



EASA Ramp Inspection Manual (RIM)	Issue 1 / Approval Date – 20/03/2019
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Log of issues			
Issue	Issue date	Change description	Applicability
001	20-03-2019	Creation of the document - initial version-	01/09/2019





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Foreword

The information presented in manual has been compiled to provide Member States and SAFA participating states with guidance related to the implementation of ARO.RAMP requirements and as well with examples of ramp inspection best practices.

In particular, it addresses the conduct, management and administration of ramp inspections and as well the ramp inspector qualification process.

The first version of this manual has been developed taking into account the input of a dedicated working group of Member States and SAFA participating states and the comments received during a focussed consultation of EASA advisory bodies.

The ramp inspection manual in itself is considered as guidance. However, the appendices, since referred to in AMCs as provisions to be followed, are considered to have the same legal status as AMCs.

The use of such system provides more flexibility when amending these appendices, as the update of the manual is not in the scope of the rulemaking process.

However, as stated during the OPS TeB 02-2018, EASA will ensure that all amendments to this manual are subject to an adequate level of consultation with affected stakeholders. In practice, the following process will take place:

- Amendments to the core part of the manual and to its attachments will be notified to all the RICS members before their publication. Depending on the urgency of the change, this notification will take place either via email or during RICS meetings. The RICS members will have in both cases the possibility to provide comments on the proposed amendments;
- Amendments to appendices to the ramp inspection manual will be subject to a focussed consultation of the OPS.TeB/FS.TEC Members, allowing them to provide comments on the draft amendments before the final version is adopted. EASA will then review the comments and prepare the final version for publication. In case of a major disagreement on a substantial change, the proposed amendment will be discussed at the next OPS.TeB meeting.

Outside these two levels of consultation, Member States and SAFA participating states may provide comments on the current version of the manual by submitting them to [safo@easa.europa.eu](mailto:safa@easa.europa.eu).

The latest version of this manual may be obtained by visiting the EASA website under <https://www.easa.europa.eu/easa-and-you/air-operations/ramp-inspection-programmes-safa-saca>



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1 Introduction

1.1 History, background & purpose of the manual

Reference: GM1 ARO.RAMP.005

In 1996, the European Civil Aviation Conference (ECAC) launched its Safety Assessment of Foreign Aircraft programme (SAFA) to complement the ICAO audits by concentrating on actual aircraft checks at airports (“ramp inspections”) aimed at ensuring that relevant ICAO standards were being complied with.

In 2004, European Commission Directive 2004/36/CE created a legal obligation upon EU Member States to perform ramp inspections on third country aircraft landing at their airports, where ‘third country aircraft’ implied aircraft not used or operated under control of a competent authority of an EU Member State. Nevertheless, the Directive did not prohibit in any way EU Member States from inspecting aircraft from other EU Member States.

On 28 October 2012, the Implementing Rules on Air Operations entered into force as the new legal basis for the EU ramp inspection programme, replacing the original system established by the SAFA Directive and its implementing regulations with a new system represented by the new EU Ramp Inspections Programme.

Under the EC SAFA programme as implemented until the 28th of October 2014, foreign aircraft (either EU or third country) may be inspected. EU carriers are checked against EU standards (SACA) when inspected in EASA States, whereas all other inspections are performed against international standards (SAFA). In case of significant irregularities, the operator and the appropriate Aviation Authority (state of operator or state of registry) are contacted in order for corrective measures to be taken not only with regard to the aircraft inspected, but also with regard to other aircraft which could be concerned in case of a generic nature irregularity. Where irregularities have an immediate impact on safety, inspectors may demand corrective actions before they allow the aircraft to leave.

The European Standard procedures for SAFA & SACA have been integrated into Commission Regulation under Part-ARO and is fully applicable from the 28th of October 2014.

The purpose of this Manual is to describe best practices and give guidance to states performing ramp inspections. It covers the delivery, management and administration of ramp inspections as well as the ramp inspector qualification process.

The legal status of the core part of the manual and the attachment is guidance only, whilst the Appendixes (8.1, 8.2 and 8.3) are considered to have the status of an AMC as they are referred to in AMC to ARO.RAMP as means to comply with the relates implementing rule (unless an AltMoC is defined in accordance with ARO.GEN.120). If a SAFA participating state wishes to deviate from the guidance provided in the manual, it may do so providing such deviation is described and followed in accordance with a national procedure.

The manuals chapter order follow to a large extent the logic structure of the ramp inspection process.





1.2 Glossary: definitions of words and acronyms

1.2.1 Acronyms

ACMI	Aircraft crew maintenance insurance (provided in a wet lease arrangement)
AD	Airworthiness Directive
AIP	Aeronautical Information Publications
AMC	Acceptable Means of Compliance
AMM	Aircraft Maintenance Manual
ARO	Authority Requirements for air Operations
ASC	Air Safety Committee
ATC	Air Traffic Control
CDL	Configuration Deviation List
CFMU	Control Flow Management Unit
CoA	Certificate of Airworthiness
EASA	European Aviation Safety Agency
EC	European Commission
ECAC	European Civil Aviation Conference
EU	European Union
GM	Guidance Material
ICAO	International Civil Aviation Organisation
IDEA	In-Depth Expert Analyses
MEL	Minimum Equipment List
NAA	National Aviation Authority
NC	National Coordinator
NMIR	Network Manager Interactive Reporting
NOP	Network Operations Portal
POI	Proof Of Inspection
RAMP	Ramp inspection process
RICS	Ramp Inspection Coordination and Standardisation
RIM	Ramp Inspection manual
RITO	Ramp Inspection Training Organisation
SACA	Safety Assessment of Community Aircraft
SAFA	Safety Assessment of Foreign Aircraft
SANA	Safety Assessment of National Aircraft
SRM	Structural Repair Manual
SWC	System Wide Coordination
SWPM	Standard Wiring Practices Manual
TCO	Third Country Organisation
VMC	Visual Meteorological Conditions
WDM	Wiring Diagram Manual





1.2.2 Definitions

'SAFA Participating states': Non-EASA Member States that have entered into a working arrangement with EASA for the participation in the SAFA programme and EASA Member States.

'SANA inspections': Ramp inspection (by a competent authority) of aircraft used by organisations under its own regulatory oversight.

'SAFA inspections': Ramp inspections performed by SAFA participating state on any aircraft and ramp inspections performed by EASA State on an aircraft operated by an operator under the regulatory oversight of a non-EASA Member State.

'SACA inspections': Ramp inspections performed by an EASA Member State on aircraft operated by an operator under the regulatory oversight of another EASA Member State.

'System wide coordination (SWC)': In agreement with all EASA Member States, the Agency has developed a common risk-based system where the Agency calculates target number of inspections on certain operators meeting a pre-defined traffic threshold criterion. Overseas territories and non-EASA Member States are not included in this system, however the latter have a possibility to opt in.

'SWC participating states': All EASA Member States¹ and voluntary SAFA participating states.

'Layer 1 operators': Operators having traffic above a threshold established by the Agency as per chapter 4.1.1 in this manual.

'Layer 2 operators': All remaining operators/aircraft which could be inspected under ARO.RAMP as per Regulation (EU) 965/2012. Typically, but not limited to, low utility commercial operators, Business operators/aircraft, General Aviation and similar types of operation.

1.3 Objectives

The purpose of ramp inspections is to perform on-the-spot assessments of aircraft on the ramp to check compliance with the applicable standards for the type of operation. The inspection covers a check of the flight crew licenses, flight operation documentation, relevant aircraft documents, aircraft condition, mandatory cabin safety equipment and cargo area.

1.4 Inspection matrix

inspected Operator originating from	EASA Member State	Non-EASA SAFA participating state
EASA Member State	SACA	SAFA
Non-EASA SAFA participating state		SAFA
Your own state		SANA

Ramp inspections are part of a European Union safety programme and should be performed in a harmonised and standardised way by all EASA Member States and all states with which EASA signed a working arrangement (participating states). State aircraft as defined in the Chicago Convention (aircraft used in military, customs and police services and declared as such in the flight plan) are outside the scope of the EU Ramp Inspections programme.

¹ After voluntary opt-in phase has ended





SANA inspections should follow, as far as possible, the same principles as applied to SAFA and SACA inspections in accordance with Part ARO.RAMP.

2 EASA's role in the EU Ramp Inspections programme

The Agency is responsible for the overall coordination of the programme to all SAFA participating states and for reporting the results thereof to the Commission.

The specific role and responsibilities of EASA in the EU Ramp Inspections programme are:

- to collect, by means of a centralised ramp inspection tool, the inspection reports of the SAFA participating states engaged in the EU Ramp Inspections Programme;
- to develop, maintain and continuously update the centralised ramp inspection tool (e.g. explore possibilities to introduce update of ramp inspection tool to run on mobile devices) including tracking for ramp inspector currency;
- to provide necessary changes and enhancements to the ramp inspection tool application;
- to analyse all relevant information concerning the safety of aircraft and its operators;
- to report potential aviation safety problems to European Commission and all the SAFA participating states;
- to inform the European Commission and all the SAFA participating states on follow-up actions;
- to propose coordinated actions to the Commission and to the competent authorities, when necessary on safety grounds, and ensure coordination at the technical level of such actions;
- to liaise with other European institutions and bodies, international organisations and third country competent authorities on information exchange;
- To submit a yearly report to European Commission, participating States and public to reflect the activities of the EU ramp inspections programme;
- To establish a list of prioritised operators, which includes:
 - Third Country states (i.e. states outside the EU) deemed to have deficiencies in their safety oversight capability (all operators based in these states are subject to additional scrutiny);
 - Third Country and European Union operators that should be prioritised for regular inspections;
 - Newly authorised Third Country operators, and
 - Individual aircraft/operators suspected of engaging in illegal commercial operations.

In addition, the Agency has the following tasks and obligations:

- Monitor the level of activities agreed upon for each SAFA participating state;
- Perform standardisation visits to confirm competency and activities;
- Organise regular meetings to facilitate exchange of information (RICS, IDEA) in cooperation with the SAFA participating states;
- Arrange for working groups on new or emerging topics;
- Develop the ramp inspection programme globally;
- Harmonise inspection methodology between SAFA participating states;
- Maintain and develop a risk-based model for fair number of inspections and distribution;
- Calculate and distribute inspection targets to the SWC participating states;
- Monitor state compliance and adherence to SWC calculated targets and distribution for “layer 1” operators;
- Collect and analyse traffic data with regards to SWC coordination and provide it to the SWC participating states.





3 Organisation

3.1 Ramp inspection national coordinator duties and responsibilities

A Ramp inspection national coordinator (NC) should be appointed by each competent authority of SAFA participating states and tasked with the day-to-day coordination of the programme at national level to facilitate the implementation of the programme in accordance with ARO.RAMP applicable requirements. The national coordinator should preferably be full-time contracted, or at least be given sufficient hours to fulfil his/her tasks relating to all aspects of the national ramp inspections programme.

In addition to the ramp inspection national coordinator, the competent authority may appoint a coordinator for national operators to act as the focal point for other SAFA participating states regarding ramp inspections performed on operators under its oversight.

The ramp inspection national coordinator is responsible for the following tasks:

- Facilitate the development of an annual ramp inspection programme, taking into account the list of prioritised operators and, for SWC participating states, the assigned “layer 1” and “layer 2” operator targets;
- Ensure that the annual ramp inspection programme leaves appropriate time and resources to enable the inspections of aircraft operated by “layer 2” operators suspected of non-compliance with the applicable requirements;
- For non SWC participating states, submit the annual ramp inspection programme to the Agency for the upcoming year as per the working arrangements or by the end of November latest and address any change requested by the Agency;
- Supervise the ramp inspectors planning process;
- Monitor the implementation of the annual ramp inspection programme, including adherence to inspection targets assigned by the Agency, in order to prevent both over- and under-inspections;
- Plan prioritised ramp inspections;
- Ensure that all staff involved in ramp inspections are competent, remain current and are trained in accordance with the individual needs;
- Schedule the recurrent training in a timely manner;
- As far as practicable, make use of the workflow function which is available in the centralised ramp inspection tool;
- Implement a national ramp inspection quality control system in the respective ramp domain (e.g. the state’s own system for quality control, or, when the overall state system does not include the ramp domain, a more specific ramp quality system on inspection reporting and staff qualifications);
- Enter the ramp inspection reports into the centralised ramp inspection tool as soon as possible after the inspection and in accordance with ARO.RAMP.145 (a);
- For non SWC participating states: collect and analyse all traffic data for their own country (using Eurocontrol’s online Extranet tool if available);
- For SWC participating states: collect and analyse traffic data (using Eurocontrol’s online Extranet tool) for “layer 2” operators;
- Support the Agency by participation in working groups, where possible;
- Represent the state at the RICS meetings and, when necessary, at other ramp inspection related meetings;
- Promote and implement the inspector exchange programme between competent authorities from the SAFA participating states;
- Provide support in handling requests for disclosure of data related to information recorded and reported in accordance with ARO.RAMP.145;
- Organise regular meetings with all ramp inspection staff to maintain a high-quality standard regarding:
 - any changes/updates to requirements relating to ramp inspections of aircraft of operators under the regulatory oversight of another state;
 - feedback on quality issues regarding reports, e.g. incorrect entries, mistakes, omissions, etc;
- Manage the access of national operators and the competent authority’s staff to the centralised ramp inspection tool;





- Act as a sectorial focal point in the domain of ramp inspections in the context of standardisation activities performed by the Agency;
- Propose appropriate team members for ramp inspection standardisation visits;
- Provide information on safety reports to the Agency, the Commission and the Member States in the domain of ramp inspections.

In addition to the above-described tasks, it is recommended that the national coordinator:

- Manages an inspector's qualification and tracking tool (in order to keep control of staff qualifications);
- Allocates adequate time, resources and budget, to participate in various EASA mandatory and/or voluntary meetings;
- Monitors, as applicable, the various available information systems (Eurocontrol, EASA alerts, internal communications) relating to prioritised or potentially new operators;
- Manages the finding follow-up information received through the ramp inspection tool dashboard, or by other means if operators have no connection to the dashboard;
- Facilitates and promotes quality principles within the team's inputs and outputs with regards to the inspection tool;
- Informs the Agency of newly certified national operators and/or operators ceasing activities (such information should be sent to [safo@easa.europa.eu](mailto:safa@easa.europa.eu)).

3.2 Ramp inspector duties and responsibilities

Ramp inspectors have the following duties and responsibilities:

- Follow the competent authority procedures and guidance on EU Ramp Inspection Programme implementation;
- Follow the defined criteria for unforeseen inspections of "layer 2" operators;
- Inspect items selected from the Ramp Inspection checklist according to assigned items of competence;
- Comply with the competent authority procedures related to inspections of aircraft not being prioritised or not being suspected ('unforeseen');
- Plan inspections (and items) based on the preparation module (use all available sources, e.g. EASA/National/Eurocontrol/local sources/etc);
- Submit Ramp Inspection paperwork and other evidence to the National Coordinator, i.e. Proof of inspection forms, and upload inspection photos and other relevant information and evidence gathered while performing ramp inspector duties;
- Attend the regular internal team meetings with the ramp national coordinator to discuss all aspects of the ramp inspection process (e.g. time management, efficiency of the inspection, team coordination, problems encountered, lessons learned, etc.).

3.3 Ramp Inspector equipment and access credentials

The competent authority should provide inspectors with the necessary access rights to all the airports they are eligible to perform the inspections, as well as necessary equipment (e.g. flashlights, digital camera, and mobile phone) and protective clothing suitable for various environmental circumstances (e.g. fluorescent vests, ear protection etc).

In addition, it is recommended that the competent authority provides the following tools to its inspectors:

- Inspection mirror (mainly for cabin);
- Technical documentation, if available (A/C manuals, MEL updates, etc);
- Operational documentation (status of NOTAMS, weather, charts, AIP, etc);
- Laptop/tablet (document storage and/or internet data to access information sources or the SAFA ramp inspection tool, etc);
- Access to expected traffic data (e.g. from slot coordinator where there is a slot system in place for a specific airport);
- Access to actual airport traffic data (e.g. public and non-public if available);
- Suitable means of transportation at the airport/inspection site (e.g. dedicated car);





- Relevant contact information (e.g. airport phone numbers etc.).

3.4 Management of safety / third party information

Safety information may be received from various external sources (e.g. whistle-blower reports). Even ramp inspectors themselves may be a source of safety related information. A structured approach on how to process such information and who to notify should be in place.

In most cases, the NC is responsible for reviewing and assessing the credibility of the available information to determine if it can be verified during a ramp inspection. If the suspicions or allegations of any kind of deficiency can be investigated during a ramp inspection, such inspection should be planned. If the operator or airframe cannot be checked by the related state, the NC may decide to file a safety report to alert the other participating states. Alternatively, the EASA ramp coordination section could be contacted for a proposed coordinated action by the state of inspection. A further information could be retrieved through the TCO WEB-INTERFACE via the confidential info exchange tab (if a registered user).

3.4.1 Safety Reports

Reference: AMC1 ARO.RAMP.145

Collected safety related information on operators may be distributed using the safety report form in the ramp inspection tool. However, it should be verified by the reporting authority, as far as possible, before insertion in the centralised ramp inspection tool. Examples of important safety related information could be, but are not limited to:

- Communication failure or difficulties;
- ATC reports on shortage of fuel (declared fuel emergencies), problems with TCAS system, abnormal take-off lengths;
- Information received from maintenance organisations concerning lack of AD compliance or maintenance work performed incorrectly;
- Reports from the general public/whistle-blowers concerning perceived unsafe situations;
- Reports from pilots on incorrect use of radio-telephony phraseology;
- Reports from airport personnel on observed unsafe practice;
- Relevant information concerning accidents and incidents which occurred in Member States' airspace, or
- Unsafe practice observed by ramp inspector outside the scope of ramp inspections programme.

Safety reports entered into the centralised ramp inspection tool may be further enhanced with useful information like documents, pictures, etc.

3.4.2 TCO WEB-INTERFACE

The TCO WEB-INTERFACE database is only accessible for EASA Member States, which may use this information under a separate confidentiality agreement. Non EASA Member states have to rely on their own systems or intelligence information received or obtainable from other sources.

The documents accessible via the TCO web-interface database might not reflect the actual status, therefore it is recommended to use the data with caution.

4 Annual Ramp inspection programme

Reference: AMC1 ARO.RAMP.100(c)

Ramp inspections should always be planned on a long, mid and short-term basis to ensure that sufficient inspecting resources are available and adequate to inspect foreign operators and individual aircraft landing in the state. Based upon updates received from the Agency, the state should amend their annual planning. Furthermore, apart from planned inspections, the state should have sufficient flexibility in their system to allow for unforeseen inspection demands on prioritised operators and aircraft suspected of





non-compliances. Additionally, the planning should take into account the principles of non-discriminatory approach, widest possible coverage and over-/under- inspection.

4.1 Annual Ramp inspection programme for the SWC participating states

When defining their annual ramp inspection programme, the SWC participating states should take into account:

- The target number of inspections assigned by the Agency on each “layer 1” operator
Based on analysis made by the Agency, the competent authorities receive every year inspection target numbers per “layer 1” operators for the annual planning, only and if the operator traffic exposure to state is above the defined threshold and reliable data is available.

- The total target number of inspections assigned by the Agency on “layer 2” operators
Based on analysis made by the Agency, the competent authorities receive every year a minimum total number of inspections to be planned on “layer 2” operators.

Note: The annual targets assigned by the Agency should be treated as confidential.

Specific case of territories outside ICAO EUR region

Inspections to be performed in territories of the SWC participating states, which are outside the ICAO EUR region, should be included in the annual ramp inspection programme defined by these states, in addition to the target numbers assigned by the Agency.

4.1.1 Annual programme on “layer 1” operators

The list of “layer 1” operators is established by the Agency with the help of the SWC participating states, taking into account the traffic exposure and the level of confidence on these operators.

Determination of the list of “layer 1” operators

Every year before 1st of December, the Agency communicates the list of “layer 1” operators.

The methodology used by the Agency to determine if an operator (a) is to be considered a “layer 1” operator is in line with the following principles:

- An operator (a) may be considered a “layer 1” operator for the year (Y) when its traffic exposure (T) in the year (Y-1) exceeds 250
- (T) is calculated with the use of Eurocontrol data, applying the following formula:

$$T = \frac{\text{Number of landings of (a) in all EASA Member States}}{\text{Number of EASA Member States with more than 50 landings}}$$

Assignment of target numbers of inspections on “layer 1” operators

A number of inspections is then established for each of these “layer 1” operators, considering a “confidence level” (C) and the “traffic exposure” calculated as explained above. The calculations are based on reliable data and all “layer 1” operators are processed towards the same parameters.

Note: Only operators for which the Agency has reliable basic data for confidence and traffic exposure are considered.





The calculation matrix used to determine the number of inspections to be performed on “layer 1” operators is defined by the Agency, after consultation with the SWC participating states, and has two axes:

- The x-Axis is displaying the “traffic exposure” (T), calculated as explained above;
- The y-axis is displaying the “confidence level” (C) whereby the Agency has established a sufficient level of confidence in an operator and/or the operator’s competent authority.

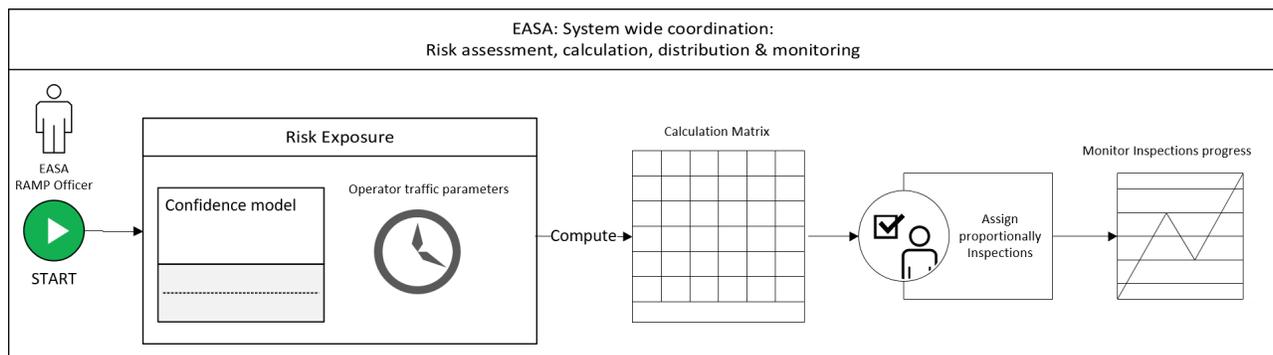
Once the traffic exposure (T) and the confidence level (C) are established for a specific “layer 1” operator, the Agency can then define the target number of inspections to be performed on this operator, using that matrix.

Once the target numbers of inspections are determined for each “layer 1” operator, the Agency assigns national targets for each SWC participating state, based on the following principles:

- 1) a target of “0” inspection is assigned to states where the historical traffic level of the operator is below a defined threshold;
- 2) each state in which the historical traffic level of the operator is above this defined threshold should receive a target number of inspections of 1 or more;
- 3) the Agency may redistribute the target numbers of inspections defined per states, in case one state has an extraordinary amount of inspections on one operator.

Inspection target numbers on “layer 1” operators are updated by the Agency at least once a year, after consultation with the SWC participating states.

The drawing below illustrates the system schematically:



Establishment of the national annual ramp inspection programme

Each SWC participating state defines its annual ramp inspection programme on “layer 1” operators, based on the target numbers of inspections assigned by the Agency. Any request to change such inspection numbers (e.g. in case an operator ceases, increases or starts its operation to the state) needs to be documented and forwarded to EASA for update. In cases where the programme requests more than one inspection, these should as far as possible be evenly spread over the year, depending on the operator’s schedule, type of operation and cover as many aircraft types as possible.

The annual ramp inspection programmes defined by the SWC participating states for “layer 1” operators should not exceed the allocated inspection targets, except for prioritised operators (identified as such in the list provided by the Agency as per ARO.RAMP.105(a)) or for safety reasons which should be documented.

Unexpected and unforeseen traffic may occasionally occur at the aerodrome(s) where and when the inspecting team is onsite. This kind of traffic might, in some cases, be more important to inspect from a flight safety perspective than the pre-planned





operators, and therefore, the ramp inspectors should have the flexibility to deviate from the plan and inspect those operators instead.

The list below is a non-exhaustive list of situations where the ramp inspectors might, and in some cases should, deviate from the plan in favour of valuable unforeseen inspections:

- Identification of immediate aviation safety hazards which seriously threaten flight safety (potential CAT3 situation) or any other safety related information justifying an inspection;
- Operators or aircraft suspected of non-compliance in accordance with the principles listed in AMC1 ARO.RAMP.100(b), including those listed on the priority list, as provided by the Agency as per ARO.RAMP.105(a);
- Series of incidents or accidents on a certain operator with a suspected root cause that could be confirmed via a ramp inspection;
- Third country operators not holding a TCO web-interface authorisation identified by the EUROCONTROL alert system;
- Operators identified by a safety report included in the ramp inspection tool and containing information that could be checked via a ramp inspection;
- Operators identified by whistle blower information that could be checked via a ramp inspection;
- “Layer 2” operators which were subject to less than 6 inspections during the last 12 months across the SAFA participating states.

Note: The national target number of inspections to be performed on prioritised “layer 1” operators and operators from prioritised states, should be reasonable and based on the national planning guidelines, in cases where such number is different to that assigned by the Agency.

Note: Ramp inspectors from a SWC participating state should refrain from performing such unforeseen inspections on “layer 1” operators if it would result in exceeding the state’s target number per operator, unless justified by safety reasons clearly evidenced. These evidences should be well documented and recorded.

4.1.2 Annual programme on “layer 2” operators

SWC participating states will not receive individual targets for “layer 2” operators, which are operators with traffic exposure below the defined threshold and/or for which no reliable data is available. Instead, a total planned number of inspections to be performed on “layer 2” operators is calculated and assigned by the Agency for each SWC participating state. This target for “layer 2” operators is defined as a statistical assumption for the state without individual risk assessment or distribution of inspections.

Note: The SWC participating states receive their individual total number of inspection targets for “layer 2” operators at the same time as the targets for “layer 1” operators.

The total planned number of inspections to be performed on “layer 2” operators, as defined by the SWC participating state, should not be less but may exceed the number assigned by the Agency for this state.

4.2 Annual Ramp inspection programme for Non-SWC States

4.2.1 Principles to be followed

For those states, which are not, SWC participating states, the following principles apply:

- The annual ramp inspection programme should be defined using risk and exposure based approach;
- The annual ramp inspection programme for the upcoming year should be sent to EASA latest by 1st of December;





- To avoid over-inspecting “layer 1” operators, the annual number of inspections on those operators should be kept to a minimum unless the operator or its state is prioritised and/or suspected of non-compliance. Inspections of “layer 1” operators should focus on aircraft types not previously inspected or operations different than those normally seen in Europe (e.g. short haul TCO web-interface or long-haul European operations);
- The selection should enable the widest possible sampling rate of the operator and aircraft types flying into its territory;
- No discrimination based on the nationality of the operators;
- The annual number of landings should be considered when defining the planned number of inspections on each regular operator.

4.2.2 Use of the annual minimum number of inspections “1”

As an indication for the expected contribution from the states not taking part in the System-wide coordination system, the following formula may be used to calculate the minimum number of inspections for the upcoming year:

$$I = (\text{Opr} \geq 50) + 0,2 * (\text{Opr} < 50) + \frac{\text{Lnd}}{2000}$$

where:

- I = minimum number of inspections;
- (Opr \geq 50) = number of operators¹ whose aircraft have landed at least 50 times in the previous 12 months at aerodromes in the territory of the state ;
- (Opr<50) = number of operators whose aircraft have landed less than 50 times in the previous 12 months at aerodromes in the territory of the state;
- (Lnd) = number of landings performed by those operators’ aircraft at aerodromes located in the state in the previous 12 months.

4.3 Follow up Inspections

The need for follow-up inspections should be determined by the competent authority based on the results of an inspection and/or if the follow-up process indicates that corrective action(s) might have been ineffective.

Follow-up inspections could be foreseen to verify:

- Implementation of corrective action(s);
- Reoccurrence of non-compliance;
- Maintenance or operational measures taken after an earlier ramp inspection which identified non-compliances or operations outside limits in breach of requirement;
- Information given by another state requesting follow-up inspection.

If a follow up inspection is required on a “layer 1” operator but the state has already reached its target number for such operator, one of the following options should be considered:

- Requesting another state to perform the follow up inspection (providing that state has enough inspections left to do so), or
- Exchange an inspection with another state via the trading system, as defined in §4.4.3.

¹ third country operators or operators under the regulatory oversight of another Member State





4.4 Monitoring of the Annual Ramp Inspection Programme

4.4.1 Updates of the Annual ramp inspection Programme

Once defined, the annual ramp inspection programme should be regularly updated. These updates should be based on, but not limited to, operational information on the operators (ceasing of operation, start of new regular services, increase or decrease in traffic level...), updates of the priority list provided by the Agency as per ARO.RAMP.105(a), update of the assigned targets by the Agency and feedback from ramp inspections. In order to ensure that the annual ramp inspection programme is adequately implemented, the state should continuously monitor the programme and take appropriate actions with the aim of achieving the following (below list is non-exhaustive):

- the assigned numbers for “layer 1” operators (for SWC participating states);
- the widest possible coverage of operators;
- proportionate distribution of inspections throughout the year;
- inspecting different aircraft types and types of operation;
- avoiding over-/under-inspection.

A control mechanism that prevents over-inspection should be put in place, either through automation or via procedures, that includes the obligation to check annual plan and the ramp inspection tool during any inspection preparation phase.

4.4.2 Updates on the target numbers of inspections assigned by EASA for the SWC participating states

The target numbers of inspections on “layer 1” and “layer 2” operators are to be updated and communicated by the Agency to the SWC participating states at least once a year. Any such update gives new range of possible target numbers of inspections on “layer 1” operators, giving the state an option to either update its objectives or to keep the previous ones. Here are examples of how to deal with such updates:

- Situation 1 on “layer 1” operator “YYY” for a SWC participating state:
 - First target number of inspections: 4 inspections
 - Already performed inspections: 4 inspections
 - Updated target number of inspections: 6 inspections
 - New range of possible targets: 4 to 6 inspections
- Situation 2 on “layer 1” operator “ZZZ” for a SWC participating state:
 - First target number of inspections: 2 inspections
 - Already performed inspections: 2 inspections
 - Updated target number of inspections: 0 inspections
 - New range of possible targets: 0 to 2 inspections

4.4.3 Trading System of Inspections on “layer 1” operators

In cases where a SWC participating state is unable to fulfil its target number of inspections or needs an extra inspection on a particular “layer 1” operator, other states may be approached for exchange of such inspections. It is the state’s responsibility to keep track and records of any confirmed exchanges and to inform EASA about such exchange.

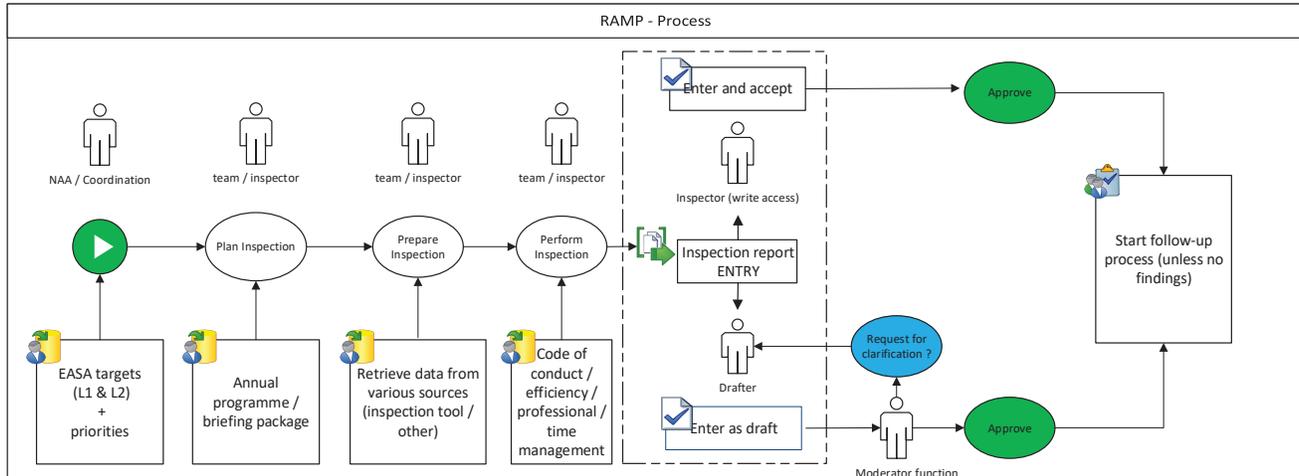
Trading of inspections may be helpful with training delivery when one state provides OJT to another. In cases where the trainer state does not have enough allocated numbers for the “layer 1” operators to deliver required OJT, the candidate state could offer to trade their inspection numbers for training.





5 Ramp inspection process

The drawing below visualises the ramp inspection process:



5.1 Planning/Preparation

5.1.1 Ramp inspection team composition

As a general rule, ramp inspections should be performed by two inspectors (may be more in special cases, such as inspection on “super wide body A/C”, short turn-arounds, etc.). Inspections performed by solo inspectors should be limited to exceptional cases where only one inspector is available. The inspection team should have access to an un-disturbed place to plan, prepare, report and debrief confidentially after an inspection.

The ramp inspectors involved should distribute the tasks between them, especially in the case of limited inspection time and/or depending on the size of the aircraft, different type of operation (PAX/Freight/Combi) or other complexity of the aircraft.

Ramp inspections should be performed by appropriately qualified inspectors. 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. A team leader may be appointed who is also responsible for the debriefing with the crew and any decisions following the inspection.

5.1.2 Planning the actual inspection

The inspection team should make use of the annual Ramp inspection programme, EASA regular reports and the inspection preparation module of the ramp inspection tool when selecting an operator to inspect prior to the mission. The following should be taken into account when selecting an operator or aircraft as inspection target (below list is non-exhaustive):

- Check the annual Ramp inspection programme to identify operators that are due for inspections;
- Look at previous follow-up actions on operators that could possibly be inspected;
- For SWC participating states: Check if the operator is “layer 1” or “layer 2”. If “layer 1”, ensure that the allocated target number allows for an inspection to be performed. If “layer 2”, follow the national planning guidelines;
- Check the date of the last own inspection (preferably in the inspection preparation module) to ensure an even distribution as far as possible;
- Check if there are operators or aircraft being suspected of non-compliance;
- Check if there are operators with no inspections or a low number of inspections as per AMC1 ARO.RAMP.100(c);





- Check if there are unique inspection opportunities, such as unusual types of operators, operations or aircraft not previously inspected;

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 which could be obtained from various available sources (the operator, airport authorities, or ground-handling agents).

Most airports have a website displaying information on arrival and departure times of scheduled flights. Moreover, airports usually have a non-public system that covers all the traffic, it is advisable for inspectors/state to request access to such a system. When not available, information on special flights, such as cargo and unscheduled or private flights, may need to be specifically requested from airports. In addition, specific online applications for flight tracking may be helpful when checking the actual arrival information for most operators.

When using an airport’s flight information system, inspectors should bear in mind that code-share flights may appear which might give misleading information regarding the actual operator of the aircraft on the flight. Furthermore, in the event of a wet-lease, airport information systems and data provided by the slot co-ordinator is unlikely to indicate the actual operator. These data sources should be read in conjunction with flight plan data at the time of the inspection to ascertain the actual operator. This might help to avoid any unintentional over inspections of certain “layer 1” operators.

Furthermore, states may elect to choose who is making the decisions on which operators to inspect. For example, NC and/or other office-based support staff may be more likely to:

- have access to the latest, and most complete, operational data;
- have more expertise and operator knowledge, than an inspector who is more likely to specialise in a technical discipline.

Liaison with various competent authority teams such as traffic rights/foreign carrier permits/ wet-leasing in by national operators may be of benefit while planning inspections, and eurocontrol alert messages may also be useful as a short-term source of planning information.

5.1.3 Preparation of the inspection

After having planned the inspection, the inspector should check the operator in the ‘Inspection preparation’ module of the ramp inspection tool for previous Ramp inspection(s) results and safety report(s). The inspection should be pre-planned with focus on safety relevant areas and specific areas where previous inspections results have revealed a weakness. In addition, in cases where previous inspections were incomplete, the remainder of the checklist items could be verified.

The following information sources are recommended to be considered during the inspection preparation phase, depending on the situation and time available (list is non-exhaustive):

- Ramp Inspection tool (inspection preparation module);
- National annual Ramp inspection oversight programme;
- For EASA Member States: TCO Website;
- Eurocontrol information;
- Manufacturer data and MMEL status;
- Notams;
- Weather charts;
- AIP, including revision status list of navigation charts.





Depending on the items to be inspected (as many as possible based on the time available), inspections 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, while flight preparation and storage of baggage in the cabin could be checked on departure.

In case of an inspection on a delayed (late incoming) aircraft, inspecting team should be mindful not to jeopardise crew duty times.

As a good practice, the proof of inspection¹ form could be filled in with basic data (such as the registration of the aircraft, flight number or the verified name of the Operator, etc) prior to the inspection to save valuable inspection time for the inspectors and to minimise document and equipment checks during the inspection thus enabling more efficient use of inspection time.

If deemed appropriate, the inspector may contact the operator’s representative shortly before the planned inspection so that he or she is informed. 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.

Inspecting teams have to be able to perform their inspecting task on the ramp, therefore cooperation with security, ground handling, and all other officials involved in airport activities is paramount. When officials from different organisations (i.e. customs, security, Dangerous Goods inspectorate) have to work in cooperation during the inspection, a procedure on co-operation might need to be developed at a national level. States should provide inspectors with the respective credentials in order to ensure an unrestricted and unimpeded access in line with the applicable airport procedures.

The centralised ramp inspection tool could and should, whenever possible, be used for the planning/preparation phase for “layer 1” and “layer 2” operators. Below is a list of items that might be checked in the TCO web-interface database (if accessible) instead of during the inspection:

- Approvals, such as AOC, TCO authorisation and ETOPS;
- Certificates, such as Certificate of Airworthiness, registration and radio licence;
- Aircraft data and equipment installed (versions), such as TCAS, BRNAV, PBN, EDTO;
- Information on leasing arrangements.

5.2 Conduct of ramp inspections

5.2.1 Standards

For aircraft used by third country operators, applicable requirements are the ICAO international standards. In case a finding is to be raised, the letter “I” should be indicated in the column “STD” of the POI.

The relevant EU requirements apply to aircraft used by operators under the regulatory oversight of another member state. Also for non-EU operators some E standards may be applicable. In case a finding is to be raised, the letter “E” should be indicated in the column “STD” of the POI.

Manufacturers’ standards “M” could be used for evaluating damages. Evaluation should not be done by the inspectors themselves but by the operator’s authorised staff.

¹ Pol instructions and form to be found in Appendix 9.3





Note: For fasteners and bonding wires findings, the letter “M” should be indicated in the column “STD”. For Category 1 and 2 findings on fasteners or bonding wires, no reference to any manufacturer data is required in the field “custom standard reference” in the ramp inspection tool, whereas category 3 findings require such a reference in this field.

Published national standards (e.g. Aeronautical Information Publications - AIPs) that are declared applicable to all operators flying to that state should 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 the letter “N” in the column “STD”. Any other deviation from national standards, which does not have an impact on safety (e.g. insurance certificate in USD instead of local currency), should be recorded as a general remark. States should develop guidance for the use of their inspectors on the enforcement of national standards.

The Chicago convention warrants a level playing field for all operators which are ICAO compliant, as it allows for international flights for such compliant operators. If an operator is sub-ICAO standards, it shall not participate in International Aviation “except with the permission of the State or States whose territory is entered”. In cases where there is an implicit mutual acceptance between two contracting States on a certain sub-ICAO Standard, one could consider that the operation is meeting the requirements of Article 40 of the Convention and therefore is ICAO compliant. In addition to the mutual acceptance by the two States, the sub-ICAO Standard might also require the acceptance of any overflown State (depending on the concerned Standard, like e.g. in the case of the ACAS II standard). Where such acceptance is in place involving one of the States participating in the EU ramp inspection programme, such State is not required to raise a finding on the accepted non-compliance, provided that a General Remark is entered into the ramp inspection report specifying the details.

5.2.2 Code of conduct

Reference: AMC1 ARO.RAMP.125(b)

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 start a ramp inspection until such representative is available. However in such cases the exterior inspection of the airplane may be performed prior to the representative arriving at the airplane. In special circumstances where there is a severe suspicion of not being compliant with the applicable requirements, it may be decided to perform a ramp inspection, but this should be limited to a visual check of the aircraft exterior. Inspection data may be obtained through the A/C tail number and flight information from the airport traffic department.

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, for example:

- Try to be as precise as possible when asking for A/C documents from flight crew. This should result in a minimum of discussion time allowing the flight crew to deal with their primary task of flight preparation;
- Debrief the commander of the aircraft, or in his/her absence the operator representative, after the inspection task is completed;
- Inform (where applicable) cargo loading staff of possible hindrance due to inspection task in cargo compartment;
- Ask the senior cabin crew member to assign a crew member to assist the inspecting team with their inspection tasks;
- When carrying out inspections on the flight deck, the flight crew should be allowed to give priority to staff directly involved in the flight preparation (e.g. fuel master, technician, load-planning agent, handling agent passenger information, etc.);
- Where possible, A/C documentation and other relevant documents should be reviewed in the cabin in order to enable the flight crew to perform their normal duties with minimal disturbance;





- In cases where a document is only available on the EFB (e.g. operations manual, MEL, technical logbook, operational flight plan, mass and balance calculation etc.) the operator should be asked to assist the inspector to prevent any unforeseen delay.

Any unnecessary contact with passengers should be avoided and the inspection should not interfere with the normal boarding/disembarking procedures. However, inspecting certain elements in the cabin may be justified, such as:

- excessive overweight in overhead luggage bins;
- baggage in front of emergency exit;
- baggage stowed in lavatory;
- cabin luggage under the seat;
- infants/children over the minimum age determined by the state of operator should have their own seat;
- distribution of infant life vests where applicable;
- allocation of passengers in the cabin, compared to the load sheet data;
- sufficient number of seats;
- observing the boarding process during normal operations and/or during refuelling in progress;
- attempt to establish the commercial nature of a flight, which is suspected to be performed illegally (e.g. transport of passengers on cargo only flight) to collect evidence for illegal commercial operations (e.g. ask for ticket / booking modalities);

A delay of the flight 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:

- tyres appear to be worn beyond the limits;
- oil leakage is to be checked against the applicable AMM to determine the actual limit;
- a flight crew member cannot produce a valid licence. Clarification is to be sought from the operator and/or NAA 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;
- relevant flight operational data are missing (e.g. missing or incorrect performance calculation, incorrect operational flight plan, incorrect weight and balance calculation);
- damages, being assessed as having a Major influence on flight safety, are identified.

5.2.3 Difficulties in performing an inspection

In cases of uncooperative crew or refusal to be inspected without a valid reason, the competent authority should consider preventing the A/C from departing (provided that the national legislative framework allows for this). In any such case, the competent authority must as soon as possible inform the operator's competent authority. A safety report could be raised to inform the SAFA participating states.

Valid reasons to allow the departure of the operator without performing an inspection might be as follows, unless the inspecting team has clear safety concern:

- A/C is close to departure (passengers on board);
- Emergency medical flight (outbound).

5.2.4 Inspection methodology

Ramp inspections should start as soon as practicable, e.g. at the moment the aircraft is safely on blocks, engines are shut-down and anti-collision light turned off. Inspections may also take place after a prolonged stop (day or night) with access to the outbound flight crew, or in case the flight will stay for a long stop with access to the inbound flight crew. One inspector should start the walk-around, while the other one awaits the earliest opportunity to start the inspection at the aircraft's entrance. The team should notify the operator's representative or identify itself to the commander as soon as possible. However, an inspection may not be





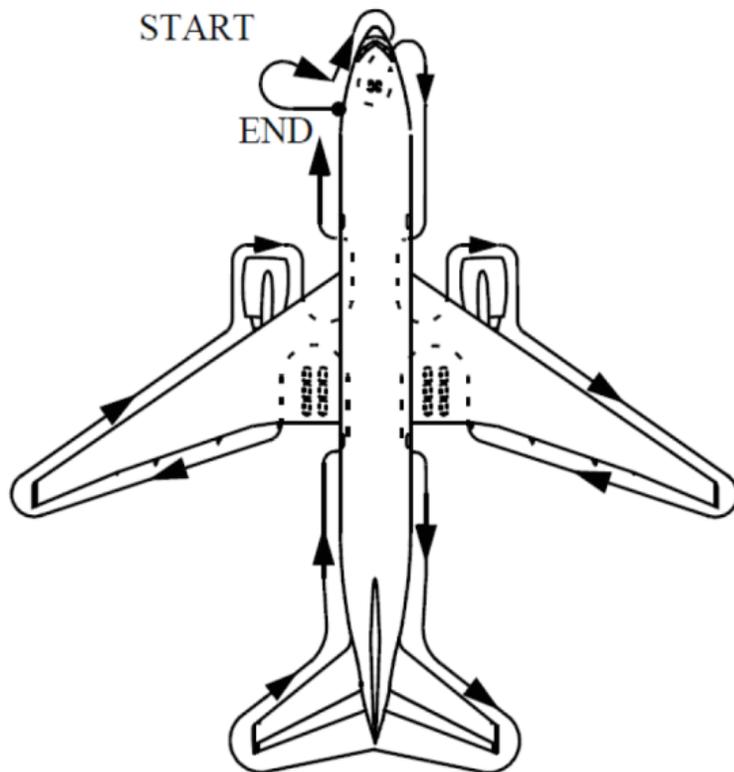
commenced inside without any crew member available unless receiving specific approval from the operator (any authorised operator staff member).

The inspectors should pay attention to time management and be always aware of the time available they have for the conduct of the inspection to avoid any delay. Best practice is to maintain direct communication with the crew. The inspection of a late incoming aircraft with a short turnaround time should focus on the evidenced safety concerns and safety critical elements instead of covering all items. The inspection should be ended within the planned turnaround time if no deficiencies are detected to avoid undue disturbances.

Any aircraft inspection should not exceed the normally prescribed depth for a walk-a-round inspection. Inspection tools like cameras are only for collecting evidences. Opening of access panels and wheel well bay doors are not allowed, unless it becomes necessary for the use of tracing the source of a leakage, but only after consulting and with the assistance of the crew.

If no defects are detected, a normal walk-around inspection is depicted below and should typically, for narrow body aircraft, take no more than 10-15 minutes and, for larger wide bodies, between 20-25 minutes max, excluding the inspection of the cargo compartments/area.

Inspection Route



Ramp inspectors should try to inspect as many ramp checklist items as possible without endangering the departure time of the operator enabling debriefing and addressing of possible findings within the turnaround time.





The ramp inspection checklist contains 53 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), 11 items are concerning the aircraft condition (C-items) and 3 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.

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:

- 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);
- Differences in aircraft configuration. Furthermore, for a cargo configuration the securing of the cargo and the segregation of dangerous goods is considered safety critical;
- Previous ramp inspection results: if serious and/or recurrent findings were raised during previous inspections such as on the Minimum Equipment List (MEL), such items might deserve higher attention compared to items on which no non-compliances were reported during the previous inspections;
- 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.

In any case, the elements inspected need to be inspected sufficiently in-depth. e.g. just looking if an MEL is on the flight deck is not sufficient, look for proper customisation before ticking the A07 box; when O₂ masks are checked, ask also for a test of the boom/mask microphone; while looking at the checklists for revision date/nbr, compare this with the version marked in the Ops manual; etc.

Attachment 10.2 gives an example of a detailed "dirty finger print" (DFP) checklist to allow for a convenient recording of findings and remarks. The DFP checklist is available as downloadable PDF from the SINAPSE website in the SAFA library of documents.

The following principles should be considered during an inspection:

- Inspections of aircraft arriving late, with a significant reduction of the turnaround time which endangers the planned departure time and/or slots. As a general principle, the focus should be to inspect the safety critical elements, unless the inspector or state have safety related information that needs further verification on this particular flight;
- One of the inspectors should try to gain entrance to the flight deck and introduce himself/herself to the team, briefly explaining the purpose of the inspection. Depending on the situation, the team might need to wait for the passengers to disembark or, if needed, board the aircraft before disembarkation. In all situations, the ramp inspectors should remain professional, diplomatic and friendly;
- The team should have previously defined how the information exchange between the outside and inside inspection will take place;
- After the introduction to the commander, the inspector should always ask for the scheduled departure time / slot time / EOBT (estimated off block time);
- The ramp inspection team members should be made aware of the available time in order to not hinder any crew duties (or at least to avoid reducing the time left for the crew to perform their tasks);
- Unless there is a suspicion, the inspector does not necessarily have to inspect each checklist item to the fullest (e.g. all life jackets), a sampling may be sufficient;
- Some spare time should be kept to allow an internal debriefing on each inspector observations;
- Any non-compliance with the applicable requirements detected during the inspection should be reported on the POI as a finding. The findings should be clearly and unambiguously written down;





- Sufficient time should be kept at the end of the inspection for a debriefing on the POI. In particular, the operator should be reminded of its obligation to assess and take corrective action on any findings with a potential to become an aviation safety hazard;
- The team should leave the aircraft as soon as their presence is no longer needed for the inspection, in order not to disturb the crew.

5.3 Findings

5.3.1 General

Before findings can be categorised, a pre-assessment of the encountered situation should be made, based on the knowledge and experience of the inspector. The inspector may only allocate a proper category to the finding, if the extent of the non-compliance is clear. The inspector should not raise any category 3 findings with the only intent to perform a further investigation/assessment.

The inspector should furthermore not combine and raise findings under item A23 with the only intent to have a follow-up of the finding or remark.

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 third country operators, no independent portable lights on board is a finding, but only during night-flight operations; similarly, an insufficient number of life-vests on-board, 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.

Non-compliance regarding missing fasteners or bonding wires should be assessed and categorised in accordance with the established Matrix in Ramp Inspections Instructions (appendix 8.1). Findings which are assessed as being Major (CAT 3) should be debriefed soonest to the operator. This “early” pre-debriefing should include an instruction to proceed in accordance with their approved procedures and report in technical logbook system or equivalent immediately. The flowchart in 5.3.3 “technical defects” gives further guidance to procedures in use for missing fasteners and bonding wires. Findings assessed as category 1 or 2 should be included in the normal debriefing without additional requirements for the operator at the time of inspection.

Note: Any state may file a difference with ICAO as per ICAO Article 38 “NOTIFICATION OF DIFFERENCES”. However, whether such filed differences are accepted or not is down to the individual contracting state and should be taken into account during the follow-up process.

All findings should be substantiated by evidences; these should be uploaded into the inspection ramp inspection tool under the tab of the respective finding. Elements of supporting evidences could be any of the following:

- picture(s) of the deficiency itself (detailed and clear);
- pictures of the manufacturer references used to assess the technical defects, if available to the inspector;
- documents received via email;
- pictures or copy of the technical logbook entries performed;
- pictures from operator manuals (MEL, OM’s., licences, AOC’s, etc.).

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.

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 category





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 category 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.

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:

- insufficient number of life jackets/flotation devices, however the flight was/will be over land;
- during a SAFA inspection: some flashlights not working, but only daytime flight.
- minor defects without safety influence, but considered as relevant information.

Note: General remarks do not require any follow-up action, either from the inspecting authority or for the operator/relevant competent authority.

5.3.2 General instructions on findings

The inspection instructions and list of pre-described findings that may be found in Appendix 8.1 include the description, categorisation and reference to the applicable requirement.

- 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 category 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.
- No finding should be raised if relevant flight preparation documents (e.g. mass and balance calculation, operational flight plan) are stored in an approved electronically system (EFB), sent by ACARS and therefore no longer accessible / reproduced by the crew at the time of inspection. In any case, the inspector could inspect the outbound flight preparation in detail (including the procedure of the electronic storage).
- In exceptional cases, where multiple findings are inter-related and the impact on safety is higher, the category of such findings may be increased to reflect the impact on safety. The increase in category should be explained in the detailed description of the finding.

5.3.3 Technical defects

An aircraft begins to 'age' after its first flight, and various effects of ageing begin to occur almost immediately, which is considered as normal "wear and tear". This "ageing" phase is considered a part of the normal lifecycle and the applicable approved maintenance programme will cover the normal deterioration of an aircraft. An inspector should not raise findings relating to the normal wear and tear, as long as such technical defects are properly managed by the operator, at most a general remark for the attention of the crew. The flowchart in figure 1 gives an overview on the assessment of technical deficiencies.

With regards to non-compliances on missing fasteners and bonding wires, findings should be raised in accordance with the assessment matrix found in INSPECTION INSTRUCTIONS ON THE CATEGORISATION OF RAMP INSPECTION (SAFA/SACA) FINDINGS in appendix 8.1 of this manual. The flowchart in figure 2 gives a detailed overview of the process and procedures to follow when non-compliances regarding missing fasteners and bonding wires are detected.





Definition of an airworthiness finding:

A technical defect is considered to be any material fault pertaining to the aircraft, its systems or components:

- Minor defects are typically with minor influence on safety and should therefore be brought to the attention of the operator using a category 1 finding.
- Significant defects are those defects, which are potentially out of limits and a further assessment may be needed to determine if the significant defect is within or outside the applicable limits. These defects should be recorded as category 2 findings.
- Major defects are those defects which are out of limits. A category 3 finding against manufacturer standards should always be demonstrated in relation to the operator's 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. In the absence of 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.

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 (more details under the inspection procedure).

Any defect needs to be recorded and documented in the operator's log system, however such a system does not need to be carried on board of the airplane, but it should be available if required.

Significant defects might have appeared during the inbound flight. In such cases, the ramp inspector should not raise a finding before the operator has performed its pre-flight inspection for the outbound flight.

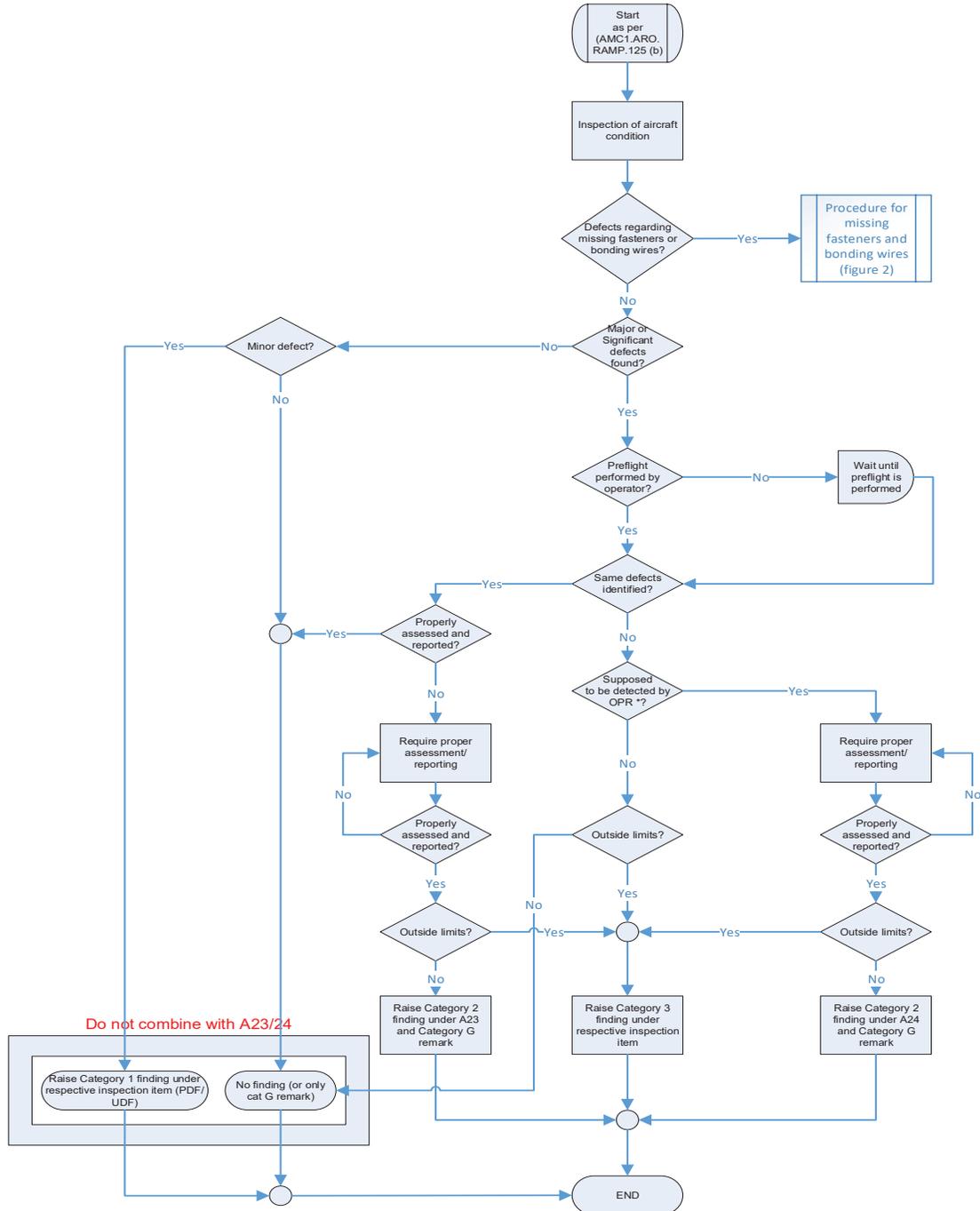
Manufacturer's data often contains limits on certain defects. This data is normally to be used during line and scheduled maintenance. It is generally accepted that, in between scheduled maintenance, defects that are beyond those manufacturer's limit might appear. The inspector should only request the operator to assess damages, that are deemed to have a significant or major influence on flight safety, towards manufacturer's standard limits, and appropriately report them in the technical log system or equivalent. However, where the manufacturer has specified dispatch limits, and the defect is beyond the dispatch limits, a category 3 finding should be raised except for the case of loose/missing fasteners and bonding wires.

A "defect within limits but not detected or not recorded" should not be considered as a technical non-compliance. If the technical non-compliance appears to be within limits, the safety focus changes from the defect itself to the non-compliance not being detected/assessed/recorded by the operator and should be recorded under item A23 or A24.





Figure 1, Flowchart of assessment of technical defects

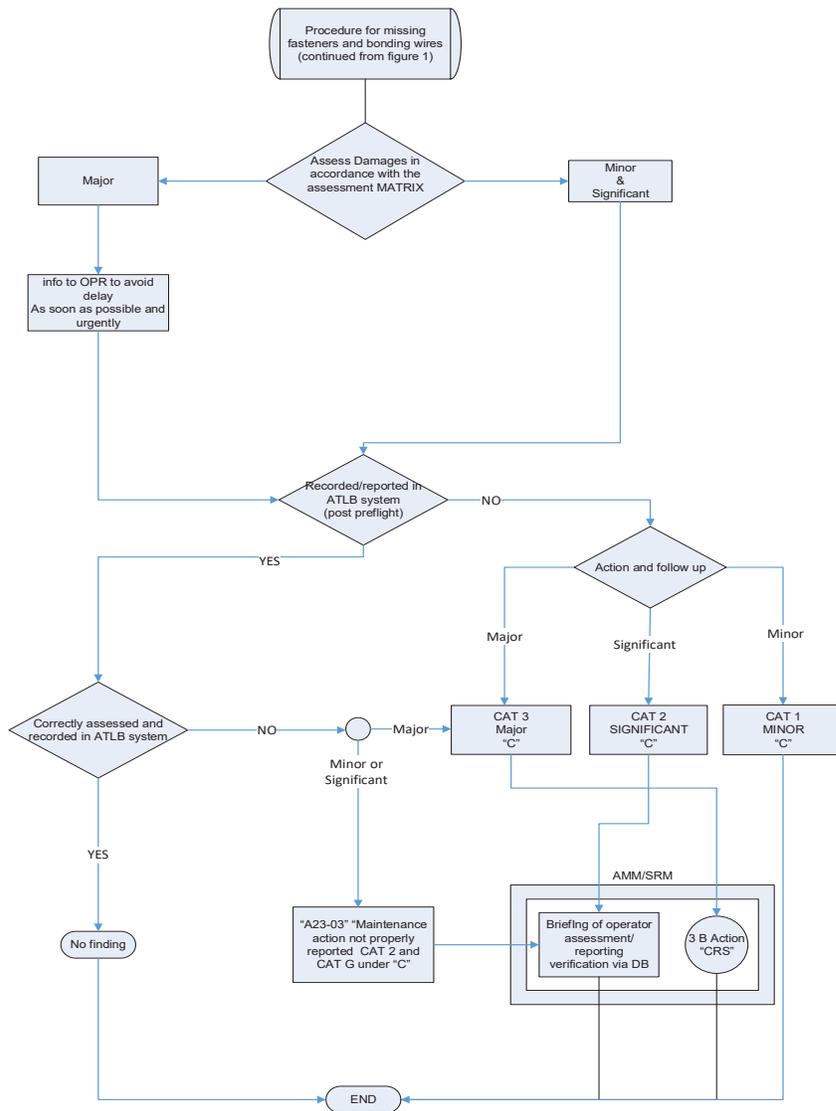




NOTE: Some technical defects are not supposed to be detected by the operator during a "normal" pre-flight inspection and should therefore not constitute a finding. Examples of such defects could be:

- cabin emergency lighting;
- defects only visible when performing an in-depth examination;
- defects only visible using special equipment, platforms or unorthodox working positions.

Figure 2, flowchart of assessment of findings relative to missing fasteners and bonding wires:





5.4 Follow-up actions

Reference: AMC1 ARO.AMP.135(a)

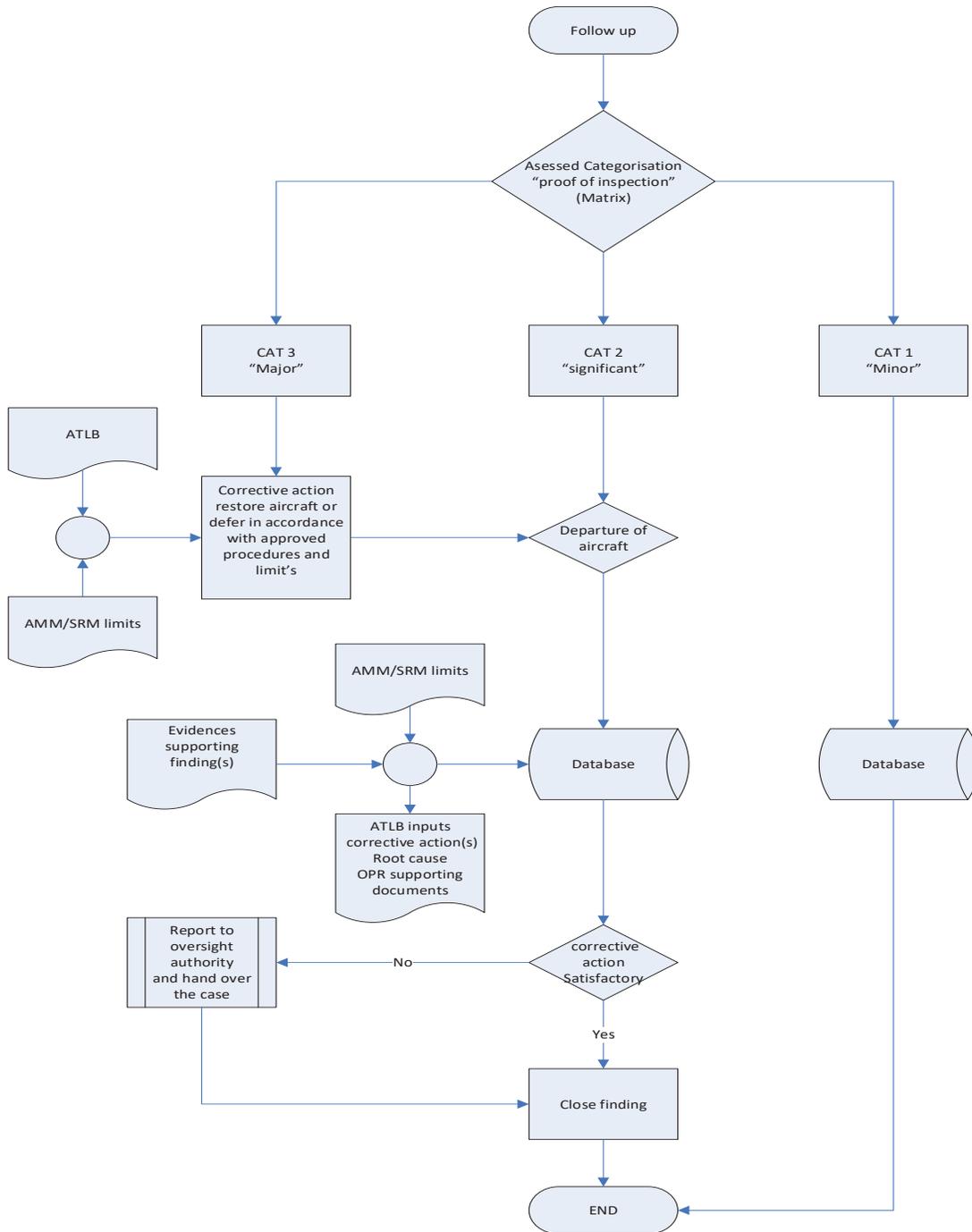
Based on the results of the inspection and on how the findings have been categorised, common follow-up actions have been defined. The relations between the category of findings and the resulting class of actions to take are given in the following table:

ACTIONS TO BE TAKEN AFTER INSPECTIONS		Class of actions		
		Class 1 Information to Captain (POI)	Class 2 Information to the operator and the responsible NAA	Class 3 Immediate action
Category of findings	General Remark Any observation from the inspector not classified as safety relevant	Yes	Not applicable	Not applicable
	Cat 1 - Minor: any detected non-compliance with the applicable requirements or the terms a certificate that has a minor influence on safety	Yes	Possible Debriefing and notification through the ramp inspection tool without further communication	Not applicable
	Cat 2 - Significant: any detected non-compliance with the applicable requirements or the terms of a certificate that has a significant influence on safety	Yes	Yes Normal communication through the ramp inspection tool for follow-up actions Note: Written communication to the operator and to the NAA (findings of several inspections may be summarised in one communication). This should only be used if the inspecting NAA have a national requirement for this	Not applicable
	Cat 3 - Major: any detected significant non-compliance with the applicable requirements or the terms of a certificate that has a major influence on safety	Yes	Yes All communication are normally to be uploaded in the inspection tool for follow-up transparency. In case of aircraft damage affecting airworthiness and not possible to be rectified before flight, the operator should establish a direct communication with the responsible NAA regarding return to flight status (e.g. "permit to fly").	Yes Note: the specific actions consisting of operational restrictions, corrective actions before flight or at maintenance-base, grounding and/or entry permit repercussions have to be reported.
	General Remark Any observation from the inspector not classified as safety relevant	Yes	Not applicable	Not applicable



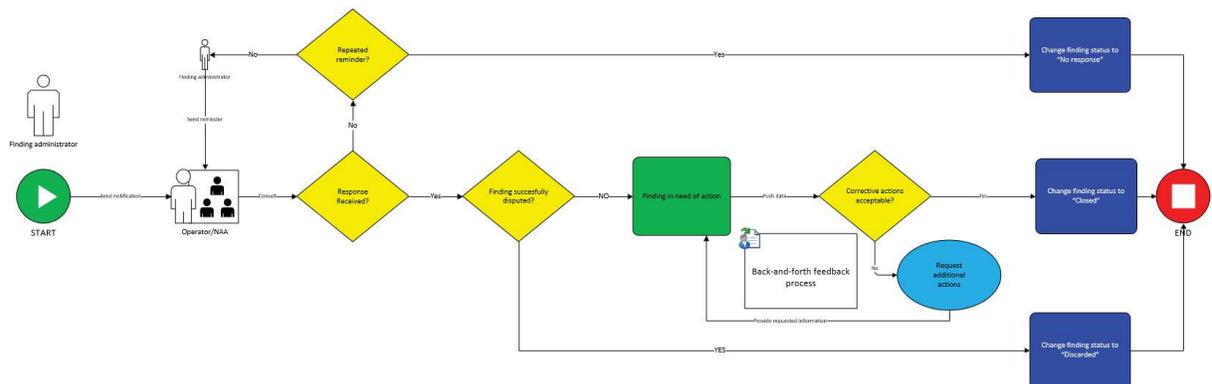
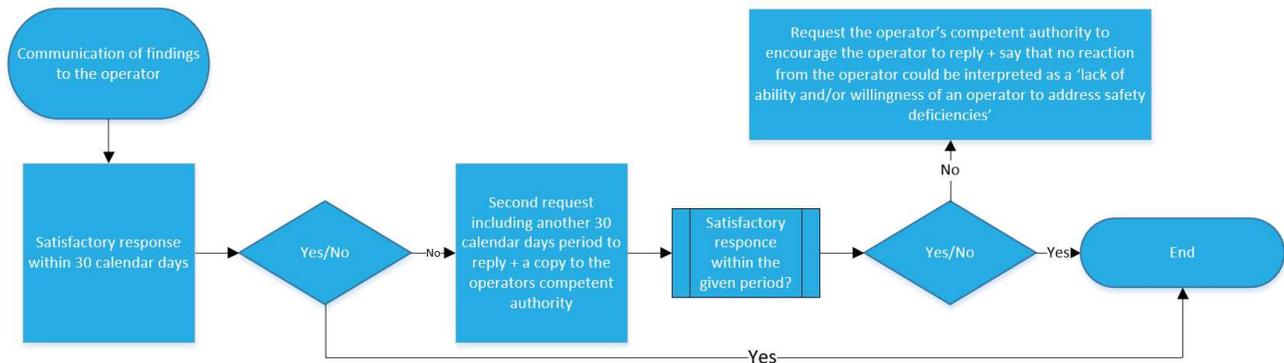


Figure 3, Flowchart follow-up bonding wires and fasteners





5.4.1 General communication and follow-up flowchart



5.4.2 Class 1 action (to operators)

A class 1 action is to be taken after each inspection and consists of providing information about the results of that ramp inspection, regardless of whether findings have been identified or not. The Proof of Inspection should always be provided to the pilot in command or representative of the operator after the completion of the inspection.

5.4.3 Class 2 action

In case category 2 and/or category 3 findings are raised, communication to the operator and to the operator’s competent authority is necessary. All communication should, as a rule of thumb, be done via the ramp inspection tool.

A category 2 finding always needs further follow-up, since it contains a request for corrective actions taken or planned. The inspecting state should monitor if a reply was received and if sufficient feedback/evidence to close the finding(s) was given, or if





there is a need to request further information. In order to close the finding, the reply of the operator does not necessarily need to contain evidence that the deficiency has been corrected. The “corrective action taken” by the operator might also be included in the implementation of a corrective action plan. It is up to the inspecting NAA to decide, based on the related risk and impact, whether or not a finding may be closed based on future corrective actions taking into account the severity and recurrence of the detected findings. Depending on the severity and recurrence of the findings detected, the Inspecting NAA may consider the actual closure of the associated report(s) only after having received satisfactory documented evidence of appropriate implementation of preventive actions.

Regarding the operator’s competent authority, no reply is expected. Only where appropriate or when the follow-up process has revealed operations outside limitations, the operator’s competent authority should be asked for “confirmation that they are satisfied with the corrective actions taken” by the operator. In this case, the competent authority who performed the inspection should monitor if such a reply is received and if the content is satisfactory.

5.4.4 Class 3a action (Restrictions on the aircraft operation)

When a class 3a restriction has been agreed/imposed, the verification of the adherence to the restrictions should be considered whenever possible.

Examples of Class 3a actions, and related verification, are, but not limited to:

- 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 Air Traffic Control system;
- A non-commercial flight to the home base, if allowed by applicable requirements and the MEL (provided that the validity of the CofA is not affected);
- Seats that may not be used by passengers might be verified just before departure to confirm that seats are not occupied;
- A cargo area that may not be used;
- Operational restrictions mandating the use of specific runways;
- Restrictions to specific environmental conditions (such as departure under visual meteorological conditions (VMC) only).

In certain cases it might not be necessary to verify if the restrictions resulting from a category 3 finding 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 operating outside the EUROCONTROL area. The inspecting authority 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.

5.4.5 Class 3b action (Corrective actions before flight)

When a class 3b corrective action is required from the operator, the verification of the corrective actions taken should be envisaged whenever possible.

Examples of immediate corrective actions to be taken before departure are:

- Assess, report and record damages in technical log-book or equivalent;
- (temporary) repairs to defects according to the manufactures definitions (e.g. AMM and/or SRM);
- recalculation of mass and balance, performance calculations and/or fuel figures;
- a copy of a missing licence/document to be sent by email or other electronic means, (downgrade to Cat 1 if obtained by other means);
- proper restraining of cargo;
- deferral of technical defects as per manufacturer/operator’s data.





If the inspectors have imposed corrective actions, they should review the actions done by the operator and mention them in the 'Class of actions' field on the final 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.

Evidence related to findings on licences and certificates should be provided by the competent authority that issued the licence or certificate. However, if that authority is not able to provide such evidence in time, the inspecting authority may accept evidence from other sources, if it seeks confirmation of the validity of such evidence at the earliest opportunity with the competent 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.

5.4.6 Class 3c action (Aircraft grounded by inspecting authority)

The aircraft should be grounded only if the crew/operator/operator's representative:

- refuses the inspection;
- significantly hinders the inspection;
- refuses to take the necessary corrective actions;
- does not respect imposed restrictions on the aircraft flight operation.

The grounding should only be lifted by the inspecting authority when the following applicable conditions are met in whole or partly (depending the circumstances of the situation):

- compliance with the applicable requirements has been re-established;
- the EASA operator has obtained a permit-to-fly in accordance with Commission Regulation (EU) No 748/2012, for aircraft registered in a Member State; or
- the non-EASA operator has obtained a permit-to-fly in accordance with their national legislation; and the operator has obtained permissions from countries (EASA + non-EASA) which will be overflown.

Firstly, the inspecting state has to make sure that the aircraft will not depart as long as the reasons for the grounding remain. Secondly, the grounding needs to be communicated to the state of the operator/state of registry and the operator's home base as soon as possible. Any records of communication and other evidence should be gathered as evidence. Contact information is normally to be found on the operator's AOC.

5.4.7 Class 3d action (Immediate operating ban)

When a class 3d action is imposed, it is usually in addition to a Class 3a, 3b or 3c action. Therefore, the further follow-up for the Ramp inspection programme is considered to be covered by the follow-up of those actions. However, when class 3d action is taken, Member States should be mindful of their obligations and always keep the Agency in copy as the actions might result in a follow-up through hearing in the air safety committee at the European Commission.

5.4.8 General follow-up issues

In general, no reply is expected when informing the operator's competent authority. However, findings which indicate possible shortcomings at the state level should be highlighted, 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 operator's competent authority 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 operator's competent authority.

The following are examples requiring a confirmation of the inspecting authority regarding the acceptance of the corrective actions taken by the operator:

- identification of a high number of non-compliances;
- repetition of same findings;





- lack of an adequate response from the operator;
- evidence of consistent non-compliance with a particular standard also detected during ramp inspections of other operators from that state;
- action by the competent authority may be required given the severity of the findings.

The inspecting authority should monitor if the operator's competent authority 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.

Any follow-up communication from the operator and its competent authority should be acknowledged, and they should be informed about the closure of findings. Requests for clarification should be responded to by the inspecting authority. Acknowledgement or clarifications from the inspecting authority should be given within 30 calendar days after receipt of communication or requests.

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, as it might contain relevant information for its oversight activities. This is particularly the case for information on the closure of ramp inspection finding(s) sent by the inspecting authority (where the operator has no connection to the ramp inspection tool sent either by e-mail or by official letter).

If the inspecting authority receives evidence from a relevant competent authority showing that the operator does not exist anymore, all related findings should be closed and the reason for closure explained in the justification.

When there is none or no satisfactory feedback from operators after 1 year from the last notification, the state of inspection may decide to close such findings. The following statement should then be entered as a comment in the closure: *"the operator has not provided an acceptable corrective action plan and is considered unresponsive"*.

5.4.9 Specific case of the follow-up of "fasteners and bonding wires" findings (the assessment matrix)

In case of category 2 findings related to loose/missing fasteners and/or broken/missing bonding wires, the operator should assess and report such findings that potentially lower safety in accordance with its approved procedures under its own responsibility and accountability; no further assessment by the inspector is needed at the time of the inspection.

The inspecting authority should request that the operator uploads AMM/SRM dispatch limits in the follow up process via the ramp inspection tool. Such findings should not be closed prior to the upload of dispatch limits or equivalent. In cases where the operator has flown outside the manufacturers limitations, the inspecting authority may also request a comment from the operator's competent authority.

When the post inspection follow-up reveals breaches or violations for technical defects, the following statement could be entered into the ramp inspection tool (follow-up tab) *"The inspecting authority would like to point out that the outbound flight was operated outside the limits of AMM/SRM without appropriate rectification or deferral and that repetitive breaches will be reported to your competent authority"*.

In case of category 3 findings related to loose/missing fasteners and/or broken/missing bonding wires, the operator should be debriefed as soon as possible to avoid any delays and with clear instructions to record defect(s) in aircraft's technical logbook or equivalent and perform an assessment. The operator should perform the assessment in accordance with the manufacturer dispatch limits prior to departure as per the operator's approved procedures with a certificate of release (CRS). Any non-compliances that significantly hazard flight safety should be resolved by the operator prior to departure.

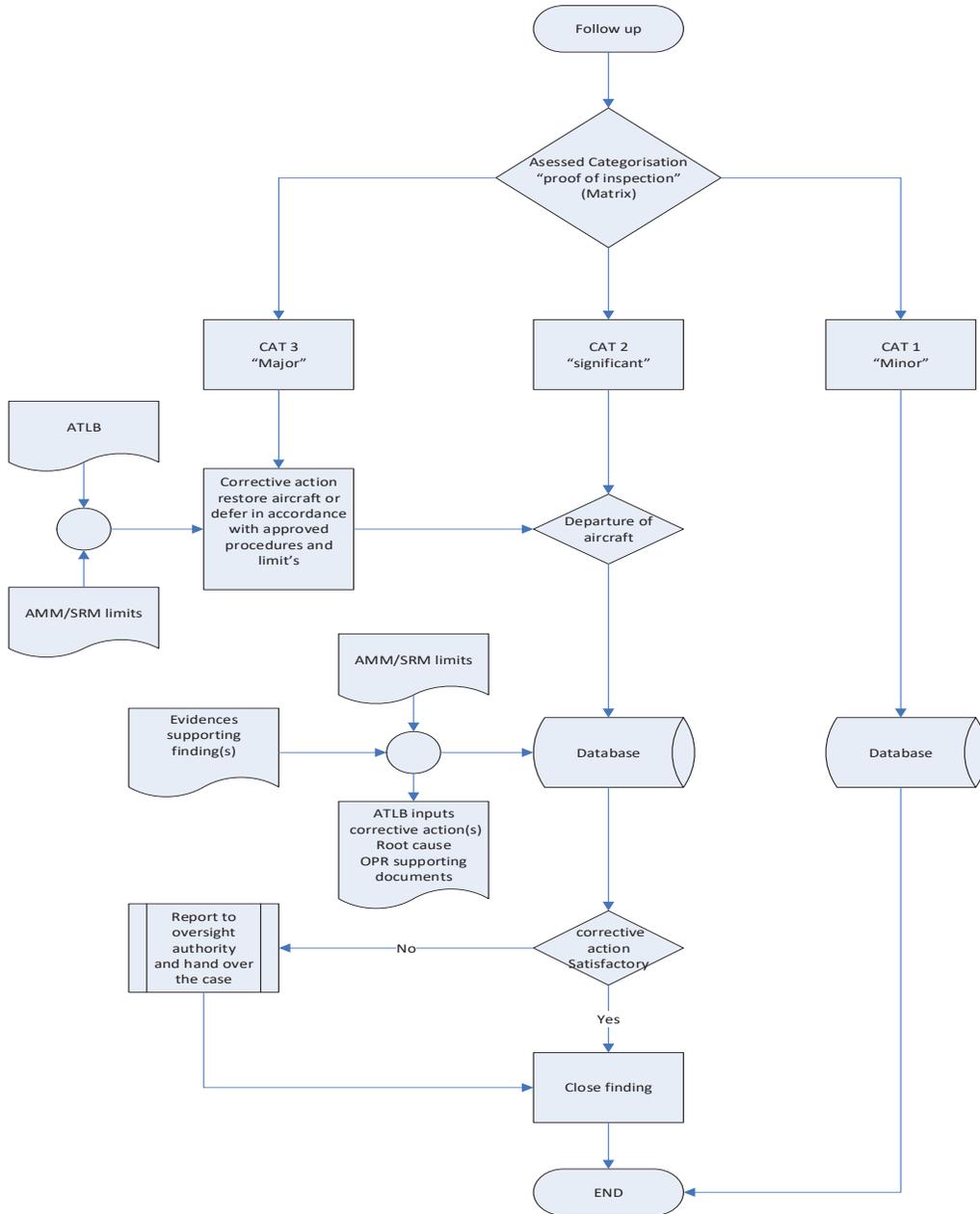




Manufacturer limits as described in AMM/SRM should only be used where the assessment indicates major impact on flight safety and the operator should provide the inspector with evidence for corrective action (3b).

If the assessment results in defect being within dispatch limits, then it should be categorised as significant category 2 finding.

The flow chart below illustrates the follow-up process of missing fasteners and bonding wires:





Note: Standard Class 1 action process applies for category 1 findings related to fasteners and bonding wires.





6 Ramp inspection tool

The ramp inspection tool containing all the EASA ramp inspection reports may be found via the following page on the internet <https://safer.easa.europa.eu/site/login>. The instructions on how to register may be found through a link in the login-page accessible before the user logon.

6.1 General instructions

The User Guide downloadable from the ramp inspection tool contains detailed instructions for registering, logging in and navigating through the centralised tool making use of the various functions available.

There are two types of ramp inspection tool users: NAA User and Operator User. The operator users only have access to the reports on their own operator. For NAA users, there are different types of access rights depending on the setup privileges, including drafter, moderator, oversight inspector and read-only.

The below instructions for logging in are applicable to all registered users:

- Open an internet browser;
- Type <https://safer.easa.europa.eu/site/login> in the address bar and press 'Enter';
- Enter your username (email address);
- Enter your password;
- Click 'Login'.

6.1.1 Drafter's role

- Draft the inspection report as soon as possible after the inspection completion;
- Avoid the use of capital letters other than starting sentences unless the technical term requires it;
- Ensure that the details of the inspected operator are correctly entered;
- Ensure that the inspected items are correctly entered;
- Verify that all findings are entered correctly with applicable references and their detailed description;
- Select an appropriate class of action (it should have at least the class 1 ticked for informing the pilot in command);
- Upload evidence under the individual finding(s) (e.g. pictures, PDF documents, emails, videos etc);
- Perform a quality check before submitting the report for approval;
- Review the operator's response(s) as and when required.

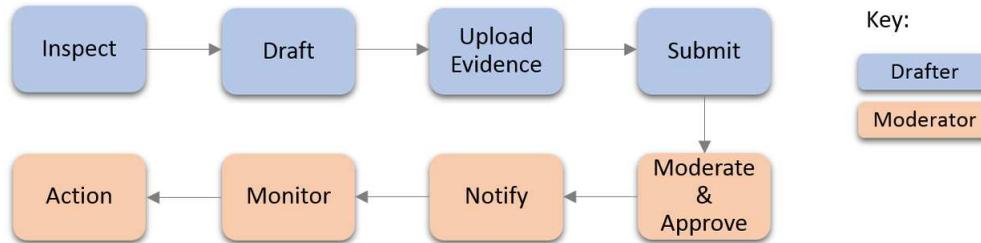
6.1.2 Moderator's role

- Access the 'Approve Ramp Inspections' function under the 'Reporting' tab;
- Moderate the individual reports, making any amendments as necessary;
- Perform a final quality check on data entered;
- Approve the report and notify the operator and its competent authority;
- Monitor and review the responses from the inspected operator in order to act timely on any feedback provided;
- Act on the operator's response (e.g. request additional information, close/discard finding(s) etc.)





The flowchart below illustrates the basic steps that should be followed by the drafter and the moderator.



6.2 User administration

It is the NAA’s responsibility to administrate the access to the ramp inspection tool for its operators and the users within the NAA. The NAA administrator creates, approves or deletes users’ access.

Once a user has registered for access to the ramp inspection tool, it is the NAA administrator’s role to validate their details. The validation process should cover at least the following: type of user requested (NAA or operator), company and user’s role within it, email address etc. The NAA administrator may approve or reject the user registration. Rejection does not preclude the user to re-register their details at any time in the future. If approved, the user will receive automated email detailing further instructions. The operators should notify their NAA in case of any required user change with regards to staff leaving the company or no longer needing access to the ramp inspection tool.

In cases where a state does not have access to the ramp inspection tool, the Agency should be approached via safa@easa.europa.eu.

More detailed information on user administration may be found in the User Guide. It is recommended that the NAA has a national guideline in place to cover the ramp inspection tool user administration.

7 Ramp Inspector qualification process

Reference: AMC1 ARO.RAMP.115(b)

7.1 Ramp inspector privileges

When determining the inspector’s privileges, the competent authority could take into account the interrelation of the intended inspection privileges with other disciplines (e.g.: a former cabin crew member may require additional training on MEL issues before being considered eligible for inspection of safety items in the cabin).

The following examples show the typical privileges of a ramp inspector based on his/her background as being previously a commercial pilot licence/airline transport pilot licence (CPL/ATPL) holder, an aircraft maintenance engineer (AML) holder or a cabin attendant:

CPL/ATPL holder:

- A items
- B items
- C items
- D1/D3 items





AML holder:

- A items except for A13, A14
- B items
- C items
- D1, D3 items

Cabin attendant:

- A15-A19
- B items

7.2 Initial Training

7.2.1 Eligibility criteria

The competent Authority should ensure that the candidate has sufficient knowledge of the English language. This may be attested by a certificate such as ICAO English Proficiency Level 4, Common European Framework of Reference for Languages: Level B2, or another equivalent certificate. English language proficiency may also be demonstrated by means of a diploma of secondary or higher education where English was used as the medium of instruction.

7.2.2 Theoretical

The scope of the initial theoretical training is to familiarise the inspectors with the 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, as the candidates should already possess such knowledge, either from previous work experience or through specialised training, prior to attending the theoretical course.

The initial theoretical training programme should be developed in accordance with the syllabus developed by the Agency (see Appendix 8.2.1).

7.2.3 Practical

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 turnaround time may be used. In the latter case, the flight and/or ground crew should be informed about the training character of the inspection.

The initial practical training may be split into several sessions if an adequate tracking system is put in place.

The practical training programme should be developed in accordance with the syllabus developed by the Agency (see Appendix 8.2.2).

7.2.4 On-the-job training

The objective of the on-the-job training (OJT) is to familiarise the candidates with the particularities of performing a ramp inspection in a real, operational environment. The competent authority should ensure that the area of expertise of the candidate is compatible with the one of the senior ramp inspector(s) delivering OJT.

When selecting the operators to be inspected during the on-the-job training programme, the senior ramp inspector should ensure that:





- before starting the OJT, the candidate is briefed about the general objectives and working methods of the training;
- the training can be performed sufficiently in depth but without undue hindrance or delay of the inspected operator;
- the ramp inspections are conducted as much as possible on different operators (i.e. EU operators, 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);
- before every inspection, the candidate is briefed regarding the objectives and lessons to be learned during that particular inspection;
- after every inspection day, the candidate is debriefed regarding his/her performance and progress and areas where improvement is needed.

OJT Training may also be performed by foreign senior ramp inspectors.

While the observation phase may be conducted with more than one candidate per senior ramp inspector, the under-supervision phase should be conducted with no more than one candidate per senior ramp inspector. In real operational environment, the duplication of A and most of the B-items during normal turn-around time is not considered feasible, therefore the competent authority should ensure a proper identification of the inspection items performed by each candidate during the under-supervision phase within the OJT forms.

In addition to the OJT, the competent authority should provide the candidate with the necessary information on administrative issues related to the conduct of ramp inspections, and on the process relating to the cooperation with the airport and air navigation service providers.

The OJT should cover at least the elements described in Appendix 8.2.3.

The senior ramp inspector should do the assessment of the candidate while the candidate is performing the ramp inspections under supervision. The candidate should be considered to have successfully completed the OJT 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.

Some ramp inspection OJT items may be replaced by a classroom training (*AMC4 ARO.RAMP.115(a)(b) paragraph (h) “using representative examples when no operational environment is required, e.g. documents, dangerous goods”*).

To fully establish the confidence in the candidate’s competence, additional ramp inspections may be needed after the initial observation phase.

7.2.5 Final Assessment

The final assessment should be carried out by Senior Inspector(s) and/or the National Coordinator or any other nominated person to verify the inspector’s competency. At this assessment the results of the theoretical, practical and OJT training should be taken into consideration.

If the candidate is found to be fully qualified, the competent Authority should issue a Formal Qualification Statement. In case the candidate does not pass the assessment, the competent Authority could request an additional theoretical, practical or on-the-job-training.

7.3 Periodical Assessment

When performing the periodical assessment of a qualified ramp inspector’s competence and performance as mentioned in AMC2 ARO.GEN.200 (a)(2), the competent authority may use any of the following assessment methods or a combination thereof:

- A theoretical examination;





- A number of ramp inspections under the supervision of a senior ramp inspector covering all inspector's privileges;
 - A sample analysis of ramp inspections, during which the inspector has raised findings in his domain of competence.
- Such assessment should take place every 3 years as a minimum.

7.4 Extension of inspector privileges

The competent authority may extend the privileges of a ramp or senior ramp inspector, provided that the following conditions are met:

- (1) the relevant knowledge of the inspector has been satisfactorily complemented by additional theoretical and/or practical training relevant to the scope of the extension; and
- (2) the inspector has received a OJT on the new inspection items that will be added to his/her privileges.

The competent authority should determine the necessary number of ramp inspections of the OJT on a case-by-case basis, taking into account both the complexity and the criticality of the new items to be covered during this training, as well as the inspector's aeronautical education and practical knowledge. Furthermore, for senior ramp inspectors additional criteria may be required before delivering training.

7.5 Senior ramp inspectors

When appointing a senior ramp inspector the competent authority may take into consideration certain "soft skills" such as: knowledge of training techniques, professionalism, maturity, judgment, integrity, safety awareness, communication skills, personal standards of performance and a commitment to quality, etc.

7.5.1 Use of foreign senior ramp inspectors

The competent authority of a state on which territory an OJT is delivered may authorise foreign senior ramp inspectors to perform ramp inspections on their behalf. These privileges may contain limitations (e.g.: A/C grounding) and could be fully or partially done based on relevant evidence provided by the competent authority of the senior ramp inspector.

When the OJT is delivered by a foreign senior ramp inspector, the competent authority of the candidate should request the competent authority of the senior ramp inspector to confirm the validity of his/her seniority.

If a foreign senior ramp inspector is delivering the recurrent training, the competent authority of the candidate should verify if the training material is developed in accordance with the content communicated by the Agency and if it is updated with the information provided by the EASA Training Bulletins.

7.6 Loss of qualification

7.6.1 Missed recurrent training

When the qualification is lost because of failure to undergo the recurrent training, it may be regained provided that the ramp inspector attends the missing recurrent training.

7.6.2 Insufficient number of inspections

A ramp inspector may regain his qualification as inspector by performing half the missing inspections from last year under supervision of a senior inspector, up to half of these may be performed on national operators, if performed in accordance with ARO.RAMP.

A senior ramp inspector may regain his qualification as inspector by performing 2 inspections under supervision of a senior inspector.





Reference: AMC1 ARO.RAMP.120(a)

Checklists for the verification of compliance and continuous compliance of RITO(s) may be found in Attachment 9.1.1.

7.7 Organisational structure

The competent authority should verify that the training organisation has appointed a head of training with corporate authority to ensure that the training organisation:

- has a sufficient number of properly qualified instructors to develop, update and deliver the training courses referred to in ARO.RAMP.115(b)(2)(i);
- makes use of adequate training facilities and properly equipped office accommodation;
- has established appropriate training procedures;
- delivers training developed in accordance with the syllabi developed by the Agency;
- periodically evaluates the effectiveness of the training provided; and
- makes available to the competent authority an annual review summarising the results of the feedback system together with the training organisation's corrective actions (if any).

7.8 Training course and facilities

The competent authority should verify that:

- the content of the training courses to be delivered complies with the syllabi developed by the Agency, also by attending at least one initial theoretical and practical training course;
- the training course material is accurate and up to date and has been developed for the type of training to be delivered (including course slides, reference documents, etc.);
- the training organisation provides a copy of the complete training course material and the relevant EU aviation legislation, as well as any relevant examples of technical information to all course participants;
- classrooms have appropriate presentation equipment ensuring that students can easily read presentation(s) text/drawings/diagrams and figures from any position in the classroom. Where necessary, audio amplification should be available to assist instructors in verbal communication. Internet access should also be available to enable instructors to use the online applications used in the EU Ramp Inspection programme;
- a suitable aircraft is available for practical training for an adequate period.

7.9 Instructors

Instructors delivering training on the regulatory framework for ramp inspections should have at least 3 years of experience either as national coordinators or as aviation safety legislative experts involved in the EU ramp inspections programme.

All instructors should attend or familiarise themselves with the content of available recurrent training, organised by the Agency to update their knowledge of the EU Ramp Inspection Programme and to promote standardisation.

Attachment 9.1.2 contains a checklist, which may be used for the evaluation of ramp inspections training instructors.

7.10 Verification of compliance by the Agency

Reference: AMC2 ARO.RAMP.120(a)

When the competent authority requests the Agency to verify a training organisation's compliance or continuous compliance with the applicable requirements, the following should be taken into account:

- the request should be submitted to the Agency at least 90 days prior to the intended date of issuing the approval or to the intended date of ending the continuous compliance verification; and





- the training organisation should be notified that the verification of compliance will be performed by the Agency, and, therefore, full cooperation and unimpeded access to the organisation staff, documentation, records and facilities should be ensured.

Verification may also include an on-site audit and/or unannounced inspection of the training organisation.

The Agency should provide the requesting competent authority with a report containing the results of the compliance verification as soon as the process is finalised, but no later than 10 days prior to the anticipated date of approval.

When the Agency identifies a non-compliance with the applicable requirements, it should:

- immediately inform the competent authority concerned of non-compliance and indicate the level of finding(s), providing all the supporting evidence available;
- provide the training organisation concerned with all the necessary information on the identified non-compliance indicating that the certifying competent authority has been informed in order to take action.

The competent authority may approve that organisation, if the results of the Agency's report indicate that the training organisation meets the applicable requirements.

When verifying continuous compliance with the applicable requirements, the Agency may:

- request the training organisation to provide updated versions of information, evidence and documents related to the training;
- sample the training course material delivered during any training session to candidates or qualified ramp inspectors;
- use the results of the standardisation inspections.

8 Appendixes

8.1 Inspection instructions and PDFs

Refer to the separate document "INSPECTION INSTRUCTIONS ON THE CATEGORISATION OF RAMP INSPECTION (SAFA/SACA) FINDINGS".





8.2 Training syllabi

8.2.1 Syllabus of theoretical training for ramp inspectors

INITIAL (THEORETICAL) TRAINING COURSE

- Module (GEN): General overview of the ramp inspection programme
- Module (A): Flight crew compartment inspection items
- Module (B): Cabin safety inspection items
- Module (C): Aircraft condition inspection items
- Module (D): Cargo inspection items and general item

MODULE (GEN) – GENERAL OVERVIEW OF THE RAMP INSPECTION PROGRAMME

a. Overview of the safety inspection of aircraft

<p>i. Introduction</p> <ul style="list-style-type: none"> • The Ramp Inspection Programme Overview • Role and responsibilities of the Agency — Overview <p>ii. ICAO basic references</p> <ul style="list-style-type: none"> • ICAO convention overview • 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 	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Candidates should know the background of the Ramp Inspection Programme 2. Candidates should be able to identify the main elements of the Programme 3. Candidates should understand the role of ramp inspections in the general safety oversight context 4. Candidates should be able to identify the stakeholders and their responsibilities
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<ul style="list-style-type: none">• Article 38 – Departures from international standards and procedures• Article 83 bis – Transfer of certain functions and duties <p>iii. Principles of the Ramp Inspection Programme</p> <ul style="list-style-type: none">• EU Member State Role and legal obligation to inspect aircraft• States on working arrangements with the Agency• Common procedures and common reporting format• Ramp inspections SAFA, SACA, SANA• Annual ramp inspection programme• The ramp inspection tool – Introduction• Safety reports <p>iv. The European Commission</p> <ul style="list-style-type: none">• Role and responsibility• Legislative power <p>v. The European Aviation Safety Agency</p> <ul style="list-style-type: none">• Role and responsibilities• The executive tasks• Collection of inspection reports• Maintenance of the ramp inspection tool• Analysis of relevant information• Reporting to European Commission and Member States• Advising the European Commission and Member States on follow-up actions• Developing training programmes and fostering the organisation and implementation of training courses and workshops <p>vi. Eurocontrol</p> <ul style="list-style-type: none">• Role and responsibilities	
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<p>viii. The Air Safety Committee – (ASC)</p> <ul style="list-style-type: none"> • Role and responsibilities • Representation of EU Member States • Legislative advisory role <p>ix. The Ramp Inspection Coordination and Standardisation group – (RICS)</p> <ul style="list-style-type: none"> • Role and responsibilities • Representation of EU Member States and non-EU Member States • Technical advisory role 	
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MODULE (GEN) – GENERAL OVERVIEW OF THE RAMP INSPECTION PROGRAMME	
b. The ramp inspection programme’s legal framework	
<p>i. Regulation (EU) No 2018/1139 (“Basic regulation”)</p> <ul style="list-style-type: none"> • General overview <p>ii. Regulation (EU) No 965/2012 (“AIR-OPS regulation”)</p> <ul style="list-style-type: none"> • General overview of Part-ARO, Part-CAT, Part-NCC, Part-NCO and Part-SPO • For non-EASA inspectors a limited awareness only on Part-CAT, Part-NCC, Part-NCO and Part-SPO • Focus on Part ARO.RAMP <p>iii. Regulation (EU) No 452/2014 (“Third Country Operators”)</p> <ul style="list-style-type: none"> • General overview <p>iv. Regulation (EC) No 2111/2005 and regulation (EC) No 474/2006</p> <ul style="list-style-type: none"> • General overview 	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Candidates should fully understand the legal instruments of the Programme 2. Candidates should be capable to define the relationship between the Ramp Inspection Programme and the EU List of Banned air carriers





MODULE (GEN) – GENERAL OVERVIEW OF THE RAMP INSPECTION PROGRAMME

c. The ICAO framework

<p>i. Ramp inspection (RI) and ICAO — Annex 1 (Personnel Licensing)</p> <ul style="list-style-type: none"> • General rules concerning licenses 	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Candidates should be able to outline ICAO’s role and responsibilities within the international civil aviation context. 2. Candidates should understand the obligations of the signatory States. 3. Candidates should understand the direct relationship between ICAO standards and ramp inspection.
<p>ii. 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>iii. RI and ICAO — Annex 7 (Aircraft Nationality and Registration Marks)</p> <ul style="list-style-type: none"> • Certificate of Registration • Example of Certificate of Registration • Identification plate <p>iv. RI and ICAO — Annex 8 (Airworthiness of Aircraft)</p> <ul style="list-style-type: none"> • Validity of the Certificate of Airworthiness • Standard form of Certificate of Airworthiness • Emergency exits, markings and lights • Safety and survival equipment <p>v. RI and ICAO — Annex 16 (Environmental Protection)</p> <ul style="list-style-type: none"> • Noise Certificate (applicability to SAFA programme) <p>vi. RI and ICAO — Annex 18 (The Safe Transport of Dangerous Goods by Air) and associated ICAO Documents: Dangerous goods Technical Instructions for the safe transport of dangerous goods by air (Doc. 9284) and Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods (Doc. 9481)</p>	





<p>vii. RI and ICAO — Doc 7030 (Regional Supplementary procedures)</p> <ul style="list-style-type: none"> • Overview • Applicability 	
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MODULE (GEN) – GENERAL OVERVIEW OF THE RAMP INSPECTION PROGRAMME	
d. Safety assessment technical aspects overview	
<p>i. Annual ramp inspection programme</p> <ul style="list-style-type: none"> • Annual ramp inspection programme for the SWC participating states • Annual ramp inspection programme for the other states • Unforeseen inspections • Monitoring of the annual ramp inspection programme <p>ii. Preparation of the inspection</p> <ul style="list-style-type: none"> • Use of ramp inspection tool • Information regarding flight preparation (e.g. NOTAM, weather, ...) • Latest manufacturer data (e.g. MMEL, AMM, SRM, AFM, ...) <p>iii. 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 inspections • ‘Intelligence’ (ramp inspection tool, ATC, passenger complaints, etc.) • Prioritisation 	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Candidates should understand how an annual ramp inspection programme is to be defined. 2. Candidates should understand what is to be checked during a ramp inspection preparation. 3. Candidates should understand the ramp inspection methodology.





<p>iv. Elements to be inspected:</p> <ul style="list-style-type: none">• Presentation of the checklist items• Time available (stop duration, slot, no unreasonable delay)• Items to be selected (e.g. for time limited inspections)• Inspector privileges• Areas of concern (based upon previous inspections from the ramp inspection tool)• Context (recent/old aircraft, new airline, new type of aircraft)• Intelligence information <p>v. 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>vi. Short transit times:</p> <ul style="list-style-type: none">• Walk around check during off boarding• Segmented inspections <p>vii. 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, formal qualification statement)• Airline documentation available <p>viii. Teamwork:</p> <ul style="list-style-type: none">• Preferably two inspectors covering all fields of expertise• Briefing on task allocation	
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- ix. The ramp inspection checklist:
 - Aspects to be covered by the ramp inspection
 - Format/structure and overview of contents

- x. Starting the Inspection:
 - 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)

- xi. Code of conduct:
 - Human factor principle (inspection = intrusion)
 - Cooperation with the crew
 - Time efficiency
 - Collection of evidence

- xii. Categorisation of findings and general remarks:
 - Definition of finding: Deviation from the standards
 - Category 3 finding with major influence on safety
 - Category 2 finding with significant influence on safety
 - Category 1 finding with minor influence on safety
 - General remarks

- xiii. Actions taken:
 - Relationship between finding and action
 - Class 1 action
 - Class 2 action
 - Class 3 actions





<p>xiv. 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 <p>xv. Follow-up process</p> <ul style="list-style-type: none"> • Corrective actions • Preventive actions • Reminders to operators • Closure of findings 	
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MODULE (GEN) – GENERAL OVERVIEW OF THE RAMP INSPECTION PROGRAMME

e. Ramp inspection tool – Hands-on training

<ul style="list-style-type: none"> • Purpose of the ramp inspection tool • The ramp inspection tool as inspectors’ tool • RI ramp inspection tool – input • RI ramp inspection tool – output • RI ramp inspection tool – search • Focused inspection module • Follow-up actions: operator logging • Ramp inspection tool analytical tools and reports 	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Candidates should have the relevant knowledge to input and retrieve data from the ramp inspection tool. 2. Candidates should know the analysis process and its deliverables. 3. Candidates should understand the analysis dependability on the accuracy of the inspection reports.
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MODULE (A) – FLIGHT CREW COMPARTMENT INSPECTION ITEMS





<p>A01 General condition</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 • Means to monitor the door area (e.g. CCTV) <p>A02 Emergency exit</p> <ul style="list-style-type: none"> • Access (easy/no blockings) • Escape ropes (secured) • Emergency exits (flight crew compartment) <p>A03 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 terrain database • System test — passed • 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) 	<p>Objectives:</p> <p>Candidates should possess the relevant knowledge enabling them to inspect each item.</p>
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- System test

8.33 kHz radio channel spacing

- 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

PBN

- General (applicability and principles)
- Special authorisation
- Required equipment
- Flight planning and completion of the flight

RVSM

- General (applicability and principles)
- Special authorisation
- Required equipment
- Flight planning and completion of the flight

NAT HLA

- General (applicability and principles)
- Special authorisation
- Required equipment
- Flight planning and completion of the flight

EFB

- Electronic flight bag (EFB portable, installed)

A04 Manuals

- Structure of Operation Manual (European and others)





- Aircraft flight manual (structure)
- Competent Authority approval
- Update status
- Content in relation to flight preparation

A05 Checklists

- 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
- Electronic Checklists

A06 Radio navigation/instrument charts

- Required charts (departure, en-route, destination and alternate) within reach and updated
- Validity of FMS navigation database
- Electronic maps and charts
- The AIRAC Cycle

A07 Minimum equipment list (MEL)

- Availability: approval and update status
- Content: MEL reflects installed equipment
- Relationship between the MEL and the MMEL
- CDL (configuration deviation list)

A08 Certificate of Registration (CoR)

- Availability and accuracy
- Original documents and copies acceptability
- Presence of mandatory information on the certificate





A09 Noise certificate

- Availability (if applicable)
- Multiple noise certification
- Approval status

A10 Air Operator Certificate (AOC) or equivalent

- Availability (original or copy) and accuracy
- Content in compliance with requirements/format
- Content of operational specifications

A11 Radio (station) licence

- Availability and accuracy
- Original documents and copies acceptability

A12 Certificate of Airworthiness (CofA)

- Format of Certificate of Airworthiness
- Original documents and copies acceptability
- Presence, accuracy and validity

A13 Flight preparation

- Presence and accuracy of operational flight plan
- Performance calculations
- Proper fuel calculation and monitoring
- Special considerations for ETOPS operations
- AIP local relevant information
- Availability and update of meteorological information
- Availability and update of NOTAMS

A14 Mass and balance calculation

- Availability and accuracy
- Data available for a verification by crew





A15 Hand fire extinguishers

- Validity, access and locations
- Mounting
- Types

A16 Life-jackets/flotation devices

- Validity, access and locations
- Applicability

A17 Harness

- Presence (and usage)
- Availability for all flight crew members
- Requirements for different crew positions
- Conditions (wearing)

A18 Oxygen equipment

- 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)

A19 Independent portable light

- Number of required independent portable light(s) (day/night)
- Condition, serviceability and access

A20 Flight crew licences

- 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

A21 Journey log book

- Content of journey log book (recommendation/roman numerals)
- Examples of journey log books

A22 Maintenance release

- Applicable requirements and duties of the PIC/ commander

A23 Defect notification and rectification (incl. technical log)

- Defects notification
- Cross check with MEL
- History of defects/notification (incl. hold item list)

A24 Pre-flight inspection

- Applicable requirements and duties of the PIC





MODULE (B) – CABIN SAFETY INSPECTION ITEMS

B01 General internal condition

- General condition
- Safety and survival equipment
- Design and construction

B02 Cabin crew stations and crew rest area

- Cabin crew seats (number, material/fire resistant and condition, upright position/safety hazard)
- Equipment

B03 First-aid kit/emergency medical kit

- Recommendation on contents (validity)
- Locations of kits
- Adequacy
- Readily/access
- Identifications/markings/seals

B04 Hand fire extinguishers

- Validity, access and locations
- Mounting
- Types

B05 Life-jackets/flotation devices

- Validity, access and locations
- Applicability
- Different models of jackets and/or flotation devices on-board
- Instructions for passengers (written and demonstration)
- Infant life-jackets

Objectives:

Candidates should possess the relevant knowledge enabling them to inspect each item.





B06 Seat belt and seat condition

- Seats and belts (material/condition/installation)
- Infant restraining devices: extensions, berths,...
- Portable light (cabin crew)
- Instructions for passengers (written and demonstration)
- Opening assistance systems

B07 Emergency exit, lighting and marking, independent portable light

- Evacuation signs
- Lighting and marking (passenger compartment)
- Independent portable light

B08 Slides/life-rafts/ELTs

- Slides/rafts general (locations, types)
- Serviceability — pressure gauge/green band
- Instructions for passengers (written and demonstration)
- Emergency locator transmitter (ELT) (general/types/location)

B09 Oxygen supply (cabin crew and passengers)

- Oxygen supply: cylinders and generators
- Serviceability — pressure gauge/green band
- Models/A/C types
- Drop-out panels/storage of masks

B10 Safety instructions

- Availability and accuracy

B11 Cabin crew members

- Appropriate number of cabin crew (A/C type)





<ul style="list-style-type: none"> • 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 (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) 	
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MODULE (C) – AIRCRAFT CONDITION INSPECTION ITEMS	
<p>C01 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 systems <p>C02 Doors and hatches</p> <ul style="list-style-type: none"> • Door types (normal — emergency — cargo doors) • Markings and placards of doors 	<p>Objectives:</p> <p>Candidates should possess the relevant knowledge enabling them to inspect each item.</p>





- Operating instructions of doors
- Condition and possible damages

C03 Flight controls

- Condition and possible damages, corrosion and loose parts
- Rotor head condition
- Leakage

C04 Wheels, tyres and brakes

- Tyre pressure (cockpit indications/wheel integrated gauge)
- Brake condition
- Condition and possible damages, leaking and loose parts

C05 Undercarriage

- Condition and possible damages, corrosion and loose parts
- Strut (and tilt cylinder) pressure

C06 Wheel well

- Condition and possible damages, corrosion, leaks and loose parts

C07 Powerplant and pylon

- 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
- Reversers' condition

C08 Fan blades, propellers, rotors

- Types of fan blades/propellers/rotors
- Foreign object damage (FOD)





<ul style="list-style-type: none"> • Dents, nicks, blade bending • De-icing (boots and heating elements) <p>C09 Obvious repairs</p> <ul style="list-style-type: none"> • Obvious repairs • Maintenance release/technical log <p>C10 Obvious unrepaired damage</p> <ul style="list-style-type: none"> • 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. 	
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MODULE (D) – CARGO INSPECTION ITEMS AND GENERAL ITEM	
<p>D01 General condition of cargo compartment</p> <ul style="list-style-type: none"> • Structures, wall panels, wall and ceiling cargo (tape) sealing • Fire detection & extinguishing systems • Blow-out panels • 9G-net • Door instructions • Loading instructions (placards, wall markings) • Damage <p>D02 Dangerous goods</p>	<p>Objectives:</p> <p>Candidates should possess the relevant knowledge enabling them to inspect each item.</p>





- Notification to the pilot-in-command/commander
- Segregation and accessibility
- Packaging and labelling
- Limitations/restrictions (cargo aircraft / dangerous goods)

D03 Cargo stowage

- Flight kit (secured)
- Pallets, nets, straps, containers (secured)
- Condition of pallets, nets, straps, containers
- Loading limitations (weight, size and height)

E01 General

- All the general items that may have a direct relation with the safety of the aircraft or its occupants

8.2.2 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 items and general item

MODULE (A) – FLIGHT CREW COMPARTMENT INSPECTION ITEMS





<p>A01 General condition</p> <ul style="list-style-type: none"> • C/Bs/circuit breakers (recognise pulled/popped) • Examples of storage of flight cases and crew luggage (possible safety hazards) • Crew seats/serviceability (functions of seats/manual — electrical) • Security/reinforced door (how to recognise, door installations, locking functions) • General condition (check cleanness of flight crew compartment) • If applicable, means to monitor the door area (e.g. CCTV cameras and screens) <p>A02 Emergency exit</p> <ul style="list-style-type: none"> • Recognise easy access (no blockings) • Escape ropes (check if secured) • Emergency exits (flight crew compartment) <p>A03 Equipment</p> <p>GPWS-TAWS</p> <ul style="list-style-type: none"> • GPWS, locate instruments in cockpit • Aural warning test demonstrating: Sounds/display patterns • Validity of GPWS terrain database <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"> • How to check real channel spacing during the inspection 	<p>Objectives:</p> <p>Candidates should be able to use their technical knowledge and ramp inspection techniques in a satisfactory manner during the subsequent on-the-job training</p>





<p>RVSM</p> <ul style="list-style-type: none">• Flight planning and completion of the flight <p>EFB</p> <ul style="list-style-type: none">• Electronic flight bag (EFB portable, installed) <p>A04 Manuals</p> <ul style="list-style-type: none">• Operations manual: (content/handling exercise)• Aircraft flight manual (examples)• Electronic manuals/integrated systems• Update status• Content in relation to flight preparation <p>A05 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)• Electronic Checklists <p>A06 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 database (check the ‘INIT’ page for validity) <p>A07 Minimum equipment list (MEL)</p> <ul style="list-style-type: none">• Check if deferred defects are in accordance with the MEL instructions (if applicable)	
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- Inspect MEL according to the current MMEL
- Approval (check)
- Check customisation of MEL
- CDL (configuration deviation list)

A08 Certificate of Registration (CoR)

- Content and accuracy of the Certificate of Registration (various examples/check)
- Show location (A/C documents or door)

A09 Noise certificate

- Format of the noise certificate
- Content of noise certificate/approval
- Show location (A/C documents or door)

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 (CofA)

- 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/performance calculation and monitoring (demonstration of various examples)
- Special considerations for ETOPS operations (if applicable)
- Weather information/available and within reach (demonstrate updated reports/examples)
- NOTAMs/check validity (examples)

A14 Mass and balance calculation

- Check examples of different type weight and balance sheets/A/C types (manual and computerised)
- Data available (on board or on demand) for a verification by crew

A15 Hand fire extinguishers

- Locations/access
- Condition and pressure gauge
- Familiarise with different date markings (inspection date or expiry date, if any)
- Mountings (review examples)
- Types (review examples)

A16 Life-jackets/flotation devices

- Locations/access
- Condition
- Familiarise with different date markings (inspection date or expiry date, if any)

A17 Harness

- Availability for all flight crew members
- Condition of fabrics and locks
- Passenger seat materials/fire resistant (recognise right materials)





A18 Oxygen equipment

- Storage of masks (Quick Donning)
- Pressure gauge (comparison with minimum required according to the operations manual)
- Operational functional check of the combined oxygen and communication system (radio boom)

A19 Independent portable light

- Number and adequate location (day/night)
- Operational check

A20 Flight crew licences

- Licenses of personnel:
 - endorsement of certificates and licenses
 - validity of endorsed certificates and licenses
 - language proficiency
 - medical certificate (limitations, spare glasses, etc.)
 - validity of licences (validation from State of Registry, if applicable)
- Aeroplane flight crew:
 - composition of the flight crew
 - age limitations

A21 Journey log book

- Content of journey log book
- Responsibility of signing log book (example)

A22 Maintenance release

- Aeroplane maintenance (maintenance record)
- Maintenance release, general (checkmark or sign)





<ul style="list-style-type: none"> • Relevant release to service (examples) <p>A23 Defect notification and rectification (incl. technical Log)</p> <ul style="list-style-type: none"> • Open defects • Cross check with MEL • 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 acknowledgement) 	
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<p>MODULE (B) – CABIN SAFETY INSPECTION ITEMS</p>	
<p>B01 General internal condition</p> <ul style="list-style-type: none"> • Safety and survival equipment • 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 — lavatory smoke detection system — built-in fire extinguisher system for each receptacle intended for disposal of towels, paper or waste (how to check extinguishers) • Check that normal and abnormal duties by cabin crew may be performed without hindrance (guided tour in cabin for demonstration of duties) <p>B02 Cabin crew stations and crew rest area</p> <ul style="list-style-type: none"> • Cabin crew seats (number, material and condition) 	<p>Objectives:</p> <p>Candidates 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">• Cabin crew seats upright position (case study/recognise safety hazard/automatic retraction)• Familiarise with problems with belt wearing and fast locks• Familiarise with seat attachment to the floor or wall• Easy access to emergency equipment (locations and condition) <p>B03 First-aid kit/emergency medical kit</p> <ul style="list-style-type: none">• Number and locations (readily/access)• Adequacy (content, need for medical kit)• Confirmation that contents match the relevant checklist• Identifications/markings/seals (examples) <p>B04 Hand fire extinguishers</p> <ul style="list-style-type: none">• Locations/access• Condition and pressure gauge• Familiarise with different date markings (inspection date or expiry date, if any)• Mountings (review examples)• Types (review examples) <p>B05 Life-jackets/flotation devices</p> <ul style="list-style-type: none">• Locations/access• Condition• Familiarise with different date markings (inspection date or expiry date, if any)• Different models of life-jackets and flotation devices• Infant life-jackets (accessibility, number, procedure used for distribution)• Instructions for passengers <p>B06 Seat belt and seat condition</p> <ul style="list-style-type: none">• Availability for all passengers• Condition of seatbelts: fabrics and locks	
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<ul style="list-style-type: none">• Condition of seats: restraining bars, seat blocked in upright position, attachment to the cabin floor, etc. (how to check)• Installation of seat belts (, hazard to block evacuation)• Extra/extension belts, berths (locations)• Passenger seat materials/fire resistant (recognise right materials) <p>B07 Emergency exit, lighting and marking, independent portable light</p> <ul style="list-style-type: none">• Lighting, signs and marking (locations and condition)• Condition and serviceability of exits• Instructions for passengers• Availability, serviceability and easy access of independent portable light <p>B08 Slides/life-rafts/ELTs</p> <ul style="list-style-type: none">• Slides/rafts general (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) (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>B09 Oxygen supply (cabin crew and passengers)</p> <ul style="list-style-type: none">• Locations and condition• Cylinder pressure gauge• Drop-out panels (locations and condition)• Storage of masks/serviceability <p>B10 Safety instructions</p> <ul style="list-style-type: none">• Available and reachable• Accuracy of the information shown	
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<ul style="list-style-type: none">• Content of instructions <p>B11 Cabin crew members</p> <ul style="list-style-type: none">• Appropriate number of cabin crew (how to check)• Cabin crew positions in case of refuelling with passengers on board <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 (requirement on the projected opening)• Instructions for passengers (written and demonstration) <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) <p>B14 Seat capacity</p> <ul style="list-style-type: none">• Compare the numbers of passenger and the number of serviceable seats• Max number of passengers according to the cabin configuration• Interrelation with other inspection items: maximum number of passengers influenced by: B6 (inoperative seat) and/or B7 (inoperative exit)	
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MODULE (C) – AIRCRAFT CONDITION INSPECTION ITEMS





<p>C01 General external condition</p> <ul style="list-style-type: none"> • Corrosion (familiarise and recognise different corrosion types) • Cleanliness and contamination of fuselage and wings (familiarise and recognise) • Recognise presence of ice, snow and frost • Windshields (recognise delaminating) • Windows (recognise damages and problems) • Exterior lights (landing lights, NAV-lights, strobes, beacon, etc.) (check the condition) • Recognise legibility of aircraft’s markings (registration) • Condition of paint (familiarise when loose of painting is problem) • Recognise marks of lightning strike • Wing de-icing system condition <p>C02 Doors and hatches</p> <ul style="list-style-type: none"> • Familiarise with different door types/structures • Familiarise with markings and placards of doors • Operating instructions of doors (recognise hazards if lack of markings) • Recognise normal condition and possible damages/loosing parts <p>C03 Flight controls</p> <ul style="list-style-type: none"> • Condition and possible damages, corrosion, leaks and loose parts • Recognise marks of lightning strike • Familiarise with static dischargers (recognise when missing) • Recognise possible defects and damages <p>C04 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) 	<p>Objectives:</p> <p>Candidates should be able to use their technical knowledge and ramp inspection techniques in a satisfactory manner during the subsequent on-the-job training</p>
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- Recognise normal condition and possible damages, leaking and loose parts
- Tyre wear/tyre pressure (check)

C05 Undercarriage

- 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

C06 Wheel well

- Condition and possible damages, corrosion and loose parts
- Lubrication (recognise signs of lubrication)
- Familiarise with marking placards
- Recognise bonding wires
- Possible defects and damages

C07 Powerplant and pylon

- Powerplant (types of engines)
- Cowlings, cowling doors and blow-out doors
- Condition and possible damages, corrosion, leaking 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)

C08 Fan blades, propellers, rotors

- Typical foreign object damages (FOD)





<ul style="list-style-type: none"> • 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 system <p>C09 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 	
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MODULE (D) – CARGO INSPECTION ITEMS AND GENERAL ITEM	
<p>D01 General condition of cargo compartment</p> <ul style="list-style-type: none"> • Structures, wall panels, wall and ceiling cargo (tape) sealing • Familiarise with A/C systems in cargo compartment: <ul style="list-style-type: none"> — fire containment, detection and extinguishing systems 	<p>Objectives:</p> <p>Candidates should be able to use their technical knowledge and ramp inspection techniques in a satisfactory manner during the subsequent on-the-job training</p>





- ventilation
- heating
- loading systems (rollers)
- lighting
- Recognise blow-out panels
- Familiarise with 9G-net
- Cargo restraining devices
- Loading instructions/door instructions (placards, wall markings/tidiness)
- Damages in cargo compartment
- Recognise obvious repairs in cargo compartment

D02 Dangerous goods

- How to recognise the special authorisation to transport dangerous goods
- Assessing the scope of the authorisation (different classes)
- Notification to Captain (NOTOC) format and content
- Segregation and accessibility
- Examples of packaging and labelling of dangerous goods
- Identifying limitations and restrictions for certain (sub)classes of dangerous goods
- Identification and removal of contamination with dangerous goods

D03 Cargo stowage

- Familiarise with flight kit/spare wheel (secured)
- Familiarise with pallets, nets, straps, containers (secured)
- Damages on pallets, nets, straps, containers
- Recognising loading limitations (weight, size and height)

E01 General

- All the general items that may have a direct relation with the safety of the aircraft or its occupants







8.2.3 Elements and checklist for the OJT training for ramp inspectors

Elements to be covered during the initial OJT

- Preparation of an inspection:
 - Selection of operator(s) to be inspected (use of the annual ramp inspection programme and of prioritisation lists);
 - Use of the ramp inspection tool to prepare an inspection, including:
 - Follow-up of previous inspections;
 - Safety reports;
 - Areas of concern, repetitive and/or open findings;
 - Other sources of information (such as passenger complaints, whistle-blowers, maintenance organisation reports, air traffic control (ATC) reports);
 - Retrieval of updated reference materials: Notices to Airmen (NOTAMs), navigation and weather charts;
 - Task allocation between team members.
- Administrative issues:
 - Ramp inspector’s credentials, rights and obligations;
 - Special urgency procedures (if any);
 - National (local) aerodrome access procedures;
 - Safety and security airside procedures; and
 - Ramp inspector kit (independent portable light, fluorescent vest, ear plugs, camera, mirror, checklists, etc.).
- Cooperation with airport and air navigation services to obtain actual flight information, parking position, time of departure, etc.
- Ramp inspection methodology:
 - Introduction to the pilot-in-command/commander, flight crew, cabin crew, ground crew;
 - Selection of inspection items, according to the area of expertise of the candidate;
 - Findings (identification, categorisation, reporting, evidencing);
 - Corrective actions — class 3:
 - Class 3a) “enforcement of restriction(s) on aircraft flight operations”: cooperation with other services/authorities to enforce a restriction;
 - Class 3b) “request of an immediate corrective action(s)”: satisfactory completion of an immediate corrective action;





- 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;
- Proof of inspection:
 - Completion and delivery of the proof of (ramp) inspection;
 - Request of acknowledgement of receipt (document or a refusal to sign);
- Debriefing to the flight crew or operator representative.
- Human factors elements:
 - Cultural aspects;
 - Resolution of disagreements and/or conflicts; and
 - Avoidance of crew stress.

Checklist on-the-job training of inspectors

The content of the following checklist should be used for ramp inspections performed with the candidate during the “observation” and “under supervision” phases of the OJT training. The information gathered by the senior ramp inspectors involved in the OJT phase should be then considered by the competent authority whilst performing the final assessment of the candidate.

The senior ramp inspectors involved during the OJT training phase should use the inspection instructions referred to in AMC1 ARO.RAMP.125 when assessing the knowledge of the candidate concerning each inspection item.





On-the-Job Training of Ramp Inspectors			
Competent Authority:		Senior ramp inspector:	
Name of candidate:		Place:	
Date:		Ramp Inspection Number:	
Operator:		A/C Registration:	A/C Type:
INSPECTION ITEM	Checked	Note	
A	FLIGHT CREW COMPARTMENT INSPECTION ITEMS		
General			
A01	General condition	<input type="checkbox"/>	
A02	Emergency exit	<input type="checkbox"/>	
A03	Equipment	<input type="checkbox"/>	
Documentation			
A04	Manuals	<input type="checkbox"/>	
A05	Checklists	<input type="checkbox"/>	
A06	Radio navigation/instrument charts	<input type="checkbox"/>	
A07	Minimum equipment list	<input type="checkbox"/>	
A08	Certificate of registration	<input type="checkbox"/>	
A09	Noise certificate	<input type="checkbox"/>	
A10	Air Operator Certificate (AOC) or equivalent	<input type="checkbox"/>	
A11	Radio (station) licence	<input type="checkbox"/>	
A12	Certificate of Airworthiness (CofA)	<input type="checkbox"/>	
Flight data			
A13	Flight preparation	<input type="checkbox"/>	
A14	Mass and balance calculation	<input type="checkbox"/>	
Safety equipment			
A15	Hand fire extinguishers	<input type="checkbox"/>	
A16	Life-jackets/flotation devices	<input type="checkbox"/>	
A17	Harness	<input type="checkbox"/>	





A18	Oxygen equipment	<input type="checkbox"/>	
A19	Independent portable light	<input type="checkbox"/>	
Flight Crew			
A20	Flight crew licences	<input type="checkbox"/>	
Journey log book / Technical log or equivalent			
A21	Journey log book	<input type="checkbox"/>	
A22	Maintenance release	<input type="checkbox"/>	
A23	Defect notification and rectification (incl. technical log)	<input type="checkbox"/>	
A24	Pre-flight inspection	<input type="checkbox"/>	
B	CABIN SAFETY INSPECTION ITEMS		
B01	General internal condition	<input type="checkbox"/>	
B02	Cabin crew stations and crew rest area	<input type="checkbox"/>	
B03	First-aid kit/emergency medical kit	<input type="checkbox"/>	
B04	Hand fire extinguishers	<input type="checkbox"/>	
B05	Life-jackets/flotation devices	<input type="checkbox"/>	
B06	Seat belt and seat condition	<input type="checkbox"/>	
B07	Emergency exit, lighting and marking, independent portable light	<input type="checkbox"/>	
B08	Slides/life-rafts/ELTs	<input type="checkbox"/>	
B09	Oxygen supply (cabin crew and passengers)	<input type="checkbox"/>	
B10	Safety instructions	<input type="checkbox"/>	
B11	Cabin crew members	<input type="checkbox"/>	
B12	Access to emergency exits	<input type="checkbox"/>	
B13	Stowage of passenger baggage (cabin luggage)	<input type="checkbox"/>	
B14	Seat capacity	<input type="checkbox"/>	
C	AIRCRAFT CONDITION INSPECTION ITEMS		
C01	General External Condition	<input type="checkbox"/>	





C02	Doors and hatches	<input type="checkbox"/>	
C03	Flight controls	<input type="checkbox"/>	
C04	Wheels, tyres and brakes	<input type="checkbox"/>	
C05	Undercarriage	<input type="checkbox"/>	
C06	Wheel well	<input type="checkbox"/>	
C07	Powerplant and pylon	<input type="checkbox"/>	
C08	Fan blades, propellers, rotors	<input type="checkbox"/>	
C09	Obvious repairs	<input type="checkbox"/>	
C10	Obvious unrepaired damage	<input type="checkbox"/>	
C11	Leakage	<input type="checkbox"/>	
D	CARGO INSPECTION ITEMS		
D01	General condition of cargo compartment	<input type="checkbox"/>	
D01	Dangerous goods	<input type="checkbox"/>	
D01	Cargo stowage	<input type="checkbox"/>	
E	GENERAL ITEMS		
E01	General	<input type="checkbox"/>	
Additional elements observed/performed during on-the-job training			
Assessment (only for "under supervision" inspections)			
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 candidate:	Signature of the senior ramp inspector:





¹ Inspection Standards: E = EASA, I = ICAO, M = Manufacturer, N = National, O = Others ² Finding Category: G = General Remark, 1 = Minor, 2 = Significant, 3 = Major

Corrective Action Information (where applicable)

13	Safety of passenger baggage's		
14	Seat capacity		
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 un-repaired damage		
11	Leakage		
D	Cargo		
1	General condition of cargo compartment		
2	Dangerous Goods		
3	Safety of cargo on board		
E	General		
1	General		

Class of Action			
<input type="checkbox"/>	3d	Immediate operating ban	
<input type="checkbox"/>	3c	Aircraft grounded by (name CA)	
<input type="checkbox"/>	3b	Corrective actions before Flight required	
<input type="checkbox"/>	3a	Restriction on aircraft operation	
<input type="checkbox"/>	2	Information to Authority and Operator	
<input type="checkbox"/>	1	Information to PIC/operator representative	
<input type="checkbox"/>	0	No Findings	

PIC / operator representative (comments / feedback)	Name & Signature (*)
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inspector(s) name or number:

(*) Signature by any member of the crew or another 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 constructed as a determination that the aircraft is fit for the intended flight.
 Data submitted in this report can be subject to change upon entering into the centralised database.

CA Document Number xxx





9 Attachments (Guidance)

9.1 RITO check-lists

9.1.1 Check-list for the evaluation of a ramp inspection training organisation

CHECKLIST FOR THE EVALUATION OF A RAMP INSPECTION TRAINING ORGANISATION (RITO)

1. ORGANISATIONAL STRUCTURE				
No.	Description	Yes	No	Remarks
1	Has a manager with corporate authority been appointed?			
2	Has the training provider contracted enough staff to develop and deliver the envisaged training?			
3	Is the development and delivery of training in accordance with the technical criteria required by the Agency?			
2. FACILITIES AND OFFICE ACCOMMODATION				
No.	Description	Yes	No	Remarks
1	Does the size and structure of the available training facilities ensure adequate protection against weather elements?			
2	Does the size and structure of the available training facilities provide proper training activities?			
3	As alternate means of compliance has the training organisation a procedure containing the applicable criteria when selecting the training facilities to be used, and are these criteria in compliance with the technical requirements provided by the Agency?			
3. INSTRUCTIONAL EQUIPMENT				
No.	Description	Yes	No	Remarks
1	Is the presentation equipment appropriate for the training to be delivered?			
2	Can the candidates easily read the presented material from any position in the classroom?			





	3	As alternate means of compliance has the training organisation a procedure containing the applicable criteria when selecting the training facilities to be used, and are these criteria in compliance with the technical requirements provided by the Agency?			
	4	Does the training organisation ensure that a suitable aircraft is available for practical training for an adequate period?			

4. TRAINING PROCEDURE

No.	Description	Yes	No	Remarks
1	Has the training provider established appropriate procedures to ensure proper training standards?			
2	Has the training provider established a system to control the training preparation and delivery process?			
3	Is the course material written in the English language and will the course be given in the English language?			
4	Has the training provider demonstrated how compliance with Agency's technical criteria is maintained current and kept in line with the training syllabi?			
5	Has the training provider developed a system to evaluate the effectiveness of training provided?			
6	Has the training provider developed a system to evaluate the effectiveness of the training based upon the feedback received?			

5. INSTRUCTORS – QUALIFICATION CRITERIA

No.	Description	Yes	No	Remarks
1	Does the training organisation have an instructors' recruitment procedure?			
2	Does the recruitment procedure contain applicable selection criteria which are in compliance with the technical requirements provided by the Agency?			
3	Do the instructors possess knowledge of the ramp inspection programmes?			
4	Do the instructors have the knowledge on training methods and techniques?			





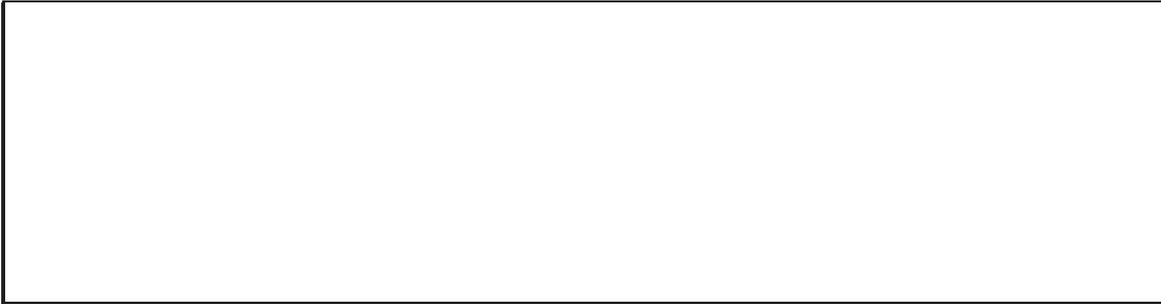
	5	Do the instructors delivering training on inspection items/practical training meet the eligibility and inspection experience requirements?			
	6	Do the other instructors meet the working experience criteria?			
6. INSTRUCTORS – QUALIFICATION RECORDS					
No.	Description		Yes	No	Remarks
	1	Has the training organisation created and maintained an adequate instructors' qualification tracking system that ensures their continuous competence at all times?			
	2	Are the criteria used for the maintenance of the instructors' continuous competence in compliance with the technical requirements provided by the Agency?			
7. INSTRUCTORS – RECENT EXPERIENCE AND RECURRENT TRAINING					
No.	Description		Yes	No	Remarks
	1	Do the instructors meet, if applicable, the requirements on recent experience?			
	2	Do the instructors meet the requirements on recurrent training?			
8. RECORDS KEEPING SYSTEM					
No.	Description		Yes	No	Remarks
	1	Has the training organisation put in place a record keeping system that ensures the appropriate collection, storage, protection, confidentiality of data related to training materials developed, associated updates, examinations of the candidates, etc.?			
9. COMPLIANCE MONITORING SYSTEM					
No.	Description		Yes	No	Remarks
	1	Has the training organisation put in place a compliance monitoring system that ensures adequate control of the training development, preparation, delivery process and records keeping?			
10. TRAINING MATERIAL					





No.	Description	Yes	No	Remarks
1	Are the overview items covered during the theoretical training?			
2	Is the legal framework covered during the theoretical training?			
3	Is the ICAO framework covered during the theoretical training?			
4	Is the EU framework covered during the theoretical training?			
5	Are the technical aspects covered during the theoretical training?			
6	Is the 'Hands-on' training of the Ramp inspection tool covered during the theoretical training?			
7	Are all A inspection items covered during the theoretical training?			
8	Are all A inspection items covered during the practical training?			
9	Are all B inspection items covered during the theoretical training?			
10	Are all B inspection items covered during the practical training?			
11	Are all C inspection items covered during the theoretical training?			
12	Are all C inspection items covered during the practical training?			
13	Are all D and E inspection items covered during the theoretical training?			
14	Are all D and E inspection items covered during the practical training?			
15	Does the training organisation provide to all course participants a copy of the complete training course material and the relevant EU aviation legislation, as well as relevant examples of technical information?			
11. ADDITIONAL REMARKS				







9.1.2 Check-list for the evaluation of ramp inspection training instructors

1 Qualification Criteria				
No.	DESCRIPTION	YES	NO	REMARKS
1	Do the instructors possess knowledge of the EU Ramp Inspection Programme?			
2	Do the instructors have the knowledge on training methods and techniques?			
3	Do the instructors delivering training on inspection items/practical training meet the eligibility and inspection experience requirements?			
4	Do the other instructors meet the working experience criteria?			
2 Qualification records				
No.	DESCRIPTION	YES	NO	REMARKS
1	Has the training organisation created and maintained proper records on their instructors?			
3 Recent experience and recurrent training				
No.	DESCRIPTION	YES	NO	REMARKS
1	Do the instructors meet, if applicable, the requirements on recent experience?			
2	Do the instructors meet the requirements on recurrent training?			
ADDITIONAL REMARKS				





9.2 Dirty fingerprint checklist (optional)

The following procedure might be used on a voluntary basis.

This form is aiming at assisting inspectors not having the POI document (which is usually in hands of the operational inspector in the flight deck). This list may be very useful as a so-called dirty finger print checklist, which contains:

- Inspection items and their more in-depth sub items;
- some extra details and general information concerning most inspected elements;
- a chart where to put down notes and remarks as not to forget what was observed during the inspection.

Additionally, this document may be stored with a copy of the POI in the office for later questions from the inspected operator relating to the inspection performed on what was found.

Note: A PDF version in two different layouts (alphabetic item structure and inspection logic structure) of this form is available on the SINAPSE website <http://europa.eu/sinapse/directaccess/safa/> in the SAFA library of documents.





A/C Reg :	A. Flight Deck Inspection	B3-P1 / Rev.1 Page 14 / 2015.09.22
A81 Flight Deck General condition Stowage (Baggage, Equipment*) Compartment Door serviceability* Locking/ unlocking mechanism Door area monitoring Windows: -Cracks/ Delamination -Windshield Wipers Warning Panel Lights Equipment installation -System Design features -Emergency Landing provisions Cables/ Wires exposed	A08 Documentation (cont.) Certificate of Registration Accuracy of CoR Format & Content incl. EN Constr. No. A09 Noise Certificate Accuracy & Content incl. EN Restrictions of MTOM / MLM A10 ACC or equivalent Operator's Name: AOC No: Formal/ Accrual/ Content Expiration date/ Validity period Operations Specifications TCO (after 25.11.2016) A11 Radio Licence Presence & Accuracy Correct Name/ Call sign A12 Certificate of Airworthiness Accuracy of CoA Format & Content incl. Eng ARC (Airworthiness Review Cert.) - Validity A13 Flight Preparation Flight Data OPF availability: -Accuracy Signature -Performance calculation -Fuel calculation -Fuel monitoring -Filled in i.a.w. OM -Alternate aerodromes WX (METAR, TAF) * -Latest available -Above minima NOTAMS * ATC FP * NOTOC/ Signed LSA & PIC Div/ Anticlimb, if required A14 M & B Calculation Accuracy & Completion Signature of LSA Load distribution Sufficient Data (OM AFM) Restrictions (TOM/ LAM)	A19 Safety Equipment (cont.) Independent portable light Access & Readily available Condition & Serviceable A20 Flight Crew Crew Licence / Composition Crew Licence -Validity -Appropriate ratings -Form & Content (incl. Eng.) -Endorsement of ELP -Age requirements -Validation from SoR Medical Certificate -Validity -Privileges exercised -Spare spectacles Crew Composition Compliance with FDT rules Journey Log Book (JLB) A21 JLB / ATLB or Equivalent Availability & Content Property filled in A22 Maintenance Release Captain's acceptance Maintenance Release Defect notification and rectification (incl. ATLB) A23 Defect notification and rectification (incl. ATLB) Deferred Defects Reported & Assessed Compliance with MEL Maintenance actions - reported Time Limit & Rectification Interval Performed A24 Pre-flight Inspection Performed Certified E01 General Insurance Entry Permission Ramp Inspection Detailed Findings Date CAT Notes/Remarks
A02 Emergency Exit Serviceable Access restriction Ropes Secured & Attached	A15 Safety Equipment Hand Fire Extinguishers Secured at indicated location Easily accessible Pressure gauge Agent Release mechanism Operating instruction Expiration date, if available A16 Life jackets / flotation devices Access & Serviceable Number & Spare jackets Expiration date, if available A17 Harness (incl. shoulder straps) Availability for all FCM Automatic restraining device: -Restriction by seat cover A18 Oxygen equipment Access & Condition Quick donning type Functional check & Radio comm. Oxygen pressure Smoke goggles: -Compatibility Goggle / Mask	
A03 Equipment TAVS -Serviceable/ Test -Terrain DB (TDB) TCAS * -Serviceable/ Test -Version RVSM Equipment * -Applicable & Serviceable PBN Nav Equipment * -Applicable & Serviceable MNPS Equipment * -Applicable & Serviceable EFB * -Approved/ Back-up Channel Spacing 8.33 kHz FDR/ CVR -Serviceable/ Test	A04 Documentation Manuals (OM / AFM) Content (at least flight ops): -M & B calculation -List of Nav. equipment (PBN) -Performance calculations -Fuel Planning & In-flight proc. -FDT limitation -Refuelling with PAX on board -QCI Info i.a.w. Annex 18 Update Language (Understandable) Emergency Response Guide A05 Checklists (CL) Normal/ Non-Norm./ Emergency Easily accessible Identical for all FCM Compare content with OM QRH Easily accessible Identical for all FCM A06 Navigation / Instrument Charts Enroute & Instrument -Within Reach & Up-to-date -AWY Manuals (rev.) NAV Data Base -FMS / GPS A07 MEL Hard copy, EFB, Downlink Revision status Customisation Reflects actual equipment Procedures (M) / (C) available Not less restrictive than MMEL	

A. Flight Deck	Additional Information	B3-P1 / Rev.1 / 2015.09.22
A01 - Equipment, e.g. (1) PBE - CAT I/DE A.245(b) (2) Crash axe and crowbar - Aeroplanes MCTOW > than 5 700 kg or MOPSC > than 9 - at least 1 crash axe or crowbar located in flight crew compartment. CAT I/DE A.255 (g) -Reinforced cockpit door On passenger carrying aeroplanes with MTOW > 45.500 kg or MOPSC > than 60 max. A03 - Equipment From 1 January 2005, all turbine-engine aeroplanes of MCTOM>5,7t or MOPSC >19 Pax shall be equipped with an airborne collision avoidance system (ACAS II). TCAS v7.1 Part-AUR/ACAS establishes airspace requirements, applicable to all airspace users irrespective whether the aircraft is registered in an EASA state or not. - Before 01.12.2015 only aircraft with CoA first issued on or after 01.03.2012 are required to be equipped with TCAS version 7.1. RVSM Equipment Aircraft used for operations in RVSM airspace shall be equipped with: (a) 2 independent altitude measurement systems; (b) an altitude alerting system; (c) an automatic altitude control system; (d) a secondary surveillance radar (SSR) transponder with attitude reporting system to use for altitude control. PBN Equipment Doc 9992 / AN/494 - MANUAL ON THE USE OF PBN IN AIRSPACE DESIGN - RVSM specification. A navigation specification that does not include requirement for on-board performance monitoring and alerting, e.g. RNAV 5, RNAV 1, RNAV systems A nav. system which permits a/c operation on any desired flight path within coverage of station-referenced navigation aids or within limits of capability of self-contained aids, or combination of these. - RNP specification. A Nav. specification that includes requirement for on-board performance monitoring and alerting, e.g. RNP 4, RNP APCH. - RNP system. An area navigation system supports on-board performance monitoring and alerting. PBN specification Limitations, conditions PBN specification Limitations, conditions RNAV 1 / 2 DME/DME, DME/DME/IRU, GNS5 RNP 4 GNS5 RNAV 5 VOR/DME, DME/DME, GNS5 RNP APCH GNS5 RNAV 10 IRS, GNS5 RNP 10 IRS, GNS5 MNPS Equipment - 2 Independent LRNs (INS, IRS or GNS5, FMS with inputs from IRS, GLONASS?) EFB Back-up provision (hardcopies or alternative EFB). A non-exhaustive list of such functions includes: OM AFM & Checklists, Radio Nav. Charts & Electronic aeronautical charts: En-route & Instrument, Aircraft performance calculation applications to provide: (a) take-off, en route, approach and landing, missed approach, etc. calculations providing masses, distance, times and/or speed limitations, (b) power settings, and (c) mass and balance calculation. A13 - Flight Preparation DOCs: Meteorological Information (WX): - METAR (Meteorological Aerodrome Report) - Issued at 00/20 and 30/50 of each hour. - TAF (Terminal Aerodrome Forecast): - FC - short time forecast, issued every 3 Hours, valid for 9 Hours - FT - long-time forecast, issued every 6 Hours, valid for 24 Hours. - Wind Charts - issued at 00:00, 06:00, 12:00 and 18:00. - Significant Weather Charts - issued at 00:00, 06:00, 12:00, 18:00. SACA Inspection Appropriate WX information and applicable NOTAMS and/or Pre-Flight information bulletins are carried on board.	A13 - ATC Flight Plan Item 8 - Flight rules and type of flight T - Instrument flight rules (IFR) S - Scheduled air transport V - Visual flight rules (VFR) N - Non-scheduled Y - Change of FR, if FR is first G - General aviation Z - Change of FR, if FR is first M - Military X - Other flights, details in Item 18, preceded by "RMK". Item 10 Equipment and capabilities L - LORAN C G - GNS5 S - SSR Mode-S D - DME I - Inertial navigation Transponder F - FPL L - L.S. W - RVSM approved R - RDP Q - VOR X - MNPS approved T - T. Y - VHF with 8.33 kHz - Standard equipment is considered to be VOR, FPL, EFB and L.S. - Types of external GNS5 augmentation, if any, shall be specified in Item 18: "NAV". - RVSM levels shall be specified in Item 18: "PBN". SSR Modes A and C transponders A - Mode A (4 digits - 4096 codes) C - Mode A and Mode C SSR Mode S transponders E - Mode S, incl. aircraft ID and pressure altitude and extended squitter (ADS-B) capability H - Mode S, incl. aircraft ID, pressure altitude and enhanced surveillance capability - Mode S, incl. aircraft ID, but no pressure altitude capability L - Mode S, incl. aircraft ID, pressure altitude, extended squitter (ADS-B) and enhanced surveillance capability P - Mode S, incl. pressure altitude but no aircraft ID capability S - Mode S, incl. both pressure altitude and aircraft ID capability X - Mode S, with neither aircraft ID nor pressure altitude capability Item 18 Other information RNAV specifications RNP specifications A1 - RNAV 10 (RNP 10) L1 - RNP 4 B1 - RNAV 5 all perm. sensors O1 - Basic RNP 1 all perm. sensors B2 - RNAV 5 GNS5 O2 - Basic RNP 1 GNS5 B3 - RNAV 5 DME/DME O3 - Basic RNP 1 DME/DME B4 - RNAV 5 VOR/DME O4 - Basic RNP 1 DME/DME/IRU B5 - RNAV 5 INS odoror IRS S1 - RNP APCH B6 - RNAV 5 LORAN C S2 - RNP APCH with BARO-VNAV C1 - RNAV 2 all perm. sensors T1 - RNP AR APCH with RE (special authorisation required) C2 - RNAV 2 GNS5 T2 - RNP AR APCH without RE (special authorisation required) C3 - RNAV 2 DME/DME C4 - RNAV 2 DME/DME/IRU D1 - RNAV 1 all perm. sensors D2 - RNAV 1 GNS5 D3 - RNAV 1 DME/DME D4 - RNAV 1 DME/DME/IRU Item 19 Supplementary information ET Fuel endurance: hours / min. S Type of survival equipment shall be crossed out, if: P / Total number of persons on board or TBN, if total number is not known at time of filing fl. plan - P polar survival equip. NA - D desert survival equip. NA - M maritime survival equip. NA - J jungle survival equip. NA R / Emergency and survival equipment shall be crossed out, if: - U - 243,000 MHz NA - V - 121,500 MHz NA - E - ELT NA Abbreviations: DOM / DOI Dry Operating Mass / Index FCM Flight Crew Member FDT Flight and Duty Time LSA Loading Supervisor Agent MOPSC Max Operating Passenger/ Seat Configuration MTOW Max Take-Off Weight / Mass SoR State of Registration Note: Text in <i>italic letters</i> is applied only to SACA inspections!	





9.3 Attachment RAMP (AMC/GM to PART.ARO.RAMP)

AMC/GM to PART.ARO.RAMP issue 3 Amendment 9

GM1 ARO.RAMP.005 Scope

RAMP INSPECTION MANUAL

The following information may be found in the ramp inspection manual established by the Agency:

- (a) Additional guidance and best practices, in the manual and its attachments;
- (b) Additional provisions which are referenced in AMCs to this subpart, in its appendices.

AMC1 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 a Member State;
- (c) a previous ramp inspection that has revealed deficiencies indicating that the aircraft does not comply with the applicable requirements and where the competent authority suspects that these deficiencies have not been corrected;
- (d) lists, referred to in ARO.RAMP.105, 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;
- (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 stemming from EASA Third-Country Operator (TCO) monitoring activities; or
- (h) any relevant information collected pursuant to ARO.RAMP.110.

AMC1 ARO.RAMP.100(c) General

ANNUAL RAMP INSPECTION PROGRAMME

- (a) The competent authority should establish an annual ramp inspection programme and determine the number of inspections for the upcoming calendar year.





- (b) To establish the annual ramp inspection programme, the competent authority should consider layer 1 and layer 2 operators as defined in AMC1 ARO.RAMP.150(b)(4)(iii).
- (c) For layer 1 operators, the annual ramp inspection programme should meet the target numbers of inspections as assigned by the Agency for the Member State territories in ICAO EUR region.

The assigned targets for layer 1 operators may be exceeded in the following cases:

- (1) operators recently considered in the lists provided by the Agency as per ARO.RAMP.105(a); or
- (2) safety reasons that were not identified in the annual programme.

The competent authority should keep records of the reasons leading to such over-inspections on layer 1 operators.

- (d) For layer 2 operators, the total planned number of inspections as defined in the annual ramp inspection programme should not be less than the layer 2 operators target assigned by the Agency for the Member State territories in ICAO EUR region.
- (e) The annual ramp inspection programme should take seasonal traffic patterns into account and, as far as possible, evenly distribute the inspections over the year.
- (f) The competent authority should ensure that the annual ramp inspection programme leaves appropriate time and resources to enable the inspections of aircraft operated by layer 2 operators suspected of not being compliant with the applicable requirements.
- (g) The competent authority should ensure that layer 2 operators, including unforeseen ones which cannot be a part of the established annual programme, receive inspections proportionate to the traffic pattern in the State. The following priority criteria should be considered before deciding to inspect the aircraft:
 - (1) prioritised ramp inspections as per ARO.RAMP.105(a);
 - (2) aircraft suspected of not being compliant with the applicable requirements; and
 - (3) inspection of an operator which was not inspected in accordance with ARO.RAMP in any State in the previous 12 months;
- (h) The competent authority should amend the annual ramp inspection programme as necessary to the extent possible:
 - (1) when new targets are assigned by the Agency;
 - (2) when new layer 2 operators start operations; or
 - (3) following the identification of a significant increase of the safety risks level as per ARO.RAMP.100(c)(1).





AMC1 ARO.RAMP.106 Alcohol testing

GENERAL – ALCOHOL TESTING METHODOLOGY

- (a) If alcohol testing is carried out by RAMP inspectors under the RAMP inspection programme, the following alcohol testing methodology should be used to ensure accurate testing results.
 - (1) The alcohol test should be carried out with an appropriate and approved testing device in accordance with national requirements on alcohol testing of individuals.
 - (2) The ramp inspector that carries out the alcohol test should be adequately trained and qualified.
 - (3) After an initial positive alcohol test, a further confirmation test should be carried out in accordance with national requirements on alcohol testing of individuals.
 - (4) Testing procedures should specify the following:
 - (1) Handling of test results, in order to determine a true positive test
 - (2) The process to be followed in case of a confirmed positive test result, including how to inform the crew member concerned about the actual testing result
- (b) Initial alcohol test
 - (1) The initial alcohol test should be carried out using a breath alcohol analyser to ensure that initial alcohol testing is non-invasive.
 - (2) The breath alcohol concentration (BrAC), measured by a breath alcohol analyser during the initial alcohol test, should not exceed a level equivalent to 0.2 grams of blood alcohol concentration (BAC) per litre of blood or the lower of the national statutory limits, whichever is the lower.
- (c) During a confirmation alcohol test, the BAC should not exceed a level equivalent to 0.2 grams per litre of blood or the lower of the national statutory limits, whichever is the lower.
- (d) In case of a positive alcohol test following a confirmation alcohol test or in case of a refusal by the crew member to cooperate during an alcohol test, the competent authority should inform the crew member concerned, as well as the competent authority and the authority responsible for the crew concerned.
- (e) A refusal by a crew member to cooperate during an alcohol test should be regarded in the same way as a positive test and as such should be regarded as a refusal to grant access in accordance with ORO.GEN.140 in the case of an EU operator or in accordance with TCO.115 of Commission Regulation (EU) No 452/2014 in the case of a third-country operator.
- (f) The competent authority should provide information on its alcohol testing procedures in an easily accessible format.





GM1 ARO.RAMP.106 Alcohol testing

CONDUCT OF THE ALCOHOL TEST

- (a) An alcohol test may be carried out at any time during a ramp inspection.
- (b) In order to ensure sufficient time in case of a confirmation test, following an initial test, the alcohol test should, where possible, be carried out at the start of the inspection.
- (c) At all times when carrying out an alcohol test, the inspector should ensure a testing environment as discreet as possible.

GM2 ARO.RAMP.106 Alcohol testing

GUIDANCE ON CARRYING OUT A CONFIRMATION ALCOHOL TEST

- (a) The written information after a positive confirmation test provided to the crew member concerned contains information on the time and date of the alcohol test, the equipment used, as well as the actual result of the alcohol test.
- (b) A further confirmation test may be carried out at least 15 minutes, but not more than 30 minutes, after the completion of the initial test. During this time, the inspector should observe that the flight and cabin crew member does not eat or drink or ingest something into their mouth, in order to prevent any accumulation of alcohol in the mouth from leading to an artificially high reading.

GM3 ARO.RAMP.106 Alcohol testing

INFORMATION ON ALCOHOL TESTING

The information by the competent authority on its alcohol testing procedures should include information on the applicable national statutory limit.

AMC1 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 whistleblowers (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) aircraft or operator banned from the Member State pursuant to Article 6 of Regulation (EC) No 2111/2005 of the European Parliament and of the Council¹⁰;
 - (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.

AMC1 ARO.RAMP.115(a)(b) 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 certificate, unless English was used as a medium of instruction during secondary or higher education; and
 - (2) relevant education or training and appropriate recent work experience (over the previous 5 years) in accordance with one of the following items:
 - (i) has successfully completed 3 years of post-secondary education followed by 2 years aeronautical experience in the field of aircraft operations and/or maintenance, and/or personnel licensing;
 - (ii) has or has had a commercial/airline transport pilot licence and carried out such duties;
 - (iii) has or has had a flight engineer licence and carried out such duties;
 - (iv) has been a cabin crew member and carried out such duties in commercial air transport;
 - (v) has been licensed as maintenance personnel and exercised the privileges of such a licence;
 - (vi) has successfully completed professional training in the field of air transport of dangerous goods, followed by experience in this field; or
 - (vii) has successfully completed post-secondary aeronautical education with a duration of at least 3 years, followed by aeronautical experience.





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

QUALIFICATION PROCESS

- (a) The competent authority should ensure that its inspectors meet, at all times, the qualification criteria with regard to training and recent experience.
- (b) Any competent authority or ramp inspection training organisation (RITO) approved in accordance with ARO.RAMP.120(a) may provide the initial theoretical and practical training.
- (c) The senior ramp inspectors delivering the on-the-job training may be appointed by any competent authority.
- (d) The initial theoretical and practical training, as well as the on-the-job training as per ARO.RAMP.115(b)(2), should be completed within 12 months. If the qualification of the candidate is not completed within 12 months, the entire process should be re-initiated.
- (e) The competent authority should issue a formal qualification statement, including the inspection privileges, for each candidate who has successfully completed the initial theoretical, practical, and on-the-job-training, as demonstrated by:
 - (1) for theoretical and practical trainings, a satisfactory evaluation by the competent authority or by the RITO which has delivered the training;
 - (2) for on-the-job training, the positive assessment, made by the senior ramp inspectors who have provided the training, of the candidate's ability to effectively perform ramp inspections in an operational environment;
 - (3) a final assessment of the inspector's competency performed at the end of the initial training process by the competent authority.

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

INITIAL THEORETICAL AND PRACTICAL TRAINING

- (a) The initial theoretical and practical training for ramp inspectors should be developed on the basis of the syllabi that are established by the Agency and which are included as appendixes of the ramp inspection manual.
- (b) The duration of the initial theoretical training should be no less than 3 training days, except for cases when previous training can be credited to the candidate, following an assessment made by the competent authority.

In case of an integrated training course, intended to transfer both technical and specific ramp inspection knowledge, the duration of the course should be extended accordingly.
- (c) The duration of the initial practical training should be not less than 1 day. The competent authority of the candidate may decide to lengthen or shorten the training taking into account the level of expertise of the candidate.





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

ON-THE-JOB TRAINING

- (a) The on-the-job training (OJT) should be conducted within the scope defined by ARO.RAMP.005.
- (b) The content of the OJT should be established on the basis of the list of elements to be covered, which is included in appendixes of the ramp inspection manual.
- (c) The competent authority should ensure that only the candidates that have successfully completed the initial theoretical and practical trainings are undertaking the OJT.
- (d) The OJT should comprise 2 phases:
 - (1) Observation:

During this phase, the candidate should accompany and observe a senior ramp inspector performing a series of ramp inspections (including the preparation of the inspection and post-inspection activities such as reporting).

The senior inspector should also provide details on applicable follow-up activities.
 - (2) Under supervision:

During this phase, the candidate should perform ramp inspections under the supervision and guidance of a senior ramp inspector.
- (e) The duration of the OJT should be customised to the individual training needs of each candidate. As a minimum, the OJT should include at least 6 observed ramp inspections and 6 ramp inspections performed under the supervision of a senior ramp inspector, over a period of maximum of 6 months. Notwithstanding (a), up to 3 of these observed ramp inspections and 3 of these inspections under supervision may be performed on national operators, as long as they are performed in accordance with ARO.RAMP.
- (f) The OJT should cover in each phase all inspection items that the inspector will be privileged with, and it should be delivered by senior ramp inspectors who are privileged with the same items.
- (g) The OJT should be documented by the senior ramp inspectors who have provided the training, using OJT forms detailing the training content.
- (h) Certain OJT items may be replaced by alternative training using representative examples when no operational environment is required (e.g. documents, dangerous goods).

AMC5 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

EXTENSION OF THE RAMP INSPECTOR PRIVILEGES

- (a) The competent authority may extend the privileges of a ramp inspector provided that the following conditions are met:





- (1) the relevant knowledge of the ramp inspector has been satisfactorily complemented by additional theoretical and/or practical training relevant to the scope of the extension; and
 - (2) the ramp inspector has received OJT on the new inspection items that will be added to his/her privileges.
- (b) The competent authority should determine the necessary number of ramp inspections of the OJT on a case-by-case basis, taking into account both the complexity and the criticality of the new items to be covered during this training, as well as the inspector's aeronautical education and practical knowledge.
- (c) Certain OJT items may be replaced by alternative training using representative examples when no operational environment is required (e.g. document inspections, dangerous goods).

AMC6 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

RECENT EXPERIENCE AND REQUALIFICATION

- (a) The minimum number of inspections to be performed by a ramp inspector to meet the recent experience requirement should be 12 per calendar year.
- (b) Up to half of these ramp inspections may be performed on national operators, as long as they are performed in accordance with ARO.RAMP.
- (c) In the calendar year during which the ramp inspector is qualified, the minimum number of inspections to meet the recent experience requirement should be determined on a pro rata basis.
- (d) When qualification is lost as a result of failure to perform the minimum number of inspections, the ramp inspector may be requalified by the competent authority after having performed at least half of the missing inspections under supervision of a senior inspector within the following calendar year. These inspections under supervision should not be counted for the recent experience requirements for that calendar year. Up to half of these inspections may be performed on national operators, as long as they are performed in accordance with ARO.RAMP.
- (e) If the ramp inspector cannot regain the qualification following the process described in (d), he/she should perform a complete OJT during the calendar year that follows.
- (f) If the ramp inspector fails to regain the qualification following the process described in (e), the conditions for initial qualification should apply.

AMC7 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

RECURRENT TRAINING

- (a) The competent authority should ensure that all ramp inspectors undergo recurrent training at least once every 3 calendar years.





- (b) In addition, the competent authority should ensure that additional training is provided to all ramp inspectors when information is received from the Agency about the necessity for ad hoc training. In developing such training, the competent authority should take into account any Agency instructions related to the training content and the associated timeframe for implementation. This ad-hoc training may be considered as recurrent training.
- (c) Recurrent training should be delivered by a competent authority, by ramp inspection training organisation approved in accordance with ARO.RAMP.120(a) or by the Agency.
- (d) The recurrent training should cover at least the following elements:
 - (1) regulatory and procedural developments;
 - (2) operational practices;
 - (3) articulation with other European processes and regulations; and
 - (4) standardisation and harmonisation issues including those communicated by the Agency.

AMC8 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

SENIOR RAMP INSPECTORS

- (a) The competent authority may appoint senior ramp inspectors provided that the appointees meet the following criteria:
 - (1) the appointees have been a qualified ramp inspector for the 36 months preceding his/her appointment; and
 - (2) during the period under (1), the appointees have performed a minimum of 72 ramp inspections, with no less than 24 ramp inspections during the last 12 months.
- (b) Senior ramp inspectors should maintain their seniority only if performing at least 24 ramp inspections during each calendar year. Up to 6 of these ramp inspections may be performed on national operators, as long as they are performed in accordance with ARO.RAMP.
- (c) For the calendar year during which the senior inspector was appointed, the recent experience requirements should be applied on a pro rata basis.
- (d) When seniority is lost, but not the ramp inspector qualification, as a result of failure to perform the minimum number of ramp inspections, it can be regained if:
 - (1) the inspector performs 2 ramp inspections under the supervision of a senior ramp inspector; or
 - (2) the inspector performs the missing number of ramp inspections.





These inspections should be performed within the following year, and should not be counted for the recent experience requirements for that year.

The above provision should not be used for two consecutive years.

- (e) If the senior ramp inspector cannot regain his/her seniority following the provisions under (d), the conditions under (a)(2) apply.
- (f) For each appointed senior ramp inspector, the competent authority should establish, based on his/her experience, the privileges for which he/she may deliver OJT.

AMC1 ARO.RAMP.120(a) Approval of training organisations

APPROVAL OF A RAMP INSPECTION TRAINING ORGANISATION BY THE COMPETENT AUTHORITY

- (a) When evaluating the ramp inspection training organisation's capability to deliver training, the competent authority should verify that the training organisation:
 - (1) Has established a detailed description of:
 - (i) the organisational structure;
 - (ii) the facilities and office accommodation;
 - (iii) the instructional equipment;
 - (iv) the instructor recruitment criteria and their continuous competence;
 - (v) the record keeping system;
 - (vi) the process for the development of the training course material and its continuous update; and
 - (vii) additional means and methods used to fulfil its tasks,

The documents and information specified above may be included into an organisation manual.
 - (2) Has developed the training course materials adequate for all types of training to be delivered;
 - (3) Ensures compliance with its own procedures on adequate control of the training development, preparation, delivery process and records keeping, as well as compliance with the legal requirements. The training organisation should evaluate the effectiveness of the training provided, based upon written feedbacks collected from course participants after each training delivery;
 - (4) Conducts the training in English with the aim to train trainees in the jargon used during ramp inspections.
- (b) The competent authority should issue the approval for an unlimited duration.





AMC2 ARO.RAMP.120(a) Approval of training organisations

OVERSIGHT OF APPROVED RAMP INSPECTION TRAINING ORGANISATION

- (a) The oversight programme of ramp inspection training organisations should be developed taking into account the scope of the approval, the size of the organisation, and the results of past certification and/or oversight activities.
- (b) An oversight cycle not exceeding 24 months should be applied. The oversight planning cycle may be extended to a maximum of 48 months if the competent authority has established that, during the previous 24 months;
 - (1) all corrective actions have been implemented within the time period accepted or extended by the competent authority; and
 - (2) no level 1 findings as described in ARO.GEN.350 have been issued.

AMC1 ARO.RAMP.120(a)(4) Approval of training organisations

TRAINING INSTRUCTORS

- (a) The competent authority should verify that:
 - (1) the training organisation has a sufficient number of instructors with at least adequate:
 - (i) aviation knowledge and experience;
 - (ii) knowledge of the EU ramp inspection programme;
 - (iii) knowledge of training delivery techniques; and
 - (iv) English language communication skills.
- (b) Instructors delivering training on inspection items and/or delivering practical training should:
 - (1) have been a qualified ramp inspector for 36 months before being nominated as instructors and have performed a minimum of 72 ramp inspections during this period;
 - (2) have conducted at least 24 inspections as qualified ramp inspectors in the calendar year prior to the year in which the training is delivered; and
 - (3) deliver training only on those inspection items which they are entitled to inspect;
- (c) Notwithstanding (a), for the delivery of the theoretical and practical training on Dangerous Goods, the competent authority may accept instructors who are certified in accordance with the Technical Instructions for the latest effective edition of the Safe Transport of Dangerous Goods by Air (ICAO Doc 9284-AN/905), provided that they possess adequate English language communication skills.





AMC1 ARO.RAMP.125 Conduct of ramp inspections & ARO.RAMP.130 Categorisation of findings

INSPECTION INSTRUCTIONS ON THE CATEGORISATION OF FINDINGS

Inspectors should follow the inspection instructions as defined in the ramp inspection manual on the categorisation of findings established by the Agency for inspections performed on aircraft used by third country operators (SAFA) and on aircraft used by operators under the regulatory oversight of another Member State (SACA).

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

GENERAL

- (a) The competent authority should put in place appropriate procedures to allow the inspecting team unrestricted access to the aircraft to be inspected. In this respect, ramp inspectors should possess adequate credentials.
- (b) The inspection should start as soon as possible and 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 of them, 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.
- (c) During the inspection, ramp inspectors should verify the rectification of previously identified non-compliances. Whenever the time available does not permit a full inspection, the items affected by such non-compliances should be prioritised over other items.
- (d) Ramp inspectors should not open any hatches, doors or panels, which are not intended to be operated by passengers during normal operations, 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).
- (e) During an inspection prior to departure, the competent authority should inform the operator of any potential non-compliance with manufacturer's standards after the crew has confirmed that the pre-flight inspection has been performed.
- (f) The items to be inspected should be selected from the Proof of Inspection (POI).
- (g) Items which have been inspected, as well as any possible findings and observations, should be recorded on the POI and in the ramp inspection tool.

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

PROOF OF 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, using the Proof of Inspection (POI) form provided as an appendix to the ramp inspection manual,





regardless of whether or not findings have been identified. When completing the 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. A refusal to sign by the recipient should be recorded in the document.
- (b) POIs may be completed electronically, including the required signatures, and may be printed on site or delivered electronically (e.g. by e-mail).

AMC1 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 ARO.RAMP.135(b).
- (b) When communicating findings to the operator, the inspecting authority should:
 - (1) use the ramp inspection tool as the primary communication channel with the operator and limit communication via other channels;
 - (2) request evidence of corrective actions taken, or alternatively the submission of a corrective action plan followed by evidence that planned corrective actions have been taken;
 - (3) inform the operator's competent authority and the operator no later than 15 calendar days after the inclusion of the report in the ramp inspection tool in order to permit appropriate action to be taken, as well as to confirm to the operator the findings raised;
 - (4) upload in the ramp inspection tool information on 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;
 - (5) give the operator a period of 30 calendar days to reply. If the operator does not react to the initial communication within this period, a second request should be sent, including a period of another 30 calendar days to reply, 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 inspecting authority 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 Regulation (EC) No 2111/2005.





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

CLASSES OF ACTIONS FOR CATEGORY 3 FINDINGS

- (a) Whenever restrictions on the aircraft flight operation (Class 3a action) have been imposed, the competent authority should conduct appropriate verification of adherence to such restrictions.
- (b) Whenever the operator is required to take corrective actions before departure (Class 3b action), inspectors should verify that the operator has taken such actions. Depending on the circumstances, this verification may take place after the departure.
- (c) Whenever a category 3 finding is raised, the aircraft should be grounded only (Class 3c action) 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 (in case of an EU operator) or contrary to Regulation (EU) 452/2014 (in case of a third country operator). The inspecting authority should then ensure that the aircraft will not depart as long as the reasons for the grounding remain. Any records of communication undertaken pursuant to ARO.RAMP.140(b), as well as other evidences, should be collected and kept as evidential material.
- (d) If inspectors have imposed any restrictions and/or corrective actions, these should be mentioned in the ramp inspection report.

AMC1 ARO.RAMP.145 Safety reports

IMPORTANT SAFETY INFORMATION

- (a) When the competent authority receives safety-related information that could be of interest to the entire RAMP community, it should create a 'safety report' and insert it into the ramp inspection tool pursuant to ARO.RAMP.110.
- (b) Safety-related information should be verified by the reporting authority, as far as possible, before insertion in the ramp inspection tool.
- (c) If available, any relevant information contained in documents and pictures should be attached to the 'safety report'.

AMC1 ARO.RAMP.150(b)(4)(iii) Agency coordination tasks

SYSTEM-WIDE COORDINATION OF RAMP INSPECTIONS

In order to ensure a coordinated approach in establishing a risk-based number of ramp inspections for operators, the Agency should establish annual targets. When doing so, the following should be taken into account:

- (a) Such targets should only be established for operators flying to Member States' territories located in the ICAO EUR region¹;

¹ As defined in ICAO Doc 7030: Regional Supplementary procedures





- (b) The targets for the upcoming year should be distributed to the Member States at the latest by 1 December and updated at least once during the upcoming year; and
- (c) The targets should be established per Member State for two layers of operators as follows:
 - (1) a target number of inspections for each operator for which the average number of commercial flights for the previous 12 months in each Member State is beyond a threshold defined by the Agency, based on an assessment of the safety risks and the number of flights ('layer 1');
 - (2) an overall target number of inspections for those operators not covered by (1) ('layer 2').

