency Check prior to commencing line operations.

For King Air operations on ambulance operations, new and inexperienced pilots joining the Company for their first commercial Operators' Conversion may be rostered for a period as supernumerary to observe the operation at first hand prior to operating as pilot crew member. This period will follow all conversion training and therefore form part of the line training only. This should be for at least one day or two sectors wherever practicable. The LTC may extend the period when possible and may include the new pilot as pilot flying or pilot monitoring at any time during this period, as and when appropriate.

2.1.7 Licence Proficiency Check / Operators Proficiency Check

Recurrent Flying Training *(Ref Appendix A)*

The Operator uses a suitable Flight Simulator or under certain circumstances the use of the aeroplane can be approved.

The system failure-training programme is to be established so that all major failures of aircraft systems and associated procedures will have been covered in the preceding 3-year period.

2.1.7.1 RENEWAL OF CLASS AND TYPE RATINGS: REFRESHER TRAINING: -
as required by AMC1 FCL.740(b)(1) Validity and renewal of class and type ratings

a. Paragraph (b)(1) of FCL.740 determines that if a class or type rating has lapsed, the applicant shall take refresher training at an ATO. The objective of the training is to reach the level of proficiency necessary to safely operate the relevant type or class of aircraft. The amount of refresher training needed should be determined on a case-by-case basis by the ATO, taking into account the following factors:

1. the experience of the applicant. To determine this, the ATO should evaluate the pilot's log book, and, if necessary, conduct a test in an FSTD;

2. the complexity of the aircraft;

3. the amount of time-lapsed since the expiry of the validity period of the rating. The amount of training needed to reach the desired level of proficiency should increase with the time lapsed. In some cases, after evaluating the pilot, and when the time lapsed is very limited (less than 3 months), the ATO may even determine that no further refresher training is necessary. When determining the needs of the pilot, the following items can be taken into consideration:

I. expiry shorter than 3 months: no supplementary requirements;

II. expiry longer than 3 months but shorter than 1 year: a minimum of two training sessions;

III. expiry longer than 1 year but shorter than 3 years: a minimum of three training sessions in which the most important malfunctions in the available systems are covered;

IV. expiry longer than 3 years: the applicant should again undergo the training required for the initial issue of the rating or, in case of helicopter, the training required for the 'additional type issue', according to other valid ratings held.

b. Once the ATO has determined the needs of the applicant, it should develop an individual training programme that should be based on the initial training for the issue of the rating and focus on the aspects where the applicant has shown the greatest needs.

c. After successful completion of the training, the ATO should provide a certificate, or other documentary evidence to the applicant that the training has been successfully completed. This certificate must contain a description of the training programme and be submitted to the competent authority when applying for the renewal.

d. When the ATO determines that no training is required prior to LPC, CAA Form SRG1119D or the equivalent certificate must be completed and sent to the CAA with the renewal notification/application. Where applicable and when authorised, following successful completion of the LPC, the examiner may issue a Temporary Licence Certificate in accordance with the provisions of EASA Part FCL. Where issued and whilst valid, this certificate may be accepted as valid renewal of the particular rating.

e. Note: The Operator holds an ATO approval and has the authority to renew Type and Instrument Ratings for its own pilots but does not have the authority to conduct Initial Type Ratings or conduct Licence Skills Tests; however, it may conduct take-offs and landings for the issuance of an initial type rating.

2.1.7.2 Licence Proficiency Check (LPC)

(Refer to AOC.TR.050 series of forms. Phase Syllabi)

To satisfy EASA regulations, pilots are to undertake an annual LPC. If successful the required FCL/LPC form, valid in accordance with Part FCL Appendix 9 and according to the National procedures of the Competent Authority of the licence holder (in UK; 'SRG 1157' or 'SRG 1158' (as applicable) & 'SRG 2199'), When authorised by the Competent Authority, the TRE shall sign the licence certificate of validation in accordance with National licensing procedures.

NOTE:- Certain National regulatory authorities may request the completed forms be returned for endorsement. A Temporary Licence Certificate (in UK 'SRG 1100') may be issue when authorised by the NAA of the licence holder

EASA regulations require training and checking, over a three-year period. The Operator uses a Phased Training matrix's off the following items:
(For more detailed information see OMD Appendix A)

2.1.7.3 Operator's Proficiency Check (OPC)

(Refer to AOC.TR.050 series of forms. Phase Syllabi)

The Operators Proficiency Check (OPC) is a bi-annual check and is regarded as continuation training. It will take place over an agreed time period by using our in house, third party training facility, or as an option, the aeroplane.

The contents of the OPC training course will be controlled by the Operators Training Department in conjunction the Operator's trainers/examiners or Third-Party Training provider.

The candidate will be provided with all details of the course well in advance and will receive a full brief of the course contents.

A CRE/TRE is responsible for certifying the check. A licence entry is not recorded on the individual's licence but a record of the event is held with the training department.
On completion the Company OPC form (GAL101 a, b or c) must be returned to the Operators Training Department no later than the original expiry.

Each flight crew member shall undergo operator proficiency checks as part of a normal flight crew complement to demonstrate competence in carrying out normal, abnormal and emergency procedures.

The check will be conducted without external visual reference (except for take-offs and landing) however the remainder of the check will be carried in either simulated or actual IMC flight conditions.

Where applicable,the operator proficiency check shall include the following manoeuvres:

a. Rejected take-off when an approved flight simulator is available, otherwise discussion item only;
b. Take-off with engine failure after V1 or equivalent IAS (as appropriate) and as safety considerations permit;
c. 3D approach to minima, in the case of multi-engined aeroplanes, with one engine inoperative;
d. 2D approach to minima;
e. Missed approach on instruments from minima and in the case of multi-engined aeroplanes, with one engine inoperative;
f. Landing with one engine inoperative.
g. For single engine aeroplanes a practice forced landing is required.

When engine out manoeuvres are carried out in an aeroplane, the engine failure must be simulated. For further details on procedures for simulated / practice engine failure and engine-out handling in aircraft, see OMD, Section 3.1.1.

To establish or maintain privileges for PBN, one approach (either 3D or 2D) shall be an RNP/PBN approach. Where a PBN approach is not practicable in the aircraft, it shall be performed in an appropriately equipped FSTD

In addition to the checks prescribed above, the requirements of Part - FCL must be completed every twelve months and may be combined with an operator proficiency check.

For a Commander or First Officer operating VFR only, the checks prescribed in (c) to (e) above may be omitted except for an approach and go-around in a multi-engined aeroplane with one engine simulated inoperative.

When an approved flight simulator is used, the opportunity should be taken to use LOFT senario's.

Refer to OM Part D Appendix A and form GAL101a, b & c for the phased recurrent schedules relating to the operator proficiency check and combined OPC/LPC.

2.1.7.4 Conduct of the LPC/OPC

Training

The Operator will carry out training procedures with the intent to complete all items required to revalidate the LPC/OPC in accordance with EASA requirements.

This will cover all aspects of the exercises and the facility to test the candidate's technical knowledge of: normal and abnormal system operations**,** abnormal and emergency procedures of the current phase in accordance with OMD Appendix A, Safety Management System (SMS) safety awareness program, SMS Training.

2.1.7.5 Check Flight

All exercises will be flown as a constituted crew, normally with a Captain and First Officer.

The Captain remains the aircraft commander, however, when acting as PF the First Officer is expected to initiate all drills and lead on the decision-making process.

Due to the diversity of the operator's fleet, it is important that the crew operate to operator's SOPs utilise best practice CRM.

Except where specified, the full use of aircraft automation is to be utilised where appropriate.

The candidate must demonstrate situational awareness and operate the aircraft smoothly at all times.

The 2D approach may be flown automatically, however for LPC, a demonstration of manual flying will be required during the following:

- Single-engine 3D Approach to Go-around followed by a landing.

2.1.7.6 Specific Guidance on Emergency Simulation in Flight

Please see the guidance and instructions in Section 3.1

2.1.7.7 Type Rating/Operator Training

The expanded checklists, SOPs and deviation/alert calls can be found in the Parts A and B of the company OM.

2.1.8 Base Training for Initial Type Rating (also refer to Part D section 3.1.1) (Completion of Take-off and Landings)

The aim of the take-off and landing training is to complete the aircraft portion of a type rating course required by AMC2 ORA.ATO.125 (k)(1). In addition, it is an opportunity for the student to become familiar with those elements of the aircraft cabin or airframe not available during the simulator phase of type rating training. In particular, it provides an opportunity for the student to get comfortable with visual manual flight which is often not covered in the simulator syllabus. Therefore, it is intended to be a VFR exercise wherever possible, using visual circuits rather than instrument approaches.

The student must have completed the theoretical knowledge and simulator training portions of the applicable type rating course. Normally this includes the LST, so that the landing training is the last item to be completed. The operator has a varied fleet of aircraft. The following minimum training requirement shall be observed, as applicable to type.

In accordance with Part-FCL.720.A, a pilot with more than 500 hours experience in MPA of similar size and performance, should complete at least 4 landings including at least one full stop landing, unless otherwise specified in the OSD established in accordance with

Regulation (EC) 1702/2003. In all other cases when training on all single pilot aeroplanes a pilot must complete at least 6 landings

For the purpose of deciding what is “similar”, aeroplanes are divided into the following categories:

Propeller aircraft <10T MTOM
Propeller aircraft >10T MTOM
Turbojet aircraft <10T MTOM
Turbojet aircraft >10T MTOM

Limitations and training minima

The Training Commander must hold a valid type rating instructor certificate (TRI) on type with an endorsement in part XII Instructors section for the type Aeroplane and or FFS/A/c

(TRI certificates endorsed “T/Os & LDGS only” are accepted for the purposes of this requirement).

Further guidance to instructors on the conduct of this training is detailed at: OMD Appendix T.

2.1.9 Line Training AMC1 – ORO.FC.220 (e)

2.1.9.1 Line Training Form

Refer to Form GAL119 for the recording of Line Training

Following completion of flight crew training and checking, as part of the operator's conversion course, each flight crew member should operate a minimum number of sectors and/or flight hours under the supervision of a flight crew member nominated by the operator. The minimum number of sectors flown under supervision shall be specified at the discretion of the Head of Training. Head of Training shall be guided but not limited by the following table taking into account the previous experience of the pilot, including familiarity with the nature and area of proposed operation and the complexity of the aircraft.

Line Orientation Training Requirements				
Training	**Recommended minimum sectors or hours under supervision**		**Min 2 Sector line check**	**Conditions**
Commanders Initial Type rating	40 sectors	100 hrs	✓	The line training is considered a particularly important factor in the development, maintenance and refinement of high operating standards, and can provide a valuable indication of the usefulness of the operators training, standard, policy and methods. Line training is a demonstration of a flight crew member's ability to perform a complete line operation satisfactorily, including pre-flight and post flight procedures using the equipment provided. It is also an opportunity for an overall assessment of his/her ability to perform the duties required. The routes flown should provide adequate representation of the scope of a pilot's normal operations. The use of automation is available at all times unless weather conditions precludes, in addition the use of the automatic landing system may be used as required. The line training is not intended to determine competence on any particular route. In addition to the above duties, flight crew members will be assessed on their CRM skills. When assessing CRM skills, the trainer/ examiner should normally occupy an observer's seat, but on occasions due to seat arrangements may be part of the operating crew. The Commander, or First Officer acting as Commander, should also demonstrate his/her ability to manage the operation and take appropriate command decisions. ***Note:** These are the recommended sectors and hours for Gama AOC operating pilots on fleets other than the B200 and B350. Only the sector recommendations apply to these aircraft (not the hours).
Commanders 2nd type Rating	20 sectors	30 hrs	✓	
Experienced Commander on Type with different operator	10 sectors	N/A	✓	
Command Upgrade same company same type	10 sectors	15 hrs	✓	
Command upgrade same company on different type	20 sectors	N/A	✓	
First Officer first OCC	40 sectors	100 hrs	✓	
First officer 2nd type rating**	20 sectors	30 hrs	✓	
Pilot operating two types at the same time	20 sectors	20 hrs	✓	
Operating same type different variant	4 sectors	N/A	✓	
Previous experience on type within 3 months of expiry	Line check		✓	
Previous experience on type within 3 months to 12 months of expiry	2 sectors	N/A	✓	
Previous experience on type within 12 months to 36 months of expiry	10 sectors	N/A	✓	

NOTES
First Officer First OCC. This section applies to first officers under training for operations under the Gama AOC who have not completed another operator's OCC prior to joining Gama. First OCC is therefore defined as the OCC completed for the pilots' first AOC operator, which may not have been Gama.

First Officer 2nd Type rating need not be the second type rating for Gama; type ratings for similar types with similar performance previously operated under other companies' AOC may be taken into account for the purposes of this paragraph.

If in doubt, any queries with regard to these requirements should be addressed to the Head of Training for final determination of the training required prior to line check.

2.1.9.2 Line Check

Line Check Form

Refer to Form GAL118 for recording of the Line Check.

The line check is considered a particularly important factor in the development, maintenance and refinement of high operating standards, and can provide a valuable indication of the usefulness of the operators training, standard, policy and methods. Line checks are a demonstration of a flight crew member's ability to perform a complete line operation satisfactorily, including pre-flight and post flight procedures using the equipment provided. It is also an opportunity for an overall assessment of his/her ability to perform the duties required.

The route chosen should provide adequate representation of the scope of a pilot's normal operations. The use of automation is available at all times unless weather conditions precludes, in addition the use of the automatic landing system may be used as required.

The line check is not intended to determine competence on any particular route.

In addition to the above duties, flight crew members may be assessed on their CRM skills. The Commander , or First Officer acting as Commander, should also demonstrate his/her ability to manage the operation and take appropriate command decisions. When assessing CRM skills, the assessor should normally occupy an observer's seat.

Where operational limitations require that the LTC must operate from a control seat

2.1.9.3 Requirement

Each flight crew member shall undergo a line check on the aeroplane to demonstrate his/her competence in carrying out normal line operations.

Line checks must establish the ability to perform satisfactorily a complete line operation including pre-flight and post-flight procedures and use of the equipment provided.

2.1.9.4 Checking both PF and PM

Where a member of an operating Flight Crew is required to operate as a Pilot Flying (PF) and Pilot Monitoring (PM), he/she will be checked on one sector as PF and on another sector as PM.

2.1.9.5 CRM Assessment During Line Checking

The flight crew will be assessed on their CRM skills throughout the operation. CRM performance will be graded and recorded on the GAL118 form. Further guidance on the grading methodology is given on page 3 of the form

2.1.9.6 Acceptable Line Training Resources

Line checks must be completed by a Company approved Line Training Commander (LTC) in the aeroplane. Where operationally practical, the check should be conducted from the jump seat or equivalent position, observing a constituted crew. The LTC must be able to connect a headset and hear all cockpit communications throughout the flight. Where, for operational reasons, the LTC is required to operate from a control seat, he/she must perform all normal crew duties as PF/PM as appropriate, whilst assessing the other pilot's performance. The LTC must allow the pilot under assessment to perform their role in accordance with normal SOP as far as is possible and without undue intervention or assistance other than in accordance with normal operating standards.

2.1.9.7 Line Checking Commanders

Line checks must be conducted by type rated commanders nominated by the operator and acceptable to the Comptetent Authority. Line Checks may be conducted by a management pilot not rated on the particular type. Where the management LTC is not rated on the type, the LTC must not occupy a control seat. Management pilots conducting Line Checks must be qualified as LTC on at least one type.

2.1.10 Qualification to Operate in either Crew Seat

Commanders whose duties also require them to operate in the right-hand seat and carry out the duties of a First Officer or Commander and/or to conduct training or examining duties from the right-hand seat, shall complete additional training and checking in the right hand seat, concurrent with the operator proficiency checks. This additional training must include at least the following:

a. Simulated/engine failure at take (EFATO) and, on a multi-engine aeroplane: -
b. Simulated/ one engine inoperative approach and go-around; and
c. Simulated/ one engine inoperative landing

When operating in the right hand seat, the checks required for operating in the left-hand seat must, in addition, be valid and current.

2.1.11 Engine out Manoeuvres

When engine out manoeuvres are carried out in the aeroplane, the engine failure must be simulated. For further details on procedures for simulated/practice engine failure and engine-out handling in aircraft, *see OMD Section 3.1.1*.

2.1.12 PBN Training

All Pilots

Gama Aviation is a PBN approved operator. From 25th August 2018, all pilots with current experience of PBN en-route, terminal and approach procedures must hold or obtain the PBN endorsement in their instrument rating in compliance with EU and National licensing procedures.

UK-issued EASA Licence-holders

The PBN endorsement (as detailed in accordance with UK CAA Information Notice IN-2017/026) included any type rating in a UK-issued EASA licence 'Certificate of Revalidation' page is accepted as qualification for the purposes of this requirement. Endorsement on any one type held in the licence validates the qualification on all other type/class ratings held. The PBN endorsement may be obtained in tandem with either recurrent LPC or Company OPC or following successful completion of a separate assessment on a dedicated check flight with a company designated examiner. Pilots and examiners should refer also to CAA Information Notice IN-2017/034.

Initial Training

Pilots joining the company with no prior PBN experience or training shall complete the company PBN initial training programme. This comprises a self-study programme and on-line CBT programme and assessment, followed by flight training in the aircraft or FSTD.

Recurrent Training

Recurrent training will form part of the Operators OPC and will include pre-flight procedures, and a minimum of one PBN approach with associated navigation systems failure. Abnormal procedures may be covered by discussion during the OPC event. PBN approaches flown during the OPC shall be recorded on the OPC report Form GAL101 (a, b or c as applicable to phase).

2.1.12.1 Syllabus for PBN Training

Ground Training

This course is designed to comply with the knowledge requirements addressed in ICAO PBN Manual (Doc 9613) for PBN procedures associated with the airspace through which the flight is to take place and any required PBN or RNAV terminal procedures (including RNAV SIDs and STARs) and approaches.

The course concentrates on important published en-route, arrival, approach and departure procedures requiring RNP capabilities. Limitations on equipment that preclude safe execution of these procedures are covered as well as ATC procedures and phraseology.

The course may be instructor led, presented through electronic media, handouts or via Computer Based Training. Satisfactory completion of the online courses provided by Flyco will be accepted for this purpose. Pilots should refer also to their Operations manual Part B for aircraft-specific systems operation and SOP.

2.1.12.2 Training for PBN Procedures - General

1. PBN Airspace concept and specifications
2. Theory of PBN procedures for en-route, terminal and approach facilities and procedures
3. The meaning of PBN, RNAV, RNP, RNP APCH, RAIM and ANP
4. Values of RNP appropriate for different phases of flight
5. Limitations of PBN
6. GPS concepts and limitations.
7. Charting, database and avionics issues (waypoint naming, depiction concepts, fly-by and fly-over waypoints).
8. Use of R-NAV equipment (verification and sensor management, tactically modifying the flight plan, addressing discontinuities, entering associated data such as wind / attitude or speed constraints / vertical profile or vertical speed) R/T phraseology for RNAV and systems failures.
9. Cross-checking of ANP during flight (use of ‘raw data’).
10. Navigation equipment required for operation in designated PBN airspace, PBN and RNAV equipment installation, airworthiness approval, limitations and MEL provisions.
11. Flight planning requirements
12. Chart database and avionic issues including RNAV path terminator concepts (use of ‘CF’ and ‘TF’ path terminators).
13. Use of RNAV equipment (retrieve a procedure from the database, briefing the procedure, comparison with the charted procedure, action if discrepancies are noted, use of autopilot / flight director / auto-throttle (if applicable) at different stages of the procedure and flight mode annunciations.
14. Methods to enable/disable navigation modes in compliance with RNP requirements.

15. Flying the procedure (use of lateral / vertical navigation mode and lateral / vertical control techniques).

16. Use of appropriate RT phraseology (RTF) pertaining to PBN operations.

17. Contingency procedures

18. Incident Reporting

19. Flight Scenario (Additional RNAV Knowledge/Training items for flight simulator type training / recurrent training)

2.1.12.3 Training for PBN Approach Procedures (RNP APCH)

Pre-flight Preparation

1. Different approach types (2D/3D, APV, LPV, LNAV/VNAV & LNAV)
2. Use of Baro-VNAV and WAAS/SBAS equipment
3. Applicability and use of temperature compensation
4. Aircraft equipment requirements for the expected approach(es)
5. Aircraft system installation, approval & limitations
6. Flight planning and use of GPS/FMS, system
7. Requirement for destination alternate(s)
8. On-board monitoring, (RAIM) prediction and alerting

In-Flight Procedures

1. Normal PBN approach procedures
2. Airspeed and bank angle limitations
3. Approach activation
4. Monitoring of RNP & ANP
5. Use of automation on approach
6. Calculation of approach minima
7. PBN Radiotelephony procedures (RTF)
8. Human factors and company operating procedures
9. Abnormal operations, system alerts warnings and failure modes
10. Contingency procedures including loss and termination on RNP capability
11. Abnormal and emergency procedures

Simulator Training should be commenced within one month of completion of the ground training.

2.1.12.4 Aircraft / Simulator PBN Flight Training

The simulator training covers the conduct of PBN-based procedures in the aircraft (or FSTD), and includes pre-flight, normal and contingency procedures for the safe completion of RNP terminal and approach operations.
Flight training will include, as a minimum, PBN terminal procedures and at least 3 RNAV/PBN approaches including abnormal indications and navigation systems failure.

Evidence of successful completion of the initial PBN training course provided by Flight Safety International or CAE will be accepted for the purposes of this requirement.

2.1.13 Route and Area Competence Training

1. Prior to being assigned as Commander, pilots shall undergo training to ensure that they have obtained adequate knowledge of the route to be flown and of the aerodromes (including alternates), facilities and procedures to be used.

2. ORO.FC.105 states: (the commander shall have) knowledge of the route or area to be flown and of the aerodromes, including alternate aerodromes, facilities and procedures to be used.

3. In the case of commercial operations, the commander shall have had initial familiarisation training of the route or area to be flown including the aerodromes and facilities to be used.

4. The regions of the world have been grouped into 7 regions including the requirements to meet RVSM airspace rules. These 7 regions are detailed at Table 1 below.

European Airspace

5. Knowledge of European operations will be demonstrated at each LPC for every pilot engaged in the Gama phased recurrent programme by including at least one European airports pairing at every annual recurrent LPC event or, where applicable, during line check with an LTC.

6. Knowledge or recent experience of European operations for freelance pilots not engaged in the Gama phased recurrent programme will be checked and, if necessary, the pilot will be subject to supervised operating experience with another qualified commander within European airspace, prior to release as commander of Gama aircraft in ECAC airspace.

Other Regions

7. For the purposes of route and area competence in other regions of the world, each aircraft type is allocated specified regions for which all commanders on that type should be qualified. The matrix at Table 1 specifies the on-line courses with Flyco, covering the regions listed at paragraph 6. The Flyco online courses are approved by the company for this purpose.

8. Commanders shall be qualified, either by recency, having flown within the region within the preceding 12 months, or by completion of the applicable Flyco online course within the preceding 12 months prior to departure to the applicable region. Commanders shall self-certify that they have met this requirement and are fully familiar with the route, area and aerodromes for the intended flight by signing the relevant section on the PDC form GAL227 prior to dispatch.

2.1.13.1 Designation of Route and Area Competency requirement for Commanders, by Fleet.

Table 1

	RVSM*	Russia	Africa. Mid-East	NAT HLA*. N. America/ Canada	Central/ S. America	China/ Far East	Other Oceanic	
GLEX	x	x	x	x	x	x	x	
G550	x	x	x	x	x	x	x	
G650	x	x	x	x	x	x	x	
B73BBJ	x	x	x	x	x	x	x	
CL6043	x	x	x	x				
CL605	x	x	x	x				
F2TH	x	x	x	x				
F7X	x	x	x	x				
C56X	x	x	x					
HS125	x	x	x					
C510	x							
BE30	x							
BE20								

**RVSM & NAT HLA online training to be completed every 24 months where applicable.*

2.1.13.2 Route & Area Competence Training Syllabus

The following is the flight crew training syllabus to operate in the applicable airspace. Refer also to operations Manual Part C Section 10 of the Operations Manual and Jeppesen Airway Manuals Enroute section.

2.1.14 RVSM, NAT HLA & Other MNPS Airspace

Prior to flight in RVSM, NAT HLA & other MNPS airspace, aircrews will be provided online by Flyco,with training covering the following subjects and their training records annotated accordingly:

- Terrain and minimum safe altitudes;
- Seasonal meteorological conditions;
- Meteorological, communication and air traffic facilities, services and procedures;
- Navigational facilities associated with the route along which the flight is to take place;
- RVSM procedures general and as applicable to aircraft type and operations
- NAT HLA and other oceanic procedures as applicable to aircraft type and operations
- CPDLC procedures as applicable to aircraft type and operations
- Overflight and Landing Permits
- NOTAMS
- Flight Planning/ Plotting Charts

- Track Messages
- Fuel planning and availability
- The knowledge and understanding of any ATC phraseology applicable to each area of operation;
- The knowledge and understanding of any published contingency procedures applicable to each area of operation including track offset and reporting.
- Minimum equipment requirements for safe flight and use of the MEL
- The reinforcement of cockpit drills to ensure that ATC clearances are fully understood, correctly complied with and queried should the need arise
- Information on the use and limitations of standby altimeters
- Visual perception of other aircraft at 300m (1000') planned separation - differences at altitudes where previously a 2000 ft separation was applied
- Characteristics of aircraft altitude capture and alerting systems
- Any additional aeroplane operating restrictions applicable to an RVSM environment
- Aeroplane and/or autopilot handling considerations if turbulence is experienced and the requirement to alert ATC if such an encounter prevents compliance with ATC procedures and clearance
- TCAS / ACAS operating characteristics and the need to ensure that currently acceptable rates of climb or descent may need to be modified whilst changing flight level, particularly when entering or flying within RVSM airspace;
- The requirement for any aeroplane/operator combination to have been granted State approval for RVSM operations and that this approval may have to be in addition to any other approvals required for operation in given airspace
- Relationship between the aeroplane's altimetry, automatic altitude control and transponder systems in normal and abnormal conditions.
- State and ATS restrictions applicable to the airspace environment
- Transponder procedures
- Use of FMS / LRNS equipment
- Aircraft altimetry requirements and procedures
- Aeroplane altimetry, automatic altitude control and transponder requirements in normal and abnormal conditions.
- Relationships between the aeroplane's altimetry, automatic altitude control and transponder systems in normal and abnormal operations
- Emergency and ATC procedures associated with the route along which the flight is to take place
- Loss of communication procedures
- Search and rescue procedures

For recurrent training and validation requirements see Operations Manual Part D Sections 1.1.7 and 2.1.13.

2.1.15 Single Pilot Operation

From time to time the operator utilises single pilot operation for the purpose of positioning aeroplanes NCAT, where the aeroplane is certified for single pilot operation.

(Refer to Ops Manual Part A, section 8.7 for operator's policy relating to Non-Commercial Air Transport (NCAT) flights).

All pilots are trained in the multi-pilot role. Those pilots required to operate single-pilot aircraft in the single pilot role will be trained and checked in both roles. Training and checking for the single-pilot proficiency requirements, are outlined in the GAL101a series of forms, Section 3 (Single Pilot Proficiency Check).

2.1.16 Command Training

Minimum Experience Level

For nomination as commander the minimum experience level prescribed in Part D 1.1.9 must be met.

For multi-crew operations, the pilot must complete the command course prescribed in this appendix.

Following satisfactory completion of a Command Course, the pilot will be considered 'inexperienced crew' in accordance with OMA 4.2 & 4.2.3 and the applicable restrictions will apply.

The Command Course shall include at least the following:

a. training in an FSTD, or the aeroplane where no FSTD is available, which includes line-oriented flight training (LOFT) and/or flight training;
b. the operator proficiency check, operating as commander;
c. command responsibilities training;
d. line training as commander under supervision, for a minimum of:
e. 10 flight sectors, in the case of aeroplanes; and
f. completion of a line check as commander and demonstration of adequate knowledge of
g. the route or area to be flown and of the aerodromes, including alternate aerodromes,
h. facilities and procedures to be used; and
i. crew resource management training.

2.1.16.1 Command Course - General

Command Conversion Ground School

a.	Technical refresher course	2 days
b.	Simulator Training	3 times 2 hours detail
c.	Flight times limitations and paperwork	Up to 2 hours
d.	SEP (Update to include commanders duties)	Up to 2 hours
e.	TECH LOG & MEL	Up to 1 hour
f.	Operations Manual (Discussion)	Up to 2 hour
g.	Command responsibilities & Accounts	Up to 1 hour

Technical Refresher

Each Flight Crew member will undertake a three-year rolling programme of study covering different topics each year.

At the end of the sessions the candidate will sit an open book-book exam. If he has answered any question incorrectly they will be advised at the time and given the opportunity to research the topic again. A result sheet is kept in the office.

Simulator Session 1

General

The following profiles are examples of the sort of training sortie to be conducted. The prime responsibility is: assess, and train where necessary, the trainee's knowledge, skill and behaviour when in command of potentially critical situations. These profiles may be followed directly or be varied by the training commander to suit the individual trainee and their demonstrated performance. The first sortie will be a handling exercise to familiarise the trainee with the operation of the aircraft from the LHS. This will cover a range of normal and non-normal profiles and events where the trainee will be required to show their command skills.

Profile Day 1 Sortie 1 to Include: 4 Hour Simulator Detail

a. Full engine-start with start failure
b. Cross wind take-off
c. Position freeze, Steep turns, stall recovery techniques
d. STAR approach ILS to GA
e. Non-precision approach crosswind to land
f. Rejected take-off (RTO)
g. Engine Failure at VI (EFATO)
h. Single Engine ILS to GA (SE)
i. SE Visual circuit
j. SE Landing
k. Fire on short finals
l. Passenger evacuation

The Operators forms GAL122 (General Training Report), and GAL150/151 (feedback forms) shall be used as a training record of these training sorties.

Simulator Session 2

This session will comprise different route with an element of LOFT exercise, and will require the trainee to practice their command, decision making and other CRM skills. By the end of this sortie trainees should have covered all the essential normal and non-normal profiles required of the LPC.

Profile Sortie 2 to Include: 4 Hour Simulator Detail

a) Pre-flight and start by instructor
b) Change Runway during taxi out
c) RT Failure at 3000 ft
d) GPWS
e) Climb flight level 210-370 depending on aircraft type
f) Air system non-normal
g) Rapid depressurisation

h) Emergency descent
i) Divert
j) ILS approach
k) Go Around
l) Divert to another airport Non-precision approach circle to land

Time Depending

Practice Engine failure on take-off at 100ft IMC
Engine failure on approach below 500ft IMC
Single engine landings

Simulator Session 3

Complete the operators Phase A/B/C recurrent training LPC as commander in the Left Seat. This check should also include the Commander's Right Seat OPC elements.

The Operators OPC form GAL101A/B/C (as applicable to current phase), feedback forms GAL150 and GAL151 as required should be used as a record of sortie 3.

2.1.16.2 **Line Flying under Supervision**

A minimum of 10 line training sectors and a final line check. The operators GAL122 and GAL119 will be used as a training record of General Training report and Line Training. Final Line Check will be conducted and recorded in accordance with paragraph 2.1.9.2.

Aircraft Command training (where no simulator training device available)

TBA

2.1.16.3 **Command Upgrade Training Records**

Following satisfactory completion of each phase of the command upgrade training, including satisfactory Line Check, the course completion certificate *(FRM-TR-1503)* must be signed by the instructor completing the training. Upon completion of all elements of the training and a satisfactory Line Check the LTC is to complete the Inexperienced Crew *(FRM-TR-1060)* Statement of Restriction.

2.1.17 Differences between Flight Simulator Training Device & the Operator's Aeroplanes

OMD Appendix V details the differences between simulator and the operator's aeroplanes. Refer to Q-Pulse using the search command OMD-App V. *(Ref: ORO.FC.145d)*

The operator monitors changes to the third-party suppliers' simulators through their approved compliance monitoring program. *(see GAL152a/152b Third Party Training Provider Audit form) (ORO.FC.145e)*

2.1.18 Airborne Collision Avoidance System (ACAS)

(CAT.OP.MPA.295 refers)

The Operator has established operational procedures and a training program to cover ACAS when installed and serviceable. The training will be in accordance with Commission Regulations (EU) No: 1332/2011 (I)

2.1.18.1 Training Syllabus

Initial Training

In accordance with manufactures training syllabus CBT, questions/ answers followed by simulator training scenarios to ensure the crews academic and practical knowledge is suitable.

This training should typically be conducted in the classroom environment. The knowledge demonstrations specified in this section may be completed through the successful completion of written tests or through providing correct response to non-real-time computer-based training (CBT) questions followed by simulator scenarios.

ACAS academic initial and recurrent training
Scenario training in the simulator in the form of LOFT rather than line orientation training should be used to ensure crew members maintain appropriate knowledge and skills to deal with any ACAS event.

ACAS recurrent will be integrated into and/or conducted in conjunction with other established recurrent training programmes.
The flight crew members undergoing manoeuver training items should be assessed in a full flight simulator equipped with ACAS display and controls similar in appearance and operation to those in the aircraft the flight crew will fly and the results assessed by a qualified instructor/examiner

The recurrent and Phase training programme will cover these subjects over a three year period *(Refer to OMD Appendix A for details of the recurrent training programme).*

Syllabus of Modules for Initial / Recurrent Training

Phase	Training module	Validity *(Months)*	Module Ref.
Assessment	knowledge of how ACAS functions	Once only for type to be flown	Initial training
Ground Training	Operational procedure	36	Recurrent training
Simulator Training	Practical operating procedures and SOP's	12	Recurrent training

Essential Training Items and Objectives

Phase	Training Module	Module Reference
Assessment	To demonstrate knowledge of how ACAS functions	Initial training
Ground Training	ACAS interrogation with other transponder-equipped aircraft within normal operating range (Surveillance)	Initial training
Ground Training	ACAS interrogation with other transponder-equipped aircraft within normal operating range (Collision avoidance)	Initial training
Ground Training	Mythology used by ACAS to issue TA's and RA's	Initial training
Ground Training	ACAS limitations awareness.	Initial training
Ground Training	ACAS inhibits conditions under which certain functions of ACAS are inhibited.	Initial training
Ground Training	Operational procedure, interpret the information presented by the ACAS.	Initial training
Ground Training Simulator Training	Use of controls and demonstrate the proper use of the controls.	Initial training and recurrent
Ground Training Simulator Training	Display interpretation, crews to demonstrate the ability to properly interoperate information displayed by ACAS.	Initial training and recurrent
	Use of TA only mode, reasons for using TA mode only.	Initial training
Ground Training Simulator Training	Crew coordination, how to handle ACAS advisory, task sharing, expected call outs and communications with ATC. (Phraseology (ICAO PANS-OPS PANS-ATM and ICAO Annex 2).	Initial training and recurrent
Ground Training	Verbal reporting, when an aircraft manoeuvred to deviate from an ATC clearance or when ATC issue instructions that, if followed would cause the crew to manoeuvre contrary to an RA with which they are complying.	Initial training
ACAS Manoeuvring Training		
Simulator Training	Flight crew to demonstrate ability to use ACAS display information to properly respond to TA's and RA's. including function test	Initial training and recurrent
Simulator Training	The scenarios should include in the manoeuvring training, corrective RA's; initial prevention RA's, maintain rate RA's, altitude crossing RA's increase rate RA's, RA reversals and multiple aircraft encounters.	Initial training and recurrent

Simulator Training	The consequences of failure to respond correctly should be demonstrated.	Initial training
Simulator Training	**TA** response, to verify that crews properly interprets and responds to TA's. Proper division task sharing of responsibilities between the Pilot Flying (PF) and Pilot Monitoring (PM)	Initial training and recurrent
Simulator Training	**RA** response, to verify that crews properly interprets and responds to TA's. division task sharing of responsibilities between the Pilot Flying (PF) and Pilot Monitoring (PM)	Initial training and recurrent
Simulator Training	Licence Skills Test (LST) Licence Proficiency Check (LPC) Operators proficiency check (OPC)	Initial training
Simulator Training	Licence Proficiency Check (LPC) Operators proficiency check (OPC)	Recurrent training

2.1.19 Electronic Flight Bag (EFB) Training Syllabus

(EASA AMC 20-25: Use of an Electronic Flight Bag – Portable Refers)
The Operator has established operational procedures and a training to cover EFB. The training will be in accordance with Gama's EFB approval

2.1.19.1 Electronic Flight Bag (EFB) Training Program

Initial Training

In accordance with Gama's EFB approval, all crews are required to attend a classroom 'ground training' course to ensure the crew's academic and practical knowledge is suitable.

This training should typically be conducted in the classroom environment. The requisite knowledge may be completed through a verbal assessment by the instructor or LTC.

On satisfactory completion of the ground training, the instructor must complete and sign Section 1 of form GAL 471 and hand it to the trainee in preparation for Initial Operating Experience (IOE). The EFB ground training phase must be completed and signed off prior to the first line flying sector.

2.1.19.2 EFB Initial Operating Experience (IOE)

The crew members will complete a minimum of five flight sectors using the EFB to ensure that they are competent with the day to day operation of the iPad and associated software, during which time paper backup charts must be carried. If one crew member on these flights is EFB current, the paper chart requirement is waived.
On satisfactory completion of the IOE sectors, the LTC or aircraft Commander must complete and sign Section 2 of form GAL 471 and pass it to the trainee for signature before submitting to Crew Control.

Recurrent Training

EFB recurrent training should be integrated into and/or conducted in conjunction with other established recurrent training programmes.

2.1.19.3 Use of Freelance Pilots

At least one pilot (the first pilot) must be fully trained in use of the EFB in accordance with OM Part D section 2.1.15 and associated references. Familiarisation for the second (freelance only) pilot may be supervised by the first pilot prior to dispatch of any company operations. This familiarisation must cover, as a minimum but shall not be limited to, all pre-flight functions and include M&B, runway analysis and TOLD card for departure, destination and alternate airports as well as use of the Jeppesen Mobile Flight Deck. Note: - This applies to freelance pilots in NCC operations only and does not apply to any pilot on AOC operations.

The GAL471 Flight Experience Record must be completed recording each of the first 5 sectors. When complete, the aircraft commander must complete Section 2 of the form GAL471 and pass it to the trainee for signature before submitting to Crew Control. The provisions of this policy continue to apply to any pilot until such time as they have completed the full company EFB training programme in accordance with this paragraph.

2.1.19.4 EFB Training Syllabus

Phase	Training Module
Ground Training	To understand the concept of replacing paper charts with electronic charts
Ground Training	Explain the basic operation of an iPad
Ground Training	To understand how to operate the Jeppesen Mobile Flight-Deck Application
Ground Training	To understand normal flight-deck procedures for using EFBs
Ground Training	To understand how to deal with equipment failures and contingencies
Ground Training	To understand correct Post-Flight and problem reporting procedures
Ground Training	To understand how to use the Airwatch Secure Content Module
Ground Training	To understand how to input W&B data and carry out a W&B calculation using APG
Ground Training	To understand how to carry out a take-off and landing performance calculation using APG
Ground Training	To understand how to update the I Pre-flight Application
Ground Training	To understand how to use the “Online” APG application
Assessment	Knowledge of EFB and associated software

Essential Training Items and Objectives

Phase	Training Module	Module Reference
Ground Training	Completion of the Gama EFB ground training course	Initial training

Line Training	Minimum five flight sectors IOE flown using the iPad EFB with paper chart backup (Completion of GAL477 Section 2 - EFB Flight Experience Record)	Initial training
Recurrent Training	The use of EFB's will be maintained and checked whilst under LPC/OPC and all line checks	6/12 months

The associated EFB manual is available on the Q-Pulse system titled:
Operations Manual – Electronic Flight Bag (EFB) - iPad Class 1

The Powerpoint presentation is available through the training department and can be found on the Gama "I" drive titled: ***"iPad EFB Training.ppx***"

2.1.20 Low Visibility Operations

Currently the Operator is approved for Low Visibility Take Off (LVTO) when flight crew are trained on appropriately equipped aircraft types. (For operating limitations refer to Operations Manual Part A section 8). Training in LVTO operations is detailed in the OMD Appendix A Phase Recurrent Training Programme and checked as part of the company OPC profile.

2.1.21 Steep Approach Training

(Refer to Appendix U – Steep Approach Training)

In accordance with *CAT.POL.A.245* a steep approach gradient greater than 4.5 degrees requires specific training. An example is London City (EGLC) which requires 5.5 degree approach.

General

The operator must conduct steep approach training in accordance with the appropriate AFM, which will state the maximum approved glideslope any other limitation, normal, ab-normal and emergency procedures for the steep approaches well as amendments to the field and performance data when using steep approach criteria.

For each aerodrome at which steep approach operations are to be conducted a CAT C brief in the OMC will be used.

Steep Approach Training is to be Conducted by the following Personnel:

1. Ground and refresher training – by a suitably qualified person nominated by the Head of Training or his appointed deputy.
2. Familiarisation training – by a suitably qualified person

The following syllabus must be completed for Initial / Recurrent Training for Steep Approach.

Initial Steep Approach Training shall be Conducted by suitably qualified:

1. TRI/CRI or TRE/CRE qualified on type or class as applicable.

2. SFE or SFI as applicable

For detailed training programme - refer to OMD Appendix U.

Familiarisation Flight - by suitably qualified person:

1. TRI/CRI or TRE/CRE qualified on type or class as applicable.
2. Type rated LTC

Ground Training / Refresher Training

The following will be Covered during Ground Training where Applicable:

1. Introduction to the AFM Supplement
2. Operating limitations
3. Weight and centre of gravity limitations
4. Performance limitations
5. Use of APG data or equivalent performance tool

Operating procedures
Performance

1. Standard performance conditions
2. Landing performance
3. Definitions
4. Use of steep approach and landing performance tables
5. APG performance tool usage.

Normal Procedures

1. Steep approach & landing procedures
2. Before intercepting the glide path
3. When intercepting the glide path
4. Final approach phase

Ab-normal Procedures

1. Single engine Go-Round during steep approach

Emergency Procedures

1. Engine failure during steep approach

Crew Resource Management (CRM)

1. CRM considerations
2. Workload management
3. Crew co-ordination
4. Decision making process

2.1.22 Use of Minimum Equipment List (MEL)

`General

All aircraft equipment is required to be serviceable when an aircraft is dispatched for flight. However, there is the possibility for redundancy of equipment without compromising safety.

The MEL does not include items such as wings, engines and landing gear that are always required, nor is equipment that is used for passenger convenience and entertainment

which when they are inoperative do not affect airworthiness. It is important to note that ANY ITEM WHICH IS RELATED TO THE AIRWORTHINESS OF THE AIRCRAFT AND WHICH IS NOT INCLUDED IN THE MEL IS ALWAYS REQUIRED TO BE OPERATIVE BEFORE A FLIGHT IS DISPATCHED**.** Likewise, Items required by Air Navigation Legislation, Additional Certification Requirements as appropriate, which are not listed, must be operative.

The MEL is for dispatch only and once the aircraft is in the air if any malfunction occurs then the action taken will be referred to in AFM and QRH procedures.

MEL's are 'Type' specific and reflect the Operators policy for safe operations. The MEL is based on the Competent Authority's approval and Manufacturers Master Minimum Equipment List requirements (MMEL).

The MEL document may be more restrictive than approved by the Competent Authority but must never be less restrictive than the MMEL.

Purpose of the MEL

The purpose of the MEL is to allow an aircraft to dispatch safely when repair or deficiency is not possible.

The MEL specifies the equipment that needs to be serviceable or partially serviceable. It states a period of time that the unserviceable component can be left before it must be repaired or replaced.

It is not the intention to use the time limits fully but to make every best endeavour to repair or replace the fault at the earliest opportunity without disruption to the flying programme.

MEL Application

Dispatch of the aircraft requires the acceptance of the aircraft Commander. When using the MEL, the fault has to be positively identified and isolated. The failure of the component and the effect to other systems has to be discussed and identified.

Multiple defects are only considered if they are totally separate items and can be managed with no compromise to safety.

When an aircraft is dispatched with a component failure then an entry in the Tech log must be made recording the MEL reference and repair category.

MEL Procedures

- Identify the failed component in the MEL using the ATA number System;
- Check if dispatch is allowed noting 'NUMBER REQUIRED' and 'REMARKS AND/OR EXCEPTIONS';
- Authorised persons comply with 'O' and 'M' procedures;
- Verify time limits remain valid for the duration of the flights remaining.

The Commander must ensure that the defect is 'Deferred' and transferred to the Deferred Defects Record. The Commander or an 'Approved Maintenance Person' must put his signature in the 'Sign and Date' column.

The reference number in the Deferred Defects Record should be noted beside the 'Deferred' entry referred to above.

MEL Time Limits Extensions

The MEL time limits are 'A','B','C' and 'D':

- 'A' limit is specified in the MEL;
- 'B' limit is three (3) consecutive days;
- 'C' limit is ten (10) consecutive days;
- 'D' limit is one hundred and twenty days (120) consecutive days.

A procedure to allow operators to grant a onetime extension to defects in categories B, C and D is available.

The extension, known as a Repair Interval Extension (RIE), can be up to the same duration as that specified in the MEL, provided that the following two requirements are met.

1. The operator will manage RIE's in accordance with this procedure which states clearly specific duties and responsibilities for controlling extensions.

2. The Competent Authority will be notified within ten days of issuing the RIE using the form contained in the aircraft document folder.

2.1.23 Cold Weather and Winter Operations Training

In compliance with AMC1 CAT.OP.MPA.255 & AMC1.NCC.OP.190, a Winter Operations syllabus is available for pilots on the On-line Flyco E-learning portal. All crews should complete the 3 modules annually during the three months ending 30th November each year.

The three modules are:

1) 1: Cold Weather operations;
2) 2: De/Anti-icing Procedures;
3) 3: Operation from Contaminated Runways

These outline to crews:

a) how to recognise & mitigate the risk from encountering icing conditions
b) the effect of icing conditions on performance limits & margins
c) the use of inflight ice detection, anti-icing & de-icing in both normal & abnormal operation
d) the effect of different forms & intensities of ice accretion & mitigation strategies.

Furthermore, pilots will be exposed to operation in icing conditions – with normal & abnormal operation of de & anti icing equipment - as part of the Gama Phased Training cycle as outlined in OM part D Appendix A.

2.2 Cabin Crew

Not Applicable

2.3 Technical Crew

Not Applicable

2.4 Dangerous Goods Training

Operational personnel, including all flight crew members, will undergo training to highlight awareness of the risks and procedures associated with the carriage of dangerous goods.

ORO.GEN.110(j) – Approval of Training Programmes

Gama Aviation (UK) Ltd, Training Link Europe, Cargo Training International, Training Team and TAG Global Training hold approval for training programmes in the carriage of dangerous goods by air in accordance with ORO.GEN.110(j). This training is identified and described in the following text. Any substantive changes to this training (or proposals for sourcing training from an alternative external company) must be submitted to the Dangerous Goods Office of the CAA for the training approval to remain valid.

General Requirements Applicable to Dangerous Goods Training Programmes

To ensure that everyone involved is aware of their responsibilities in the transport of dangerous goods, no matter whether such goods are carried as cargo or are in the possession of passengers, training must be given so that an awareness is gained of the hazards associated with dangerous goods and how they should be dealt with in air transport. Personnel identified in the categories specified in Table 1-4 of the ICAO Technical Instructions (extract produced below) must be trained or training must be verified prior to the person performing any duty specified in Table 1-4.

Recurrent training must be provided within 24 months of previous training in addition to the remainder of the month of completion to ensure knowledge is current. If recurrent training is completed within the final three months of validity of previous training, the period of validity shall extend from the month of completion, until 24 months from the expiry month of that previous training.

As with other aviation qualifications an offence against the regulations will be committed if staff continue to work after their training qualification has expired.

A test to verify understanding must be undertaken following training and confirmation that the test has been completed satisfactorily is required. The pass mark for the test is 75%. In the event the candidate fails to achieve the required standard, additional training and a retake of the test will be required. The records of training must be retained by the employer for a minimum period of 36 months from the most recent training completion month and must be made available upon request to the employee or the appropriate national authority.

Syllabus of Training for Dangerous Goods
(Refer to OM Part A section 9 Dangerous Goods regulations)

Syllabus for Dangerous Goods – Awareness course

The following is the Dangerous Goods Awareness training programme for all Flight Crew – Course Content every 24 calendar Months:

NOTE: *Gama Aviation (UK) Ltd is approved for the **carriage** of dangerous goods. Pilots operating on commercial flights shall have a certificate of completion for the Operators' Course. DGS Awareness training is not sufficient for commercial operations for Gama.*

1. General Philosophy/ Applicability
2. Basis for The Legislation.
3. Definition of Dangerous Goods.
4. Limitations: Aircraft Equipment, Passengers' Baggage, Cargo.
5. Flight Crew notification
6. Recognition of undeclared dangerous goods
7. Passengers' and crew Baggage, (provision).
8. Classes of Dangerous Goods.
9. Classes of Dangerous Goods: Types of Hazard, Subsidiary Risks.
10. Classes of Dangerous Goods: Packing Groups, Compatibility Letter for Explosives.
11. Package Markings. Labelling of Packages.
12. Storage and Loading procedures
13. Typical Dangerous Goods list, Package – Markings and Labels.
14. Reporting of Dangerous Goods Accidents and Incidents.
15. Emergency Procedures.
16. Aircraft Types. Aircraft Equipment: Airworthiness Items, Operating Items.
17. Exclusions: Medical Aid for a Patient and Veterinary Aid / Humane Killer for an Animal.

Syllabus for the carriage of Dangerous Goods - Operators Course

The following is the training programme for the carriage of Dangerous Goods; Flight Crew – Course Content every 24 calendar Months:

(Refer to OM Part A section 9 Dangerous Goods regulations and IATA Dangerous Goods Regulation Table 1.5.a; *requirements for flight crew and crew member training conducted in acordance with the ICAO technical instructions*.

1. General philosophy
2. Period of Validity
3. Legislation and regulations
4. Provisions for passenger and crew
5. Recognition of undeclared dangerous goods
6. Limitations
7. Exemptions
8. Classification and identification
9. Labelling and markings
10. Storing and loading
11. Pilot's notification (NOTOCs (notice to Commanders).
12. Emergency procedures
13. Practical Exercise of in-flight dangerous goods spillages/clean up
14. Use of Emergency Response Guide
15. Reporting
16. Segregation of Incompatible Dangerous Goods.
17. Hidden Dangerous Goods.
18. Damaged Packages of Dangerous Goods.

Instructor Qualifications

Instructors of initial and recurrent dangerous goods training programmes must have adequate instructional skills and have successfully completed a dangerous goods training programme in the applicable category, or Category 6, prior to delivering such a dangerous goods training programme.

Instructors delivering initial and recurrent dangerous goods training programmes must at least every 24 months deliver such courses, or in the absence of this attend recurrent training.

Training is generally delivered internally by appropriately qualified Gama staff or contracted to Gama approved training providers holding UK Civil Aviation Authority approval for the instruction of Dangerous Goods by Air Regulations.

Further information concerning training can be found in CAP 483 *Training in the Safe Transport of Dangerous Goods by Air (Part A)*.

2.4.1 Security

Operational Personnel, including all Flight crew members, will undergo training to highlight the importance of responsibility and vigilance with regard to aircraft security.

Ground Crew - Refer to the Operations Procedures and Training Manual GAL/GOP

Syllabus for Security Awareness Training

Initial & Recurrent Security Training (every 12 months)

The following is the Security Awareness training programme for all Flight Crew – Course Content every 12 calendar months:

1. CAA Security Organisation and Responsibility.
2. Personnel Security.
3. Document Security.
4. Computer Security.
5. Disclosure of Official Information.
6. Physical Security.
7. Crime Prevention.
8. Counter Terrorism.
9. Security Education.
10. Reporting of Security Incidents.

Training is completed by approved third party training providers or 'in house' with the Operator's Competent Authority's approved EASA Security Trainer. All Flight Crew members will be scheduled to attend annually and a certificate will be provided at the end of the course.

Initial Security Training Syllabus Modules

1. The threat to aviation
2. International & National Objectives of Aviation Security.
3. Response to Security Incidents & Threat Assessments.
4. Legal Powers.
5. Maintaining Effective Security
6. General Security Awareness
7. Airport Security & procedures for all Flight Crew
8. Recog of Firearms, explosives and dangerous goods
9. Searching and Checking Aircraft
10. Protecting Aircraft
11. Hi-jack countermeasures
12. Airline and Government response to hi-jack
13. Hi-jack, police objectives and procedures
14. Flight Crew response to a hi-jack
15. Emergency procedures in the air
16. Emergency procedures on the ground
17. Handling the media and post-event de-briefing

Operators Refresher Training Syllabus, Flight Crew/Flight Attendants is as follows:

1. Current Threat Assessment.
2. Review of recent incidents/ lessons to be learned.
3. Government Advice.
4. Reminders of the Operators SEP's, manual amendments etc.
5. Update of Initial training course as appropriate.

2.5 Operations Personnel – Excluding Crew Members

2.5.1 Ground Staff Training

The Operator will provide training for ground staff directly involved with flight operations. The following points should be covered:

- Aviation Security;
- Knowledge of dangerous goods awareness and the carriage thereof;
- Management of passengers and handling agents;
- The use of aeronautical reference materials and office equipment;
- Differences of aircraft types;
- Aircraft Performance and loading;
- Flight time limitations.
- CRM where appropriate
- Aircrew Qualifications

These procedures are to be reviewed each year. Flight Operations Personnel will have a performance review on the above procedures. This will take place annually and a record will be kept with the Ground Operations Manager and review dates will be monitored on Airops.

Refer to the Operations Procedures and Training Manual GAL/GOP

3 Procedures

3.1 Procedures for Training and Checking

(Please also see Appendix A)

The following guidance is for ALL pilots when operating an aircraft under Gama Aviation's AOC for the purpose of training and checking. It details items of the scope of emergency and abnormal conditions that can be simulated under every phase of a training/checking flight. Fleet differences may mean certain items cannot be conducted in the aircraft therefore only available under FSTD simulation.

3.1.1 Simulated / Practice Engine Failure

Simulating engine failure during / after take-off above V1, in aeroplanes.

In aeroplanes not certified as Transport category or Commuter category aeroplanes, engine failure must be simulated in VMC at an IAS of not less than V2 (or take-off safety speed as applicable) and by reduction of power at a minimum height of 500' agl. When in IMC the engine failure shall not be simulated before reaching a height of at least 800' agl.

In aeroplanes certified as Transport or Commuter category aeroplanes or having the same performance as a transport or commuter category aeroplane regarding take off/climb performance at MTOM, the engine failure may be simulated shortly after reaching V2 and at a safe height allowing for potential handling error by the PF and, in any event at height of not less than 400'.

Minimum Shut-down Heights - Propeller Aircraft

The minimum height at which an engine may be shutdown for the purpose of flight training and testing is 3,000 feet AGL. This minimum height has been calculated by taking into account height losses that are likely to occur following failure of the other engine and prior to the restoration of power from the engine which has been shut down.

Below 3,000 feet AGL engine failure may be simulated by throttling back the "failed" engine and setting the power to simulate the same drag as a feathered propeller (refer to aircraft manual for "Zero Thrust").

Most feathering propellers fitted to light twin-engine aircraft are designed in such a way that it is not possible to feather the blades below 1000 RPM. In the event of an engine failure caused by a major mechanical fault the rate of deceleration of the engine can be rapid and it is thus imperative that the pilot takes immediate action to feather the propeller before the RPM falls below 1000 RPM.

Minimum Shut-down Heights - Jet Aeroplanes

The minimum height at which an engine may be shut-down for the purpose of flight training and testing is 8,000 feet AGL.

Below 8,000 feet AGL engine failure may be simulated by throttling back the "failed" engine to idling rpm.

Above 8,000 feet AGL and a maximum of 15,000 feet AGL an engine may only be shut-down provided the training is undertaken in daylight, clear of cloud, with adequate fuel reserves and within 25 nm of an airfield with a dry runway adequate for a visual single engine landing in the event of not being able to relight the engine.

Operative Calls (Practice engine emergencies – and simulated engine emergencies)

At or above the minimum shut-down heights the operative call is "Practice" engine emergency. The Pilot Flying (PF) will then execute 'actual drills' appropriate to that emergency.

Below the minimum shut-down heights the operative call is "Simulated" engine emergency. The Pilot Flying (PF) must then only execute 'touch drills' appropriate to that emergency.

Procedures for 'Touch and Go Landings'

Refer to Appendix T

Simulating In-flight Situations

The Operator will ensure when training on the actual aircraft in flight, that no passengers will be carried during simulated emergency or abnormal situations and the simulation of instrument flight conditions, unless these passengers are associated with the specific training.

The simulation of instrument flying conditions for the purpose of training and testing will be achieved by obscuring the PF forward vision, by means of an approved screen, through an arc of 25° either side of the centre.

Weather Minima

Training for instrument approach with one engine inoperative (OEI) presents an increased risk of handling error, especially in the event of a go-around. To help mitigate this additional risk & to assist the Training Captain should intervention be required, the following restrictions will apply:

When conducting OEI training for 3D or 2D instrument approaches in an aeroplane, regardless of intention to land or go-around, cloud ceiling must be reported at not less than 200' above the published minima for the approach being flown. Likewise, visibility must be reported not less than 2km greater than the minimum published for the approach being flown.

3.2 Failure to Achieve Required Standards

If at any stage of training, or as a result of a test, it is evident that the pilot has not reached the necessary standards, the appropriate case and circumstances should be referred back to the operators Head of Training for a decision on whether or not further training should be given in line with our company policy.

Pass/Fail Criteria (MPA & SPHPCA only)

A complete retest is only required if more than 5 items are failed. An item can be repeated at the discretion of the examiner.

All repeated sections must be annotated on the part approved forms; if a repeat is failed, this becomes a failure at first attempt. A further repeat may not be attempted, until every item of the check is completed.

Applicants who fail to achieve a pass in all sections of a proficiency check before the expiry date of a class or type rating shall not exercise the privileges of that rating until a pass in the proficiency check has been achieved. FC.740A (c)

If further training is required, then refer to the note below:

In accordance with Part FCL an Approved Training Organisation (ATO) shall determine and deliver the required refresher/remedial training prior to the applicant reattempting the skill test, proficiency check or assessment of competence.

The applicant must provide evidence of this training to the examiner who conducts the next test, check or assessment of competence.

Specific minimum training may be recommended by the Examiner.

3.3 Abnormal or Emergency Situations

Simulated abnormal situations in flight (CAT.OP.MPA.275)

The operator shall ensure that when carrying passengers or cargo the following are not simulated:

a) abnormal or emergency situations that require the application of abnormal or emergency procedures; or
b) flight in IMC by artificial means.

OPC's/LPC's and Instrument Rating Revalidations tests should be carried out in total using an approved flight simulator, or on specially detailed training flights.

OPC's/LPC's and Instrument rating renewals will require assessment by an Approved Training Organisation (ATO) prior to conducting the test.

Abnormal or emergency procedures training requiring the application of part or all of abnormal or emergency procedures and simulation of Instrument Meteorological Conditions by artificial means, are not to be undertaken during flights for the purpose of Commercial Air Transport.

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Section 4 – Documentation and Storage

4.1 General

4.1.1 Responsibility for the Provision of Resources

The Head of Training or his deputy will be responsible for determining the syllabi, contents, and time scales for all training courses. He will ensure that sufficient ground training courses and flying training programmes are arranged to accommodate planned operations. He will also be responsible for ensuring that sufficient training and checking staffs are available to meet the training requirements.

4.1.2 Record Keeping

In accordance with *ORO.MLR.115 Record-keeping* the following documents will be stored in Q-Pulse / AirOps computer system for the period stated:

a) The records of the activities referred to in ORO.GEN.200. Management System shall be stored for at least five years.
b) OFP, NOTAM and AIS information, Mass and Balance documentation, Notification of special loads, Journey Logs and flight reports recording details of any special occurrence will be kept for 3 months.
c) Personnel records shall be stored for the periods indicated below:

Flight crew licence and cabin crew attestation:	**As long as the crew member is exercising the privileges of the licence or attestation for the aircraft operator:**
Crew member training, checking and qualifications	5 years
Records on crew member recent experience	15 months
Crew member route and aerodrome/task and area competence, as appropriate	3 years
Dangerous goods training, as appropriate	3 years
Training/qualification records of other personnel for whom a training programme is required	Last 2 training records

4.1.3 The Maintenance of Records

The Head of Training and the Training establishment will be responsible for maintaining a record of the expiry dates of the following checks/tests/training:

- Operator Proficiency check;
- Line check;
- Annual Emergency and Safety Equipment check;

- Triennial Emergency and Safety Equipment check;
- CRM training;
- Ground and Refresher training;
- Licence Proficiency Checks;
- Instrument Rating Revalidation/Renewal;
- Base Training Initial Type Rating
- Steep approaches;
- RVSM & NAT HLA

And if future Operations and aircraft warrant it the following:

- ETOPS;
- AWO Category II/III;
- (Other)

4.1.4 Advance Notification of Crew Check Expiry

The Head of Training and/or a member of the Training establishment will notify the Crew Rostering Department and the flight crew concerned sufficiently in advance of the expiry of any check/test/training.

4.1.5 Management of Completed Training Forms

Once a check or test has been completed, the authorised person conducting the check or test should forward the completed forms to the Head of Training and/or a member of the Training Department.

4.1.6 Checking of completed Training Forms

The Head of Training and/or a member of the Training Department is to ensure that the forms have been completed correctly and are retained on the individual flight crew member's file. Copies of all completed records shall be made available to the individual crew member on request.

4.2 Training Records and Checking Forms

(Refer to: GAL Crew Control Procedures Manual for the crew records admin procedures).

4.2.1 Company Training Forms

Refer to Q Pulse for all operator current and approved Documents.

4.2.2 Training Certificates

- Wet Drills Certificate;
- First Aid Certificate;
- Health, Safety and Quality Certificate;
- Fire Training Certificate.
- CRM - Modular Training;

- Dangerous Goods and Security Training;
- Record of Flight/Simulator Training - Cat C;
- RVSM & NAT HLA Training
- Winter Operations Training;
- Steep Approach Authorisation;
- CRM Trainer's Qualification.

NOTE: Copies of the training certificates are held electronically on Q-Pulse and AirOPs.

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