



Bhutan Civil Aviation Requirements

Authority Requirements for Air Operations (BCAR-ARO)

Initial Issue
(October 2021)

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Bhutan Civil Aviation Authority
Royal Government Of Bhutan
Paro : Bhutan



Foreword

The Bhutan Civil Aviation Authority is pleased to issue Bhutan Civil Aviation Requirements- Authority Requirements (BCAR-ARO) initial issue establishing technical requirements and the administrative procedures to be fulfilled by the BCAA for the implementation and enforcement of Civil Aviation Act of Bhutan 2016 and rules and regulations regarding civil air operations.

These requirements have been developed under the South Asian Regional Initiatives (SARI OPS) to harmonize the air operations requirements in the region.

This BCAR-ARO shall supersede the air operations rules and regulations issued earlier and shall come into force from 01 August 2022.

Head of the Authority
Bhutan Civil Aviation Authority

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BCAR.ARO.GEN.005 Scope

This BCAR establishes requirements for the administration and management system to be fulfilled by the BCAA for the implementation and enforcement of Civil Aviation Act of Bhutan 2016 and its Regulations regarding civil aviation air operations.

SUBPART GEN: GENERAL REQUIREMENTS

SECTION I - GENERAL

BCAR.ARO.GEN.115 Oversight documentation

BCAA shall provide all legislative acts, standards, rules, technical publications and related documents to relevant personnel in order to allow them to perform their tasks and to discharge their responsibilities.

BCAR.ARO.GEN.135 Immediate reaction to a safety problem

- (a) BCAA shall implement a system to appropriately collect, analyse and disseminate safety information.
- (b) Not applicable
- (c) Upon receiving the information referred to in (a), BCAA shall take adequate measures to address the safety problem.
- (d) Measures taken under (c) shall immediately be notified to all persons or organisations, which need to comply with them.

SECTION II - MANAGEMENT

BCAR.ARO.GEN.200 Management system

- (a) BCAA shall establish and maintain a management system, including as a minimum:
 - (1) documented policies and procedures to describe its organisation, means and methods to achieve compliance with the Civil Aviation Act of Bhutan 2016 and rules and Regulations. The procedures shall be kept up to date and serve as the basic working documents within BCAA for all related tasks;
 - (2) a sufficient number of personnel to perform its tasks and discharge its responsibilities. Such personnel shall be qualified to perform their allocated tasks and have the necessary knowledge, experience, initial and recurrent training to ensure continuing competence. A system shall be in place to plan the availability of personnel, in order to ensure the proper completion of all tasks;
 - (3) adequate facilities and office accommodation to perform the allocated tasks;
 - (4) a function to monitor compliance of the management system with the relevant requirements and adequacy of the procedures including the establishment of an internal audit process and a safety risk management process. Compliance monitoring shall include a feedback system of audit findings to the senior management of BCAA to ensure implementation of corrective actions as necessary; and
 - (5) a person or group of persons, ultimately responsible to the senior management of BCAA for the compliance monitoring function.
- (b) BCAA shall, for each field of activity, including management system, appoint one or more persons with the overall responsibility for the management of the relevant task(s).
- (c) BCAA shall establish procedures for participation in a mutual exchange of all necessary information and assistance with other competent authorities concerned including on all findings raised and follow-up actions taken as a result of oversight of persons and organisations exercising activities in the territory of the Kingdom of Bhutan.
- (d) Not applicable

AMC1 BCAR.ARO.GEN.200(a) Management system

GENERAL

- (a) All of the following should be considered when deciding upon the required organisational structure:
 - (1) the number of certificates, attestations, authorisations and approvals to be issued;
 - (2) Reserved
 - (3) the number of certified or authorised persons and organisations exercising an activity within Bhutan, including persons or organisations certified or authorised by other competent authorities;
 - (4) the possible use of qualified entities and of resources of other competent authorities to fulfil the continuing oversight obligations;
 - (5) the level of civil aviation activity in terms of:

- (i) number and complexity of aircraft operated;
- (ii) size and complexity of Bhutan's aviation industry;
- (6) the potential growth of activities in the field of civil aviation.
- (b) The set-up of the organisational structure should ensure that the various tasks and obligations of the BCAA do not rely solely on individuals. A continuous and undisturbed fulfilment of these tasks and obligations of the BCAA should also be guaranteed in case of illness, accident or leave of individual employees.

GM1 BCAR.ARO.GEN.200(a) Management system

GENERAL

- (a) The BCAA should be organised in such a way that:
 - (1) there is specific and effective management authority in the conduct of all relevant activities;
 - (2) the functions and processes described in the applicable requirements and AMCs and Guidance Material (GM) may be properly implemented;
 - (3) the BCAA's organisation and operating procedures for the implementation of the applicable requirements are properly documented and applied;
 - (4) all BCAA personnel involved in the related activities are provided with training where necessary;
 - (5) specific and effective provision is made for the communication and interface as necessary with other States;
 - (6) all functions related to implementing the applicable requirements are adequately described; and
 - (7) should take into account the applicable State Safety Program (SSP) elements.
- (b) A general policy in respect of activities related to the applicable requirements should be developed, promoted and implemented by the manager at the highest appropriate level; for example the manager at the top of the functional area of the BCAA that is responsible for such activities.
- (c) Appropriate steps should be taken to ensure that the policy is known and understood by all personnel involved, and all necessary steps should be taken to implement and maintain the policy.
- (d) The general policy, whilst also satisfying additional national regulatory responsibilities, should in particular take into account:
 - (2) the provisions of the applicable Requirements and their AMCs and GM;
 - (3) the needs of industry; and
 - (4) the needs of the BCAA.
- (e) The policy should define specific objectives for key elements of the organisation and processes for implementing related activities, including the corresponding control procedures and the measurement of the achieved standard.

AMC1 BCAR.ARO.GEN.200(a)(1) Management system

DOCUMENTED POLICIES AND PROCEDURES

- (a) The BCAA should document its activities to comply with its applicable requirements.
- (b) The documented procedures should be established in a way that facilitates their use. They should be clearly identified, kept up-to-date and made readily available to all personnel involved in the related activities.
- (c) The documented procedures should cover, as a minimum, all of the following aspects:
 - (1) policy and objectives;
 - (2) organisational structure;
 - (3) responsibilities and associated authority;
 - (4) procedures and processes;
 - (5) internal and external interfaces;
 - (6) internal control procedures;
 - (7) training of personnel;
 - (8) cross-references to associated documents;
 - (9) assistance from other competent authorities or other Organization (where required).
- (d) It is likely that the information is held in more than one document or series of documents, and suitable cross-referencing should be provided. For example, organisational structure and job descriptions are not usually in the same documentation as the detailed working procedures. In such cases, it is recommended that the documented procedures include an index of cross-references to all such other related information, and the related documentation should be readily available when required.

AMC1 BCAR.ARO.GEN.200(a)(2) Management system

QUALIFICATION AND TRAINING — GENERAL

- (a) The BCAA should ensure appropriate and adequate training of its personnel to meet the standard that is considered necessary to perform the work. To ensure personnel remain qualified, arrangements should be made for initial and recurrent training as required.
- (b) The basic capability of the BCAA's personnel is a matter of recruitment and normal management functions in selection of personnel for particular duties. Moreover, the BCAA should provide training in the basic skills as required for those duties. However, to avoid differences in understanding and interpretation, all personnel should be provided with further training specifically related to the requirements and related AMCs and GM,
- (c) The BCAA may provide training through its own training organisation with trainers or through another training source.
- (d) When training is not provided through an internal training organisation, adequately experienced and qualified persons may act as trainers, provided their training skills have been assessed. If

required, an individual training plan should be established covering specific training skills. Records should be kept of such training and of the assessment, as appropriate.

AMC2 BCAR.ARO.GEN.200(a)(2) Management system

QUALIFICATION AND TRAINING — INSPECTORS

(a) Initial training programme:

The initial training programme for inspectors should include, as appropriate to their role, current knowledge, experience and skills in at least all of the following:

- (1) aviation legislation organisation and structure;
- (2) the Chicago Convention, relevant ICAO annexes and documents;
- (3) the applicable requirements and procedures;
- (4) management systems, including auditing, risk assessment and reporting techniques;
- (5) human factors principles;
- (6) rights and obligations of inspecting personnel of the competent authority;
- (7) 'on-the-job' training;
- (8) suitable technical training appropriate to the role and tasks of the inspector, in particular for those areas requiring approvals.

(b) Recurrent training programme:

The recurrent training programme should reflect, at least, changes in aviation legislation and industry. The programme should also cover the specific needs of the inspectors and the competent authority.

AMC3 BCAR.ARO.GEN.200(a)(2) Management system

QUALIFICATION AND TRAINING — CREW RESOURCE MANAGEMENT (CRM)

For the oversight of the operator's CRM training, the inspectors of the BCAA should be qualified and trained as follows:

(a) Qualification

To fulfil the qualification provisions, inspectors should:

- (1) have adequate knowledge of the relevant flight operations;
- (2) have adequate knowledge of human performance and limitations (HPL);
- (3) have completed initial CRM training;
- (4) have received additional training in the fields of group management, group dynamics and personal awareness; and
- (5) have experience in the assessment of the effectiveness of training programmes and management systems.

(b) Training

The training of inspectors should be both theoretical and practical, and should include:

- (1) in-depth knowledge of the CRM training elements as laid down in BCAR-ORO; and

- (2) specific skills for the oversight of the operator's CRM training including the assessment of non-technical skills using proper techniques and methodologies.

GM1 BCAR.ARO.GEN.200(a)(2) Management System

SUFFICIENT PERSONNEL

- (a) This GM on the determination of the required personnel is limited to the performance of certification, authorisation and oversight tasks, excluding personnel required to perform tasks subject to any national regulatory requirements.
- (b) The elements to be considered when determining required personnel and planning their availability may be divided into quantitative and qualitative elements:
 - (1) Quantitative elements:
 - (i) the estimated number of initial certificates to be issued;
 - (ii) the number of organisations certified by the competent authority;
 - (iii) the number of persons to whom the BCAA has issued a licence, certificate, rating, authorisation or attestation;
 - (iv) the estimated number of persons and organisations exercising their activity within the territory of Bhutan and established or residing in another Member State;
 - (v) Not applicable
 - (vi) the number of organisations holding a specialised operations authorisation issued by the BCAA.
 - (2) Qualitative elements:
 - (i) the size, nature and complexity of the activities of certified and authorised organisations (cf. AMC1 BCAR.ORO.GEN.200(b)), taking into account:
 - (a) privileges of the organisation;
 - (b) type of approval, scope of approval, multiple certification and authorisation
 - (c) possible certification to industry standards;
 - (d) types of aircraft/flight simulation training devices (FSTDs) operated;
 - (e) number of personnel; and
 - (f) organisational structure, existence of subsidiaries;
 - (ii) the safety priorities identified;
 - (iii) the results of past oversight activities, including audits, inspections and reviews, in terms of risks and regulatory compliance, taking into account:
 - (a) number and level of findings;
 - (b) timeframe for implementation of corrective actions; and
 - (c) maturity of management systems implemented by organisations and their ability to effectively manage safety risks, taking into account also information provided by other competent authorities related to activities in the territory of the Member States concerned; and
 - (iv) the size and complexity of Bhutan's aviation industry and the potential growth of activities in the field of civil aviation, which may be an indication of the number of

new applications and changes to existing certificates and authorisations to be expected.

- (c) Based on existing data from previous oversight planning cycles and taking into account the situation within Bhutan's aviation industry, the BCAA may estimate:
- (1) the standard working time required for processing applications for new certificates (for persons and organisations) and authorisations;
 - (2) the number of new declarations or changed declarations;
 - (3) the number of new certificates and authorisations to be issued for each planning period; and
 - (4) the number of changes to existing certificates and authorisations to be processed for each planning period.
- (d) In line with the BCAA's oversight policy, the following planning data should be determined specifically for each type of organisation certified by the BCAA as well as for declared organisations, including those being authorised:
- (1) standard number of audits to be performed per oversight planning cycle;
 - (2) standard duration of each audit;
 - (3) standard working time for audit preparation, on-site audit, reporting and follow-up, per inspector;
 - (4) standard number of ramp and unannounced inspections to be performed;
 - (5) standard duration of inspections, including preparation, reporting and follow-up, per inspector;
 - (6) minimum number and required qualification of inspectors for each audit/inspection.
- (e) Standard working time could be expressed either in working hours per inspector or in working days per inspector. All planning calculations should then be based on the same unit (hours or working days).
- (f) It is recommended to use a spreadsheet application to process data defined under (c) and (d), to assist in determining the total number of working hours/days per oversight planning cycle required for certification, authorisation, oversight and enforcement activities. This application could also serve as a basis for implementing a system for planning the availability of personnel.
- (g) For each type of organisation certified or high risk commercial specialised operation authorised by the BCAA, the number of working hours/days per planning period for each qualified inspector that may be allocated for certification, authorisation, oversight and enforcement activities should be determined, taking into account:
- (1) purely administrative tasks not directly related to oversight and certification/authorisation;
 - (2) training;
 - (3) participation in other projects;
 - (4) planned absence; and
 - (5) the need to include a reserve for unplanned tasks or unforeseeable events.
- (h) The determination of working time available for certification, authorisation, oversight and enforcement activities should also consider:
-

- (1) the possible use of qualified entities; and
 - (2) possible cooperation with other competent authorities for approvals or authorisations involving more than one Member State.
- (i) Based on the elements listed above, the BCAA should be able to:
- (1) monitor dates when audits and inspections are due and when they have been carried out;
 - (2) implement a system to plan the availability of personnel; and
 - (3) identify possible gaps between the number and qualification of personnel and the required volume of certification/authorisation and oversight.

Care should be taken to keep planning data up-to-date in line with changes in the underlying planning assumptions, with particular focus on risk-based oversight principles.

BCAR.ARO.GEN.205 Allocation of tasks to qualified entities

- (a) Tasks related to the initial certification, specialised operation authorisation or continuing oversight of persons or organizations subject to the Civil Aviation Act of Bhutan 2016 and its Regulations shall be allocated only to qualified entities. When allocating tasks, BCAA shall ensure that it has:
- (1) put a system in place to initially and continuously assess that the qualified entity complies with the applicable legislations. This system and the results of the assessments shall be documented.
 - (2) established a documented agreement with the qualified entity, approved by both parties at the appropriate management level, which clearly defines:
 - (i) the tasks to be performed;
 - (ii) the reports and records to be provided;
 - (iii) the technical conditions to be met in performing such tasks;
 - (iv) the related liability coverage; and
 - (v) the protection given to information acquired in carrying out such tasks.
- (b) BCAA shall ensure that the internal audit process and safety risk management process required by BCAR.ARO.GEN.200 (a) (4) covers all certification, authorisation or continuing oversight tasks performed on its behalf.

GM1 BCAR.ARO.GEN.205 Allocation of tasks to qualified entities

CERTIFICATION/AUTHORISATION TASKS

The tasks that may be performed by a qualified entity on behalf of the BCAA include those related to the initial certification, or specialised operations authorisation and continuing oversight of persons and organisations as defined in this requirements, with the exclusion of the issuance of certificates, authorisations, licences, ratings or approvals.

BCAR.ARO.GEN.210 Changes in the management system

- (a) BCAA shall have a system in place to identify changes that affect its capability to perform its tasks and discharge its responsibilities as defined in Civil Aviation Act of Bhutan 2016 and its Regulations. This system shall enable it to take action as appropriate to ensure that its management system remains adequate and effective.
- (b) Not applicable
- (c) Not applicable

BCAR.ARO.GEN.220 Record-keeping

- (a) BCAA shall establish a system of record-keeping providing for adequate storage, accessibility and reliable traceability of:
 - (1) the management system's documented policies and procedures;
 - (2) training, qualifications and authorisation of its personnel;
 - (3) the allocation of tasks, covering the elements required by BCAR.ARO.GEN.205 as well as the details of tasks allocated;
 - (4) certification processes and continuing oversight of certified organisations: and
 - (4a) Not applicable
 - (5) Not applicable
 - (6) details of training courses provided by certified organisations, and if applicable, records relating to FSTDs used for such training;
 - (7) oversight of persons and organisations exercising activities within Bhutan, but overseen, certified or authorised by another state;
 - (8) Not applicable
 - (9) Not applicable
 - (10) findings, corrective actions and date of action closure;
 - (11) enforcement measures taken; and
 - (12) safety information and follow-up measures.
 - (13) Not applicable
- (b) BCAA shall maintain a list of all organisation certificates for a period of 5 years.
- (c) All records shall be kept for the minimum period specified in this requirements. In the absence of such indication, records shall be kept for a minimum period of five years subject to applicable national data protection laws.

AMC1 BCAR.ARO.GEN.220(a) Record-keeping

GENERAL

- (a) The record-keeping system should ensure that all records are accessible whenever needed within a reasonable time. These records should be organised in a way that ensures traceability and retrievability throughout the required retention period.
- (b) Records should be kept in paper form or in electronic format or a combination of both media. Records stored on microfilm or optical disc form are also acceptable. The records should remain legible and accessible throughout the required retention period. The retention period starts when the record has been created.
- (c) Paper systems should use robust material, which can withstand normal handling and filing. Computer systems should have at least one backup system, which should be updated within 24 hours of any new entry. Computer systems should include safeguards against unauthorised alteration of data.
- (d) All computer hardware used to ensure data backup should be stored in a different location from that containing the working data and in an environment that ensures they remain in good condition. When hardware or software changes take place, special care should be taken that all necessary data continue to be accessible at least through the full period specified in the relevant Subpart or by default in BCAR.ARO.GEN.220 (c).

AMC1 BCAR.ARO.GEN.220(a)(1);(2);(3) Record-keeping

BCAA MANAGEMENT SYSTEM

Records related to the BCAA's management system should include, as a minimum and as applicable:

- (a) the documented policies and procedures;
- (b) the personnel files of BCAA personnel, with supporting documents related to training and qualifications;
- (c) the results of the BCAA's internal audit and safety risk management processes, including audit findings and corrective actions; and
- (d) the contract(s) established with qualified entities performing certification, authorisation or oversight tasks on behalf of the BCAA.

AMC1 BCAR.ARO.GEN.220(a)(4); Record-keeping

ORGANISATIONS

Records related to an organisation certified or operations authorised by or having declared its activity to the BCAA should include, as appropriate to the type of organisation:

- (a) the application for an organisation approval, a specialised operation authorisation or the declaration received;
- (b) the documentation based on which the approval or authorisation has been granted and any amendments to that documentation;

- (c) the organisation approval certificate or specialised operation authorisation, including any changes;
- (d) a copy of the continuing oversight programme listing the dates when audits are due and when such audits were carried out;
- (e) continuing oversight records, including all audit and inspection records;
- (f) copies of all relevant correspondence;
- (g) details of any exemption and enforcement actions;
- (h) any report from other competent authorities relating to the oversight of the organisation; and
- (i) a copy of any other document approved by the competent authority.

GM1 BCAR.ARO.GEN.220(a)(4) Record-keeping

ORGANISATIONS — DOCUMENTATION

Documentation to be kept as records in support of the approval includes the management system documentation, including any technical manuals, such as the operations manual, and training manual, that have been submitted with the initial application, and any amendments to these documents.

AMC1 BCAR.ARO.GEN.220(a)(7) Record-keeping

ACTIVITIES PERFORMED IN THE TERRITORY OF BHUTAN BY PERSONS OR ORGANISATIONS ESTABLISHED OR RESIDING IN ANOTHER ICAO CONTRACTING STATE

- (a) Records related to the oversight of activities performed in the territory of Bhutan by persons or organisations established or residing in another ICAO Contracting State should include, as a minimum:
 - (1) oversight records, including all audit and inspection records and related correspondence;
 - (2) copies of all relevant correspondence to exchange information with other competent authorities relating to the oversight of such persons/organisations;
 - (3) details of any enforcement measures and penalties; and
 - (4) any report from other competent authorities relating to the oversight of these persons/organisations, including any notification of evidence showing non-compliance with the applicable requirements.
- (b) Records should be kept by the BCAA having performed the audit or inspection and should be made available to other competent authorities at least in the following cases:
 - (1) serious incidents or accidents;
 - (2) findings through the oversight programme where organisations certified or authorised by another BCAA are involved, to determine the root cause;
 - (3) an organisation being certified, authorised or having approvals in several other States.
- (c) When records are requested by another competent authority, the reason for the request should be clearly stated.

- (d) The records can be made available by sending a copy or by allowing access to them for consultation.

GM1 BCAR.ARO.GEN.220 Record-keeping

GENERAL

Records are required to document results achieved or to provide evidence of activities performed. Records become factual when recorded. Therefore, they are not subject to version control. Even when a new record is produced covering the same issue, the previous record remains valid.

SECTION III - OVERSIGHT, CERTIFICATION AND ENFORCEMENT

BCAR.ARO.GEN.300 Oversight

- (a) BCAA shall verify:
 - (1) compliance with the requirements applicable to organisations or type of operations prior to the issue of a certificate, approval or authorization;
 - (2) continued compliance with the applicable requirements of organisations it has certified, and specialised operations it has authorised;
 - (3) Not applicable
 - (4) implementation of appropriate safety measures mandated by BCAA as defined in BCAR.ARO.GEN.135(c) and (d).
- (b) This verification shall:
 - (1) be supported by documentation specifically intended to provide personnel responsible for safety oversight with guidance to perform their functions;
 - (2) provide the persons and organisations concerned with the results of safety oversight activity;
 - (3) be based on audits and inspections, including ramp and unannounced inspections; and
 - (4) provide BCAA with the evidence needed in case further action is required, including the measures foreseen by BCAR.ARO.GEN.350 and BCAR.ARO.GEN.355.
- (c) The scope of oversight defined in (a) and (b) shall take into account the results of past oversight activities and the safety priorities.
- (d) Not applicable
- (e) Where the activity of a person or organisation involves more than one State, the authority responsible for the oversight under (a) may agree to have oversight tasks performed by the authority(ies) of the other State(s) where the activity takes place. Any person or organisation subject to such agreement shall be informed of its existence and of its scope.
- (f) BCAA shall collect and process any information deemed useful for oversight, including for ramp and unannounced inspections.

AMC1 BCAR.ARO.GEN.300(a);(b);(c) Oversight

GENERAL

- (a) The BCAA should assess the organisation and monitor its continued competence to conduct safe operations in compliance with the applicable requirements. The BCAA should ensure that accountability for assessing organisations is clearly defined. This accountability may be delegated or shared, in whole or in part. Where more than one competent authority is involved, a responsible person should be appointed under whose authority organisations are assessed.
- (b) It is essential that the BCAA has the full capability to adequately assess the continued competence of an organisation by ensuring that the whole range of activities is assessed by appropriately qualified personnel.

AMC2 BCAR.ARO.GEN.300(a);(b);(c) Oversight

EVALUATION OF OPERATIONAL SAFETY RISK ASSESSMENT

As part of the initial certification or the continuing oversight of an operator, the BCAA should normally evaluate the operator's safety risk assessment processes related to hazards identified by the operator as having an interface with its operations. These safety risk assessments should be identifiable processes of the operator's management system.

As part of its continuing oversight, the BCAA should also remain satisfied as to the effectiveness of these safety risk assessments.

(a) General methodology for operational hazards

The BCAA should establish a methodology for evaluating the safety risk assessment processes of the operator's management system.

When related to operational hazards, the BCAA's evaluation under its normal oversight process should be considered satisfactory if the operator demonstrates its competence and capability to:

- (1) understand the hazards and their consequences on its operations;
- (2) be clear on where these hazards may exceed acceptable safety risk limits;
- (3) identify and implement mitigations, including suspension of operations where mitigation cannot reduce the risk to within safety risk limits;
- (4) develop and execute effectively robust procedures for the preparation and the safe operation of the flights subject to the hazards identified;
- (5) assess the competence and currency of its staff in relation to the duties necessary for the intended operations and implement any necessary training; and
- (6) ensure sufficient numbers of qualified and competent staff for such duties.

The BCAA should take into account that:

- (1) the operator's recorded mitigations for each unacceptable risk identified are in place;
- (2) the operational procedures specified by the operator with the most significance to safety appear to be robust; and
- (3) the staff on which the operator depends in respect of those duties necessary for the intended operations are trained and assessed as competent in the relevant procedures.

EVALUATION OF OPERATORS' VOLCANIC ASH SAFETY RISK ASSESSMENT

In addition to the general methodology for operational hazards, the BCAA's evaluation under its normal oversight process should also assess the operator's competence and capability to:

- (a) choose the correct information sources to use to interpret the information related to volcanic ash contamination forecast and to resolve correctly any conflicts among such sources; and
- (b) take account of all information from its type certificate holders (TCHs) concerning volcanic ash-related airworthiness aspects of the aircraft it operates, and the related pre-flight, in-flight and post flight precautions to be observed.

GM1 BCAR.ARO.GEN.300(a);(b);(c) Oversight

GENERAL

- (a) Responsibility for the conduct of safe operations lies with the organisation. Under these provisions a positive move is made towards devolving upon the organisation a share of the responsibility for monitoring the safety of operations. The objective cannot be attained unless organisations are prepared to accept the implications of this policy, including that of committing the necessary resources to its implementation. Crucial to the success of the policy is the content of BCAR-ORO, which requires the establishment of a management system by the organisation.
- (b) The BCAA should continue to assess the organisation's compliance with the applicable requirements, including the effectiveness of the management system. If the management system is judged to have failed in its effectiveness, then this in itself is a breach of the requirements which may, among others, call into question the validity of a certificate, if applicable.
- (c) The accountable manager is accountable to the BCAA as well as to those who may appoint him/her. It follows that the BCAA cannot accept a situation in which the accountable manager is denied sufficient funds, manpower or influence to rectify deficiencies identified by the management system.

GM2 BCAR.ARO.GEN.300(a);(b);(c) Oversight

VOLCANIC ASH SAFETY RISK ASSESSMENT — ADDITIONAL GUIDANCE

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

GM3 BCAR.ARO.GEN.300(a);(b);(c) Oversight

CHECKLIST FOR CRM TRAINING OVERSIGHT

The following list includes the major elements for the monitoring of the operator's CRM training:

- (a) development of CRM training considering the operator's management system;
- (b) content of the CRM training syllabus;
- (c) qualification of CRM trainer;
- (d) training facilities:
 - (1) classroom;
 - (2) flight simulation training device (FSTD);
 - (3) aircraft; and
 - (4) cabin training device;
- (e) training methods:
 - (1) classroom training (instructions, presentations and behavioural exercises);
 - (2) computer-based training (CBT);
 - (3) line-oriented flight training (LOFT); and
 - (4) check or test;

- (f) training analysis:
 - (1) pre-course reading and study;
 - (2) integration of the different training methods;
 - (3) competence and performance of the trainer or instructor;
 - (4) assessment of flight crew members; and
 - (5) effectiveness of training.

AMC1 BCAR.ARO.GEN.300(a)(2) Oversight

OPERATIONAL APPROVALS ISSUED BY OTHER STATE OF REGISTRY

When verifying continued compliance of non-commercial operators using an aircraft registered in other country holding operational approvals for operations in PBN, MNPS and RVSM airspace issued by other State of Registry, the BCAA should at least assess if:

- (a) the State of registry has established an equivalent level of safety, considering any differences notified to the ICAO Standards for RVSM, RNP, MNPS and MEL; or
- (b) there are reservations on the safety oversight capabilities and records of the State of registry; or
- (c) operators of the State of registry are subject to an operating ban pursuant to the applicable requirements; or
- (d) relevant findings on the State of registry from audits carried out under international conventions exist; or
- (e) relevant findings on the State of registry from other safety assessment programmes of States exist.

BCAR.ARO.GEN.305 Oversight programme

- (a) BCAA shall establish and maintain an oversight programme covering the oversight activities required by BCAR.ARO.GEN.300 and by BCAR.ARO.RAMP.
- (b) For organisations certified by BCAA, the oversight programme shall be developed taking into account the specific nature of the organisation, the complexity of its activities, the results of past certification and/or oversight activities required by BCAR.ARO.GEN and BCAR.ARO.RAMP and shall be based on the assessment of associated risks. It shall include within each oversight planning cycle:
 - (1) audits and inspections, including ramp and unannounced inspections as appropriate;
 - (2) meetings convened between the accountable manager and BCAA to ensure both remain informed of significant issues.
- (c) For organisations certified by BCAA an oversight planning cycle not exceeding 12 months shall be applied.

The oversight planning cycle may be reduced if there is evidence that the safety performance of the organisation has decreased.

- (1) Not applicable

- (2) Not applicable
- (3) Not applicable
- (4) Not applicable
- (d) Not applicable
- (d1) Not applicable
- (e) For persons holding a licence, certificate, or rating issued by BCAA the oversight programme shall include inspections, including unannounced inspections, as appropriate.
- (f) The oversight programme shall include records of the dates when audits, inspections and meetings are due and when such audits, inspections and meetings have been carried out.

AMC1 BCAR.ARO.GEN.305 Oversight programme

SPECIFIC NATURE AND COMPLEXITY OF THE ORGANISATION, RESULTS OF PAST OVERSIGHT

- (a) When determining the oversight programme for an organisation, the BCAA should consider in particular the following elements, as applicable:
 - (1) the implementation by the organisation of industry standards, directly relevant to the organisation's activity subject to this requirement;
 - (2) the procedure applied for and scope of changes not requiring prior approval;
 - (3) specific approvals held by the organisation;
- (b) For the purpose of assessing the complexity of an organisation's management system, AMC1 BCAR.ORO.GEN.200(b) should be used.
- (c) Regarding results of past oversight, the BCAA should also take into account relevant results of ramp inspections of organisations it has certified or authorised, persons and other organisation having declared their activity or persons performing operations with other-than-complex motor-powered aircraft that were performed in other States in accordance with BCAR.ARO.RAMP.

AMC2 BCAR.ARO.GEN.305(b) Oversight programme

PROCEDURES FOR OVERSIGHT OF OPERATIONS

- (a) Each organisation to which a certificate has been issued should have an inspector specifically assigned to it. Several inspectors should be required for the larger companies with widespread or varied types of operation. This does not prevent a single inspector being assigned to several companies. Where more than one inspector is assigned to an organisation, one of them should be nominated as having overall responsibility for supervision of, and liaison with, the organisation's management, and be responsible for reporting on compliance with the requirements for its operations as a whole.
- (b) Audits and inspections, on a scale and frequency appropriate to the operation, should cover at least:
 - (1) infrastructure,
 - (2) manuals,
 - (3) training,
 - (4) crew records,
 - (5) equipment,

- (6) release of flight/dispatch,
 - (7) dangerous goods,
 - (8) organisation's management system.
- (c) The following types of inspections should be envisaged, as part of the oversight programme:
- (1) flight inspection,
 - (2) ground inspection (e.g. documents and records),
 - (3) training inspection (e.g. ground, aircraft/FSTD)
 - (4) ramp inspection.

The inspection should be a 'deep cut' through the items selected and all findings should be recorded. Inspectors should review the root cause(s) identified by the organisation for each confirmed finding.

Inspectors should be satisfied that the root cause(s) identified and the corrective actions taken are adequate to correct the non-compliance and to prevent re-occurrence.

- (d) Audits and inspections may be conducted separately or in combination. Audits and inspections may, at the discretion of the BCAA, be conducted with or without prior notice to the organisation.
- (e) Where it is apparent to an inspector that an organisation has permitted a breach of the applicable requirements, with the result that air safety has, or might have, been compromised, the inspector should ensure that the responsible person within the BCAA is informed without delay.
- (f) In the first few months of a new operation, inspectors should be particularly alert to any irregular procedures, evidence of inadequate facilities or equipment, or indications that management control of the operation may be ineffective. They should also carefully examine any conditions that may indicate a significant deterioration in the organisation's financial management. When any financial difficulties are identified, inspectors should increase technical surveillance of the operation with particular emphasis on the upholding of safety standards.
- (g) The number or the magnitude of the non-compliances identified by the BCAA will serve to support the BCAA's continuing confidence in the organisation's competence or, alternatively, may lead to an erosion of that confidence. In the latter case, the BCAA should review any identifiable shortcomings of the management system.

GM1 BCAR.ARO.GEN.305(b) Oversight programme

FINANCIAL MANAGEMENT

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

- (a) significant lay-offs or turnover of personnel;
- (b) delays in meeting payroll;
- (c) reduction of safe operating standards;
- (d) decreasing standards of training;
- (e) withdrawal of credit by suppliers;
- (f) inadequate maintenance of aircraft;
- (g) shortage of supplies and spare parts;

- (h) curtailment or reduced frequency of revenue flights; and
- (i) sale or repossession of aircraft or other major equipment items.

AMC1 BCAR.ARO.GEN.305(b)(1) Oversight programme

AUDIT SCOPE

- (a) The oversight programme should indicate which aspects of the approval will be covered with each audit.
- (b) Part of an audit should concentrate on the organisation's compliance monitoring reports produced by the compliance monitoring personnel to determine if the organisation is identifying and correcting its problems.
- (c) At the conclusion of the audit, an audit report should be completed by the auditing inspector, including all findings raised.

AMC2 BCAR.ARO.GEN.305(b)(1) Oversight programme

RAMP INSPECTIONS

- (a) When conducting a ramp inspection of aircraft used by organisations under its regulatory oversight, the BCAA should, as far as possible, comply with the requirements defined in BCAR.ARO.RAMP.
- (b) When conducting ramp inspections on other-than-suspected aircraft, the BCAA should take into account the following elements:
 - (1) repeated inspections should be avoided of those organisations for which previous inspections have not revealed safety deficiencies;
 - (2) the oversight programme should enable the widest possible sampling rate of aircraft flying into their territory; and
 - (3) there should be no discrimination on the basis of the organisation's nationality, the type of operation or type of aircraft, unless such criteria can be linked to an increased risk.
- (c) For third country operations the BCAA should consider aircraft that have not been ramp inspected for more than 6 months.

AMC1 BCAR.ARO.GEN.305 (b); (c); Oversight programme

INDUSTRY STANDARDS

- (a) For organisations having demonstrated compliance with industry standards, the BCAA may adapt its oversight programme, in order to avoid duplication of specific audit items.
- (b) Demonstrated compliance with industry standards should not be considered in isolation from the other elements to be considered for the BCAA's risk-based oversight.
- (c) In order to be able to credit any audits performed as part of certification in accordance with industry standards, the following should be considered:
 - (1) the demonstration of compliance is based on certification auditing schemes providing for independent and systematic verification;
 - (2) the existence of an accreditation scheme and accreditation body for certification in accordance with the industry standards has been verified;

- (3) certification audits are relevant to the requirements defined in BCAR-ORO and other Annexes to this Regulation as applicable;
- (4) the scope of such certification audits can easily be mapped against the scope of oversight in accordance with BCAR-ORO;
- (5) audit results are accessible to the BCAA and open to exchange of information in accordance with the applicable requirements.
- (6) the audit planning intervals of certification audits in accordance with industry standards are compatible with the oversight planning cycle.

AMC1 BCAR.ARO.GEN.305(c) Oversight programme

OVERSIGHT PLANNING CYCLE

- (a) When determining the oversight planning cycle and defining the oversight programme, the BCAA should assess the risks related to the activity of each organisation and adapt the oversight to the level of risk identified and to the organisation's ability to effectively manage safety risks.
- (b) The BCAA should establish a schedule of audits and inspections appropriate to each organisation's business. The planning of audits and inspections should take into account the results of the hazard identification and risk assessment conducted and maintained by the organisation as part of the organisation's management system. Inspectors should work in accordance with the schedule provided to them.
- (c) When the competent authority, having regard to an organisation's safety performance, varies the frequency of an audit or inspection, it should ensure that all aspects of the operation are audited and inspected within the applicable oversight planning cycle.
- (d) The section(s) of the oversight programme dealing with ramp inspections should be developed based on geographical locations, taking into account aerodrome activity, and focusing on key issues that can be inspected in the time available without unnecessarily delaying the operations.

AMC2 BCAR.ARO.GEN.305(c) Oversight programme

OVERSIGHT PLANNING CYCLE

- (a) For each organisation certified by the BCAA all processes should be completely audited at periods not exceeding the applicable oversight planning cycle. The beginning of the first oversight planning cycle is normally determined by the date of issue of the first certificate.
- (b) The interval between two audits for a particular process should not exceed the interval of the applicable oversight planning cycle.
- (c) Audits should include at least one on-site audit within each oversight planning cycle. For organisations exercising their regular activity at more than one site, the determination of the sites to be audited should consider the results of past oversight, the volume of activity at each site, as well as main risk areas identified.
- (d) Reserved

AMC1 BCAR.ARO.GEN.305(e) Oversight programme

PERSONS HOLDING A LICENCE, CERTIFICATE, RATING OR ATTESTATION

The oversight of persons holding a licence, certificate, rating or attestation should normally be ensured as part of the oversight of organisations. Additionally, the BCAA should verify compliance with applicable requirements when endorsing or renewing ratings.

To properly discharge its oversight responsibilities, the BCAA should perform a certain number of unannounced verifications.

BCAR.ARO.GEN.310 Initial certification and renewal procedure — organisations

- (a) Upon receiving an application for the initial issue of a certificate for an organisation, BCAA shall verify the organisation's compliance with the applicable requirements. This verification may take into account the statement referred to in BCAR.ORO.AOC.100 (b).
- (b) When satisfied that the organisation is in compliance with the applicable requirements, BCAA shall issue the certificate(s), as established in Appendices I and II. The certificate(s) shall be issued for a period of 12 months. The privileges and scope of the activities that the organisation is approved to conduct shall be specified in the terms of approval attached to the certificate(s).
- (c) To enable an organisation to implement changes without prior authority approval in accordance with BCAR.ORO.GEN.130, BCAA shall approve the procedure submitted by the organisation defining the scope of such changes and describing how such changes shall be managed and notified.
- (d) When renewing the certificate(s), BCAA shall take into account, if:
 - (1) the organisation has demonstrated an effective identification of aviation safety hazards and management of associated risks;
 - (2) the organisation has demonstrated under BCAR.ORO.GEN.130 that it has effective control over changes;
 - (3) previous findings ; and
 - (4) whether corrective actions have been implemented within the time period accepted or extended by BCAA as defined in BCAR.ARO.GEN.350(d)(2).

AMC1 BCAR.ARO.GEN.310(a) Initial certification and renewal procedure — organisations

VERIFICATION OF COMPLIANCE FOR INITIAL CERTIFICATION

- (a) Upon receipt of an application for an air operator certificate (AOC), the BCAA should:
 - (1) assess the management system and processes, including the operator's organisation and operational control system;
 - (2) review the operations manual and any other documentation provided by the organisation; and
 - (3) for the purpose of verifying the organisation's compliance with the applicable requirements, conduct an audit at the organisation's facilities. The BCAA may require the conduct of one or more demonstration flights operated as if they were commercial flights.
- (b) The BCAA should ensure that the following steps are taken:
 - (1) The organisation's written application for an AOC should be submitted at least 6 months before the date of intended operation, except that the operations manual may be

submitted later, but not less than 90 days before the date of intended operation. The application form should be printed in language(s) of the competent authority's choosing.

- (2) An individual should be nominated by the responsible person of the BCAA to oversee, to become the focal point for all aspects of the organisation certification process and to coordinate all necessary activity. The nominated person of the organization should be responsible to the responsible person of the BCAA for confirming that all appropriate audits and inspections have been carried out. The focal point should also ensure that the necessary specific or prior approvals required by (b)(3) are issued in due course. Of particular importance on initial application is a careful review of the qualifications of the organisations' nominated persons. Account should be taken of the relevance of the nominee's previous experience and known record.
 - (3) Submissions that require the BCAA specific or prior approval should be referred to the appropriate department of the BCAA. Submissions should include, where relevant, the associated qualification requirements and training programmes.
- (c) The ability of the applicant to secure, in compliance with the applicable requirements and the safe operation of aircraft, all necessary training and, where required, licensing of personnel, should be assessed. This assessment should also include the areas of responsibility and the numbers of those allocated by the applicant to key management tasks.
- (d) In order to verify the organisation's compliance with the applicable requirements, the BCAA should conduct an audit of the organisation, including interviews of personnel and inspections carried out at the organisation's facilities.

The BCAA should only conduct such an audit after being satisfied that the application shows compliance with the applicable requirements.

- (e) The audit should focus on the following areas:
- (1) detailed management structure, including names and qualifications of personnel required by BCAR.ORO.GEN.210 and adequacy of the organisation and management structure;
 - (2) personnel:
 - (i) adequacy of number and qualifications with regard to the intended terms of approval and associated privileges;
 - (ii) validity of licences, ratings, certificates or attestations as applicable;
 - (3) processes for safety risk management and compliance monitoring;
 - (4) facilities — adequacy with regard to the organisation's scope of work;
 - (5) documentation based on which the certificate should be granted (organisation documentation as required by BCAR-ORO, including technical manuals, such as operations manual or training manual).
- (f) In case of non-compliance, the applicant should be informed in writing of the corrections that are required.
- (g) When the verification process is complete, the person with overall responsibility, nominated in accordance with (b)(2), should present the application to the person responsible for the issue of an AOC together with a written recommendation and evidence of the result of all investigations or assessments which are required before the operator certificate is issued. Approvals required should be attached to the recommendation. The BCAA should inform the applicant of its decision concerning the application within 60 days of receipt of all supporting documentation. In cases where an application for an organisation certificate is refused, the applicant should be

informed of the right of appeal as exists under Section 114(2) of the Civil Aviation Act of Bhutan 2016.

AMC1 BCAR.ARO.GEN.310(d) Initial certification and renewal procedure — organisations

Renewal procedures shall be carried out as per the AOC Manual (BCAP 4100)

BCAR.ARO.GEN.330 Changes — organisations

- (a) Upon receiving an application for a change that requires prior approval, BCAA shall verify the organisation's compliance with the applicable requirements before issuing the approval.

BCAA shall prescribe the conditions under which the organisation may operate during the change, unless BCAA determines that the organisation's certificate needs to be suspended.

When satisfied that the organisation is in compliance with the applicable requirements, BCAA shall approve the change.
- (b) Without prejudice to any additional enforcement measures, when the organisation implements changes requiring prior approval without having received BCAA approval as defined in (a), BCAA shall suspend, limit or revoke the organisation's certificate.
- (c) For changes not requiring prior approval, BCAA shall assess the information provided in the notification sent by the organisation in accordance with BCAR.ORO.GEN.130 to verify compliance with the applicable requirements. In case of any non-compliance, BCAA shall:
 - (1) notify the organisation about the non-compliance and request further changes;
 - (2) in case of level 1 or level 2 findings, act in accordance with BCAR.ARO.GEN.350.

AMC1 BCAR.ARO.GEN.330 Changes — organisations

AOC HOLDERS

- (a) Changes in nominated persons:

The BCAA should be informed of any changes to personnel specified in BCAR-ORO that may affect the certificate or terms of approval/approval schedule attached to it. When an organisation submits the name of a new nominee for any of the persons nominated as per BCAR.ORO.GEN.210(b), the BCAA should require the organisation to produce a written résumé of the proposed person's qualifications. The BCAA should reserve the right to interview the nominee or call for additional evidence of his/her suitability before deciding upon his/her acceptability.
- (b) A simple management system documentation status sheet should be maintained, which contains information on when an amendment was received by the BCAA and when it was approved.
- (c) The organisation should provide each management system documentation amendment to the competent authority, including for the amendments that do not require prior approval by the competent authority. Where the amendment requires BCAA approval, the competent authority, when satisfied, should indicate its approval in writing. Where the amendment does not require prior approval, the BCAA should acknowledge receipt in writing within 10 working days.
- (d) For changes requiring prior approval, in order to verify the organisation's compliance with the applicable requirements, the BCAA should conduct an audit of the organisation, limited to the

extent of the changes. If required for verification, the audit should include interviews and inspections carried out at the organisation's facilities.

GM1 BCAR.ARO.GEN.330 Changes — organisations

CHANGE OF NAME OF THE ORGANISATION

- (a) On receipt of the application and the relevant parts of the organisation's documentation as required by BCAR-ORO, the BCAA should re-issue the certificate.
- (b) A name change alone does not require the BCAA to audit the organisation, unless there is evidence that other aspects of the organisation have changed.

BCAR.ARO.GEN.350 Findings and corrective actions — organisations

- (a) For oversight in accordance with BCAR.ARO.GEN.300 (a) BCAA shall have a system to analyse findings for their safety significance.
- (b) A level 1 finding shall be issued by BCAA when any significant non-compliance is detected with the applicable requirements, with the organisation's procedures and manuals or with the terms of an approval or certificate, specialised operation authorisation or with the content of a declaration which lowers safety or seriously hazards flight safety.

The level 1 finding shall include:

- (1) failure to give BCAA access to the organisation's facilities as defined in BCAR.ORO.GEN.140 during normal operating hours and after two written requests;
 - (2) obtaining or maintaining the validity of the organisation certificate, specialised operation authorisation by falsification of submitted documentary evidence;
 - (3) evidence of malpractice or fraudulent use of the organisation certificate, specialised operation authorisation; and
 - (4) the lack of an accountable manager.
- (c) A level 2 shall be issued by BCAA when any non-compliance is detected with the applicable requirements, with the organisation's procedures and manuals or with the terms of an approval or certificate, specialised operation authorisation or with the content of a declaration which could lower safety or hazard flight safety.
 - (d) When a finding is detected during oversight or by any other means, BCAA shall, without prejudice to any additional action required by applicable regulations, communicate the findings to the organisation in writing and request corrective action to address the non-compliance(s) identified. Where relevant, BCAA shall inform the State in which the aircraft is registered.
 - (1) In the case of level 1 findings BCAA shall take immediate and appropriate action to prohibit or limit activities, and if appropriate, it shall take action to revoke the certificate, specialised operation authorisation or specific approval or to limit or suspend it in whole or in part, depending upon the extent of the level 1 finding, until successful corrective action has been taken by the organisation.
 - (2) In the case of level 2 findings, BCAA shall:
 - (i) grant the organisation a corrective action implementation period appropriate to the nature of the finding that in any case initially shall not be more than three months. At the end of this period, and subject to the nature of the finding, BCAA

- may extend the three-month period subject to a satisfactory corrective action plan agreed by BCAA; and
- (ii) assess the corrective action and implementation plan proposed by the organisation and, if the assessment concludes that they are sufficient to address the non-compliance(s), accept these.
- (3) Where an organisation fails to submit an acceptable corrective action plan, or to perform the corrective action within the time period accepted or extended by BCAA, the finding shall be raised to a level 1 finding and action taken as laid down in (d)(1).
 - (4) BCAA shall record all findings it has raised or that have been communicated to it and, where applicable, the enforcement measures it has applied, as well as all corrective actions and date of action closure for findings.
- (e) Without prejudice to any additional enforcement measures, when BCAA identifies any non-compliance with the applicable requirements by an organisation certified by, or authorised by or declaring its activity to the authority of another State, it shall inform that authority and provide an indication of the level of finding.

GM1 BCAR.ARO.GEN.350 Findings and corrective actions — organisations

TRAINING

For a level 1 finding it may be necessary for the BCAA to ensure that further training by the organisation is carried out and audited by the BCAA before the activity is resumed, dependent upon the nature of the finding.

BCAR.ARO.GEN.355 Findings and enforcement measures — persons

- (a) If, during oversight or by any other means, evidence is found by the BCAA that shows a non-compliance with the applicable requirements by a person holding a licence, certificate, rating or attestation issued in accordance with Civil Aviation Act of Bhutan 2016 and its regulations, BCAA shall act in accordance with the applicable requirements of BCAR.ARA.GEN.355 (a) to (d).
- (b) If, during oversight or by any other means, evidence is found showing a non-compliance with the applicable requirements by a person subject to the requirements laid down in the Civil Aviation Act of Bhutan 2016 and its regulations and not holding a licence, certificate, rating or attestation issued in accordance with Civil Aviation Act of Bhutan 2016 and its regulations, the BCAA may take any enforcement measures necessary to prevent the continuation of that non-compliance.

GM1 BCAR.ARO.GEN.355(b) Findings and enforcement measures — persons

GENERAL

This provision is necessary to ensure that enforcement measures will be taken also in cases where the BCAA may not act on the licence, certificate or attestation. The type of enforcement measure will depend on the applicable national law and may include for example the payment of a fine or the prohibition from exercising.

It covers two cases:

- (a) persons subject to the applicable requirements who are not required to hold a licence, certificate or attestation; and

- (b) persons who are required to hold a licence, rating, certificate or attestation, but who do not hold the appropriate licence, rating, certificate or attestation as required for the activity they perform.

BCAR.ARO.GEN.360 Findings and enforcement measures — all operators

If, during oversight or by any other means, evidence is found showing a non-compliance with the applicable requirements by an operator subject to the requirements laid down in the Civil Aviation Act of Bhutan 2016 and its regulations, BCAA shall take any enforcement measures necessary to prevent the continuation of that non-compliance.

SUBPART OPS: AIR OPERATIONS

SECTION I - CERTIFICATION OF COMMERCIAL AIR TRANSPORT OPERATORS

BCAR.ARO.OPS.100 Issue of the air operator certificate

- (a) BCAA shall issue the air operator certificate (AOC) when satisfied that the operator has demonstrated compliance with the elements required in BCAR.ORO.AOC.100.
- (b) The certificate shall include the associated operations specifications.
- (c) BCAA may determine specific operational limitations. Such limitations shall be documented in the operations specifications.

BCAR.ARO.OPS.105 Code-share arrangements

In considering the safety of a code-share agreement involving another country operator, BCAA shall:

- (1) satisfy itself, following the verification by the operator as set out in BCAR.ORO.AOC.115, that the third-country operator complies with the applicable ICAO standards;
- (2) liaise with the authority of the State of the other country operator as necessary.

AMC1 BCAR.ARO.OPS.105 Code-share arrangements

SAFETY OF A CODE-SHARE AGREEMENT

- (a) When evaluating the safety of a code-share agreement, the BCAA should check that the:
 - (1) documented information provided by the applicant in accordance with BCAR.ORO.AOC.115 is complete and shows compliance with the applicable ICAO standards; and
 - (2) operator has established a code-share audit programme for monitoring continuous compliance of the operator of other country with the applicable ICAO standards.
- (b) The BCAA should request the applicant to make a declaration covering the above items.
- (c) In case of non-compliance, the applicant should be informed in writing of the corrections which are required.

AMC2 BCAR.ARO.OPS.105 Code-share arrangements

AUDITS PERFORMED BY A THIRD PARTY PROVIDER

When audits are performed by a third party provider, the BCAA should verify if the third party provider meets the criteria established in AMC2 BCAR.ORO.AOC.115(b).

BCAR.ARO.OPS.110 Lease agreements

- (a) BCAA shall approve a lease agreement when satisfied that the operator certified in accordance with BCAR-ORO complies with BCAR.ORO.AOC.110 and relevant requirements of continuing airworthiness.
- (b) The approval of a wet lease-in agreement shall be suspended or revoked whenever:
 - (1) the AOC of the lessor or lessee is suspended or revoked;
 - (2) the lessor is subject to an operating ban;
 - (3) the authorisation issued has been suspended, revoked or surrendered.
- (c) The approval of a dry lease-in agreement shall be suspended or revoked whenever:
 - (1) the certificate of airworthiness of the aircraft is suspended or revoked;
 - (2) the aircraft is included in the list of operators subject to operational restrictions or it is registered in a State of which all operators under its oversight are subject to an operating ban.
- (d) When asked for the prior approval of a dry-lease out agreement in accordance with ORO.AOC.110, the BCAA shall ensure:
 - (1) proper coordination with the competent authority responsible for the continuing oversight of the aircraft or for the operation of the aircraft, if it is not the same authority;
 - (2) that the aircraft is timely removed from the operator's AOC.
- (e) When asked for prior approval of a dry lease-in agreement in accordance with point ORO.AOC.110, the BCAA shall ensure proper coordination with the State of Registry of the aircraft as necessary to exercise the oversight responsibilities of the aircraft.

AMC1 BCAR.ARO.OPS.110 Lease agreements

WET LEASE-IN

- (a) Before approving a wet lease-in agreement, the BCAA should assess available reports on ramp inspections performed on aircraft of the lessor.
- (b) The BCAA should only approve a wet lease-in agreement if the routes intended to be flown are contained within the authorised areas of operations specified in the AOC of the lessor.

SECTION IA - AUTHORISATION OF COMMERCIAL SPECIALIZED OPERATIONS

BCAR.ARO.OPS.150 Authorisation of commercial specialized operations

- (a) Upon receiving an application for the issue of commercial specialised operations authorisation, BCAA shall review the operator's risk assessment documentation and standard operating procedures (SOP), related to one or more planned operations and developed in accordance with the relevant requirements of BCAR-SPO.
- (b) When satisfied with the risk assessment and SOP, BCAA shall issue the authorisation, as established in Appendix V. The authorisation shall not exceed 12 months. The conditions under which an operator is authorised to conduct commercial specialised operations shall be specified in the authorisation.
- (c) Upon receiving an application for a change to the authorisation, BCAA shall comply with (a) and (b). It shall prescribe the conditions under which the operator may operate during the change, unless BCAA determines that the authorisation needs to be suspended.
- (d) Upon receiving an application for the renewal of the authorisation, BCAA shall comply with (a) and (b) and may take into account the past authorisation process and oversight activities.
- (e) Without prejudice to any additional enforcement measures, when the operator implements changes without having submitted an amended risk assessment and SOP, BCAA shall suspend, limit or revoke the authorisation.
- (f) Upon receiving an application for the issue of an authorisation for a cross-border high-risk commercial specialised operation, the competent authority of the operator shall review the operator's risk assessment documentation and standard operating procedures (SOP) in coordination with the competent authority of the place where the operation is planned to be conducted. When both authorities are satisfied with the risk assessment and SOP, the competent authority of the operator shall issue the authorisation.

AMC1 BCAR.ARO.OPS.150 Authorisation of specialized operations

GENERAL

The BCAA should make publicly available a list of activities of commercial specialised operations so that operators are informed when to apply for an authorisation.

AMC1 BCAR.ARO.OPS.150(a);(b) Authorisation of specialized operations

VERIFICATION OF COMPLIANCE

- (a) For the purpose of verifying the operator's standard operating procedures (SOPs), the BCAA may conduct an audit at the operator's facilities or require the conduct of one or more demonstration flights operated as if they were commercial specialised operations.
- (b) An individual should be nominated by the BCAA to become the focal point for all aspects of the authorisation process and to coordinate all necessary activity. This nominated person should confirm to the responsible person of the BCAA issuing the authorisation that all appropriate audits and inspections have been carried out.

- (c) When the verification process is complete, the person nominated in accordance with (b), should present the application to the person responsible for the issuance of an authorisation together with a written recommendation and evidence of the result of the review of the operator's risk assessment documentation and SOPs, which is required before the authorisation is issued. The BCAA should inform the applicant of its decision concerning the application. In cases where an application for an authorisation is refused, the applicant should be informed of the right of appeal as exists under national law.

GM1 BCAR.ARO.OPS.150(b) Authorisation of specialized operations

LIMITATIONS

The BCAA may issue the authorisation for a limited duration, e.g. for a single event or a defined series of flights, or limit the operating area.

GM1 BCAR.ARO.OPS.150(c) Authorisation of specialized operations

CHANGE OF NAME OF THE ORGANISATION

- (a) Upon receipt of the application for a change of the authorisation, the BCAA should re-issue the authorisation.
- (b) A name change alone does not require the BCAA to re-assess the risk assessment and SOPs, unless there is evidence that other aspects of the operation have changed.

AMC1 BCAR.ARO.OPS.150(f) Authorisation of specialized operations

AUTHORISATION OF CROSS-BORDER SPECIALISED OPERATION

- (a) An authorisation for cross-border specialised operations should be issued by the competent authority, when both the Competent Authority itself and the Competent Authority of the place where the operation is planned to be conducted are satisfied that the risk assessment and SOPs are appropriate for the area overflown.
- (b) The authorisation should be amended to include those areas for which the operator has received the authorisation to conduct cross-border specialised operation.

BCAR.ARO.OPS.155 Lease agreements

- (a) Reserved
- (b) Reserved

SECTION II - APPROVALS

BCAR.ARO.OPS.200 Specific approval procedure

- (a) Upon receiving an application for the issue of a specific approval or changes thereof, BCAA shall assess the application in accordance with the relevant requirements of BCAR-SPA and conduct, where relevant, an appropriate inspection of the operator.
- (b) When satisfied that the operator has demonstrated compliance with the applicable requirements, BCAA shall issue or amend the approval. The approval shall be specified in:
 - (1) the operations specifications, as established in Appendix II, for commercial air transport operations; or
 - (2) the list of specific approval, as established in Appendix V, for commercial specialised operations.

AMC1 BCAR.ARO.OPS.200 Specific approval procedure

PROCEDURES FOR THE APPROVAL OF CARRIAGE OF DANGEROUS GOODS

When verifying compliance with the applicable requirements of BCAR.SPA.DG.100, the BCAA should check that:

- (a) the procedures specified in the operations manual are sufficient for the safe transport of dangerous goods;
- (b) operations personnel are properly trained in accordance with the ICAO *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (ICAO Doc 9284-AN/905); and
- (c) a reporting scheme is in place.

AMC2 BCAR.ARO.OPS.200 Specific approval procedure

PROCEDURES FOR THE APPROVAL FOR REDUCED VERTICAL SEPARATION MINIMA (RVSM) OPERATIONS

- (a) When verifying compliance with the applicable requirements of Subpart D of BCAR-SPA (BCAR.SPA.RVSM), the BCAA should verify that:
 - (1) each aircraft holds an adequate RVSM airworthiness approval;
 - (2) procedures for monitoring and reporting height keeping errors have been established;
 - (3) a training programme for the flight crew involved in these operations has been established; and
 - (4) operating procedures have been established.
- (b) Demonstration flight(s)

The content of the RVSM application may be sufficient to verify the aircraft performance and procedures. However, the final step of the approval process may require a demonstration flight. The BCAA may appoint an inspector for a flight in RVSM airspace to verify that all relevant procedures are applied effectively. If the performance is satisfactory, operation in RVSM airspace may be permitted.

(c) Form of approval documents

Each aircraft group for which the operator is granted approval should be listed in the approval.

(d) Airspace monitoring

For airspace, where a numerical target level of safety is prescribed, monitoring of aircraft height keeping performance in the airspace by an independent height monitoring system is necessary to verify that the prescribed level of safety is being achieved. However, an independent monitoring check of an aircraft is not a prerequisite for the grant of an RVSM approval.

(1) Suspension, revocation and reinstatement of RVSM approval

The incidence of height keeping errors that can be tolerated in an RVSM environment is small. It is expected of each operator to take immediate action to rectify the conditions that cause an error. The operator should report an occurrence involving poor height keeping to the BCAA within 72 hours. The report should include an initial analysis of causal factors and measures taken to prevent repeat occurrences.

The need for follow-up reports should be determined by the competent authority. Occurrences that should be reported and investigated are errors of:

- (i) total vertical error (TVE) equal to or greater than ± 90 m (± 300 ft);
- (ii) altimeter system error (ASE) equal to or greater than ± 75 m (± 245 ft); and
- (iii) assigned altitude deviation equal to or greater than ± 90 m (± 300 ft).

Height keeping errors fall into two broad categories:

- errors caused by malfunction of aircraft equipment; and
- operational errors.

(2) An operator that consistently experiences errors in either level should have approval for RVSM operations suspended or revoked. If a problem is identified that is related to one specific aircraft type, then RVSM approval may be suspended or revoked for that specific type within that operator's fleet.

(3) Operators' actions:

The operator should make an effective, timely response to each height keeping error. The BCAA may consider suspending or revoking RVSM approval if the operator's responses to height keeping errors are not effective or timely. The BCAA should consider the operator's past performance record in determining the action to be taken.

(4) Reinstatement of approval:

The operator should satisfy the BCAA that the causes of height keeping errors are understood and have been eliminated and that the operator's RVSM programmes and procedures are effective. At its discretion and to restore confidence, the BCAA may require an independent height monitoring check of affected aircraft to be performed.

BCAR.ARO.OPS.205 Minimum equipment list approval

- (a) When receiving an application for initial approval of a minimum equipment list (MEL) or an amendment thereof from an operator, BCAA shall assess each item affected, to verify compliance with the applicable requirements, before issuing the approval.

- (b) BCAA shall approve the operator's procedure for the extension of the applicable rectification intervals B, C and D, if the conditions specified in BCAR.ORO.MLR.105 (f) are demonstrated by the operator and verified by BCAA.
- (c) BCAA shall approve, on a case-by-case basis, the operation of an aircraft outside the constraints of the MEL but within the constraints of the master minimum equipment list (MMEL), if the conditions specified in BCAR.ORO.MLR.105 are demonstrated by the operator and verified by BCAA.

GM1 BCAR.ARO.OPS.205 Minimum equipment list approval

EXTENSION OF RECTIFICATION INTERVALS

The BCAA should verify that the operator does not use the extension of rectification intervals as a means to reduce or eliminate the need to rectify MEL defects in accordance with the established level limit. The extension of rectification intervals should only be considered valid and justifiable when events beyond the operator's control have precluded rectification.

BCAR.ARO.OPS.210 Determination of distance or local area

BCAA may determine a distance or local area for the purpose of operations.

GM1 BCAR.ARO.OPS.210 Determination of local area

GENERAL

The distance or local area should reflect the local environment and operating conditions.

BCAR.ARO.OPS.215 Approval of helicopter operations over a hostile environment located outside a congested area

- (a) The State of operator shall designate those areas where helicopter operations may be conducted without an assured safe forced landing capability, as described in CAT.POL.H.420.
- (b) Before issuing the approval referred to in CAT.POL.H.420 the competent authority shall have considered the operator's substantiation precluding the use of the appropriate performance criteria.

AMC1 BCAR.ARO.OPS.215 Approval of helicopter operations over a hostile environment located outside a congested area

APPROVALS THAT REQUIRE ENDORSEMENT

- (a) Whenever the operator applies for an approval in accordance with BCAR.CAT.POL.H.420 for which an endorsement from another State is required, the BCAA should only grant the approval once endorsement of that other State has been received.
- (b) The Operations Specification should be amended to include those areas for which endorsement was received.

AMC2 BCAR.ARO.OPS.215 Approval of helicopter operations over a hostile environment located outside a congested area

ENDORSEMENT BY ANOTHER STATE

- (a) Whenever the operator applies for an endorsement to operate over hostile environment located outside a congested area in another State in accordance with BCAR.CAT.POL.H.420,

the competent authority of that other State should only grant the endorsement once it is satisfied that:

- (1) the safety risk assessment is appropriate to the area overflown; and
 - (2) the operator's substantiation that preclude the use of the appropriate performance criteria are appropriate for the area overflown.
- (b) The competent authority of that other State should inform the competent authority of the other State responsible for issuing the approval.

BCAR.ARO.OPS.220 Approval of helicopter operations to or from a public interest site

The approval referred to in CAT.POL.H.225 shall include a list of the public interest site(s) specified by the operator to which the approval applies.

AMC1 BCAR.ARO.OPS.220 Approval of helicopter operations to or from a public interest site

APPROVALS THAT REQUIRE ENDORSEMENT

Whenever the operator applies for an approval in accordance with BCAR.CAT.POL.H.225 to conduct operations to or from a public interest site (PIS) for which an endorsement from another State is required, the BCAA should only grant such an approval once endorsement of that other State has been received.

AMC2 BCAR.ARO.OPS.220 Approval of helicopter operations to or from a public interest site

ENDORSEMENT BY ANOTHER STATE

- (a) Whenever the operator applies for an endorsement to operate to/from a public interest site in another State in accordance with BCAR.CAT.POL.H.225, the competent authority of that other State should only grant the endorsement once it is satisfied that:
- (1) the conditions of BCAR.CAT.POL.H.225 (a)(1) through (5) can be met by the operator at those sites for which endorsement is requested; and
 - (2) the operations manual includes the procedures to comply with BCAR.CAT.POL.H.225 (b) for these sites for which endorsement is requested.
- (b) The competent authority of that other State should inform the competent authority of the other State responsible for issuing the approval.

BCAR.ARO.OPS.225 Approval of operations to an isolated aerodrome

The approval referred to in CAT.OP.MPA.106 shall include a list of the aerodromes specified by the operator to which the approval applies.

BCAR.ARO.OPS.230 Determination of disruptive schedules

For the purpose of flight time limitations, the BCAA shall determine, in accordance with the definitions of "early type" and "late type" of disruptive schedules in point BCAR.ORO.FTL.105 of BCAR-ORO, which of those two types of disruptive schedules shall apply to all CAT operators under its oversight.

BCAR.ARO.OPS.240 Specific approval of RNP AR APCH

- (a) When compliance with the requirements in BCAR.SPA.PBN.105 has been demonstrated by the applicant, BCAA shall grant a generic specific approval or a procedure-specific approval for RNP AR APCH.
- (b) In the case of a procedure-specific approval, BCAA shall:
 - (1) list the approved instrument approach procedures at specific aerodromes in the PBN approval;
 - (2) establish coordination with the competent authorities for these aerodromes, if appropriate; and
 - (3) take into account possible credits stemming from RNP AR APCH specific approval already issued to the applicant.

GM1 BCAR.ARO.OPS.240 Specific approval of RNP AR APCH

TEMPORARY LIMITATION ON RVR

Where operators are new to RNP AR APCH operations and their initial application is for RNP < 0.3, it is appropriate to establish a temporary limitation for RVR minima, until operational experience is gained. This period could be based upon time (e.g. 90 days) and a number of conducted operations, as agreed by the BCAA and the operator.

GM2 BCAR.ARO.OPS.240 Specific approval of RNP AR APCH

REFERENCES

Additional guidance material for the specific approval of PBN operations, when required, can be found in ICAO Doc 9997 Performance-Based Navigation (PBN) Operational Approval Manual. In particular, a job aid can be found in paragraph 4.7 therein for assessment of applications for RNP AR APCH.

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SUBPART RAMP: RAMP INSPECTIONS OF AIRCRAFT OF OPERATORS

BCAR.ARO.RAMP.005 Scope

This Subpart establishes the requirements to be followed by BCAA when exercising its tasks and responsibilities regarding the performance of ramp inspections of aircraft used by all operators when landing at aerodromes located in the Kingdom of Bhutan.

BCAR.ARO.RAMP.100 General

- (a) Aircraft, as well as their crew, shall be inspected against the applicable requirements.
- (b) In addition to conducting ramp inspections on foreign operators, BCAA shall perform a ramp inspection of the operators that are certified in accordance with this BCAR.
- (c) Within the development of the oversight programme established in accordance with BCAR.ARO.GEN.305, BCAA shall establish an annual ramp inspection programme.
- (d) Not applicable

AMC1 BCAR.ARO.RAMP.100 General

RAMP INSPECTIONS

- (a) The ramp inspection should normally be performed during a turn-around.
- (b) In addition to the applicable requirements, when inspecting the technical condition of the aircraft, it should be checked against the aircraft manufacturer's standard.

AMC1 BCAR.ARO.RAMP.100(b) General

SUSPECTED AIRCRAFT

In determining whether an aircraft is suspected of not being compliant with the applicable requirements, the following should be taken into account:

- (a) information regarding poor maintenance of, or obvious damage or defects to an aircraft;
- (b) reports that an aircraft has performed abnormal manoeuvres that give rise to serious safety concerns in the airspace of any State;
- (c) a previous ramp inspection that has revealed deficiencies indicating that the aircraft does not comply with the applicable requirements and where the BCAA suspects that these deficiencies have not been corrected;
- (d) previous lists, if any, indicating that the operator or the State of the operator has been suspected of non-compliance;
- (e) evidence that the State in which an aircraft is registered is not exercising proper safety oversight;
or
- (f) concerns about the operator of the aircraft that have arisen from occurrence reporting information and non-compliance recorded in a ramp inspection report on any other aircraft used by that operator;
- (g) information received from SAFA and/or other monitoring activities;
- (h) any relevant information collected pursuant to BCAR.ARO.RAMP.110.

BCAR.ARO.RAMP.106 Alcohol testing

- (a) The BCAA may carry out at any time alcohol testing on flight and cabin crew as deemed necessary.
- (b) Not applicable
- (c) Not applicable
- (d) Not applicable
- (e) In case of a reasonable cause or suspicion, alcohol tests may be carried out at any time.
- (f) The alcohol testing methodology shall apply recognised quality standards that ensure accurate testing results.
- (g) A flight crew or cabin crew member who refuses to cooperate during tests or who has been identified to be under the influence of alcohol after a positive test shall not be allowed to continue his or her duty.

BCAR.ARO.RAMP.110 Collection of information

The BCAA shall collect and process any information deemed useful for conducting ramp inspections.

AMC1 BCAR.ARO.RAMP.110 Collection of information

COLLECTION OF INFORMATION

The information should include:

- (a) important safety information available, in particular, through:
 - (1) pilot reports;
 - (2) maintenance organisation report;
 - (3) incident reports;
 - (4) reports from other organisations, independent from the inspection authorities;
 - (5) complaints; and
 - (6) information received from whistle blowers (such as, but not limited to, ground handling or maintenance personnel) regarding poor maintenance, obvious damage or defects, incorrect loading, etc.
- (b) information on action(s) taken subsequent to a ramp inspection, such as:
 - (1) aircraft grounded;
 - (2) not applicable
 - (3) corrective action required;
 - (4) contacts with the operator's competent authority; and
 - (5) restrictions on flight operations.
- (c) follow-up information concerning the operator, such as:
 - (1) implementation of corrective action(s); and
 - (2) recurrence of non-compliance.

BCAR.ARO.RAMP.115 Qualification of ramp inspectors

- (a) BCAA shall have qualified inspectors to conduct ramp inspections.
- (b) Ramp inspectors shall:
 - (1) possess the necessary aeronautical education or practical knowledge relevant to their area(s) of inspection;
 - (2) have successfully completed:
 - (i) appropriate specific theoretical and practical training, in one or more of the following areas of inspection:
 - (A) flight deck;
 - (B) cabin safety;
 - (C) aircraft condition;
 - (D) cargo;
 - (ii) appropriate on-the-job training delivered by a senior ramp inspector appointed by the BCAA.
 - (3) maintain the validity of their qualification by undergoing recurrent training and by performing a minimum of 03 inspections in every 12-month period.
- (c) The training in (b)(2)(i) shall be delivered by the BCAA or by any organisation recognized by the BCAA
- (d) Not applicable
- (e) Not applicable

AMC1 BCAR.ARO.RAMP.115(a) Qualification of ramp inspectors

BACKGROUND KNOWLEDGE AND EXPERIENCE

The background knowledge and/or working experience of the inspector determines the privileges of the inspector. The BCAA should determine what the inspector is entitled to inspect, taking into account the following considerations:

- (a) background knowledge;
- (b) working experience; and
- (c) interrelation of the inspection item with other disciplines (e.g. a former cabin crew member may require additional training on minimum equipment list (MEL) issues before being considered eligible for inspection of safety items in the cabin).

AMC1 BCAR.ARO.RAMP.115(b)(1) Qualification of ramp inspectors

ELIGIBILITY CRITERIA

- (a) The candidate should be considered eligible to become a ramp inspector provided he/she meets the following criteria:
- (1) has good knowledge of the English language attested by a valid language proficiency certificate; and
 - (2) education and experience over the previous 5 years in accordance with one of the following items:
 - (i) has successfully completed post-secondary education with a duration of at least 3 years and after that at least 1 year aeronautical experience in the field of aircraft operations or maintenance, or personnel licensing;
 - (ii) has or has had a commercial/airline transport pilot licence and preferably carried out such duties for at least 1 year;
 - (iii) has or has had a flight engineer licence and preferably carried out such duties for at least 1 year;
 - (iv) has been a cabin crew member and preferably carried out such duties in commercial air transport for at least 1 year;
 - (v) has been licensed as maintenance personnel and preferably exercised the privileges of such a licence for at least 1 year;
 - (vi) has successfully completed professional training in the field of air transport of dangerous goods and preferably after that at least 1 year of experience in this field; or
 - (vii) has successfully completed post-secondary aeronautical education with a duration of at least 3 years.

GM1 BCAR.ARO.RAMP.115(b)(1) Qualification of ramp inspectors

ENGLISH LANGUAGE PROFICIENCY CERTIFICATE

A valid language proficiency certificate means a certificate such as ICAO English Proficiency Level 4, Common European Framework of Reference for Languages: Level B2, or another equivalent certificate.

AMC1 BCAR.ARO.RAMP.115(b)(2) Qualification of ramp inspectors

SENIOR RAMP INSPECTORS

Reserved

AMC2 BCAR.ARO.RAMP.115(b)(2) Qualification of ramp inspectors

SCOPE AND DURATION OF INITIAL TRAINING

Initial training should encompass:

- initial theoretical training,
- practical training, and
- on-the-job training.

- (a) Initial theoretical training
- (1) The scope of the initial theoretical training is to familiarise the inspectors with the BCAA Ramp Inspection Programme, and with the common inspection, finding categorisation, reporting and follow-up procedures. The primary scope of the theoretical training is not the transfer of technical (operational, airworthiness, etc.) knowledge. The trainees should possess such knowledge, either from previous work experience or through specialised training, prior to attending the theoretical course. The duration of the initial theoretical training should be no less than 3 training days.
 - (2) In case an integrated course is delivered (consisting of both the transfer of technical knowledge and specific ramp inspection information), the duration of the course should be extended accordingly.
 - (3) The initial theoretical training shall be conducted in accordance with the syllabus in AMC1 BCAR.ARO.RAMP.115(b)(2)(i).
- (b) Practical training
- (1) The scope of practical training is to instruct on inspection techniques and specific areas of attention without any interference with the flight crew. Preferably, this should be done in a non-operational environment (e.g. on an aircraft in a maintenance hangar). Alternatively, aircraft with an adequate turn-around time may be used. In the latter case, the flight and/or ground crew should be informed about the training character of the inspection.
 - (2) The duration of the practical training should be no less than 1 training day. The BCAA may decide to lengthen the training based on the level of expertise of the attendees. Practical training may be split into several sessions provided an adequate training tracking system is in place.
 - (3) The practical training should be conducted in accordance with the syllabus in AMC2 BCAR.ARO.RAMP.115(b)(2)(i).

ON-THE-JOB TRAINING

- (c) Scope of on-the-job training
- (1) The objective of the on-the-job training should be to familiarise trainees with the particularities of performing a ramp inspection in a real, operational environment. The BCAA should ensure that on-the-job training is undertaken only by trainees that have successfully completed theoretical and practical training.
 - (2) The BCAA should ensure that the area of expertise of the trainee is compatible with the one of the senior ramp inspectors delivering on-the-job training.
 - (3) When selecting the operators to be inspected during the on-the-job training programme, the senior ramp inspector should ensure:
 - (i) that the training can be performed on a sufficient level but without undue hindrance or delay of the inspected operator; and
 - (ii) that the ramp inspections are conducted on different operators (i.e. third country operators), different aircraft types and aircraft configurations (i.e., jet and propeller aircraft, single aisle and wide-body aeroplanes, passenger operations and cargo operations), different types of operations (i.e., commercial and non-commercial operations, long-haul and short-haul operations).
 - (4) On-the-job training should comprise two phases:
-

- (i) observing inspector: during this phase the trainee should accompany and observe the senior ramp inspector when performing a series of ramp inspections (including the preparation of the inspection and post-inspection activities: reporting, follow-up); and
 - (ii) inspector under supervision: during this phase the trainee should gradually start to perform ramp inspections under the supervision and guidance of the senior ramp inspector.
- (d) Duration and conduct of on-the-job training
- (1) The duration of the on-the-job training should be customised to the particular training needs of every trainee. As a minimum, the on-the-job training programme should contain at least six observed ramp inspections and six ramp inspections performed under the supervision of the senior ramp inspector, over a period of a maximum of 6 months. In general, on-the-job training should start as soon as possible after the completion of the practical training and cover all inspection items that the inspector will be privileged to inspect.

Appropriate records should be maintained for each trainee documenting the training received (when the trainee is observing the inspection) and his/her ability to effectively perform ramp inspections (under supervision). For this purpose, the senior ramp inspector should use a checklist containing the applicable elements presented in AMC4 BCAR.ARO.RAMP.115(b)(2). The on-the-job training may be given by more than one senior ramp inspector.
 - (2) Before starting on-the-job training the trainee should be briefed with regard to the general objectives and working methods of the training.
 - (3) Before every inspection the trainee should be briefed with regard to the particular objectives and lessons to be learned during this inspection.
 - (4) After every day of inspection the trainee should be debriefed with regard to his/her performance and progress and areas where improvement is needed.
- (e) Elements to be covered during the on-the-job training
- On-the-job training should address the following elements. However, some of the situations described below do not happen very often (i.e. grounding of an aircraft) and should, therefore, be presented by the senior ramp inspector during one of the debriefings.
- (1) Preparation of an inspection:
 - (i) use of the centralised database to prepare an inspection;
 - (ii) other sources of information (such as passenger complaints, maintenance organisation reports, air traffic control (ATC) reports);
 - (iii) areas of concern and/or open findings;
 - (iv) retrieval of updated reference materials: notice to Airmen (NOTAMs), navigation and weather charts;
 - (v) selection of operator(s) to be inspected (oversight programme, priority list);
 - (vi) task allocation among members of a ramp inspection team; and
 - (vii) daily/weekly/monthly ramp inspection schedule.
 - (2) Administrative issues:
-

- (i) ramp inspector's credentials, rights and obligations;
 - (ii) special urgency procedures (if any);
 - (iii) national (local) aerodrome access procedures;
 - (iv) safety and security airside procedures; and
 - (v) ramp inspector kit (electric torch, fluorescent vests, ear plugs, digital camera, checklists, etc.).
- (3) Cooperation with airport and air navigation services to obtain actual flight information, parking position, time of departure, etc.
- (4) Ramp inspection:
- (i) introduction to the pilot-in-command/commander, flight crew, cabin crew, ground crew;
 - (ii) inspection items: according to the area of expertise of the trainee;
 - (iii) findings (identification, categorisation, reporting, evidencing);
 - (iv) corrective actions — class 2;
 - (v) corrective actions — class 3:
 - (A) Class 3a) enforcement of restriction(s) on aircraft flight operations (cooperation with other services/authorities to enforce a restriction);
 - (B) Class 3b) request of an immediate corrective action(s), satisfactory completion of an immediate corrective action;
 - (C) Class 3c) grounding of an aircraft: notification of the grounding decision to the aircraft commander; national procedures to prevent the departure of a grounded aircraft; communication with the State of operator/registry;
 - (vi) Proof of Inspection:
 - (A) completion and delivery of the Proof of Inspection report; and
 - (B) request of acknowledgement of receipt (document or a refusal to sign).
- (5) Human factors elements:
- (i) cultural aspects;
 - (ii) resolution of disagreements and/or conflicts; and
 - (iii) crew stress.
- (f) Assessment of trainees
- The assessment of the trainee should be done by the senior ramp inspector while the trainee is performing ramp inspections under supervision. The trainee should be considered to have successfully completed the on-the-job training only after demonstrating to the senior ramp inspector that he/she possesses the professional capacity, knowledge, judgment and ability to perform ramp inspections in accordance with the requirements of this Subpart.

AMC3 BCAR.ARO.RAMP.115(b)(2) Qualification of ramp inspectors

QUALIFICATION OF THE INSPECTOR AFTER SUCCESSFUL COMPLETION OF TRAINING

Qualification of the inspector after successful completion of training

- (a) Successful completion of theoretical training should be demonstrated by passing an evaluation by the BCAA or by the approved training organisation who has delivered the training.
- (b) Successful completion of practical and on-the-job training should be assessed by the senior ramp inspector providing on-the-job training, through evaluation of the trainee’s ability to effectively perform ramp inspections in an operational environment.
- (c) The BCAA should issue a formal qualification statement for each qualified inspector listing the inspecting privileges.
- (d) The background knowledge and working experience of the inspector should determine the privileges of the inspector (the scope of his/her inspection; what he/she is entitled to inspect). The numerous varieties in backgrounds of the candidate inspectors make it impossible to issue a full set of templates showing the background-privileges relation. It is, therefore, up to the BCAA to determine the eligibility and the related privileges for the inspector, whereby the following should be considered:
 - (1) background knowledge;
 - (2) working experience; and
 - (3) interrelation of the inspection item with other disciplines (e.g. former cabin crew member may require additional training on MEL issues before being considered eligible for safety items in the cabin).
- (e) The BCAA should issue the qualification statement only after the candidate has successfully completed the theoretical, practical and on-the-job-training.
- (f) The BCAA should put in place a system that will ensure that their inspectors meet at all times the qualification criteria with regard to eligibility, training and recent experience.

AMC4 BCAR.ARO.RAMP.115(b)(2) Qualification of ramp inspectors

CHECKLIST ON-THE-JOB TRAINING OF INSPECTORS

On-the-Job Training of Ramp Inspection Inspectors				
Competent Authority:		Senior ramp inspector:		
Name of trainee:		Place:		
Date:		Ramp Inspection Number:		
Operator:		A/C Registration:	A/C Type:	
A	Flight deck	Check: (Description/ notes)	Observation	Under Supervision
General				

1	General condition	<ul style="list-style-type: none"> • inappropriately pulled circuit breakers • reinforced flight crew compartment door, if required • crew baggage • flight crew seats 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
2	Emergency exit	<ul style="list-style-type: none"> • Are exits serviceable (if not, check MEL limitations) • Possible obstacles • emergency exits (serviceability) • escape ropes (secured or not) 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
3	Equipment	<p>ACAS II/TCAS:</p> <ul style="list-style-type: none"> • Presence • System test/passed <p>8.33 kHz: (if required)</p> <ul style="list-style-type: none"> • Radio channel spacing <p>RNAV:</p> <ul style="list-style-type: none"> • Authorisation to perform operations in RNAV airspace. <p>TAWS/E-GPWS:</p> <ul style="list-style-type: none"> • Presence • TAWS/SRPBZ for forward looking terrain avoidance function • Database of system (content and update) • System test (if possible) <p>MNPS</p> <ul style="list-style-type: none"> • Special authorisation • Cockpit Voice Recorder • System test (if possible) <p>RVSM: (if required)</p> <ul style="list-style-type: none"> • Presence • Serviceability 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
Documentation				
4	Manuals	<ul style="list-style-type: none"> • Presence of the applicable parts of the operations manual • Up-to-date • Competent authority approval where applicable content (complies with the requirements) • Presence of aircraft flight manual / performance data • Differences regarding manuals of aircraft of ex-Soviet design (e.g. Rukowodstwo on former Commonwealth of Independent States (CIS) built aircraft. 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		

5	Checklists	<ul style="list-style-type: none"> • Available/within reach • Tidiness/cleanliness • Normal • Abnormal • Emergency • Up-to-date/not for training, etc. • Content (compliance with the operator procedures) • Appropriate for aircraft configuration being used 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
6	Radio navigation/ instrument charts	<ul style="list-style-type: none"> • Presence of instrument approach charts (available/within reach/ up-to-date) • Presence of en-route charts (available/within reach/up-to-date) • Route covering • FMS/GPS database validity 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
7	Minimum equipment list	<ul style="list-style-type: none"> • Presence of instrument approach charts (available/w within reach/ up-to-date) • Presence of en-route charts (available/within reach/up-to-date) • Route covering • FMS/GPS database validity 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
8	Certificate of registration	<ul style="list-style-type: none"> • On-board • Accuracy (Reg. mark, A/C type and S/N) • Format • English translation when needed • Identification plate (S/N) 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
9	Noise certificate	<ul style="list-style-type: none"> • On-board • Approval (state of registry) 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
10	AOC or equivalent	<ul style="list-style-type: none"> • Accuracy • Content (operator identification, validity, date of issue, A/C type, OPS SPECS) • EASA TCO authorisation (if applicable) 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
11	Radio licence	<ul style="list-style-type: none"> • On-board • Accuracy with installed equipment 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
12	Certificate of airworthiness (C of A)	<ul style="list-style-type: none"> • On-board (original or certified true copy) • Accuracy • Validity 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
Flight data				

13	Flight preparation	<ul style="list-style-type: none"> Operational flight plan on board Proper filling Signed by pilot-in-command/commander (and where applicable, Dispatch) Fuel calculation Fuel monitoring/management NOTAMs Updated meteorological information Letter Y in flight plan 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
14	Mass and balance calculation	<ul style="list-style-type: none"> On-board Accuracy (calculations/ limits) Pilots acceptance Load and trim sheet/ actual load distribution 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
Safety equipment				
15	Hand fire extinguishers	<ul style="list-style-type: none"> On-board Condition/pressure indicator Mounting (secured) Expiry date (if any) Access Sufficient number 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
16	Life jackets/flotation devices	<ul style="list-style-type: none"> On-board Access/within reach Condition Expiry date (where applicable) Sufficient number 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
17	Harness	<ul style="list-style-type: none"> On-board (no seatbelt) Condition Sufficient number (one for each crew member) 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
18	Oxygen equipment	<ul style="list-style-type: none"> On-board Condition Cylinder pressure (minimum acc. to operations manual) Ask crew to perform the operational function check of combined oxygen and communication system Follow practice of the flight crew 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
19	Independent Portable light	<ul style="list-style-type: none"> On-board Appropriate quantities Condition Serviceability Access/within reach The need for an independent portable light (departure or arrival at night time) 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		

Flight crew				
20	Flight crew licence/composition	<ul style="list-style-type: none"> ● On-board ● Form/content/English translation when needed ● Validity ● Ratings (appropriate type) (pilot-in-command (PIC)/ATPL) ● Pilots' age ● Possible difference with ICAO Annex 1 (concerning the age of pilots) ● In case of validation (all documents needed) ● Medical assessment/ check interval ● Spare eyeglasses if applicable ● Minimum flight crew requirements 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
Journey log book / Technical log or equivalent				
21	Journey log book or equivalent	<ul style="list-style-type: none"> ● On-board ● Content ● Filling (carefully and properly) 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
22	Maintenance release	<ul style="list-style-type: none"> ● Validity ● When need of maintenance, technical log has been complied with ● When ETOPS, requirement are met ● Signed off ● Verify that maintenance release has not expired ● Ex-Soviet built A/C 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
23	Defect notification and rectification	<ul style="list-style-type: none"> ● Number of deferred defects ● All defects been notified ● Defect deferments include time limits and comply with the stated time limits ● All the defects are notified ● Technical log markings (should be understandable by captain) ● Ex-Soviet built A/C 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
24	Pre-flight inspection	<ul style="list-style-type: none"> ● Performed (inbound/ outbound flight) ● Signed off 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
B	Cabin Safety			

1	General internal condition	<ul style="list-style-type: none"> ● General condition ● Possible loose carpets ● Possible loose or damaged floor panels ● Possible loose or damaged wall panels ● Seats ● Markings of unserviceable seats ● Lavatories ● Lavatory smoke detectors ● Safety and survival equipment (shall be reliable, readily accessible and easily identified. Instructions for operation shall be clearly marked) ● Possible obstacles to perform normal and abnormal duties 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
2	Cabin crew stations and crew rest area	<ul style="list-style-type: none"> ● Presence of cabin crew seats and compliance with the requirement ● Sufficient number ● Condition (seatbelt, harness) ● Emergency equipment (independent portable light, fire extinguishers, portable breathing equipment ...) ● Cabin preparation list 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
3	First-aid kit/ emergency medical kit	<ul style="list-style-type: none"> ● On-board ● Condition ● Expiry date ● Location (as indicated) ● Identification ● Adequacy ● Access ● Operating instructions (clear) 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
4	Hand fire extinguishers	<ul style="list-style-type: none"> ● On-board ● Condition (pressure indicator) ● Expiry date (if available) ● Mounting and access ● Number 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
5	Life jackets/ flotation devices	<ul style="list-style-type: none"> ● On-board ● Easy access ● Condition ● Expiry dates as applicable ● Sufficient number ● Infant vest 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		

6	Seat belt and seat condition	<ul style="list-style-type: none"> ● On-board ● Sufficient number ● Condition ● Availability of extension belts ● Cabin seats (verify the condition) ● If unserviceable check U/S-tag. ● Restraint bars 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
7	Emergency exit, lightning and marking, independent portable light	<ul style="list-style-type: none"> ● Emergency exits (condition) ● Emergency exit signs/ presence (condition) ● Operation instructions (markings and passenger emergency briefing cards) ● Floor path markings (ask to switch on). Possible malfunction/MEL ● Lighting ● Independent Portable light and batteries (condition) ● Sufficient number of Independent Portable light (night operations) ● Availability on each cabin attendant's station. 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
8	Slides/life-rafts (as required), ELT	<ul style="list-style-type: none"> ● Slides on-board ● Condition ● Expiry date ● Sufficient number ● Location and mounting ● Bottle pressure gauge ● ELT on board ● ELT (condition and date) 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
9	Oxygen supply (cabin crew and passengers)	<ul style="list-style-type: none"> ● Presence ● Sufficient quantity of masks (cabin crew and passengers) ● Drop-out panels are free to fall ● Passenger instructions (passenger emergency briefing cards) ● Portable cylinder supply and medical oxygen, check pressure and mounting 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
10	Safety instructions	<ul style="list-style-type: none"> ● On-board ● Tidiness ● Accuracy/content (A/C type) ● Sufficient numbers (passenger emergency briefing card for each passenger) ● Cards for flight crew (check emergency equipment locations) 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		

11	Cabin crew members	<ul style="list-style-type: none"> • General overview of cabin crew (conditions) • The sufficient number of cabin crew (appropriate) • How the duty stations are manned • Follow practice of the cabin crew • When refuelling with passengers on-board check procedures 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
12	Access to emergency exits	<ul style="list-style-type: none"> • Access areas • Possible obstacles for evacuation (foldable jump seat or seat backrest table) 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
13	Stowage of passenger baggage	<ul style="list-style-type: none"> • Hand baggage storages in cabin • Size of hand baggage • Quantity of hand baggage • Weight of hand baggage • Placed under seat (restraint bar) 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
14	Seat capacity	<ul style="list-style-type: none"> • Number of passengers/ permitted • Sufficient seat capacity 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
C Aircraft condition				
1	General external condition	<ul style="list-style-type: none"> • Radom (latches/painting) • Windshields • Wipers • Static ports/areas • AoA probes • Pitot tubes • TAT probe • Crew oxygen discharge indicator (if exist) • Ground power connection (condition) • Wings (general condition, ice/snow contamination) • Fairings • Leading edge (dents) • Winglets • Trailing edge/static dischargers • Look for hydraulic leaks • Look for fuel leak • Fuselage • Tail section/static dischargers • APU cooling air inlet • APU exhaust air/surge • Look at APU area for leaks • Tail bumper (contact markings) • Maintenance and service panels (water/waste/hydraulic maintenance panels/refuel panels/cargo door control panel/RAT door) • Cabin windows 	<input type="checkbox"/>	<input type="checkbox"/>

		<ul style="list-style-type: none"> ● Exterior lights ● Painting (condition) ● Cleanliness ● Markings/operational instructions and registration ● Obvious repairs ● Obvious damage 		
		Note:		
2	Doors and hatches	<ul style="list-style-type: none"> ● Passenger doors (condition) ● Emergency exits (condition) ● Cargo doors (condition) ● Avionics compartment doors (condition) ● Accessory compartment doors (condition) ● Operation instructions of all doors ● Lubrications of all doors ● Door seals ● Handles 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
3	Flight controls	<ul style="list-style-type: none"> ● Ailerons (condition) ● Slats/Krueger flaps/Notch flap (condition) ● Spoiler panels (condition) ● Flaps/track fairings (condition) ● Rudder (condition) ● Elevators (condition) ● Stabiliser (condition) <p><i>heck for leaks, flap drooping, wearing, corrosion, disbonding, dents, loose fittings and obvious damages.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
4	Wheels, tyres and brakes	<ul style="list-style-type: none"> ● Wheels (assembly condition, bolts and paint markings) ● Tires (condition and pressure). Check for cuts, groove cracks, worn out shoulders, blister, bulges, flat spots) ● Worn tire areas (measure the tread depth) ● If cuts measure depth ● Brakes (condition, wearing pins) ● Measure and familiarise length of the pin/check for the limits. 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
5	Undercarriage	<ul style="list-style-type: none"> ● Landing gear/hinges (general condition/leaks) ● Struts ● Locking mechanisms ● Hydraulic (or pneumatic) lines (condition) ● Strut pressure (visual check/piston length) ● Lubrication ● Electric lines and plugs. ● Bonding ● Cleanliness ● FOD (foreign object damage) ● Surface (plasma) and paintings ● Check for corrosion ● Placards and markings (nitrogen pressure table) 	<input type="checkbox"/>	<input type="checkbox"/>

		<ul style="list-style-type: none"> ● Dampers and bogie cylinders (check for leaks) ● Landing gear strut doors ● Use independent portable light and mirror 		
		Note:		
6	Wheel well	<ul style="list-style-type: none"> ● General condition (structures) ● Possible corrosion ● Cleanliness ● Installations (wiring, piping, hoses, hydraulic containers and devices) ● Check for leaks ● Wheel well doors (hinges) ● Check for maintenance safety pins 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
7	Power plant and pylon	<ul style="list-style-type: none"> ● Air intake ring (general condition/inner skin and acoustic panels) ● Engine cowlings (panels aligned, handles aligned, vortex generators/access doors) ● Intake area fasteners ● Sensors ● Thrust reverses (ring and inner doors or thrust reverser doors) ● Reverser duct inner skin and acoustic panels ● Outlet guide vanes (from behind/reverser duct) ● Exhaust barrel (inner and outer skin) ● Drain mast/leaks ● Pylons (sealants, panels, doors and blow-out-doors, possible leaks) 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
8	Fan blades, propellers, rotors (main/tail)	<ul style="list-style-type: none"> ● Fan blades: general condition (check for foreign object damage, cracks, nicks, cuts, corrosion and erosion) ● Fan blade: <ul style="list-style-type: none"> ○ Leading edge ○ Mid-span shroud (no stacked) ○ Tip ○ Contour surface ○ Root area ○ platform <p><i>Note! Wait until rotation stop! Use independent portable light and mirror for the backside of the blades.</i></p> <ul style="list-style-type: none"> ● Spinner (damages/bolts) ● Fan outlet vanes (thorough the fan) ● FOD (foreign object damage) ● Split fairing ● Blades (general condition) ● Tip and mid area (75 % from root) ● Check for nicks, dents, cracks, leakages etc. ● Hub/spinner ● Looseness of blades in hub 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
9	Obvious repairs	<ul style="list-style-type: none"> ● During the inspection of C-items notify unusual design and repairs obviously not carried out in accordance with the applicable AMM/SRM 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		

10	Obvious damages unrepaired	<ul style="list-style-type: none"> ● During the inspection of C-items notify unassessed and unrecorded damages and corrosion (lightning strike, bird strikes, FODs, etc.) ● Check damage charts 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
11	Leakage	<ul style="list-style-type: none"> ● During the inspection of C-items notify all the leaks: ● Fuel leaks ● Hydraulic leaks ● Toilet liquid leaks ● When leak: measure the leak rate and check the leak rates from AMM etc. if it is allowable and within normal operation limits or not. ● Wear eye protection and use proper inspection gears for inspection 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
D Cargo				
1	General condition of cargo compartment	<ul style="list-style-type: none"> ● Cleanliness ● Lightning ● Fire protection/detection/ extinguishing systems and smoke detectors ● Floor panels ● Wall panels/markings ● Blow-out-panels ● Ceilings ● Wall and ceiling panel sealants ● Cargo nets/door nets ● Fire extinguishers ● Cargo roller and driving system and control panel 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
2	Dangerous goods	<ul style="list-style-type: none"> ● Operations manual/ information required by ICAO Annex 18 ● Technical Instructions (ICAO Doc. 9284-AN/905) are applied <p>If dangerous goods on-board:</p> <ul style="list-style-type: none"> ● Pilots' notification ● Stowing of dangerous goods cargo ● Packaging (condition, leaks, damage) ● Labelling <p>If leak or damage of dangerous goods cargo:</p> <ul style="list-style-type: none"> ● Condition of other cargo ● Follow removal ● Follow cleaning of contamination 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		
3	Secure stowage of cargo	<ul style="list-style-type: none"> ● Load distribution (floor limits, pallets and containers/maximum gross weight) ● Flight kit/spare wheel/ ladders (secured) ● Cargo (secured) ● Condition and presence of: ● Lockers ● Restraints ● Pallets ● Nets ● Straps ● Containers 	<input type="checkbox"/>	<input type="checkbox"/>
		Note:		

		<ul style="list-style-type: none"> ● Container locks on the floor ● Heavy items securing inside containers 		
		Note:	<input type="checkbox"/>	<input type="checkbox"/>
E	General			
1	General	Note:	<input type="checkbox"/>	<input type="checkbox"/>
Additional elements (O) observed/performed (P) during On the Job Training				
<i>(Please List)</i>				
Assessment				
- Was the inspection carried out in a satisfactory manner regarding:				
-	preparation of the inspection	<input type="checkbox"/> Yes <input type="checkbox"/> No (provide further details below*)		
-	ramp inspection	<input type="checkbox"/> Yes <input type="checkbox"/> No (provide further details below*)		
-	proof of inspection	<input type="checkbox"/> Yes <input type="checkbox"/> No (provide further details below*)		
-	human factors elements	<input type="checkbox"/> Yes <input type="checkbox"/> No (provide further details below*)		
Further training needed:				
Additional Remarks:*				
Signature of the trainee:			Signature of the senior ramp inspector:	

AMC1 BCAR.ARO.RAMP.115(b)(2)(i) Qualification of ramp inspectors

SYLLABUS OF THEORETICAL KNOWLEDGE FOR RAMP INSPECTORS

INITIAL (THEORETICAL) TRAINING COURSE

- Module (GEN): General overview (legal)
- Module (A): Flight crew compartment inspection items
- Module (B): Cabin safety inspection items
- Module (C): Aircraft condition inspection items
- Module (D): Cargo inspection items

MODULE (GEN)		
a. Overview of the safety assessment of aircraft		
<p>i. Introduction</p> <ul style="list-style-type: none"> ● The Ramp Inspection Programme Overview ● Role and responsibilities of the BCAA — Overview <p>ii. The BCAA Ramp Inspection programme — ICAO basic references</p> <ul style="list-style-type: none"> ● ICAO convention ● Annex 1 – Personnel Licensing ● Annex 6 – Operations of Aircraft ● Annex 8 – Airworthiness of Aircraft — Main features ● Application by all participating States ● Dissemination of inspection results ● Bottom-up approach ● Focused attention ● Compliance with ICAO standards <p>iii. Principles of the BCAA Ramp Inspection Programme</p> <ul style="list-style-type: none"> ● BCAA Role ● Common procedures and common reporting format ● The legal obligation to inspect <p>iv. Not applicable</p> <p>v. Not applicable</p> <p>vi. Not applicable</p> <p>vii. Not applicable</p> <p>viii. Not applicable</p> <p>ix. Not applicable</p>	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Trainees should know the background of the BCAA Ramp Inspection Programme 2. Trainees should be able to identify the main elements of the Programme 3. Trainees should understand the role of ramp inspections in the general safety oversight context 	
c. The ICAO framework		
<p>i. International Requirements</p> <ul style="list-style-type: none"> ● The Chicago Convention – general overview ● The ICAO general overview ● The Convention – key ramp inspection-related Articles ● Article 11 – Applicability of air regulations ● Article 12 – Rules of the air ● Article 16 – Search of aircraft ● Article 29 – Documents carried on aircraft ● Article 30 – Aircraft radio equipment ● Article 31 – Certificate of airworthiness ● Article 32 – Licences of personnel ● Article 33 – Recognition of certificates and licences ● Article 37 – Adoption of international standards and recommended practices ● Article 38 – Departures from international standards and procedures ● Article 83 <i>bis</i> – Transfer of certain functions and duties <p>ii. Ramp inspection (RI) and ICAO — Annex 7 (Aircraft Nationality and Registration Marks) – Overview</p> <ul style="list-style-type: none"> ● The Certificate of Registration ● Example of Certificate of Registration ● The identification plate <p>iii. RI and ICAO — Annex 8 (Airworthiness of Aircraft) – Overview</p> <ul style="list-style-type: none"> ● Validity of the Certificate of Airworthiness 	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Trainees should be able to outline ICAO’s role and responsibilities within the international civil aviation context. 2. Trainees should understand the obligations of the signatory States. 3. Trainees should understand the direct relationship between ICAO standards and ramp inspection. 	

<ul style="list-style-type: none"> ● Standard form of Certificate of Airworthiness ● Emergency exits, markings and lights ● Safety and survival equipment <p>iv. RI and ICAO — Annex 1 (Personnel Licensing) – Overview</p> <ul style="list-style-type: none"> ● General rules concerning licenses <p>v. RI and ICAO — Annex 6 (Operation of Aircraft) — Overview</p> <ul style="list-style-type: none"> ● Part I, International commercial air transport aeroplanes ● Part II, International general aviation aeroplanes ● Part III, International operations helicopter <p>vi. RI and ICAO — Annex 16 (Environmental Protection) – Overview</p> <ul style="list-style-type: none"> ● Noise Certificate (applicability to SAFA programme) <p>RI & ICAO — Annex 18 (The Safe Transport of Dangerous Goods by Air)</p> <ul style="list-style-type: none"> ● Overview ● Dangerous goods Technical Instructions for the safe transport of dangerous goods by air (Doc 9284) <p>RI & ICAO Doc 7030 (Regional Supplementary procedures)</p> <ul style="list-style-type: none"> ● Overview ● Applicability 	
d. Safety assessment technical aspects overview	
<p>i. Preparation of the inspection</p> <p>ii. Subjects of the inspection:</p> <ul style="list-style-type: none"> ● Aircraft used by third country operators or used by operators under the regulatory oversight of another Member State. ● Technical considerations ● Experience/feedback from previous checks ● ‘Intelligence’ (ATC, passenger complaints, etc.) ● Prioritisation <p>iii. Elements to be inspected:</p> <ul style="list-style-type: none"> ● In principle, all RI checklist items; but: ● Other considerations for a limited inspection: ● Time available (stop duration, slot, no unreasonable delay) ● Inspector privileges ● Areas of concern (based upon previous checks and/or centralised database) ● Context (recent/old aircraft, new airline, new type of aircraft) ● Intelligence information <p>iv. Planning the inspection:</p> <ul style="list-style-type: none"> ● Efficient use of the time available ● Considerations for inspections on arrival or departure ● Any day in a week, any time in a day <p>v. Short transit times:</p> <ul style="list-style-type: none"> ● Walk around check during off boarding ● Segmented inspections <p>vi. Toolkit for the RI inspector:</p> <ul style="list-style-type: none"> ● Inspector’s documentation (RI procedures, regulations, updated reference material, etc.) ● Inspector’s tools (vest, Independent Portable light, camera, telephone, protective personal equipment, etc.) ● Inspector’s identification (authority ID, airport badge) ● Airline documentation available 	

<p>Vii. Teamwork:</p> <ul style="list-style-type: none"> ● Preferably two inspectors covering all fields of expertise ● Briefing on task allocation <p>viii. The ramp inspection checklist:</p> <ul style="list-style-type: none"> ● Aspects to be covered by the ramp inspection ● The ramp inspection checklist (format/structure and overview of contents) <p>ix. Starting the Inspection:</p> <ul style="list-style-type: none"> ● Introduction to the crew (flight crew/technical staff/airline representative/translator) ● Determination of available inspection time ● Explain that any operator is subject to inspections (ramp inspection principle) <p>x. Code of conduct:</p> <ul style="list-style-type: none"> ● Human factor principle (inspection = intrusion) ● Cooperation with the crew ● Time efficiency ● Collection of evidence <p>xi. Categorisation of findings:</p> <ul style="list-style-type: none"> ● Definition of finding: Deviation from the standards ● Level 3 finding with major influence on safety ● Level 2 finding with significant influence on safety ● Level 1 finding with minor influence on safety <p>xii. Follow-up actions:</p> <ul style="list-style-type: none"> ● Relationship between finding and action ● Class 1 action ● Class 2 action ● Class 3 actions <p>xiii. Concluding the inspection:</p> <ul style="list-style-type: none"> ● Debriefing of inspection results ● Delivery of proof of inspection to the pilot-in-command/commander/airline representative/sub-contractors 	
2. MODULE (A)	
a. Ramp inspection items (A)	
<p>A1 General condition (flight crew compartment)</p> <ul style="list-style-type: none"> ● Circuit breakers (C/B) (inappropriately pulled/popped) ● Secure stowage of interior equipment (incl. baggage) ● Crew seats (manual or electrical) ● Security/reinforced flight crew compartment door ● General condition of flight crew compartment <p>A2 Emergency Exit (flight crew compartment)</p> <ul style="list-style-type: none"> ● Access (easy/no blockings) ● Escape ropes (secured) ● Emergency exits (flight crew compartment) <p>A3 Equipment</p> <ul style="list-style-type: none"> ● Awareness of different design philosophies of A/C systems (BITE, message displays/status) ● Proper functioning (system test) <p>GPWS — TAWS</p> <ul style="list-style-type: none"> ● General (basic principles) ● Forward looking terrain avoidance function (7-channel SRPBZ ICAO compliant) ● Presence of the equipment ● Validity of GPWS database ● System test — passed 	<p>Objectives: Trainees should possess the relevant knowledge enabling them to inspect each item.</p>

<ul style="list-style-type: none">● CIS built A/C systems (SSOS, SPPZ and SRPBZ) <p>ACAS/TCAS II</p> <ul style="list-style-type: none">● General (applicability and principles)● Mode S transponder and ACAS II (general)● System test <p>8.33 kHz radio channel spacing</p> <ul style="list-style-type: none">● Selection of an 8.33 kHz channel● Presence of 6 or 5 digits (132.055 or 32.055)● Letter Y in field 10 of the flight plan <p>RNAV – BRNAV – PRNAV</p> <ul style="list-style-type: none">● General (applicability and principles)● Special authorisation● Required equipment● Flight planning and completion of the flight <p>RVSM</p> <ul style="list-style-type: none">● General (applicability and principles)● Special authorisation● Required equipment● Flight planning and completion of the flight <p>MNPS</p> <ul style="list-style-type: none">● General (applicability and principles)● Special authorisation● Required equipment● Flight planning and completion of the flight <p>A4 Manuals</p> <ul style="list-style-type: none">● Operation manual (structure)● Aircraft flight manual (structure)● Competent Authority approval● Update status <ul style="list-style-type: none">● Electronic flight bag (EFB class 1, 2 and 3)● Content in relation to flight preparation <p>A5 Checklists</p> <ul style="list-style-type: none">● Availability: within reach and update status● Compliance with operator procedures (normal, abnormal and emergency)● Appropriateness of checklist used (aircraft checklists)● A/C system integrated checklists <p>A6 Radio navigation/instrument charts</p> <ul style="list-style-type: none">● Required charts (departure, en-route, destination and alternate):● within reach and update status● Validity of FMS database● Electronic maps and charts● The AIRAC Cycle <p>A7 Minimum equipment list (MEL)</p> <ul style="list-style-type: none">● Availability: approval and update status● Content: MEL reflects installed equipment● Relationship MEL/Master MEL● CDL (configuration deviation list) <p>A8 Certificate of Registration</p> <ul style="list-style-type: none">● Availability and accuracy	
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<ul style="list-style-type: none">● Original documents and certified copies acceptability● Presence of mandatory information on the certificate:● Identification plate (type — location) <p>A9 Noise certificate</p> <ul style="list-style-type: none">● Availability (if applicable)● Multiple noise certification● Approval status <p>A10 AOC or equivalent</p> <ul style="list-style-type: none">● Availability (original or copy) and accuracy● Content in compliance with requirements/format● Content of operational specifications <p>A11 Radio (station) license</p> <ul style="list-style-type: none">● Availability and accuracy● Original documents and certified copies acceptability <p>A12 Certificate of Airworthiness (C of A)</p> <ul style="list-style-type: none">● Format of Certificate of Airworthiness● Original documents and certified copies acceptability● Presence, accuracy and validity <p>A13 Flight preparation</p> <ul style="list-style-type: none">● Presence and accuracy of operational flight plan● Performance calculations● Proper fuel calculation and monitoring● Special considerations for ETOPS operations● Availability and update of meteorological information● Availability and update of NOTAMS <p>A14 Mass and balance calculation</p> <ul style="list-style-type: none">● Availability and accuracy● Data available for a verification by crew <p>A15 Hand fire extinguishers</p> <ul style="list-style-type: none">● Validity, access and locations● Mounting● Types <p>A16 Life-jackets/flotation devices</p> <ul style="list-style-type: none">● Validity, access and locations● Applicability <p>A17 Harness</p> <ul style="list-style-type: none">● Presence (and usage)● Availability for all flight crew members● Requirements for different crew positions● Conditions (wearing) <p>A18 Oxygen equipment</p> <ul style="list-style-type: none">● Presence, access and condition● Oxygen cylinder pressure● Minimum required according to the operations manual (in case of low pressure)● Operational functional check of the combined oxygen and communication system (crew) <p>A19 Independent portable light</p> <ul style="list-style-type: none">● Number of required independent portable light(s) (day/night)● Condition, serviceability and access	
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<p>A20 Flight crew licences</p> <ul style="list-style-type: none"> ● Validity of crew licences and appropriate ratings ● Validation of foreign licences ● Validity of medical certificate ● Special medical conditions (spare glasses, etc.) ● Age limitations ● Minimum crew requirements <p>A21 Journey Log book</p> <ul style="list-style-type: none"> ● Content of journey log book (recommendation/roman numerals) ● Examples of journey log books <p>A22 Maintenance Release</p> <ul style="list-style-type: none"> ● Applicable requirements and duties of the PIC/ commander <p>A23 Defect notification and rectification (incl. technical log)</p> <ul style="list-style-type: none"> ● Defects notification ● Cross check with MEL ● History of defects/notification (incl. hold item list) <p>A24 Pre-flight inspection</p> <ul style="list-style-type: none"> ● Applicable requirements and duties of the PIC 	
<p>MODULE (B)</p> <p>a. Ramp inspection items (b)</p>	
<p>B1 General internal condition</p> <ul style="list-style-type: none"> ● General condition ● Safety and survival equipment ● Design and construction <p>B2 Cabin Crew Stations and Crew Rest Area</p> <ul style="list-style-type: none"> ● Cabin crew seats (number, material/fire resistant and condition, upright position/safety hazard) ● Equipment <p>B3 First-aid kit/emergency medical kit</p> <ul style="list-style-type: none"> ● Recommendation on contents (validity) ● Locations of kits ● Adequacy ● Readily/access ● Identifications/markings/seals <p>B4 Hand fire extinguishers</p> <ul style="list-style-type: none"> ● Validity, access and locations ● Mounting ● Types <p>B5 Life-jackets/flotation devices</p> <ul style="list-style-type: none"> ● Validity, access and locations ● Applicability ● Different models of jackets and/or flotation devices on-board ● Instructions for passengers (written and demonstration) <p>B6 Seat belt and seat condition</p> <ul style="list-style-type: none"> ● Seats and belts (material/condition/installation) ● Portable light (cabin crew) ● Instructions for passengers (written and demonstration) ● Opening assistance systems 	<p>Objectives: Trainees should possess the relevant knowledge enabling them to inspect each item.</p>

<p>B7 Emergency exit, lighting and marking, independent portable light</p> <ul style="list-style-type: none"> ● Evacuation signs ● Lighting and marking (passenger compartment) ● Independent Portable light <p>B8 Slides/life-rafts/ELTs</p> <ul style="list-style-type: none"> ● Slides/rafts general (locations, types) ● Serviceability — pressure gauge/green band ● Instructions for passengers (written and demonstration) ● Emergency locator transmitter (ELT) (general/types/location) <p>B9 Oxygen supply (cabin crew and passengers)</p> <ul style="list-style-type: none"> ● Oxygen supply: cylinders and generators ● Serviceability — pressure gauge/green band ● Models/A/C types ● Drop-out panels/storage of masks <p>B10 Safety instructions</p> <ul style="list-style-type: none"> ● Availability and accuracy <p>B11 Cabin crew members</p> <ul style="list-style-type: none"> ● Appropriate number of cabin crew (A/C type) ● Refuelling with passengers on-board (crew positions) <p>B12 Access to emergency exits</p> <ul style="list-style-type: none"> ● Number and location of exits ● Different models and sizes (A/C type) ● Obstructions ● Instructions for passengers (written and demonstration) <p>B13 Stowage of passenger baggage's (cabin luggage)</p> <ul style="list-style-type: none"> ● Proper storage (size, weight and number) ● Safety risks <p>B14 Seat capacity</p> <ul style="list-style-type: none"> ● Numbers of seats (A/C type) ● Max number of passengers (A/C type) 	
<p>MODULE (C)</p>	
<p>RAMP INSPECTION ITEMS (C)</p>	
<p>C1 General External Condition</p> <ul style="list-style-type: none"> ● Corrosion (different corrosion types) ● Cleanliness and contamination (fuselage and wings) ● Windows and windshields (delamination) ● Exterior lights (landing lights, NAV-lights, strobes, beacon, etc.) ● Markings ● De-icing requirements <p>C2 Doors and hatches</p> <ul style="list-style-type: none"> ● Door types (normal — emergency — cargo doors) ● Markings and placards of doors ● Operating instructions of doors ● Condition and possible damages <p>C3 Flight controls</p>	<p>Objectives: Trainees should possess the relevant knowledge enabling them to inspect each item.</p>

<ul style="list-style-type: none"> ● Condition and possible damages, corrosion and loose parts ● Rotor head condition ● Leakage <p>C4 Wheels, tyres and brakes</p> <ul style="list-style-type: none"> ● Tyre pressure (cockpit indications/wheel integrated gauge) ● Brake condition ● Condition and possible damages, leaking and loose parts <p>C5 Undercarriage</p> <ul style="list-style-type: none"> ● Condition and possible damages, corrosion and loose parts ● Strut (and tilt cylinder) pressure <p>C6 Wheel well</p> <ul style="list-style-type: none"> ● Condition and possible damages, corrosion, leaks and loose parts <p>C7 Powerplant and pylon</p> <ul style="list-style-type: none"> ● Cowlings, cowling doors and blow-out doors ● Condition and possible damages, corrosion, leaks and loose parts ● Pylon, pylon doors, blow-out panels and missing rivets ● Condition and possible damages, corrosion, leaks and loose parts ● Reversers' condition <p>C8 Fan blades, propellers, rotors</p> <ul style="list-style-type: none"> ● Types of fan blades/propellers/rotors ● Foreign object damage (FOD), (dents, nicks, blade bending) ● De-icing (boots and heating elements) <p>C9 Obvious repairs</p> <ul style="list-style-type: none"> ● Obvious repairs/maintenance release, technical log <p>C1.0 Obvious unprepared damage</p> <ul style="list-style-type: none"> ● Damages/missing maintenance release, technical log ● Assessment of damage <p>C11 Leakage</p> <ul style="list-style-type: none"> ● Obvious leakage, technical log ● Types and assessment of leakage ● Toilet leaks/blue ice, etc. 	
<p>MODULE (D)</p> <p>Ramp inspections items (D)</p>	
<p>D1 General condition of cargo compartment</p> <ul style="list-style-type: none"> ● Structures, wall panels, wall sealing ● Fire detection & extinguishing systems ● Blow-out panels ● 9G-net ● Containers ● Loading instructions/door instructions ● Damage <p>D2 Dangerous goods</p>	<p>Objectives: Trainees should possess the relevant knowledge enabling them to inspect each item.</p>

<ul style="list-style-type: none">● Notification to the pilot-in-command/commander● Segregation and accessibility● Packaging and labelling● Limitations/restrictions (cargo aircraft) goods) <p>D3 Cargo stowage</p> <ul style="list-style-type: none">● Loading instructions (placards, wall markings)● Flight kit (secured)● Pallets, nets, straps, containers (secured)● Loading limitations (weight, size and height) <p>E1 General</p> <ul style="list-style-type: none">● All the general items that may have a direct relation with the safety of the aircraft or its occupants	
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AMC2 BCAR.ARO.RAMP.115(b)(2)(i) Qualification of ramp inspectors

SYLLABUS OF PRACTICAL TRAINING FOR RAMP INSPECTORS — INITIAL (PRACTICAL) TRAINING COURSE

- Module (A): Flight crew compartment inspection items
- Module (B): Cabin safety inspection items
- Module (C): Aircraft condition inspection items
- Module (D): Cargo inspection item

MODULE A (Flight crew compartment inspection items)	
	Objectives: Trainees should be able to use their technical knowledge and ramp inspection techniques in a satisfactory manner during the subsequent on-the-job training

<p>A1 General condition (of flight crew compartment)</p> <ul style="list-style-type: none">● Security/reinforced door (how to recognise)● Reinforced flight crew compartment installations/locking functions (with a real example)● C/Bs/circuit breakers (recognise pulled/popped)● Crew seats/serviceability (functions of seats/manual — electrical)● Examples of storage of flight cases and crew luggage (possible safety hazards)● Check cleanliness of flight crew compartment <p>A2 Emergency exit (flight crew compartment)</p> <ul style="list-style-type: none">● Recognise easy access (no blockings)● Escape ropes (check if secured) <p>A3 Equipment</p> <p>GPWS-TAWS:</p> <ul style="list-style-type: none">● GPWS, locate instruments in cockpit● Aural warning test demonstrating: Sounds/display patterns● Recognise CIS-built A/C systems (if possible): SSOS — SPPZ — SRPBZ <p>ACAS/TCAS II</p> <ul style="list-style-type: none">● Locate instruments in cockpit● Mode S transponder and ACAS II (locate and check the model)● System warning test/indications <p>8.33 kHz radio channel spacing</p> <ul style="list-style-type: none">● Indication in the flight plan (examples)● How to check real channel spacing during the inspection (performed with real radios or approved training devices) <p>A4 Manuals (flight manuals only)</p> <ul style="list-style-type: none">● Operations manual: (content/handling exercise)● Aircraft flight manual (examples)● Electronic manuals (lap-tops)/integrated systems <p>A5 Checklists</p> <ul style="list-style-type: none">● Check validity normal-, abnormal-, emergency checklists and 'quick reference handbook'● Meaning of 'available'/within reach (case study/ examples)● A/C system integrated checklists (demonstration of system) <p>A6 Radio navigation/instrument charts</p> <ul style="list-style-type: none">● Check the covering of charts● En-route and instruments approach charts (view examples)● Locations in the flight crew compartment● Electronic maps and charts (examples)● Check updating markings of the charts and folders.● FMS navigation data-base (check the 'INIT' page for validity) <p>A7 Minimum equipment list (MEL)</p> <ul style="list-style-type: none">● Check the deferred defects are in accordance with the MEL instructions● Inspect MEL according the current MMEL● Approval (check)	
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A8 Certificate of Registration (CoR)

- Content and accuracy of the Certificate of Registration (various examples/check)
- Requirements of certified true copy (examples of copies)
- Common location in the A/C
- Identification plate/show various locations in A/C

A9 Noise certificate

- Format of the noise certificate
- Content of noise certificate/approval/(check)

A10 Air Operator Certificate (AOC) or equivalent

- Format of the air operator certificate
- Content and accuracy of AOC/approval (check compliance with the requirement)
- Show location (A/C documents or door)

A11 Radio (station) licence

- Format of the radio station licence (examples)
- Show location (a/c documents or door)

A12 Certificate of Airworthiness (C of A)

- Check certificate and content (recognise standard form)
- Accuracy and validity (check)
- Show location (A/C documents or door)

A13 Flight preparation

- Check operational flight plan, proper filling and relevant documents
- Proper fuel calculation and monitoring (demonstration of various examples)
- NOTAMs/check validity (examples)
- Weather information/available and within reach (demonstrate updated reports/examples)

A14 Mass and balance calculation

- Check examples of different type weight and balance sheets/A/C types (manual and computerised)

A15 Hand fire extinguishers

- Locations/access (flight crew compartment visit)
- Condition and pressure gauge
- Familiarise with different date markings (inspection date or expiry date)
- Mountings (review examples)
- Types (review examples)

A16 Life-jackets/flotation devices

- Locations
- Familiarise with date markings
- Extra raft location in flight crew compartment (installation, pressure gauge)

A17 Harness

- Worn out (examples)
- Locks (common problems)

A18 Oxygen equipment

- Storage of masks (Quick Donning/Balloon)

<ul style="list-style-type: none"> ● Pressure gauge (check green band) ● Radio boom — mask check <p>A19 Independent Portable light</p> <ul style="list-style-type: none"> ● Locations ● Operational check <p>A20 Flight crew licences</p> <ul style="list-style-type: none"> ● Licenses of personnel: <ul style="list-style-type: none"> —endorsement of certificates and licenses —validity of endorsed certificates and licenses —language proficiency —medical certificate (spare glasses, etc.) —validity of licences ● Aeroplane flight crew: <ul style="list-style-type: none"> —composition of the flight crew —age limitations <p>A21 Journey logbook</p> <ul style="list-style-type: none"> ● Content of journey log book (check markings and comply with the requirement) ● Responsibility of signing log book (example) <p>A22 Maintenance release</p> <ul style="list-style-type: none"> ● Aeroplane maintenance (maintenance record) ● Maintenance release, general (checkmark or sign) ● Relevant release for service (examples) <p>A23 Defect notification and rectification (incl. Tech Log)</p> <ul style="list-style-type: none"> ● Open defects ● History of defects (including hold item list) <p>A24 Pre-flight inspection</p> <ul style="list-style-type: none"> ● Pre-flight inspection sheet and journey log book (presence and signed off) 	
MODULE B (Cabin Safety)	
<p>B1 General internal condition (cabin)</p> <ul style="list-style-type: none"> ● Safety and survival equipment (cabin visit for the locations) ● Design and construction (familiarise with different type cabins) ● Recognise loose carpet and damaged floor panel ● System design features: <ul style="list-style-type: none"> — recognise right materials (<i>Cabin visit</i>) — lavatory smoke detection system/<i>Cabin visit for the locations</i> — built-in fire extinguisher system for each receptacle intended for disposal of towels, paper or waste (how to check extinguishers)/<i>Cabin visit for the locations</i> ● Check that normal and abnormal duties by cabin crew may be performed without hindrance (<i>Guided tour in cabin for demonstration of duties</i>) <p>B2 Cabin crew stations and crew rest area</p> <ul style="list-style-type: none"> ● Cabin crew seats (cabin visit for number, material and condition) ● Cabin crew seats upright position (case study/ recognise safety hazard) ● Familiarise with problems with belt wearing and fast locks ● Familiarise with seat attachment to the floor or wall ● Easy access to emergency equipment (cabin visit for locations and condition) <p>B3 First-aid kit/emergency medical kit</p> <ul style="list-style-type: none"> ● Cabin visit for locations (readily/access) ● Adequacy (how to determine) ● Confirmation that contents match the relevant checklist 	<p>Objectives:</p> <p>Trainees should be able to use their technical knowledge and ramp inspection techniques in a satisfactory manner during the subsequent on-the-job training</p>

<ul style="list-style-type: none">● Identifications/markings/seals (examples) <p>B4 Hand fire extinguishers</p> <ul style="list-style-type: none">● Cabin visit for locations (readily/access)● Checking serviceability <p>B5 Life-jackets/flotation devices</p> <ul style="list-style-type: none">● Different models of life- jackets and flotation devices● Instructions for passengers● Condition and serviceability <p>B6 Seat belt and seat condition</p> <ul style="list-style-type: none">● Seat belt material/condition (examples)● Recognise common problems with fast locks● Recognise common problems with seat belt wearing● Installation of seat belts (hazard to block evacuation)● Extra belts (locations)● Passenger seats (number and condition)● Passenger seat materials/fire resistant (recognise right materials)● Seat attached to the cabin floor (how to check) <p>B7 Emergency exit, lighting and marking, independent portable light</p> <ul style="list-style-type: none">● Lighting and marking (cabin visit for locations and condition)● Condition and serviceability of exits● Instructions for passengers● Availability, serviceability and easy access of independent Portable light <p>B8 Slides/life-rafts/ELT's</p> <ul style="list-style-type: none">● Slides/rafts general (cabin visit for locations and condition)● Check pressure gauge and recognise green band● Recognise condition of slides and rafts and familiarise with expiry date markings● Emergency locator transmitter (ELT) (cabin visit for locations and condition)● Automatic fixed ELT (examples/how to recognise)● Automatic portable ELT (examples/how to recognise)● Automatic deployable ELT (examples/how to recognise) <p>B9 Oxygen supply (cabin crew and passengers)</p> <ul style="list-style-type: none">● Check oxygen supply (cylinders and generators) (cabin visit for locations and condition)● Check the cylinder pressure gauge and recognise green band● Drop-out panels (cabin visit for locations and condition)● Storage of masks/serviceability <p>B10 Safety instructions</p> <ul style="list-style-type: none">● The meaning of available (within reach)● The meaning of accuracy/A/C types (recognise difference in instructions)● Content of instructions <p>B11 Cabin crew members</p> <ul style="list-style-type: none">● Appropriate number of cabin crew (how to check)● Refuelling with passengers on board (check cabin crew positions)● Cabin crew member's type training document (familiarise with different types) <p>B12 Access to emergency exits</p> <ul style="list-style-type: none">● Number and location of exits● Different models and sizes (A/C type)● Instructions for passengers (written and demonstration)● Obstructions (requirement on the projected opening) <p>B13 Stowage of passenger baggage (cabin luggage)</p> <ul style="list-style-type: none">● Recognise proper storage (size, weight and number)● Familiarise and recognise safety risks (case study)	
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<p>B14 Seat capacity</p> <ul style="list-style-type: none"> ● Max number of passengers according to the cabin configuration ● Compare the numbers of passengers and the number of serviceable seats ● Interrelation with other inspection items: maximum number of passengers influenced by: B6 (inoperative seat) and/or B7 (inoperative exit) 	
<p>MODULE C (aircraft condition)</p>	
<p>C1 General external condition</p> <ul style="list-style-type: none"> ● Recognise the presence of ice, snow and frost ● Condition of paint (familiarise when loose of painting is problem) ● Recognise legibility of aircraft's markings (registration) ● Corrosion (familiarise and recognise different corrosion types) ● Cleanliness and contamination of fuselage and wings (familiarise and recognise) ● Windshields (recognise delaminating) ● Windows (recognise damages and problems) ● Exterior lights (landing lights, NAV-lights, strobes, beacon, etc.) (check the condition) ● Recognise marks of lightning strike <p>C2 Doors and hatches</p> <ul style="list-style-type: none"> ● Familiarise with different door types/structures (aircraft visit for locations) ● Cockpit indications of doors (flight crew compartment visit) ● Familiarise with markings and placards of doors ● Operating instructions of doors (recognise hazards if lack of markings) ● Recognise normal condition and possible damages/losing parts <p>C3 Flight controls</p> <ul style="list-style-type: none"> ● Condition and possible damages, corrosion and loose parts ● Recognise marks of lightning strike ● Familiarise with static dischargers (recognise when missing) ● Recognise possible defects and damages <p>C4 Wheels, tyres and brakes</p> <ul style="list-style-type: none"> ● Familiarise with different tyre models ● Familiarise with different brake assemblies ● Familiarise with maintenance manual limits ● Recognise brake wearing indicator 'pin' (examples/locations) ● Recognise normal condition and possible damages, leaking and loose parts ● Tyre wear/tyre pressure (check) <p>C5 Undercarriage</p> <ul style="list-style-type: none"> ● Condition and possible damages, corrosion and loose parts ● Proper strut (and tilt cylinder pressure) ● Lubrication (recognise signs of lubrication) ● Familiarise with marking placards ● Recognise bonding wires ● Possible defects and damages <p>C6 Wheel well</p> <ul style="list-style-type: none"> ● Condition and possible damages, corrosion and loose parts ● Lubrication (recognise signs of lubrication) ● Familiarise with marking placards ● Recognise bonding wires ● Possible defects and damages <p>C7 Powerplant and pylon</p> <ul style="list-style-type: none"> ● Power Plants (type of engines) ● Cowlings, cowlings doors and blow-out doors 	<p>Objectives: Trainees should be able to use their technical knowledge and ramp inspection techniques in a satisfactory manner during the subsequent on-the-job training</p>

<ul style="list-style-type: none"> ● Leaks (hydraulic, fuel, oil) ● Condition and possible damages, corrosion, leaks and loose parts ● Recognise engine sensors (condition) ● Possible defects and damages ● Pylon (types of pylons) — Recognise pylon doors, panels and blow-out panels and loose rivets — bolts ● Reverser's condition (broken hinges and proper closure) <p>C8 Fan blades, propellers, rotors</p> <ul style="list-style-type: none"> ● Typical foreign object damage (FOD), (examples of dents, nicks and blade bending) ● Recognise looseness of blades in hub ● Possible defects and damages (familiarise with procedures related to compliance with engine maintenance manual) ● Check de-icing boots <p>C9 Obvious repairs</p> <ul style="list-style-type: none"> ● Recognise obvious repairs (examples) ● Maintenance release/technical log <p>C10 Obvious unrepaired damage</p> <ul style="list-style-type: none"> ● Recognise obvious damages (examples) ● Damages/maintenance release/technical log ● Recognise assessment of damage (examples) <p>C11 Leakage</p> <ul style="list-style-type: none"> ● Fluid leaks outside of limits (examples fuel, hydraulic, oil) ● Obvious leak: check the maintenance release, technical log ● Recognise toilet leaks (blue ice examples) ● Recognise de-icing fluids on the A/C (aircraft visit for locations) 	
<p>MODULE D (Cargo)</p>	
<p>D1 General condition of cargo compartment</p> <ul style="list-style-type: none"> ● Cargo compartment (aircraft visit for locations) ● Check wall panels ● Recognise wall sealing ● Familiarise with A/C systems in cargo compartment: <ul style="list-style-type: none"> —fire containment, detection and extinguishing systems —ventilation —heating —loading systems (rollers) —lighting ● Recognise blow-out panels ● Familiarise with 9G-net ● Cargo restraining devices ● Check cargo door sealing for ETOPS ● Containers ● Loading instructions/door instructions ● Damages in cargo compartment ● Recognise obvious repairs in cargo compartment <p>D2 Dangerous goods (DG)</p> <ul style="list-style-type: none"> ● How to recognise the special authorisation to transport DG ● Assessing the scope of the authorisation (different classes) ● Notification to Captain (NOTOC) format and content ● Segregation and accessibility ● Examples of packaging and labelling of DG ● Identifying limitations and restrictions for certain (sub)classes of DG ● Identification and removal of contamination with DG 	

D3 Secure cargo stowage <ul style="list-style-type: none">● Cargo bay (guided visit for locations)● Loading instructions (placards, wall markings/tidiness)● Familiarise with flight kit/spare wheel (secured)● Familiarise with pallets, nets, straps, containers (secured)● Recognising loading limits (weight and height)	
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AMC1 BCAR.ARO.RAMP.115(b)(3) Qualification of ramp inspectors

RECURRENT TRAINING

- (a) Once qualified, ramp inspectors should undergo recurrent training in order to be kept up-to-date.
- (b) The BCAA should ensure that all ramp inspectors undergo recurrent training at least once every 3 years after being qualified as ramp inspectors or when deemed necessary by the BCAA, e.g. after major changes in the inspection procedures.
- (c) Recurrent training should be delivered by a BCAA or by an approved training organisation.
- (d) The recurrent training should cover at least the following elements:
 - (1) new regulatory and procedural developments;
 - (2) new operational practices;
 - (3) not applicable
 - (4) not applicable
- (e) Not applicable

AMC2 BCAR.ARO.RAMP.115(b)(3) Qualification of ramp inspectors

RECENT EXPERIENCE REQUIREMENTS

- (a) The minimum number of inspections required for ramp inspectors to maintain their qualification should be conducted during any 12-month period after undergoing training, evenly spread during such intervals.
- (b) This number may be reduced by the number of inspections on aircraft operated by domestic operators if the inspector is also a qualified flight operations, ramp or airworthiness inspector of a BCAA and is regularly engaged in the oversight of such operators.
- (c) If the inspector has performed some ramp inspections but he/she loses his/her qualification as a result of not reaching the minimum number of inspections during any 12-month period after qualification, he/she may be re-qualified by the BCAA by performing a number of inspections under the supervision of a senior ramp inspector. The number of supervised inspections should not be less than half the number of missed inspections according to the minimum requirement. All ramp inspections under supervision which are necessary for re-qualification should be performed within 90 calendar days.
- (d) If the inspector loses his/her qualification because he/she has not been engaged in performing inspections on aircraft for more than 12 months, he/she may be requalified by the BCAA only

after successfully completing on-the-job-training as prescribed in AMC2 BCAR.ARO.RAMP.115(b)(2) and any recurrent training required.

- (e) If the inspector loses his/her qualification because he/she has not been engaged in performing inspections on aircraft for more than 36 months, he/she should be fully requalified by successfully completing initial theoretical, practical and on-the-job training.
- (f) The BCAA should ensure that all ramp inspectors undergo recurrent training at least once every 3 years after being qualified as ramp inspectors and whenever deemed necessary due to significant changes of the ramp inspection programme.

GM1 BCAR.ARO.RAMP.115(c) Qualification of ramp inspectors

BCAA'S TRAINING PROGRAMME

The BCAA should ensure that its training programmes are amended accordingly to reflect any recommendations arising from the audits conducted by the ICAO.

BCAR.ARO.RAMP.120 Approval of training organisation

Reserved.

BCAR.ARO.RAMP.125 Conduct of ramp inspections

- (a) Ramp inspections shall be performed in a standardised manner.
- (b) When performing a ramp inspection, the inspector(s) shall make all possible efforts to avoid an unreasonable delay of the aircraft inspected.
- (c) On completion of the ramp inspection, the pilot-in-command or, in his/her absence, another member of the flight crew or a representative of the operator shall be informed of the ramp inspection's results.

AMC1 BCAR.ARO.RAMP.125 Conduct of Ramp Inspections & BCAR.ARO.RAMP.130 Level of findings

INSPECTION INSTRUCTIONS ON THE CATEGORISATION OF FINDINGS

Inspectors should follow the inspection instructions on the level of findings established by the BCAA for inspections performed on aircraft used by the operators of other country (SAFA).

GM1 BCAR.ARO.RAMP.125(a) Conduct of ramp inspections

STANDARDISED PERFORMANCE OF RAMP INSPECTIONS

- (a) When preparing a ramp inspection, the following should be taken into account:
 - (1) Selection of the aircraft/operator to be inspected and gathering of general information about the aircraft and operator;
 - (2) Obtaining the last update of the operating schedule for the selected operator from the operator, airport authorities, or ground-handling agents. In general, operators submit operating schedules twice per year. However, there might be 'last-minute changes' to these schedules. Therefore, inspecting team members should ensure that they have the latest schedule update. The internet can be a valuable source of information, and most airports have a website displaying information on arrival and departure times of scheduled flights. Schedule information on special flights, such as cargo and unscheduled or private flights, may need to be specifically requested from airports.

- (3) Distribution of the tasks between ramp inspectors involved, especially in the case of limited inspection time and/or size and complexity of the aircraft.
- (4) Co-operation with security, ground, and all other officials involved in airport activities, to enable the inspecting team to reach the aircraft to be inspected. When officials from different organisations (i.e. customs, security, Dangerous Goods inspectorate) have to work in co-operation during the inspection, a procedure on co-operation might need to be developed at a national level. Since most ICAO contracting states have different airport procedures for inspectors, there is no standardised method, but BCAA should provide inspectors with the respective credentials in order to ensure an unrestricted and unimpeded access.
- (5) Not applicable
- (6) As a general rule, ramp inspections should be performed by at least two inspectors. Inspections performed by solo inspectors should be limited to exceptional cases, such as last minute unavailability of a team member, very short time to prepare a spot inspection, etc. The authority should provide inspectors with the necessary tools (e.g. flashlights, digital camera, mobile phone) and protective clothing suitable for environmental circumstances (e.g. fluorescent vests, ear protection, anti-static clothing).
- (7) Depending on the items to be inspected, a ramp inspection may be performed on landing or on departure of the aircraft. The remaining fuel and cargo area (overloading, restraining, segregation, etc.) are examples of items that could be checked on landing. Flight preparation and storage of baggage in the cabin could be checked on departure. An inspection after landing should not jeopardise the total resting time of the flight crew.
- (8) Any unnecessary contact with passengers should be avoided and the inspection should not interfere, as much as possible, with the normal boarding/de-boarding procedures. However, inspecting certain elements in the cabin may be justified, for example such as:
 - (i) proper stowage of cabin baggage under the seat;
 - (ii) excessive overweight in overhead luggage bins;
 - (iii) baggage in front of emergency exit;
 - (iv) infants/children over the minimum age determined by the State of operator should have their own seat;
 - (v) allocation of passengers in the cabin, compared to the load sheet data;
 - (vi) sufficient number of seats;
 - (vii) observing the boarding process during normal operations and/or during refuelling in process;
 - (viii) attempting to establish the commercial nature of a flight which is suspected to be performed illegally.
- (9) When circumstances (time, manpower, etc.) prevent inspection of all checklist items, inspectors should try to inspect those elements which, according to the inspectors' preparation and experience, are likely to be more safety critical depending on the particularities of the inspected flight. For this purpose, the following should be taken into account:
 - (i) Certain elements are less safety critical, and should, therefore, be given lower priority (e.g. a noise certificate has far less impact on safety than incorrectly completed mass and balance documentation, or incorrect calculation).

- (ii) Differences in aircraft configuration: whereas for a cargo configuration the securing of the cargo and the segregation of dangerous goods is important; for a passenger configuration, checking the refuelling procedures with passengers on board could have higher priority.
 - (iii) Previous ramp inspection results: if serious and/or recurrent findings were raised during previous inspections on e.g. the Minimum Equipment List (MEL), this might be more important than the flight preparation on which previously no non-compliances were found.
 - (iv) Type and age of the aircraft: some aircraft types are known to have issues with e.g. leakages or missing screws, therefore, the age of the aircraft should also be taken into consideration.
- (10) If deemed appropriate, the inspector could contact the operator's representative at the airport so that he or she can be present during the ramp inspection. Experience shows that the operator's representative may be helpful in providing support, especially in facilitating communication with the crew or the operator's home base.
- (11) Inspecting authorities might consider informing operators and authorities about the Ramp Inspection programme and explain to them what is expected from them when an inspection is being performed.

GM2 BCAR.ARO.RAMP.125(a) Conduct of ramp inspections

DEFICIENCIES UNDER THE CONTROL OF THE OPERATOR

Deficiencies under the control of operators in accordance with applicable requirements are not to be considered as non-compliance: e.g. if an aircraft diverted because of a technical defect is inspected upon arrival, such defect should not be considered as a non-compliance and no finding should be raised, as long as the defect is properly reported (e.g. through the Technical Log Book) and subsequently assessed.

AMC1 BCAR.ARO.RAMP.125(b) Conduct of ramp inspections

GENERAL

- (a) Ramp inspections should be performed by inspectors possessing the necessary knowledge relevant to the area of inspection whereby technical, airworthiness and operational knowledge must be represented in case all items of the checklist are being verified. When a ramp inspection is performed by two or more inspectors, the main elements of the inspection — the visual inspection of the aircraft exterior, the inspection in the flight deck and the inspection of the passenger cabin and/or cargo compartments — may be divided among the inspectors, according to their privileges granted in accordance with BCAR.ARO.RAMP.115.
- (b) The BCAA should put in place appropriate procedures to allow them unrestricted access to the aircraft to be inspected. In this respect ramp inspectors should possess adequate credentials.
- (c) Inspectors should identify themselves to the pilot-in-command/commander of the aircraft or, in his/her absence, to a member of the flight crew or to the most senior representative of the operator prior to commencing the on-board part of their ramp inspection. When it is not possible to inform any representative of the operator or when there is no such representative

- present in or near the aircraft, the general principle should be not to perform a ramp inspection. In special circumstances it may be decided to perform a ramp inspection but this should be limited to a visual check of the aircraft exterior.
- (d) The inspection should be as comprehensive as possible within the time and resources available. This means that if only a limited amount of time or resources is available, not all inspection items but a reduced number may be verified. According to the time and resources available for a ramp inspection, the items that are to be inspected should be selected accordingly in conformity with the objectives of the ramp inspection programme. Items not being inspected may be inspected during a next inspection.
 - (e) Inspectors should show tact and diplomacy when performing a ramp inspection. A certain amount of inconvenience to flight and cabin crews, handling agents and other personnel involved in ground handling activities may arise but inspectors should try to reduce it to the minimum. Unnecessary contact with passengers should be avoided.
 - (f) Ramp inspectors should not open any hatches, doors or panels themselves nor should they operate or interfere with any aircraft controls or equipment. When such actions are required for the scope of the inspection, the ramp inspectors should request the assistance of the operator's personnel (flight crew, cabin crew, ground crew).
 - (g) The items to be inspected should be selected from the ramp inspection checklist (see Appendices III and IV). The ramp inspection checklist contains a total of 54 items. Of these, 24 relate to operational requirements (A-items) to be checked on the flight crew compartment, 14 items address safety and cabin items (B-items), 12 items are concerning the aircraft condition (C-items) and three items (D-items) are related to the inspection of cargo (including dangerous goods) and the cargo compartment. In case of any general inspection items not addressed by the other items of the checklist, they may be administered by the E-item (General) of the checklist.
 - (h) Items which have been inspected as well as any possible findings and observations will be recorded in the Ramp Inspections Report (see Appendices III and IV).
 - (i) BCAR.ARO.RAMP.125(c) requires that the operator is informed about the results of every ramp inspection by providing it with a copy of the Proof of Inspection (see Appendix III). A signed acknowledgement of receipt should be requested from the recipient and retained by the inspector. Refusal to sign by the recipient should be recorded in the document.

GM1 BCAR.ARO.RAMP.125(b) Conduct of ramp inspections

UNREASONABLE DELAY

- (a) The inspector intending to conduct the ramp inspection should be able to start the inspection immediately. The inspector should ensure that the inspection can be carried out expeditiously. Delays related to the availability of the inspector or the necessary inspection documentation or similar avoidable reasons of delay caused by the inspector, which are not directly related to safety, should be avoided without exception.
- (b) The inspector should carefully consider that flight and cabin crew distraction during the flight preparation phase as this might be a significant safety hazard and should, therefore, be avoided as much as possible. In order to minimise distraction to the flight and cabin crew, the inspector should:
 - (1) try to be as precise and complete as possible when requesting aircraft documents from flight crew. This should result in a minimum of discussion time, thus allowing the flight crew to deal with their primary task of flight preparation;

- (2) ask the senior cabin crew member to assign a crew member to assist them with their inspection tasks;
 - (3) inform cargo loading staff of possible hindrance due to inspection task in cargo compartment;
 - (4) give priority to staff directly involved in the flight preparation, when carrying out inspections on the flight deck (e.g. fuel master, load-planning agent, handling agent, etc.).
- (c) A delay of the aircraft might be justified for safety reasons, such as whenever non-compliances are detected and either need a corrective action before departure, or need proper identification/assessment by the operator, for example if:
- (1) tyres appear to be worn beyond the limits (central groove no longer visible). However, reference is to be made to the applicable Aircraft Maintenance Manual (AMM) to determine the actual limit;
 - (2) oil leakage (e.g. 5 drops per minute) is to be checked against the applicable AMM to determine the actual limit;
 - (3) a flight crew member cannot produce a valid licence. Clarification is to be sought from the operator to confirm that the flight crew member has a valid licence by requesting, for instance, a copy of the licence to be sent to the inspectors for verification.
 - (4) missing relevant flight operational data (e.g. missing or incorrect performance calculations, incorrect operational flight plan, incorrect weight and balance calculation).

AMC1 BCAR.ARO.RAMP.125(c) Conduct of ramp inspections

PROOF OF RAMP INSPECTION

- (a) On completion of the ramp inspection, information about its results should be provided to the pilot-in-command/commander or, in his/her absence, to another member of the flight crew or a representative of the operator, regardless of whether or not findings have been identified. When completing the Proof of Inspection (POI), the following should be taken into account:
 - (1) Only the remarks mentioned in the POI should be reported as findings in the final ramp inspection report. Any other relevant information which was not included in the POI should only be reported in the final report as a general remark under 'G' or in the additional information box.
- (2) When handing over the POI to the pilot-in-command/commander or operator representative, the inspector should ask him/her to sign the POI whilst explaining that the signature does in no way imply acceptance of the listed findings. The signature only confirms that the POI has been received by the pilot-in-command/operator representative, and that the aircraft has been inspected on the date and at the place indicated.
- (b) POIs may be completed electronically, including the required signatures, and may be printed on site or delivered electronically (e.g. by e-mail). In either case, they should follow, to the greatest possible extent, the layout provided by BCAA form 136, and should contain all the elements of such form.

BCAR.ARO.RAMP.130 Categorization of findings

For each inspection item, three categories of possible non-compliance with the applicable requirements are defined as findings. Such findings shall be categorised as follows:

- (1) a category 1 finding is any detected significant non-compliance with the applicable requirements or the terms of a certificate that has a major influence on safety;
- (2) a category 2 finding is any detected non-compliance with the applicable requirements or the terms of a certificate that has a significant influence on safety;
- (3) a category 3 finding is any detected non-compliance with the applicable requirements or the terms a certificate that has a minor influence on safety

GM1 BCAR.ARO.RAMP.130 Categorisation of findings

APPLICABLE REQUIREMENTS

- (a) For aircraft used by operators of other country, applicable requirements are the ICAO international standards.
- (b) Not applicable
- (c) Manufacturers' standards should be used for checking the technical condition of the aircraft.
- (d) Published national standards (e.g. Aeronautical Information Publications (AIPs)) that are declared applicable to all operators flying to that State may also be checked. Deviations from national standards should be reported as findings only if they have an impact on safety. For such findings, the report should indicate 'N' in the column 'Std.' and the appropriate reference should be included in the column 'Ref.'. Any other deviation from national standards which does not have an impact on safety (e.g. insurance certificate in USD instead of SDR) should be recorded as level G (General Remark).

GM2 BCAR.ARO.RAMP.130 Categorisation of findings

ASSESSMENT OF NON-COMPLIANCES

- (a) When a non-compliance with the applicable requirements is identified, the inspector should be certain that the finding is applicable to the specific circumstances of the inbound and/or outbound flight. (e.g. for operators of other country, no electric torch on board is, a finding, but only during night-flight operations; or insufficient number of life-vests, but only if the flight is overwater on a distance greater than 50 NM from the shore or when taking off or landing at an aerodrome where the take-off or approach path is so disposed over water that there would be a likelihood of a ditching). Nevertheless, such information should be reported as a general remark.
- (b) When a contracting state finds it impracticable to comply with an international standard, it is entitled to notify a difference to ICAO in accordance with Article 38 of the Chicago Convention. However, this right has its boundaries within the sovereign territory of other contracting States. It is not 'exportable' into other Contracting States. More precisely, there is no legal obligation for other Contracting States to accept within their territory an activity, organisation or object which has been certified or approved by a Contracting State according to such lower standards. So, for operators of other country, a notification to ICAO of a difference in accordance with

Article 38 of the Chicago Convention has no effect within the territory of another Contracting State. Therefore, in another State's territory the operator is obliged to:

- (1) comply with the ICAO standard (Art. 37 in conjunction with Art. 33 of the Chicago Convention);
- (2) Not applicable

Notified differences may, however, be taken into account in the follow-up process of the ramp inspection report (as detailed in the follow-up procedures).

- (c) Compliance with the applicable requirements of aircraft and their crew is not only a responsibility of the operator. The State of operator, the State of licensing, and the State of registry are also responsible. The inspected operator might not be the responsible entity for certain non-compliances (e.g. related to the issuance of certificates of registration, of the AOC and/or personnel licences). Such non-compliances pertaining to the authority should be raised by the inspector as part of the ramp inspection process in accordance with BCAR.ARO.RAMP and recorded as non-compliance in the ramp inspection report.
- (d) Non-compliances detected should, as much as possible, be documented and recorded as follows:
 - (1) pictures of the deficiency itself;
 - (2) pictures of the manufacturer references used to assess the technical defects;
 - (3) pictures or copy of the technical logbook entries performed.

Such documents or records could be very useful in the follow-up phases of the ramp inspection either to explain in detail and illustrate detected findings or to be able to exchange appropriate documented evidence when findings are challenged.

GM3 BCAR.ARO.RAMP.130 Categorisation of findings

NON-COMPLIANCES WITH MANUFACTURER STANDARDS

- (a) A finding against manufacturer standards should always be demonstrated in relation to aircraft technical documentation such as: Aircraft Maintenance Manual (AMM), Structural Repair Manual (SRM), Configuration Deviation List (CDL), Wiring Diagram Manual (WDM), Standard Wiring Practices Manual (SWPM), etc., and MEL references. If significant defects are suspected, the operator should be asked to demonstrate compliance with the standards. Deviations from these standards can only be acceptable if the operator's competent authority has issued a formal waiver or concession detailing conditions and/or limitations to allow the aircraft to continue to operate for a specific period of time before final repair, or if the aircraft will perform a non-commercial flight (with less prescriptive standards and requirements), provided that the validity of the C of A is not affected.
- (b) With regard to non-compliances on missing fasteners, findings can only be raised if the maintenance documentation contains clear limits and/or dispatch conditions. In the absence of such clear manufacturer standards, inspectors should only raise findings if their expert judgement (possibly supported by licensed maintenance personnel) is such that similar circumstances on comparable aircraft would be considered to be out of limits.
- (c) In exceptional cases, a single fault may give rise to more than one finding under different inspection items, for example: a tyre worn beyond limits whilst the pilot-in-command refuses to enter the defect in the Technical Log (or equivalent) would trigger raising findings under both C04 and A23.

GM4 BCAR.ARO.RAMP.130 Level of findings

INSPECTION INSTRUCTIONS

- (a) The inspection instructions include the description, level and reference to the applicable requirement.
- (b) Findings on arrival flights being identical to the findings raised for departure flights should lead to the same categorisation, although the corrective action might not be possible when the flight has been completed. For example, an incorrect mass and balance sheet (outside operational limits) found on arrival should be categorised as a level 3. Obviously, this cannot be corrected, however, the appropriate class 3 action could be to confirm that the mass and balance calculations are within operational limits for the outbound flight.
- (c) In exceptional cases, where multiple findings are inter-related and the impact on safety is higher, the level of such findings may be increased to reflect the impact on safety. The increase in level should be explained in the detailed description of the findings.

GM5 BCAR.ARO.RAMP.130 Level of findings

DETECTION, REPORTING AND ASSESSMENT OF SIGNIFICANT TECHNICAL DEFECTS

- (a) A technical defect is considered to be any material fault pertaining to the aircraft, its systems or components. Minor defects are typically without influence on safety and, therefore, the operator is deemed to be compliant. However, minor defects should be brought to the attention of the operator using general remarks as described in GM8 BCAR.ARO.RAMP.130. Those defects which are potentially out of limits are considered to be significant defects. Further assessment is needed to determine if the significant defect is within or outside the applicable limits. Such defects should be known to the operator since they should have been detected during regular maintenance, aircraft acceptance procedure or pre-flight inspections.
- (b) Technical defects which were not detected by the operator, because the Approved Maintenance Programme (AMP) did not require the operator to detect such defects during turn-around inspections, do not necessarily qualify as a finding under A23/A24. Examples of such defects, which are not supposed to be part of the pre-flight inspection are:
 - (1) missing fasteners,
 - (2) bonding wires,
 - (3) the cabin emergency lighting,

Manufacturer's data often contain limits on certain defects. Those data are normally to be used during scheduled maintenance. It is generally accepted that, in between scheduled maintenance, defects that are beyond those manufacturer's limit might appear. Inspectors should, therefore, be reluctant in using such limits during ramp inspections. However, where the manufacturer has specified dispatch limits, and the defect is beyond the dispatch limits, a level 3 finding should be raised.

- (c) Significant defects might have appeared during the inbound flight. If time allows the inspector should delay his/her own inspection of the aircraft condition until the operator has completed the pre-flight inspection, in order to give the operator the opportunity to identify and assess such a defect during the pre-flight inspection.

- (d) A 'defect within limits but not recorded' should not be considered as a technical non-compliance. Such discrepancies should be brought to the attention of the operator using general remarks as described in GM8 BCAR.ARO.RAMP.130. If the significant defect appeared to be within limits, the safety focus changes from the defect itself to the non-compliance of the defect not being detected/assessed by the operator.

GM6 BCAR.ARO.RAMP.130 Level of findings

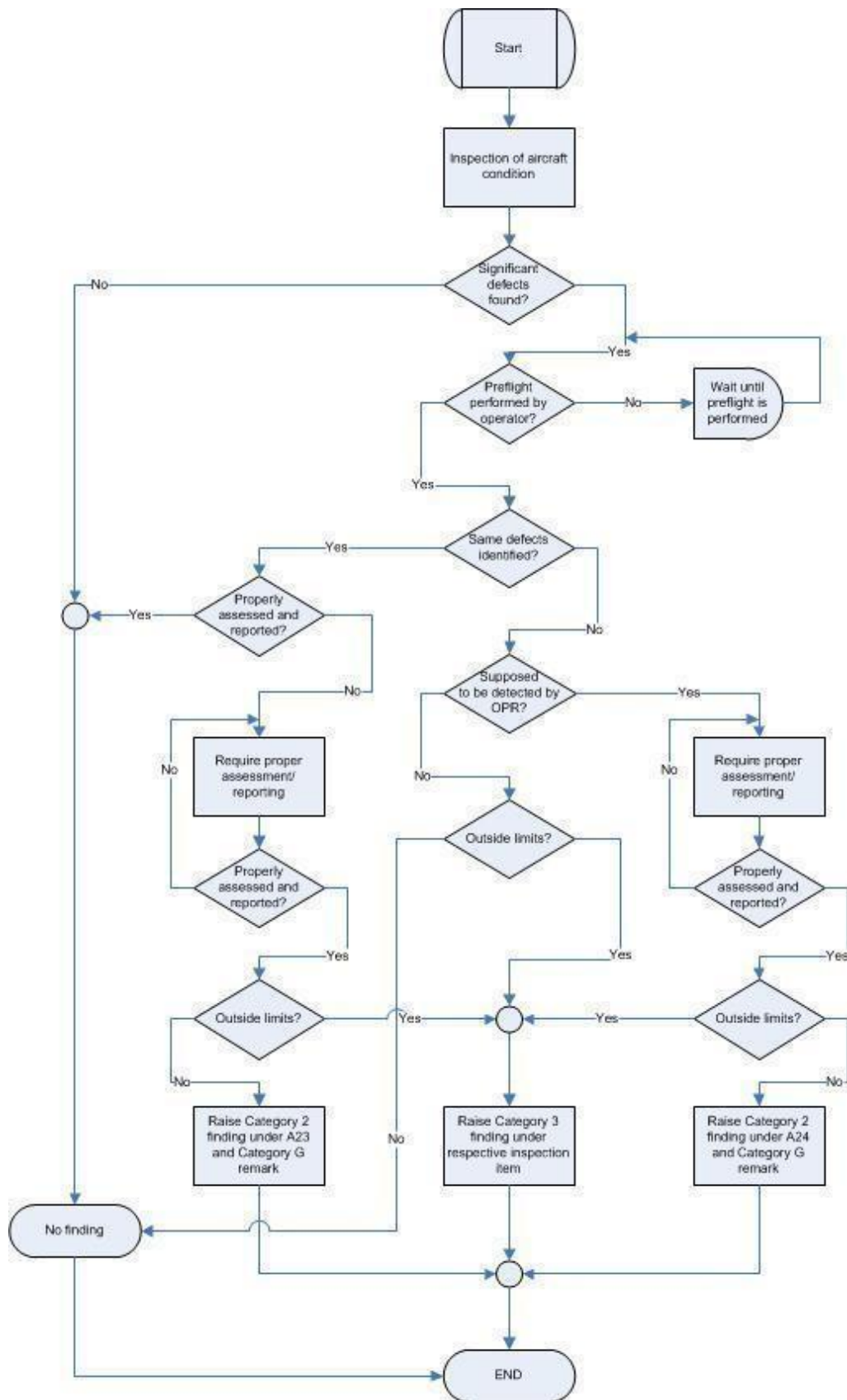
DETECTION, REPORTING AND ASSESSMENT OF SIGNIFICANT TECHNICAL DEFECTS

- (a) Before findings can be categorised, an assessment of the encountered situation should be made. The inspector can only allocate a proper level to the finding, if the extent of the non-compliance is clear. This implies that inspectors should not raise category 3 findings with the only intent to perform a further investigation/assessment. The Appendix to this GM provides a flowchart that can be used as guidance for the steps to be taken.
- (b) The following procedure should be used when inspecting Aircraft Condition (C-items) or, if appropriate, items A, B and D.
- (1) The inspector should delay the inspection of the aircraft until the operator has completed the pre-flight inspection, if time allows. However, he/she should always start with a quick check on the cargo compartment(s) after the arrival of the aircraft.
 - (2) When the inspector performs the aircraft condition inspection in advance of the operator's pre-flight inspection, reporting defects identified should not be done before the operator has completed the pre-flight inspection.
 - (3) The inspector should subsequently check if the operator detected the significant defects found by the inspector, such as:
 - (i) leaks;
 - (ii) dents in pressurised areas of the fuselage; and
 - (iii) damages to emergency systems (e.g., escape hatches, escape slides, RAT, cargo compartment blow out panels).
 - (4) A single fastener missing in the middle of a fairing, traces of old leaks and non-structural damages to e.g. fairings can, in many cases, be considered as 'minor defects'. Such defects need to be pre-assessed by the inspector in accordance with the relevant manufacturer limitation instruction (e.g. AMM, SRM etc.)
 - (5) If the operator detected the significant defect, but did not report and/or assess it in accordance with the applicable procedures, the operator should assess the defect. If the defect appears to be within limits, a finding should be raised under A23 (Defect notification and rectification) mentioning 'Known defect not reported/assessed'. However, when collecting evidence for this finding, the inspector should take into account the reporting system used by the operator. For instance, if the operator uses a Technical Logbook and/or a damage chart, a finding could be raised if the defect was not entered. Additionally, a general remark should be created for such defect. If the defect is outside limits, a level 3 finding should be raised under the respective inspection item. In this case no supplementary finding related to this defect should be raised under A23.
 - (6) If the operator did not detect the significant defect, the inspector should inform the crew of the non-identified defects. Subsequently, the operator should assess the defect in order to determine if the defect is within or outside dispatch limits. If the defect is within limits, a level 2 finding mentioning 'Pre-flight inspection performed but without

identifying significant defects' should be raised under A24 (pre-flight inspection) addressing the deficiency that the defect was not detected. Additionally, a general remark should be made for the defect. If the defect is outside limits, a level 3 finding should be raised under the respective inspection item. In this case, no supplementary finding related to this defect should be raised under A24.

- (7) Multiple findings related to the same system or item should be grouped and reported as one finding. Examples of such findings are:
 - (i) Multiple level 2 findings raised under A23 or A24, if such findings concern the same system as per ATA system taxonomy (e.g. hydraulic leakage, fuel leakage,) and the non-compliance was not identified, reported or assessed); examples requiring regrouping hydraulic leakages which were identified but not assessed. Nonetheless, situations such as a fuel leakage on the left wing which was not identified and a fuel leakage on engine #2 which was reported but not assessed, should be noted as two separate findings.
 - (ii) Findings on missing fasteners.
- (8) If an operator performs the pre-flight inspection procedures (aircraft acceptance) only briefly before the departure of the aircraft, the inspector should wait until completion of the inspection before reporting identified defects to the operator. Although an assessment, which may cause a delay, might subsequently be needed once the inspector has informed the operator of those non-detected technical defects, the procedure established by the operator would have resulted in the same delays if the flight crew would have identified the defect requiring the associated assessment. Therefore, a pre-flight inspection performed by the operator close to departure entails risk of a delay.

Appendix to GM5 and GM6 BCAR.ARO.RAMP.130



GM7 BCAR.ARO.RAMP.130 Level of findings

ASSESSMENT OF FINDINGS ON CERTIFICATES AND LICENSES PRIOR TO CATEGORISATION

- (a) The principle described in GM6 BCAR.ARO.RAMP.130 should be applied for the assessment of findings on certificates and licenses prior to their categorisation.
- (b) Whenever a licence or a certificate is not carried on board (including AOC and OPS Specs), it may become clear that the impact on safety is less than initially foreseen after receiving a copy of a missing licence or certificate before departure. In this case, a level 1 finding should be raised and the relevant pre-described findings (PDFs) should be used regarding certificates and licenses not carried on board at the time of the inspection. If evidence is not provided before departure, a higher category of finding should be raised (for a missing certificate of registration or radio station license, the appropriate level 2 PDF should be used; for all other cases, the relevant category 3 PDF should be used. Under no circumstances should a flight crew member be permitted to perform flying duties without receiving confirmation that he/she has been issued an appropriate and valid licence.

GM8 BCAR.ARO.RAMP.130 Level of findings

USE OF GENERAL REMARKS

- (a) Although not classified as a non-compliance, any relevant safety issues identified during ramp inspections should be reported as a General Remark (category G) under each inspection item. For example:
 - (1) insufficient number of life jackets/flotation devices, however the flight was/will be over land;
 - (2) any non-compliance not recorded in the Proof of Inspection (POI), as well as any other relevant information;
 - (3) minor defects;
 - (4) non-compliances with operator/national standards whereas regulatory standards are met (e.g. smoke goggles at the work station in the cockpit unserviceable).
- (b) General remarks (as well as level 1 findings) do not require any follow-up action, either from the BCAA or for the operator/relevant oversight authority.

BCAR.ARO.RAMP.135 Follow-up actions on findings

- (a) For a category 2 or 3 finding, the BCAA shall;
 - (1) communicate the findings in writing to the operator, including a request for evidence of corrective actions taken; and
 - (2) inform the competent authority of the State of the operator and, where relevant, the State in which the aircraft is registered and where the licence of the flight crew was issued. Where appropriate, BCAA shall request confirmation of their acceptance of the corrective actions taken by the operator in accordance with BCAR.ARO.GEN.350 or BCAR.ARO.GEN.355.
- (b) In addition to (a), in the case of a level 1 finding, BCAA shall take immediate steps by:
 - (1) imposing a restriction on the aircraft flight operation;
 - (2) requesting immediate corrective actions;

- (3) grounding the aircraft in accordance with BCAR.ARO.RAMP.140; or
 - (4) imposing an immediate operating ban in accordance with applicable regulations.
- (c) Not applicable

AMC1 BCAR.ARO.RAMP.135(a) Follow-up actions on findings

FOLLOW-UP ACTIONS FOR CATEGORY 2 OR 3 FINDINGS

- (a) Exceptionally, where multiple category 2 findings have been raised and the accumulation of these findings or their interaction justifies corrective action before the flight takes place, the class of action may be increased to the actions foreseen by BCAR.ARO.RAMP.135(b).
- (b) When communicating findings to the operator, the BCAA should:
 - (1) use the database as the primary communication channel with the operator and limit communication via other channels.
 - (2) request evidence of corrective/preventive actions taken, or alternatively the submission of a corrective action plan followed by evidence that planned corrective actions have been taken.
 - (3) communicate findings to the operator's focal points, the operational department or the management or, failing this, the quality department.
 - (4) monitor if the operator has provided a response to the findings, as required, and if such response gives sufficient reason, or if further information is needed to close findings, evidence of corrective actions taken might be the actual implementation of a corrective action plan. It is then for the BCAA to decide, based on the related risk and impact, whether or not a finding may be closed based on proposed corrective actions and taking into account the severity and previous recurrence of detected findings. Depending on the severity and recurrence of the findings raised, the BCAA may consider the actual closure of the findings in other report(s) containing the same findings only after having received satisfactory documented evidence of appropriate implementation of actions meant to prevent the reoccurrence of the non-compliance.
 - (5) inform the operator's competent authority and the operator no later than 10 working days after the inclusion of the report in the database in order to permit appropriate action to be taken, as well as to confirm to the operator the findings raised. The primary source of information to enable operators to take swift action to address safety deficiencies is the database
 - (6) upload in the database information on possible actions taken and responses provided by the operator following the RAMP inspection and send a communication to the operator only if the operator's actions have not been satisfactory.
 - (7) give the operator a period of 30 days to reply. If the operator does not react to the initial communication within this period, a second request should be sent, including a specific period of days to reply (e.g. 15 working days) whilst copying the operator's competent authority. If the second attempt is also unsuccessful, the operator's competent authority should be requested to encourage the operator to reply. The BCAA should indicate in such request that no reaction from the operator could be interpreted as a 'lack of ability and/or willingness of an operator to address safety deficiencies' under applicable requirements.

- (c) In general, no reply is expected when informing the State(s) of oversight. However, findings which indicate possible shortcomings at State level should be emphasised, e.g. when the medical certificate does not indicate the medical class or type/instrument rating validation/expiration date is not mentioned. For such findings, which are out of the control of the operator, the State of oversight should be asked for corrective actions. When assessing the operator's corrective action (plan), it should be accepted that, for such non-compliances, the issue should be escalated to the oversight authority.
- (d) The following are examples requiring a confirmation of the BCAA regarding its acceptance of the corrective actions taken by the operator:
- (1) identification of a high number of non-compliances;
 - (2) repetition of same findings;
 - (3) lack of an adequate response from the operator;
 - (4) evidence of consistent non-compliance with a particular standard also detected during ramp inspections of other operators from that State;
 - (5) action by the competent authority may be required given the severity of the findings.

The BCAA should monitor if the State(s) of oversight has replied to any requests for confirmation made and if the response is satisfactory. Should the response be unsatisfactory, the communication should be re-launched following the procedure described in (b)(6) above.

- (e) Any follow-up communication from operators and States of oversight should be acknowledged, and they should be informed about the closure of findings. Requests for clarification should be responded by the inspecting authority. Acknowledgement or clarifications from the BCAA should be given within 30 working days after receipt of communications or requests.
- (f) When communicating a finding to the operator, and in any further correspondence from the inspecting authority, the operator's competent authority should, as much as possible, be copied in the communication, as it might contain relevant information for its oversight activities. This is particularly the case for information on the closure of ramp inspections findings sent by the BCAA (sent either by email or by official letter).
- (g) Findings should remain 'open' as long as no satisfactory response of the operator and/or the State(s) of oversight was received. However, the findings could be closed if it could be confirmed, as an example by means of additional inspection(s) that appropriate corrective action was taken. Whenever there is further communication to the operator, evidence of such could be uploaded as report attachments.
- (h) If the BCAA received evidence from a relevant oversight authority showing that the operator does not exist anymore, all related findings should be closed and the reason for closure explained in the justification.
- (i) A finding raised during a ramp inspection to which the BCAA has not received detailed corrective and/or preventive actions from the operator concerned or from its State(s) of oversight, should be considered as closed in the follow-up part of the ramp inspection process, if the acceptance of mitigating measures in accordance with applicable requirements ensures an equivalent level of safety to that achieved by the standards to which differences have been notified to ICAO.

AMC1 BCAR.ARO.RAMP.135(b) Follow-up actions on findings

CLASSES OF CATEGORY 3 FINDINGS

- (a) In the case of a category 3 finding, the action(s) taken before departure of the aircraft should be verified.
- (b) Whenever restrictions on the aircraft flight operation (Class 3a action) have been imposed, it is appropriate to conduct appropriate verification of adherence to such restrictions. Examples of Class 3a actions, and related verification, are, but not limited to:
 - (1) restrictions on flight altitudes if oxygen system deficiencies have been found. This might be verified by checking the ATC flight plans and/or the actual altitude flown as reported by the EUROCONTROL CFMU system;
 - (2) a non-commercial flight to the home base, if allowed by applicable requirements and the MEL (provided that the validity of the C of A is not affected);
 - (3) seats that may not be used by passengers might be verified just before departure to confirm that seats are not occupied;
 - (4) a cargo area that may not be used;
 - (5) operational restrictions mandating the use of specific runways;
 - (6) restrictions to specific environmental conditions (such as departure under visual meteorological conditions (VMC) only).
- (c) Whenever the operator is required to take corrective actions before departure (Class 3b), inspectors should verify that the operator has taken such actions. Examples of immediate corrective actions to be taken before departure are:
 - (1) (temporary) repairs to defects according to the manufactures definitions (e.g. AMM and/or SRM);
 - (2) recalculation of mass and balance, performance calculations and/or fuel figures;
 - (3) a copy of a missing licence/document to be sent by fax or other electronic means;
 - (4) proper restraining of cargo.

If inspectors have imposed corrective actions, they should be mentioned in the 'Class of actions' field on the ramp inspection report. If the operator took voluntarily corrective actions to address a category 1 or a category 2 finding before the flight, it should be reported in the 'Additional information' field only.

- (d) An aircraft following a Class 3c finding should be grounded only if the crew refuses to take the necessary corrective actions or to respect imposed restrictions on the aircraft flight operation. However, grounding might be appropriate if an operator refuses to grant access in accordance with ORO.GEN.140 or contrary to applicable requirements . The BCAA should then ensure that the aircraft will not depart as long as the reasons for the grounding remains. Any records of communication undertaken pursuant to BCAR.ARO.RAMP.140(b), as well as other evidence, should be collected and kept as evidential material.
- (e) Evidence related to findings on licences and certificates should be provided by the authority that issued the licence or certificate. However, if that authority is not able to provide such evidence in time, the BCAA may accept evidence from other sources, provided that it seeks confirmation of the validity of such evidence at the earliest opportunity with the authority that issued the licence or certificate. The ramp inspection report should mention which evidence was provided

and by whom, including when necessary subsequent confirmation from the authority that issued the licence or certificate.

- (f) In exceptional cases it might not be necessary to verify if the restrictions resulting from a category 3 findings are followed or if corrective actions have been taken (e.g. if the inspector has indications that appropriate actions will be taken), or if they are possible (e.g. for flight segments outside the Kingdom of Bhutan area). The BCAA should determine on a case by case basis if it is necessary or feasible to verify that restrictions are respected or if corrective actions have been taken.

GM1 BCAR.ARO.RAMP.135(b) Follow-up actions on findings

CLASSES OF CATEGORY 3 FINDINGS

- (a) The BCAA could impose an immediate operating ban (Class 3d) on an operator under applicable regulations. A Class 3d action is usually imposed in addition to a Class 3a, 3b or 3c action. Therefore, its further follow-up as regards the Ramp Inspection Programme, is considered to be covered by the follow-up of those actions.
- (b) If category 3 findings that have been raised concern non-compliances that affect the validity of the certificate of airworthiness of the aircraft, this should be communicated immediately to the State responsible for overseeing the airworthiness of the aircraft. Although the first contact may be, as a matter of urgency, accomplished by telephone, it is advisable to inform the state concerned in writing. For ICAO guidance on this matter, refer to ICAO Annex 8, Part II, Chapter 3.5 — Temporary Loss of Airworthiness.
- (c) If the a posteriori verification shows that the operator did not respect the restrictions imposed, this information should be mentioned in the final ramp inspection report or should be reported in accordance with BCAR.ARO.RAMP.145(b) and (c).

BCAR.ARO.RAMP.140 Grounding of aircraft

- (a) In the case of a level 1 finding where it appears that the aircraft is intended or is likely to be flown without completion by the operator or owner of the appropriate corrective action, BCAA shall:
- (1) notify the pilot-in-command or the operator that the aircraft is not permitted to commence the flight until further notice; and
 - (2) ground that aircraft in accordance with Civil Aviation Act of Bhutan 2016.
- (b) BCAA shall immediately inform the competent authority of the State of the operator and of the State in which the aircraft is registered.
- (c) BCAA shall, in coordination with the State of the operator or the State of Registry, prescribe the necessary conditions under which the aircraft can be allowed to take-off.
- (d) If the non-compliance affects the validity of the certificate of airworthiness of the aircraft, the grounding shall only be lifted by BCAA when the operator shows evidence that:
- (1) compliance with the applicable requirements has been re-established;
 - (2) it has obtained a permit-to-fly in accordance with applicable airworthiness requirements; and
 - (3) Not applicable
 - (4) permission from other countries which shall be overflown, if applicable.

GM1 BCAR.ARO.RAMP.140(a) Grounding of aircraft

AIRCRAFT LIKELY TO BE FLOWN WITHOUT COMPLETION OF APPROPRIATE CORRECTIVE ACTION

Should an operator refuse to permit the performance of a ramp inspection without valid reasons, the BCAA should consider grounding of the aircraft. In such a case, the BCAA must immediately undertake the relevant communication in accordance with BCAR.ARO.RAMP.140(b).

BCAR.ARO.RAMP.145 Reporting

- (a) Not applicable
- (b) The BCAA shall enter into a database or record any information useful for the application of Civil Aviation Act of Bhutan 2016 and its regulations and for the accomplishment by the BCAA of the tasks assigned to it by BCAR-ARO, including the relevant information referred to in BCAR.ARO.RAMP.110.
- (c) Whenever the information as referred to in ARO.RAMP.110 shows the existence of a potential safety threat, such information shall also be communicated to respective competent authorities without delay.
- (d) Whenever information concerning aircraft deficiencies is given by a person to the competent authority, the information referred to in BCAR.ARO.RAMP.110 and BCAR.ARO.RAMP.125(a) shall be de-identified regarding the source of such information.

GM1 BCAR.ARO.RAMP.145(b) Reporting

IMPORTANT SAFETY INFORMATION

- (a) Safety-related information should be verified by the reporting authority, as far as possible, before insertion in the centralised database pursuant to BCAR.ARO.RAMP.110. However, credible safety information received voluntarily (e.g. whistle blower reports) which can be verified by means of ramp inspections should also be reported.
- (b) If available, any relevant information contained in the documents and pictures should be attached to the 'Standard report' available in the database.
- (c) Significant safety-related occurrences where, in addition to the follow-up required by occurrence reporting requirements, ramp checks of an aircraft or operator are desirable include (among others):
 - (1) ATC reports on level-busts;
 - (2) communication failure or difficulties;
 - (3) non-standard take-off lengths;
 - (4) information received from maintenance organisations with regard to lack of AD compliance or maintenance work performed incorrectly;
 - (5) reports from the general public/whistle blower concerning perceived unsafe situations;
 - (6) reports from airport personnel on observed unsafe practices; or
 - (7) factual information concerning accidents and serious incidents which occurred in airspace of other States.

BCAR.ARO.RAMP.160 Information to the public and protection of information

- (a) BCAA shall use the information received by them pursuant to ARO.RAMP.145 (d) and solely for the purpose of safety and shall protect it accordingly.
- (b) Not applicable.

Appendix I – Air Operator Certificate

<p>AIR OPERATOR CERTIFICATE (Approval schedule for air transport operators)</p>											
<p>Types of operation: Commercial air transport (CAT) <input type="checkbox"/> Passengers; <input type="checkbox"/> Cargo; <input type="checkbox"/> Other¹:.....</p>											
5	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">State of the Operator³</td> <td rowspan="2" style="width: 20%; padding: 5px; vertical-align: top;">5</td> </tr> <tr> <td style="padding: 5px;">Issuing Authority⁴</td> </tr> </table>	State of the Operator ³	5	Issuing Authority ⁴							
State of the Operator ³	5										
Issuing Authority ⁴											
AOC # ⁶ :	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Operator Name⁷</td> <td rowspan="4" style="width: 20%; padding: 5px; vertical-align: top;">Operational Points of Contact:⁹ Contact details, at which operational management can be contacted without undue delay, are listed in¹².</td> </tr> <tr> <td style="padding: 5px;">Dba Trading Name⁸</td> </tr> <tr> <td style="padding: 5px;">Operator address¹⁰:</td> </tr> <tr> <td style="padding: 5px;">Telephone¹¹:</td> </tr> <tr> <td style="padding: 5px;">Fax:</td> <td></td> </tr> <tr> <td style="padding: 5px;">E-mail:</td> <td></td> </tr> </table>	Operator Name ⁷	Operational Points of Contact: ⁹ Contact details, at which operational management can be contacted without undue delay, are listed in ¹² .	Dba Trading Name ⁸	Operator address ¹⁰ :	Telephone ¹¹ :	Fax:		E-mail:		
Operator Name ⁷	Operational Points of Contact: ⁹ Contact details, at which operational management can be contacted without undue delay, are listed in ¹² .										
Dba Trading Name ⁸											
Operator address ¹⁰ :											
Telephone ¹¹ :											
Fax:											
E-mail:											
<p>This certificate certifies that¹³ is authorised to perform commercial air operations, as defined in the attached operations specifications, in accordance with the operations manual, Section 3 to BANRs and its operating requirements.</p>											
Date of issue ¹⁴ :	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Name and Signature¹⁵:</td> </tr> <tr> <td style="padding: 5px;">Title:</td> </tr> </table>		Name and Signature ¹⁵ :	Title:							
Name and Signature ¹⁵ :											
Title:											

1. Other types of transportation to be specified.
3. Replaced by the name of the State of the Operator.
4. Replaced by the identification of the issuing competent authority.
5. For use of the competent authority.
6. Approval reference, as issued by the competent authority.
7. Replaced by the operator’s registered name.
8. Operator’s trading name, if different. Insert “Dba” (for “Doing business as”) before the trading name.
9. The contact details include the telephone and fax numbers, including the country code, and the e-mail address (if available) at which operational management can be contacted without undue delay for issues related to flight operations, airworthiness, flight and cabin crew competency, dangerous goods and other matters as appropriate.

10. Operator's principal place of business address.
11. Operator's principal place of business telephone and fax details, including the country code. E-mail to be provided if available.
12. Insertion of the controlled document, carried on board, in which the contact details are listed, with the appropriate paragraph or page reference. E.g.: "Contact details ... are listed in the operations manual, gen/basic, chapter 1, 1.1"; or "... are listed in the operations specifications, page 1"; or "... are listed in an attachment to this document".
13. Operator's registered name.
14. Issue date of the AOC (dd-mm-yyyy).
15. Title, name and signature of the BCAA representative. In addition, an official stamp may be applied on the AOC.

Appendix II – Operations Specifications

OPERATIONS SPECIFICATIONS (subject to the approved conditions in the operations manual)				
Issuing Authority Contact Details Telephone ⁽¹⁾ : _____; Fax: _____; E-mail: _____				
AOC ⁽²⁾ : _____ Operator Name ⁽³⁾ : _____ Date ⁽⁴⁾ : _____ Signature: _____ Db a Trading Name Operations Specifications #: _____				
Aircraft model ⁽⁵⁾ : _____ Registration marks ⁽⁶⁾ : _____				
Types of operations: Commercial operations <input type="checkbox"/> Passengers <input type="checkbox"/> Cargo <input type="checkbox"/> Others ⁽⁷⁾ : _____				
Area of operation ⁽⁸⁾ : _____				
Special limitations ⁽⁹⁾ : _____				
Specific approvals:	Yes	No	Specification ⁽¹⁰⁾	Remarks
Dangerous goods	<input type="checkbox"/>	<input type="checkbox"/>		
Low visibility operations Take-off Approach and landing	<input type="checkbox"/>	<input type="checkbox"/>	CAT ⁽¹¹⁾ RVR ⁽¹²⁾ : m DA/H: ft RVR: m	
RVSM ⁽¹³⁾ <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>		
ETOPS ⁽¹⁴⁾ <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	Maximum diversion time ⁽¹⁵⁾ : min.	
Complex navigation specifications for PBN operations ⁽¹⁶⁾	<input type="checkbox"/>	<input type="checkbox"/>		(17)
Minimum navigation performance specification	<input type="checkbox"/>	<input type="checkbox"/>		
Operations of single-engined turbine aeroplane at night or in IMC (SET-IMC)	<input type="checkbox"/>	<input type="checkbox"/>	(18)	

Helicopter operations with the aid of night vision imaging systems	<input type="checkbox"/>	<input type="checkbox"/>		
Helicopter hoist operations	<input type="checkbox"/>	<input type="checkbox"/>		
Helicopter emergency medical service operations	<input type="checkbox"/>	<input type="checkbox"/>		
Helicopter offshore operations	<input type="checkbox"/>	<input type="checkbox"/>		
Cabin crew training ⁽¹⁹⁾	<input type="checkbox"/>	<input type="checkbox"/>		
Issue of CC attestation ⁽²⁰⁾	<input type="checkbox"/>	<input type="checkbox"/>		
Continuing airworthiness	<input type="checkbox"/>	<input type="checkbox"/>	⁽²¹⁾	
Others ⁽²²⁾				

- (1) Telephone and fax contact details of the competent authority, including the country code. E-mail to be provided if available.
- (2) Insertion of associated air operator certificate (AOC) number.
- (3) Insertion of the operator's registered name and the operator's trading name, if different. Insert 'DbA' before the trading name (for 'Doing business as').
- (4) Issue date of the operations specifications (dd-mm-yyyy) and signature of the BCAA representative.
- (5) Insertion of ICAO designation of the aircraft make, model and series, or master series, if a series has been designated (e.g. Airbus 319-500 or Airbus 320-500 or Boeing-737-3K2 or Boeing-777-232).
- (6) Either the registration marks are listed in the operations specifications or in the operations manual. In the latter case, the related operations specifications must make a reference to the related page in the operation manual. In case not all specific approvals apply to the aircraft model, the registration marks of the aircraft may be entered in the remark column to the related specific approval.
- (7) Other type of transportation to be specified (e.g. emergency medical service).
- (8) Listing of geographical area(s) of authorised operation (by geographical coordinates or specific routes, flight information region or national or regional boundaries).
- (9) Listing of applicable special limitations (e.g. VFR only, Day only, etc.).
- (10) List in this column the most permissive criteria for each approval or the approval type (with appropriate criteria).
- (11) Insertion of applicable precision approach level: LTS CAT I, CAT II, OTS CAT II, CAT IIIA, CAT IIIB or CAT IIIC. Insertion of minimum runway visual range (RVR) in meters and decision height (DH) in feet. One line is used per listed approach level.
- (12) Insertion of approved minimum take-off RVR in metres. One line per approval may be used if different approvals are granted.

- (13) Not Applicable (N/A) box may be checked only if the aircraft maximum ceiling is below FL290.
- (14) Extended range operations (ETOPS) currently applies only to two-engined aircraft. Therefore, the not applicable (N/A) box may be checked if the aircraft model has more or less than two engines.
- (15) The threshold distance may also be listed (in NM), as well as the engine type.
- (16) Performance-based navigation (PBN): one line is used for each complex PBN specific approval (e.g. RNP AR APCH), with appropriate limitations listed in the 'Specifications' and/or 'Remarks' columns. Procedure-specific approvals of specific RNP AR APCH procedures may be listed in the operations specifications or in the operations manual. In the latter case, the related operations specifications must have a reference to the related page in the operations manual.
- (17) Specify if the specific approval is limited to certain runway ends and/or aerodromes.
- (18) Insertion of the particular airframe/engine combination.
- (19) Approval to conduct the training course and examination to be completed by applicants for a cabin crew attestation as specified in BCAR-SPA.
- (20) Approval to issue cabin crew attestations as specified in BCAR-SPA, as applicable .
- (21) The name of the person/organisation responsible for ensuring that the continuing airworthiness of the aircraft is maintained and a reference to the regulation that requires the work, i.e. Subpart G of BCAR-M.
- (22) Other approvals or data may be entered here, using one line (or one multi-line block) per authorisation (e.g. short landing operations, steep approach operations, helicopter operations to/from a public interest site, helicopter operations over a hostile environment located outside a congested area, helicopter operations without a safe forced landing capability, operations with increased bank angles, maximum distance from an adequate aerodrome for two-engined aeroplanes without an ETOPS approval, aircraft used for non-commercial operations).

Appendix III - Ramp Inspection

Ramp Inspection

Date:	Time:	Place:	
Operator:		State:	AOC no.:
Route from:	Flight no:	Route to:	Flight no:
Flight type:	Chartered by Operator:	Aircraft type:	Aircraft configuration:
Charterer's State:		Registration mark:	Construction no:
Flight crew State(s) of licensing:	Acknowledgement of Receipt ^(*)		
	Name:	Signature:	
	Function:		
	Function:		



Tel: +97508271347
 Fax: +97508271909
 Email: bcaa@bcaa.gov.bt

		Check	Remark			Check	Remark			Check	Remark
A	Flight deck										
1	General condition										
2	Emergency exit										
3	Equipment										
	Documentation										
4	Manuals										
5	Checklists										
6	Navigation/instrument charts										
7	Minimum equipment list										
8	Certificate of registration										
9	Noise certificate (where applicable)										
10	AOC or equivalent										
11	Radio licence										
12	Certificate of Airworthiness										
	Flight data										
13	Flight preparation										
14	Mass and balance calculation										
	Safety equipment										
15	Hand fire extinguishers										
16	Life-jackets / flotation devices										
17	Harness										
18	Oxygen equipment										
	Flight crew										
20	Flight licence/composition crew										
	Journey log book / Technical log or equivalent										
21	Journey log book or equivalent										
22	Maintenance release										
23	Defect notification and rectification (incl. Tech log)										
24	Pre-flight inspection										
B	Cabin Safety										
1	General internal condition										
2	Cabin crew station and crew rest area										
3	First-aid kit / Emergency medical kit										
4	Hand fire extinguishers										
5	Life-jackets / flotation devices										
6	Seat belt and seat condition										
7	Emergency exit, lighting and Independent Portable light										
8	Slides /Life-rafts (as required), ELT										
9	Oxygen Supply (Cabin Crew and Passengers)										
10	Safety Instructions										
11	Cabin crew members										
12	Access to emergency exits										
13	Stowage of passenger baggage										
C	Aircraft condition										
1	General external condition										
2	Doors and hatches										
3	Flight controls										
4	Wheels, tyres and brakes										
5	Undercarriage, skids/floats										
6	Wheel well										
7	Power plant and pylon										
8	Fan blades, Propellers, Rotors (main/tail)										
9	Obvious repairs										
10	Obvious unrepaired damage										
11	Leakage										
D	Cargo										
1	General condition of cargo compartment										
2	Dangerous goods										
3	Cargo stowage										
E	General										
1	General										

19	Independent Portable light				14	Seat capacity			
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Action Taken	Inspection Item	Level	Remarks
(3d) Immediate operating ban			
(3c) Aircraft grounded by inspecting CAA			
(3b) Corrective actions before flight			
(3a) Restrictions on the aircraft operation			
(2) Information to the authority an operator			
(1) Information to the pilot-in-command/			
(0) No remarks			
Inspector(s) sign or code			
Crew comments (if any):			

(* Signature by any member of the crew or other representative of the inspected operator does in no way imply acceptance of the listed findings but simply a confirmation that the aircraft has been inspected on the date and at the place indicated on this document.

This report represents an indication of what was found on this occasion and must not be construed as a determination that the aircraft is fit for the intended flight. Data submitted in this report can be subject to changes upon entering into the centralised database.

Appendix IV - Ramp Inspection Report



Bhutan Civil Aviation Authority
 Ramp Inspection Report

NR: _____

Source: RI

Date: _____ Place: _____

Local time: _____

Operator: _____ AOC Number: _____

State: _____ Type of Operation: _____

Route from: _____ Flight Number: _____

Route to: _____ Flight Number: _____

Chartered by Operator*: _____ Charterer's State*: _____

**(where applicable)*

Aircraft Type: _____ Registration Marks: _____

Aircraft Configuration: _____ Construction Number: _____

Flight crew: State of Licensing: _____

2nd State of Licensing*: _____

**(where applicable)*

Findings:

Code / Std / Ref / Cat / Finding	Detailed Description
_____-_____-_____-_____-_____	_____
_____-_____-_____-_____-_____	_____
_____-_____-_____-_____-_____	_____
_____-_____-_____-_____-_____	_____
_____-_____-_____-_____-_____	_____

- Class of actions taken: Detailed Description
- 3d) Immediate operating ban
 - 3c) Aircraft grounded by inspecting competent authority.....
 - 3b) Corrective actions before flight.....
 - 3a) Restriction on aircraft flight operation.....
 - 2) Information to the competent authority and Operator

1) Information to pilot-in-command

Additional information (if any)

Inspector's names or no:

- This report represents an indication of what was found on this occasion and must not be construed as a determination that the aircraft is fit for the intended flight.

- Data submitted in this report can be subject to changes for correct wording.

Item Code	Checked	Remark
A. Flight Deck		
General		
1. General Condition	1. <input type="checkbox"/>	1. <input type="checkbox"/>
2. Emergency Exit	2. <input type="checkbox"/>	2. <input type="checkbox"/>
3. Equipment	3. <input type="checkbox"/>	3. <input type="checkbox"/>
Documentation		
4. Manuals	4. <input type="checkbox"/>	4. <input type="checkbox"/>
5. Checklists.....	5. <input type="checkbox"/>	5. <input type="checkbox"/>
6. Radio Navigation Charts	6. <input type="checkbox"/>	6. <input type="checkbox"/>
7. Minimum Equipment List	7. <input type="checkbox"/>	7. <input type="checkbox"/>
8. Certificate of registration	8. <input type="checkbox"/>	8. <input type="checkbox"/>
9. Noise certificate (where applicable)	9. <input type="checkbox"/>	9. <input type="checkbox"/>
10. AOC or equivalent	10. <input type="checkbox"/>	10. <input type="checkbox"/>
11. Radio licence	11. <input type="checkbox"/>	11. <input type="checkbox"/>
12. Certificate of Airworthiness (C of A)	12. <input type="checkbox"/>	12. <input type="checkbox"/>
Flight data		
13. Flight preparation	13. <input type="checkbox"/>	13. <input type="checkbox"/>
14. Mass and balance calculation	14. <input type="checkbox"/>	14. <input type="checkbox"/>
Safety Equipment		
15. Hand fire extinguishers	15. <input type="checkbox"/>	15. <input type="checkbox"/>
16. Life-jackets / flotation device	16. <input type="checkbox"/>	16. <input type="checkbox"/>
17. Harness	17. <input type="checkbox"/>	17. <input type="checkbox"/>
18. Oxygen equipment	18. <input type="checkbox"/>	18. <input type="checkbox"/>

19. Independent Portable light	19.	<input type="checkbox"/>	19	<input type="checkbox"/>
Flight Crew				
20. Flight crew licence/composition	20.	<input type="checkbox"/>	20	<input type="checkbox"/>
Journey logbook / Technical log or equivalent				
21. Journey log book, or equivalent	21.	<input type="checkbox"/>	21	<input type="checkbox"/>
22. Maintenance release	22.	<input type="checkbox"/>	22	<input type="checkbox"/>
23. Defect notification and rectification (incl. Tech log)	23.	<input type="checkbox"/>	23	<input type="checkbox"/>
24. Pre-flight inspection	24.	<input type="checkbox"/>	24	<input type="checkbox"/>
B. Cabin Safety				
1. General Internal Condition	1.	<input type="checkbox"/>	1.	<input type="checkbox"/>
2. Cabin crew stations and crew rest area	2.	<input type="checkbox"/>	2.	<input type="checkbox"/>
3. First-aid kit/ Emergency medical kit	3.	<input type="checkbox"/>	3.	<input type="checkbox"/>
4. Hand fire extinguishers	4.	<input type="checkbox"/>	4.	<input type="checkbox"/>
5. Life-jackets / Flotation devices	5.	<input type="checkbox"/>	5.	<input type="checkbox"/>
6. Seat belt and seat condition	6.	<input type="checkbox"/>	6.	<input type="checkbox"/>
7. Emergency exit, lighting and Independent Portable light	7.	<input type="checkbox"/>	7.	<input type="checkbox"/>
8. Slides /Life-rafts (as required), ELT	8.	<input type="checkbox"/>	8.	<input type="checkbox"/>
9. Oxygen Supply (Cabin Crew and Passengers)	9.	<input type="checkbox"/>	9.	<input type="checkbox"/>
10. Safety Instructions	10.	<input type="checkbox"/>	10	<input type="checkbox"/>
11. Cabin crew members	11.	<input type="checkbox"/>	11	<input type="checkbox"/>
12. Access to emergency exits	12.	<input type="checkbox"/>	12	<input type="checkbox"/>
13. Stowage of passenger baggage's	13.	<input type="checkbox"/>	13	<input type="checkbox"/>
14. Seat capacity.....	14.	<input type="checkbox"/>	14	<input type="checkbox"/>
Item Code		Checked		Remark
C. Aircraft Condition				
1. General external condition	1.	<input type="checkbox"/>	1.	<input type="checkbox"/>

2. <i>Doors and hatches</i>	2.	<input type="checkbox"/>	2.	<input type="checkbox"/>
3. <i>Flight controls</i>	3.	<input type="checkbox"/>	3.	<input type="checkbox"/>
4. <i>Wheels, tyres and brakes</i>	4.	<input type="checkbox"/>	4.	<input type="checkbox"/>
5. <i>Undercarriage skids/floats</i>	5.	<input type="checkbox"/>	5.	<input type="checkbox"/>
6. <i>Wheel well</i>	6.	<input type="checkbox"/>	6.	<input type="checkbox"/>
7. <i>Power plant and pylon</i>	7.	<input type="checkbox"/>	7.	<input type="checkbox"/>
8. <i>Fan blades, Propellers, Rotors (main & tail)</i>	8.	<input type="checkbox"/>	8.	<input type="checkbox"/>
9. <i>Obvious repairs</i>	9.	<input type="checkbox"/>	9.	<input type="checkbox"/>
10. <i>Obvious unrepaired damage</i>	10.	<input type="checkbox"/>	10.	<input type="checkbox"/>
11. <i>Leakage</i>	11.	<input type="checkbox"/>	11.	<input type="checkbox"/>
.		<input type="checkbox"/>		<input type="checkbox"/>
D. Cargo				
1. <i>General condition of cargo compartment</i>	1.	<input type="checkbox"/>	1.	<input type="checkbox"/>
2. <i>Dangerous Goods</i>	2.	<input type="checkbox"/>	2.	<input type="checkbox"/>
3. <i>Stowage of cargo</i>	3.	<input type="checkbox"/>	3.	<input type="checkbox"/>
E. General				
1. <i>General</i>	1.	<input type="checkbox"/>	1.	<input type="checkbox"/>

AUTHORISATION OF COMMERCIAL SPECIALISED OPERATIONS	
Issuing Authority: ¹	
Authorisation no: ²	
Operator Name: ³ Operator address: ⁴ Telephone: ⁵ Fax: E-mail:	
Aircraft Model and Registration Marks: ⁶	
Authorised specialised operation: ⁷	
Authorised area or site of operation: ⁸	
Special limitations: ⁹	
This is to confirm that is authorised to perform specialised operation(s) in accordance with this authorisation, operator's Standard Operating Procedures, Section 3 to BANRs and its operating requirements.	
Date of issue ¹⁰ :	Name and Signature ¹¹ : Title:

1. Name and contact details of the competent authority
2. Insertion of associated authorisation number.
3. Insertion of the operator's registered name and the operator's trading name, if different. Insert "Dba" before the trading name (for "Doing business as").
4. Operator's principal place of business address.
5. Operator's principal place of business telephone and fax details, including the country code. E-mail to be provided if available.
6. Insertion of the Commercial Aviation Safety Team (CAST)/ICAO designation of the aircraft make, model and series, or master series, if a series has been designated (e.g. Boeing-737-3K2 or Boeing-777-232). The CAST/ICAO taxonomy is available at: <http://www.intlaviationstandards.org/H>. The registration marks should be either listed in the List of Specific Approvals or in the operations manual. In the latter case the List of Specific Approvals shall refer to the related page in the operation manual.

7. Specify the type of operation, e.g., agriculture, construction, photography, surveying, observation and patrol, aerial advertisement.
8. Listing of geographical area(s) or site(s) of authorised operation (by geographical coordinates or flight information region or national or regional boundaries).
9. Listing of applicable special limitations (e.g. VFR only, Day only, etc.).
10. Issue date of the authorisation (dd-mm-yyyy).
11. Title, name and signature of BCAA representative. In addition, an official stamp may be applied on the authorisation.