***European Aviation Safety Agency***

# Acceptable Means of Compliance (AMC)
# and Guidance Material (GM)
# to
# Part-ARA

Initial issue
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**TABLE OF CONTENTS**

# AMC and GM to Annex VI AUTHORITY REQUIREMENTS FOR AIRCREW

# (PART-ARA)

## SUBPART GEN – GENERAL REQUIREMENTS

## SECTION I - GENERAL

### GM1 ARA.GEN.105 Definitions

The following provides a list of acronyms used throughout this Annex:

| | |
|---|---|
| (A) | aeroplane |
| (H) | helicopter |
| A/C | aircraft |
| ACAS | airborne collision avoidance system |
| AeMC | aero-medical centre |
| ALARP | as low as reasonably practicable |
| AMC | Acceptable Means of Compliance |
| AME | aero-medical examiner |
| APU | auxiliary power unit |
| ARA | authority requirements for aircrew |
| ATO | approved training organisation |
| ATPL | airline transport pilot licence |
| BITD | basic instrument training device |
| bpm | beats per minute |
| CAT | category |
| CC | cabin crew |
| cm | centimetres |
| CPL | commercial pilot licence |
| CS | Certification Specification |
| CS-FSTD(A) | Certification Specifications for aeroplane flight simulation training devices |
| CS-FSTD(H) | Certification Specifications for helicopter flight simulation training devices |
| dB | decibel |
| DH | decision height |
| DPATO | defined point after take-off |
| DPBL | decision point before landing |
| EC | European Community |
| ECG | electrocardiogram |
| ENT | ear, nose and throat |
| EOG | electro-oculography |

| | |
|---|---|
| ETOPS | extended range operations with twin-engined aeroplanes |
| FANS | future air navigation system |
| FD | flight director |
| $FEV_1$ | forced expiratory volume in 1 second |
| FFS | full flight simulator |
| FMECA | failure mode, effects and criticality analysis |
| FMGC | flight management and guidance computer |
| FMS | flight management system |
| FNPT | flight navigation and procedures trainer |
| FSTD | flight simulation training device |
| FTD | flight training device |
| FTE | full time equivalent |
| ft | feet |
| FVC | forced vital capacity |
| GM | Guidance Material |
| GPS | global positioning system |
| HF | human factors |
| Hg | mercury |
| HUD/HUGS | head-up display / head-up guidance system |
| Hz | Herz |
| IATA | International Air Transport Association |
| ICAO | International Civil Aviation Organisation |
| IGE | in ground effect |
| ILS | instrument landing system |
| IOS | instructor operating station |
| IR | Implementing Rule |
| IR | instrument rating |
| kg | kilogram |
| LDP | landing decision point |
| LVTO | low visibility take-off |
| m | metre |
| mm | millimetre |
| OGE | out of ground effect |
| ORA | organisation requirements for aircrew |
| ORO | organisation requirements for air operations |
| OSD | operational suitability data |
| QTG | qualification test guide |
| POM | proof of match |
| ROD | rate of descent |
| RVR | runway visual range |

TDP take-off decision point

VDR validation data roadmap

### AMC1 ARA.GEN.120(d)(3) Means of compliance

GENERAL

The information to be provided to other Member States following approval of an alternative means of compliance should contain a reference to the Acceptable Means of Compliance (AMC) to which such means of compliance provides an alternative, as well as a reference to the corresponding Implementing Rule, indicating as applicable the subparagraph(s) covered by the alternative means of compliance.

### GM1 ARA.GEN.120 Means of compliance

GENERAL

Alternative means of compliance used by a competent authority or by organisations under its oversight may be used by other competent authorities or organisations only if processed again in accordance with ARA.GEN.120 (d) and (e).

## SECTION II - MANAGEMENT

### AMC1 ARA.GEN.200(a) Management system

GENERAL

(a) All of the following should be considered when deciding upon the required organisational structure:

  (1) the number of certificates, attestations, authorisations and approvals to be issued;

  (2) the number of certified persons and organisations exercising an activity within that Member State, including persons or organisations certified by other competent authorities;

  (3) the possible use of qualified entities and of resources of other competent authorities to fulfil the continuing oversight obligations;

  (4) the level of civil aviation activity in terms of:

    (i) number and complexity of aircraft operated;

    (ii) size and complexity of the Member State's aviation industry;

  (5) the potential growth of activities in the field of civil aviation.

(b) The set-up of the organisational structure should ensure that the various tasks and obligations of the competent authority do not rely solely on individuals. A continuous and undisturbed fulfilment of these tasks and obligations of the competent authority should also be guaranteed in case of illness, accident or leave of individual employees.

### GM1 ARA.GEN.200(a) Management system

GENERAL

(a) The competent authority designated by each Member State should be organised in such a way that:

(1) there is specific and effective management authority in the conduct of all relevant activities;

(2) the functions and processes described in the applicable requirements of Regulation (EC) No 216/2008[1] and its Implementing Rules and AMCs, Certification Specifications (CSs) and Guidance Material (GM) may be properly implemented;

(3) the competent authority's organisation and operating procedures for the implementation of the applicable requirements of Regulation (EC) No 216/2008 and its Implementing Rules are properly documented and applied;

(4) all competent authority personnel involved in the related activities are provided with training where necessary;

(5) specific and effective provision is made for the communication and interface as necessary with the Agency and the competent authorities of other Member States; and

(6) all functions related to implementing the applicable requirements are adequately described.

(b) A general policy in respect of activities related to the applicable requirements of Regulation (EC) No 216/2008 and its Implementing Rules should be developed, promoted and implemented by the manager at the highest appropriate level; for example the manager at the top of the functional area of the competent authority that is responsible for such activities.

(c) Appropriate steps should be taken to ensure that the policy is known and understood by all personnel involved, and all necessary steps should be taken to implement and maintain the policy.

(d) The general policy, whilst also satisfying additional national regulatory responsibilities, should in particular take into account:

(1) the provisions of Regulation (EC) No 216/2008;

(2) the provisions of the applicable Implementing Rules and their AMCs, CSs and GM;

(3) the needs of industry; and

(4) the needs of the Agency and of the competent authority.

(e) The policy should define specific objectives for key elements of the organisation and processes for implementing related activities, including the corresponding control procedures and the measurement of the achieved standard.

**AMC1 ARA.GEN.200(a)(1) Management system**

DOCUMENTED POLICIES AND PROCEDURES

(a) The various elements of the organisation involved with the activities related to Regulation (EC) No 216/2008 and its Implementing Rules should be documented in order to establish a reference source for the establishment and maintenance of this organisation.

(b) The documented procedures should be established in a way that facilitates their use. They should be clearly identified, kept up-to-date and made readily available to all personnel involved in the related activities.

(c) The documented procedures should cover, as a minimum, all of the following aspects:

(1) policy and objectives;

(2) organisational structure;

(3) responsibilities and associated authority;

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[1] Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC. *OJ L* 79, 19.3.2008, p. 1.

(4) procedures and processes;

(5) internal and external interfaces;

(6) internal control procedures;

(7) training of personnel;

(8) cross-references to associated documents;

(9) assistance from other competent authorities or the Agency (where required).

(d) It is likely that the information is held in more than one document or series of documents, and suitable cross-referencing should be provided. For example, organisational structure and job descriptions are not usually in the same documentation as the detailed working procedures. In such cases it is recommended that the documented procedures include an index of cross-references to all such other related information, and the related documentation should be readily available when required.

**AMC1 ARA.GEN.200(a)(2) Management system**

QUALIFICATION AND TRAINING - GENERAL

(a) The competent authority should ensure appropriate and adequate training of its personnel to meet the standard that is considered necessary to perform the work. To ensure personnel remain qualified, arrangements should be made for initial and recurrent training as required.

(b) The basic capability of the competent authority's personnel is a matter of recruitment and normal management functions in selection of personnel for particular duties. Moreover, the competent authority should provide training in the basic skills as required for those duties. However, to avoid differences in understanding and interpretation, all personnel should be provided with further training specifically related to Regulation (EC) No 216/2008, its Implementing Rules and related AMCs, CSs and GM, as well as related to the assessment of alternative means of compliance.

(c) The competent authority may provide training through its own training organisation with qualified trainers or through another qualified training source.

(d) When training is not provided through an internal training organisation, adequately experienced and qualified persons may act as trainers, provided their training skills have been assessed. If required, an individual training plan should be established covering specific training skills. Records should be kept of such training and of the assessment, as appropriate.

**AMC2 ARA.GEN.200(a)(2) Management system**

QUALIFICATION AND TRAINING - INSPECTORS

(a) Initial training programme:

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

(1) aviation legislation organisation and structure;

(2) the Chicago Convention, relevant ICAO annexes and documents;

(3) the applicable requirements and procedures;

(4) management systems, including auditing, risk assessment and reporting techniques;

(5) human factors principles;

(6) rights and obligations of inspecting personnel of the competent authority;

(7) 'on-the-job' training;

(8) suitable technical training appropriate to the role and tasks of the inspector, in particular for those areas requiring approvals.

(b) Recurrent training programme:

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

**GM1 ARA.GEN.200(a)(2) Management system**

SUFFICIENT PERSONNEL

(a) This GM on the determination of the required personnel is limited to the performance of certification and oversight tasks, excluding personnel required to perform tasks subject to any national regulatory requirements.

(b) The elements to be considered when determining required personnel and planning their availability may be divided into quantitative and qualitative elements:

(1) Quantitative elements:

(i) the estimated number of initial certificates to be issued;

(ii) the number of organisations certified by the competent authority;

(iii) the number of persons to whom the competent authority has issued a licence, certificate, rating, authorisation or attestation;

(iv) the estimated number of persons and organisations exercising their activity within the territory of the Member State and established or residing in another Member State.

(2) Qualitative elements:

(i) the size, nature and complexity of activities of certified organisations and FSTD qualification certificate holders (cf. AMC1 ORA.GEN.200(b)), taking into account:

(A) privileges of the organisation;

(B) type of approval, scope of approval, multiple certification;

(C) possible certification to industry standards;

(D) types of aircraft / flight simulation training devices (FSTDs) operated;

(E) number of personnel; and

(F) organisational structure, existence of subsidiaries;

(ii) the safety priorities identified;

(iii) the results of past oversight activities, including audits, inspections and reviews, in terms of risks and regulatory compliance, taking into account:

(A) number and level of findings;

(B) timeframe for implementation of corrective actions; and

(C) maturity of management systems implemented by organisations and their ability to effectively manage safety risks, taking into account also information provided by other competent authorities related to activities in the territory of the Member States concerned; and

(iv) the size and complexity of the Member State’s aviation industry and the potential growth of activities in the field of civil aviation, which may be an indication of the number of new applications and changes to existing certificates to be expected.

(c) Based on existing data from previous oversight planning cycles and taking into account the situation within the Member State's aviation industry, the competent authority may estimate:

(1) the standard working time required for processing applications for new certificates (for persons, organisations and FSTD qualification);

(2) the number of new certificates to be issued for each planning period; and

(3) the number of changes to existing certificates to be processed for each planning period.

(d) In line with the competent authority's oversight policy, the following planning data should be determined specifically for each type of organisation certified by the competent authority (approved training organisation (ATO) and aero-medical centres (AeMC)) and for FSTD qualification certificate holders:

(1) standard number of audits to be performed per oversight planning cycle;

(2) standard duration of each audit;

(3) standard working time for audit preparation, on-site audit, reporting and follow-up, per inspector;

(4) standard number of ramp and unannounced inspections to be performed;

(5) standard duration of inspections, including preparation, reporting and follow-up, per inspector;

(6) minimum number and required qualification of inspectors for each audit/inspection.

(e) Standard working time could be expressed either in working hours per inspector or in working days per inspector. All planning calculations should then be based on the same unit (hours or working days).

(f) It is recommended to use a spreadsheet application to process data defined under (c) and (d), to assist in determining the total number of working hours / days per oversight planning cycle required for certification, oversight and enforcement activities. This application could also serve as a basis for implementing a system for planning the availability of personnel.

(g) For each type of organisation certified by the competent authority and for FSTD qualification certificate holders the number of working hours / days per planning period for each qualified inspector that may be allocated for certification, oversight and enforcement activities should be determined, taking into account:

(1) purely administrative tasks not directly related to oversight and certification;

(2) training;

(3) participation in other projects;

(4) planned absence; and

(5) the need to include a reserve for unplanned tasks or unforeseeable events.

(h) The determination of working time available for certification, oversight and enforcement activities should also consider:

(1) the possible use of qualified entities; and

(2) possible cooperation with other competent authorities for approvals involving more than one Member State.

(i) Based on the elements listed above, the competent authority should be able to:

(1) monitor dates when audits and inspections are due and when they have been carried out;

(2) implement a system to plan the availability of personnel; and

(3) identify possible gaps between the number and qualification of personnel and the required volume of certification and oversight.

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

## AMC1 ARA.GEN.210(d) Management system

PROCEDURES AVAILABLE TO THE AGENCY

(a) Copies of the procedures related to the competent authority's management system and their amendments to be made available to the Agency for the purpose of standardisation should provide at least the following information:

(1) Regarding continuing oversight functions undertaken by the competent authority, the competent authority's organisational structure with description of the main processes. This information should demonstrate the allocation of responsibilities within the competent authority, and that the competent authority is capable of carrying out the full range of tasks regarding the size and complexity of the Member State's aviation industry. It should also consider overall proficiency and authorisation scope of competent authority personnel.

(2) For personnel involved in oversight activities, the minimum professional qualification requirements and experience and principles guiding appointment (e.g. assessment).

(3) How the following are carried out: assessing applications and evaluating compliance, issuance of certificates, performance of continuing oversight, follow-up of findings, enforcement measures and resolution of safety concerns.

(4) Principles of managing exemptions and derogations.

(5) Processes in place to disseminate applicable safety information for timely reaction to a safety problem.

(6) Criteria for planning continuing oversight (oversight programme), including adequate management of interfaces when conducting continuing oversight (air operations, flight crew licensing, continuing airworthiness management for example).

(7) Outline of the initial training of newly recruited oversight personnel (taking future activities into account), and the basic framework for continuation training of oversight personnel.

(b) As part of the continuous monitoring of a competent authority, the Agency may request details of the working methods used, in addition to the copy of the procedures of the competent authority's management system (and amendments). These additional details are the procedures and related guidance material describing working methods for competent authority personnel conducting oversight.

(c) Information related to the competent authority's management system may be submitted in electronic format.

## GM1 ARA.GEN.205 Allocation of tasks to qualified entities

CERTIFICATION TASKS

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

**AMC1 ARA.GEN.220(a) Record-keeping**

GENERAL

(a) The record-keeping system should ensure that all records are accessible whenever needed within a reasonable time. These records should be organised in a way that ensures traceability and retrievability throughout the required retention period.

(b) Records should be kept in paper form or in electronic format or a combination of both media. Records stored on microfilm or optical disc form are also acceptable. The records should remain legible and accessible throughout the required retention period. The retention period starts when the record has been created.

(c) Paper systems should use robust material, which can withstand normal handling and filing. Computer systems should have at least one backup system, which should be updated within 24 hours of any new entry. Computer systems should include safeguards against unauthorised alteration of data.

(d) All computer hardware used to ensure data backup should be stored in a different location from that containing the working data and in an environment that ensures they remain in good condition. When hardware- or software-changes take place, special care should be taken that all necessary data continue to be accessible at least through the full period specified in the relevant Subpart or by default in ARA.GEN.220 (c).

**AMC1 ARA.GEN.220(a)(1);(2);(3) Record-keeping**

COMPETENT AUTHORITY MANAGEMENT SYSTEM

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

(a) the documented policies and procedures;

(b) the personnel files of competent authority personnel, with supporting documents related to training and qualifications;

(c) the results of the competent authority's internal audit and safety risk management processes, including audit findings and corrective actions; and

(d) the contract(s) established with qualified entities performing certification or oversight tasks on behalf of the competent authority.

**AMC1 ARA.GEN.220(a)(4) Record-keeping**

ORGANISATIONS

Records related to an organisation certified by the competent authority should include, as appropriate to the type of organisation:

(a) the application for an organisation approval;

(b) the documentation based on which the approval has been granted and any amendments to that documentation;

(c) the organisation approval certificate including any changes;

(d) a copy of the continuing oversight programme listing the dates when audits are due and when such audits were carried out;

(e) continuing oversight records including all audit and inspection records;

(f) copies of all relevant correspondence;

(g) details of any exemption and enforcement actions;

(h) any report from other competent authorities relating to the oversight of the organisation; and

(i) a copy of any other document approved by the competent authority.

**GM1 ARA.GEN.220(a)(4) Record-keeping**

ORGANISATIONS - DOCUMENTATION

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

**AMC1 ARA.GEN.220(a)(5) Record-keeping**

PERSONS

Records related to personnel licences, certificates, ratings, authorisations or attestations issued by the competent authority should include, as a minimum:

(a) the application for a licence, certificate, rating, authorisation or attestation or change to a licence, certificate, rating, authorisation or attestation;

(b) documentation in support of the application for a licence, certificate, rating, authorisation or attestation or change to a licence, certificate, rating, authorisation or attestation, covering as applicable:

  (1) theoretical examination(s);

  (2) skill test(s);

  (3) proficiency check(s); and

  (4) certificates attesting required experience;

(c) a copy of the licence or certificate including any changes;

(d) all relevant correspondence or copies thereof;

(e) details of any exemption;

(f) details of any enforcement action(s); and

(g) any report from other competent authorities relating to personnel licences, certificates, ratings, authorisations or attestations issued by the competent authority.

**AMC1 ARA.GEN.220(a)(7) Record-keeping**

ACTIVITIES PERFORMED IN THE TERRITORY OF A MEMBER STATE BY PERSONS OR ORGANISATIONS ESTABLISHED OR RESIDING IN ANOTHER MEMBER STATE

(a) Records related to the oversight of activities performed in the territory of a Member State by persons or organisations established or residing in another Member State should include, as a minimum:

  (1) oversight records including all audit and inspection records and related correspondence;

  (2) copies of all relevant correspondence to exchange information with other competent authorities relating to the oversight of such persons/organisations;

  (3) details of any enforcement measures and penalties; and

  (4) any report from other competent authorities relating to the oversight of these persons/organisations, including any notification of evidence showing non-compliance with the applicable requirements.

(b) Records should be kept by the competent authority having performed the audit or inspection and should be made available to other competent authorities at least in the following cases:

  (1) serious incidents or accidents;

  (2) findings through the oversight programme where organisations certified by another competent authority are involved, to determine the root cause;

(3) an organisation being certified or having approvals in several Member States.

(c) When records are requested by another competent authority, the reason for the request should be clearly stated.

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

### GM1 ARA.GEN.220 Record-keeping

GENERAL

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

## SECTION III - OVERSIGHT, CERTIFICATION AND ENFORCEMENT

### GM1 ARA.GEN.300(d) Oversight

ACTIVITIES WITHIN THE TERRITORY OF THE MEMBER STATE

(a) Activities performed in the territory of the Member State by persons or organisations established or residing in another Member State include:

(1) activities of organisations certified by the competent authority of any other Member State or the Agency;

(2) activities of persons holding a licence, certificate, rating, or attestation issued by the competent authority of any other Member State; and

(3) activities of persons making declarations to the competent authority of any other Member State.

(b) Audits and inspections of such activities, including ramp and unannounced inspections, should be prioritised towards those areas of greater safety concern, as identified through the analysis of data on safety hazards and their consequences in operations.

### AMC1 ARA.GEN.305(b) Oversight programme

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

(a) When determining the oversight programme for an organisation the competent authority should consider in particular the following elements, as applicable:

(1) the implementation by the organisation of industry standards, directly relevant to the organisation's activity subject to this Regulation;

(2) the procedure applied for and scope of changes not requiring prior approval;

(3) specific approvals held by the organisation;

(4) specific procedures implemented by the organisation related to any alternative means of compliance used.

(b) For the purpose of assessing the complexity of an organisation's management system, AMC1 ORA.GEN.200(b) should be used.

(c) Regarding results of past oversight, the competent authority should also take into account relevant results of ramp inspections of organisations it has certified that were performed in other Member States in accordance with ARO.RAMP.

## AMC1 ARA.GEN.305(b)(1) Oversight programme

AUDIT

(a) The oversight programme should indicate which aspects of the approval will be covered with each audit.

(b) Part of an audit should concentrate on the organisation's compliance monitoring reports produced by the compliance monitoring personnel to determine if the organisation is identifying and correcting its problems.

(c) At the conclusion of the audit, an audit report should be completed by the auditing inspector, including all findings raised.

## AMC2 ARA.GEN.305(b)(1) Oversight programme

RAMP INSPECTIONS

When conducting a ramp inspection of aircraft used by organisations under its regulatory oversight the competent authority should, in as far as possible, comply with the requirements defined in ARO.RAMP.

## AMC1 ARA.GEN.305(b);(c) Oversight programme

INDUSTRY STANDARDS

(a) For organisations having demonstrated compliance with industry standards, the competent authority may adapt its oversight programme, in order to avoid duplication of specific audit items.

(b) Demonstrated compliance with industry standards should not be considered in isolation from the other elements to be considered for the competent authority's risk-based oversight.

(c) In order to be able to credit any audits performed as part of certification in accordance with industry standards, the following should be considered:

(1) the demonstration of compliance is based on certification auditing schemes providing for independent and systematic verification;

(2) the existence of an accreditation scheme and accreditation body for certification in accordance with the industry standards has been verified;

(3) certification audits are relevant to the requirements defined in Annex VII (Part-ORA) and other Annexes to this Regulation as applicable;

(4) the scope of such certification audits can easily be mapped against the scope of oversight in accordance with Part-ORA;

(5) audit results are accessible to the competent authority and open to exchange of information in accordance with Article 15(1) of Regulation (EC) No 216/2008; and

(6) the audit planning intervals of certification audits i.a.w. industry standards are compatible with the oversight planning cycle.

## AMC1 ARA.GEN.305(c) Oversight programme

OVERSIGHT PLANNING CYCLE

(a) When determining the oversight planning cycle and defining the oversight programme, the competent authority should assess the risks related to the activity of each organisation and adapt the oversight to the level of risk identified and to the organisation's ability to effectively manage safety risks.

(b) The competent authority should establish a schedule of audits and inspections appropriate to each organisation. The planning of audits and inspections should take into account the results of the hazard identification and risk assessment conducted and

maintained by the organisation as part of the organisation's management system. Inspectors should work in accordance with the schedule provided to them.

(c) When the competent authority, having regard to an organisation's safety performance, varies the frequency of an audit or inspection it should ensure that all aspects of the organisation's activity are audited and inspected within the applicable oversight planning cycle.

(d) The section(s) of the oversight programme dealing with ramp inspections should be developed based on geographical locations, taking into account aerodrome activity, and focusing on key issues that can be inspected in the time available without unnecessarily delaying the operations.

**AMC2 ARA.GEN.305(c) Oversight programme**

OVERSIGHT PLANNING CYCLE

(a) For each organisation certified by the competent authority and each FSTD qualification certificate holder all processes should be completely audited at periods not exceeding the applicable oversight planning cycle. The beginning of the first oversight planning cycle is normally determined by the date of issue of the first certificate. If the competent authority wishes to align the oversight planning cycle with the calendar year, it should shorten the first oversight planning cycle accordingly.

(b) The interval between two audits for a particular process should not exceed the interval of the applicable oversight planning cycle.

(c) Audits should include at least one on-site audit within each oversight planning cycle. For organisations exercising their regular activity at more than one site, the determination of the sites to be audited should consider the results of past oversight, the volume of activity at each site, as well as main risk areas identified.

(d) For organisations holding more than one certificate, the competent authority may define an integrated oversight schedule to include all applicable audit items. In order to avoid duplication of audits, credit may be granted for specific audit items already completed during the current oversight planning cycle, subject to four conditions:

(1) the specific audit item should be the same for all certificates under consideration;

(2) there should be satisfactory evidence on record that such specific audit items were carried out and that all corrective actions have been implemented to the satisfaction of the competent authority;

(3) the competent authority should be satisfied that there is no reason to believe standards have deteriorated in respect of those specific audit items being granted a credit;

(4) the interval between two audits for the specific item being granted a credit should not exceed the applicable oversight planning cycle.

**AMC1 ARA.GEN.305(d) Oversight programme**

PERSONS HOLDING A LICENCE, CERTIFICATE, RATING OR ATTESTATION

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

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

**AMC1 ARA.GEN.310(a) Initial certification procedure – organisations**

VERIFICATION OF COMPLIANCE

(a) In order to verify the organisation's compliance with the applicable requirements, the competent authority should conduct an audit of the organisation, including interviews of personnel and inspections carried out at the organisation's facilities.

(b) The competent authority should only conduct such audit after being satisfied that the application shows compliance with the applicable requirements.

(c) The audit should focus on the following areas:

(1) detailed management structure, including names and qualifications of personnel required by ORA.GEN.210 and adequacy of the organisation and management structure;

(2) personnel:

(i) adequacy of number and qualifications with regard to the intended terms of approval and associated privileges;

(ii) validity of licences, ratings, certificates or attestations as applicable;

(3) processes for safety risk management and compliance monitoring;

(4) facilities – adequacy with regard to the organisation's scope of work;

(5) documentation based on which the certificate should be granted (organisation documentation as required by Part-ORA, including technical manuals, such as operations manual or training manual).

(d) In case of non-compliance, the applicant should be informed in writing of the corrections that are required.

(e) In cases where an application for an organisation certificate is refused, the applicant should be informed of the right of appeal as exists under national law.

**AMC1 ARA.GEN.315(a) Procedure for issue, revalidation, renewal or change of licences, ratings or certificates – persons**

VERIFICATION OF COMPLIANCE

(a) In order to verify that the applicant meets the requirements, the competent authority should review the application and any supporting documents submitted, for completeness and compliance with applicable requirements.

(b) As part of the verification that the applicant meets the requirements, the competent authority should check that he/she:

(1) was not holding any personnel licence, certificate, rating, authorisation or attestation with the same scope and in the same category issued in another Member State;

(2) has not applied for any personnel licence, certificate, rating, authorisation or attestation with the same scope and in the same category in another Member State; and

(3) has never held any personnel licence, certificate, rating, authorisation or attestation with the same scope and in the same category issued in another Member State which was revoked or suspended in any other Member State.

(c) The competent authority should request the applicant to make a declaration covering items (b)(1) to (b)(3). Such declaration should include a statement that any incorrect information could disqualify the applicant from being granted a personnel licence, certificate, rating, authorisation or attestation. In case of doubts, the competent authority should contact the competent authority of the Member State where the applicant may have previously held any personnel licence, certificate, rating, authorisation or attestation.

## AMC1 ARA.GEN.330 Changes – organisations

GENERAL

(a) Changes in nominated persons:

The competent authority should be informed of any changes to personnel specified in Part-ORA that may affect the certificate or terms of approval/approval schedule attached to it. When an organisation submits the name of a new nominee for any of the persons nominated as per ORA.GEN.210 (b), the competent authority should require the organisation to produce a written résumé of the proposed person's qualifications. The competent authority should reserve the right to interview the nominee or call for additional evidence of his/her suitability before deciding upon his/her acceptability.

(b) A simple management system documentation status sheet should be maintained, which contains information on when an amendment was received by the competent authority and when it was approved.

(c) The organisation should provide each management system documentation amendment to the competent authority, including for the amendments that do not require prior approval by the competent authority. Where the amendment requires competent authority approval, the competent authority, when satisfied, should indicate its approval in writing. Where the amendment does not require prior approval, the competent authority should acknowledge receipt in writing within 10 working days.

(d) For changes requiring prior approval, in order to verify the organisation's compliance with the applicable requirements, the competent authority should conduct an audit of the organisation, limited to the extent of the changes. If required for verification, the audit should include interviews and inspections carried out at the organisation's facilities.

## GM1 ARA.GEN.330 Changes – organisations

CHANGE OF NAME OF THE ORGANISATION

(a) On receipt of the application and the relevant parts of the organisation's documentation as required by Part-ORA, the competent authority should re-issue the certificate.

(b) A name change alone does not require the competent authority to audit the organisation, unless there is evidence that other aspects of the organisation have changed.

## GM1 ARA.GEN.350 Findings and corrective actions – organisations

TRAINING

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

## GM1 AMC1-ARA.GEN.355(e) Findings and enforcement measures – persons

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

It covers two cases:

(a) persons subject to the requirements laid down in Regulation (EC) No 216/2008 and its Implementing Rules who are not required to hold a licence, certificate or attestation - for example general medical practitioners (GMPs); and

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

## SUBPART FCL - SPECIFIC REQUIREMENTS RELATING TO FLIGHT CREW LICENSING

## SECTION II - LICENCES, RATINGS AND CERTIFICATES

### AMC1 ARA.FCL.205 Monitoring of examiners

QUALIFICATION OF INSPECTORS

Inspectors of the competent authority supervising examiners should ideally meet the same requirements as the examiners being supervised. However, it is unlikely that they could be so qualified on the large variety of types and tasks for which they have a responsibility and, since they normally only observe training and testing, it is acceptable if they are qualified for the role of an inspector.

## SECTION III - THEORETICAL KNOWLEDGE EXAMINATIONS

### AMC1 ARA.FCL.300 Examination procedures

GENERAL

(a) The competent authority should provide suitable facilities for the conduct of examinations.

(b) The content of the examination papers should retain a confidential status until the end of the examination session.

(c) The identity of the applicant should be confirmed before an examination is taken.

(d) Examination applicants should be seated in a way so that they cannot read each other's examination papers. They should not speak to any person other than the invigilators.

(e) All examination papers, associated documents and additional papers handed out to the applicants for the examination should be handed back to the invigilator at the end of the examination.

(f) Only the examination paper, specific documentation and tools needed for the examination should be available to the applicant during the examination.

(g) Applicants may use the following equipment during an examination:

  (1) a scientific, non-programmable, non-alphanumeric calculator without specific aviation functions;

  (2) mechanical navigation slide-rule (DR calculator);

  (3) protractor;

  (4) compasses and dividers;

  (5) ruler.

(h) Applicants may use a translation dictionary at the discretion of the competent authority.

(i) Except equipment specified above, applicant(s) should not use any electronic equipment during the examination(s).

**AMC1 ARA.FCL.300(b) Examination procedures**

THEORETICAL KNOWLEDGE EXAMINATIONS FOR PROFESSIONAL LICENCES AND INSTRUMENT RATINGS

| Subject: 010 - AIR LAW | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total number of questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | 1:00 | 0:45 | 1:00 | 0:45 | 0:45 | 0:45 |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 010 01 | 3 | 2 | 3 | 3 | 2 | XX |
| 010 02 | 2 | 2 | 2 | 2 | 2 | XX |
| 010 03 | 1 | 1 | 1 | 1 | 1 | XX |
| 010 04 | 2 | 2 | 2 | 2 | 2 | 1 |
| 010 05 | 8 | 8 | 8 | 8 | 8 | 8 |
| 010 06 | 7 | 4 | 7 | 3 | 4 | 7 |
| 010 07 | 5 | 3 | 5 | 3 | 3 | 5 |
| 010 08 | 2 | 2 | 2 | 2 | 2 | 2 |
| 010 09 | 6 | 4 | 6 | 4 | 4 | 6 |
| 010 10 | 2 | 1 | 2 | 1 | 1 | XX |
| 010 11 | 2 | 2 | 2 | 2 | 2 | XX |
| 010 12 | 2 | 1 | 2 | 1 | 1 | XX |
| 010 13 | 2 | 1 | 2 | 1 | 1 | XX |
| Total questions | 44 | 33 | 44 | 33 | 33 | 29 |

| Subject: 021 - AIRCRAFT GENERAL KNOWLEDGE - AIRFRAME/SYSTEMS/POWER PLANT |
|---|
| Theoretical knowledge examination |
| Exam length, total number of questions and distribution of questions |

| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
|---|---|---|---|---|---|---|
| Time allowed (hours) | 2:00 | 1:30 | 2:00 | 2:00 | 1:30 | XX |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 021 01 | 04 | 02 | 04 | 04 | 02 | XX |
| 021 02 | 04 | 04 | 04 | 04 | 02 | XX |
| 021 03 | 05 | 02 | 04 | 04 | 03 | XX |
| 021 04 | 05 | 06 | 04 | 04 | 02 | XX |
| 021 05 | 07 | 04 | 06 | 06 | 03 | XX |
| 021 06 | 05 | 04 | 04 | 04 | 02 | XX |
| 021 07 | 04 | 04 | 02 | 02 | 02 | XX |
| 021 08 | 06 | 04 | 04 | 04 | 04 | XX |
| 021 09 | 06 | 06 | 06 | 06 | 04 | XX |
| 021 10 | 06 | 14 | 06 | 06 | 08 | XX |
| 021 11 | 20 | 06 | 20 | 20 | 13 | XX |
| 021 12 | 04 | 02 | 02 | 02 | 02 | XX |
| 021 13 | 04 | 02 | XX | XX | XX | XX |
| 021 14 | XX | XX | 01 | 01 | 01 | XX |
| 021 15 | XX | XX | 04 | 04 | 03 | XX |
| 021 16 | XX | XX | 06 | 06 | 05 | XX |
| 021 17 | XX | XX | 03 | 03 | 04 | XX |
| Total questions | 80 | 60 | 80 | 80 | 60 | XX |

| Subject: 022 - AIRCRAFT GENERAL KNOWLEDGE - INSTRUMENTATION | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total number of questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | 1:30 | 1:00 | 1:30 | 1:30 | 1:00 | 0:30 |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 022 01 | 08 | 08 | 08 | 08 | 08 | XX |
| 022 02 | 08 | 06 | 08 | 08 | 06 | 06 |
| 022 03 | 04 | 04 | 04 | 04 | 04 | 04 |
| 022 04 | 04 | 05 | 06 | 06 | 05 | 04 |
| 022 05 | 05 | XX | 03 | 03 | XX | XX |
| 022 06 | 08 | 06 | XX | XX | XX | XX |
| 022 07 | XX | XX | 14 | 14 | 08 | XX |
| 022 08 | 03 | 02 | XX | XX | XX | XX |
| 022 09 | 02 | XX | XX | XX | XX | XX |
| 022 10 | 02 | XX | XX | XX | XX | XX |
| 022 11 | 04 | XX | 04 | 04 | XX | XX |
| 022 12 | 06 | 04 | 06 | 06 | 04 | 03 |
| 022 13 | 04 | 04 | 05 | 05 | 04 | 03 |
| 022 14 | 01 | XX | 01 | 01 | XX | XX |
| 022 15 | 01 | XX | 01 | 01 | XX | XX |
| Total questions | 60 | 39 | 60 | 60 | 39 | 20 |

| Subject: 031 - FLIGHT PERFORMANCE AND PLANNING - MASS AND BALANCE | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total number of questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | 1:00 | 1:00 | 1:00 | 1:00 | 1:00 | XX |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 031 01 | 03 | 03 | 03 | 03 | 03 | XX |
| 031 02 | 05 | 05 | 05 | 05 | 05 | XX |
| 031 03 | 05 | 05 | 05 | 05 | 05 | XX |
| 031 04 | 05 | 05 | 05 | 05 | 05 | XX |
| 031 05 | 05 | 05 | 05 | 05 | 05 | XX |
| 031 06 | 02 | 02 | 02 | 02 | 02 | XX |
| Total questions | 25 | 25 | 25 | 25 | 25 | XX |

| Subject: 032 - FLIGHT PERFORMANCE AND PLANNING - PERFORMANCE (AEROPLANES) | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total number of questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | 1:00 | 0:45 | XX | XX | XX | XX |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 032 01 | 05 | 05 | XX | XX | XX | XX |
| 032 02 | 10 | 10 | XX | XX | XX | XX |
| 032 03 | 10 | 10 | XX | XX | XX | XX |
| 032 04 | 10 | XX | XX | XX | XX | XX |
| Total questions | 35 | 25 | XX | XX | XX | XX |

| Subject: 033 - FLIGHT PERFORMANCE AND PLANNING - FLIGHT PLANNING AND MONITORING | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total number of questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | 2:00 | 1:30 | 2:00 | 1:30 | 1:30 | 1:30 |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 033 01 | 05 | 05 | 05 | 05 | 05 | XX |
| 033 02 | 10 | XX | 10 | XX | XX | 10 |
| 033 03 | 10 | 10 | 10 | 10 | 10 | 05 |
| 033 04 | 08 | 08 | 08 | 08 | 08 | 08 |
| 033 05 | 05 | 05 | 05 | 05 | 05 | 05 |
| 033 06 | 05 | 05 | 05 | 05 | 05 | 05 |
| Total questions | 43 | 33 | 43 | 33 | 33 | 33 |

| Subject: 034 - FLIGHT PERFORMANCE AND PLANNING - PERFORMANCE (HELICOPTERS) | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | XX | XX | 1:00 | 1:00 | 0:45 | XX |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 034 01 | XX | XX | 15 | 15 | 15 | XX |
| 034 02 | XX | XX | 05 | 05 | 05 | XX |
| 034 03 | XX | XX | 05 | 05 | XX | XX |
| 034 04 | XX | XX | 10 | 10 | XX | XX |
| Total questions | XX | XX | 35 | 35 | 20 | XX |

| Subject: 040 - HUMAN PERFORMANCE | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | 1:00 | 0:45 | 1:00 | 1:00 | 0:45 | 0:45 |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 040 01 | 02 | 01 | 02 | 02 | 01 | 01 |
| 040 02 | 33 | 26 | 33 | 33 | 26 | 26 |
| 040 03 | 13 | 09 | 13 | 13 | 09 | 09 |
| Total questions | 48 | 36 | 48 | 48 | 36 | 36 |

| Subject: 050 - METEOROLOGY | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | 2:00 | 1:30 | 2:00 | 2:00 | 1:30 | 1:30 |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 050 01 | 11 | 09 | 11 | 11 | 09 | 09 |
| 050 02 | 11 | 06 | 11 | 11 | 06 | 06 |
| 050 03 | 04 | 04 | 04 | 04 | 04 | 04 |
| 050 04 | 07 | 06 | 07 | 07 | 06 | 06 |
| 050 05 | 03 | 03 | 03 | 03 | 03 | 03 |
| 050 06 | 07 | 07 | 07 | 07 | 07 | 07 |
| 050 07 | 06 | 02 | 06 | 06 | 02 | 02 |
| 050 08 | 08 | 03 | 08 | 08 | 03 | 03 |
| 050 09 | 11 | 09 | 11 | 11 | 09 | 09 |
| 050 10 | 16 | 14 | 16 | 16 | 14 | 14 |
| Total questions | 84 | 63 | 84 | 84 | 63 | 63 |

| Subject: 061 - GENERAL NAVIGATION | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | 2:00 | 1:30 | 2:00 | 2:00 | 1:30 | XX |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 061 01 | 12 | 07 | 12 | 12 | 07 | XX |
| 061 02 | 04 | 04 | 04 | 04 | 04 | XX |
| 061 03 | 14 | 12 | 14 | 14 | 12 | XX |
| 061 04 | 16 | 11 | 16 | 16 | 11 | XX |
| 061 05 | 14 | 11 | 14 | 14 | 11 | XX |
| Total questions | 60 | 45 | 60 | 60 | 45 | XX |

| Subject: 062 - RADIO NAVIGATION | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | 1:30 | 0:30 | 1:30 | 1:00 | 0:30 | 1:00 |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 062 01 | 07 | 04 | 07 | 05 | 04 | 02 |
| 062 02 | 21 | 12 | 21 | 15 | 12 | 23 |
| 062 03 | 12 | 02 | 12 | 08 | 02 | 05 |
| 062 04 | XX | XX | XX | XX | XX | XX |
| 062 05 | 15 | XX | 15 | XX | XX | 10 |
| 062 06 | 11 | 04 | 11 | 06 | 04 | 04 |
| Total questions | 66 | 22 | 66 | 34 | 22 | 44 |

| Subject: 070 - OPERATIONAL PROCEDURES | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | 1:15 | 0:45 | 1:00 | 1:00 | 0:45 | XX |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 071 01 | 25 | 18 | 18 | 18 | 14 | XX |
| 071 02 | 20 | 12 | 14 | 14 | 12 | XX |
| 071 03 | XX | XX | 06 | 06 | 04 | XX |
| Total questions | 45 | 30 | 38 | 38 | 30 | XX |

| Subject: 081 - PRINCIPLES OF FLIGHT (AEROPLANES) | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | 1:00 | 0:45 | XX | XX | XX | XX |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 081 01 | 17 | 14 | XX | XX | XX | XX |
| 081 02 | 06 | XX | XX | XX | XX | XX |
| 081 03 | XX | XX | XX | XX | XX | XX |
| 081 04 | 06 | 06 | XX | XX | XX | XX |
| 081 05 | 04 | 03 | XX | XX | XX | XX |
| 081 06 | 03 | 03 | XX | XX | XX | XX |
| 081 07 | 04 | 03 | XX | XX | XX | XX |
| 081 08 | 04 | 04 | XX | XX | XX | XX |
| Total questions | 44 | 33 | XX | XX | XX | XX |

| Subject: 082 - PRINCIPLES OF FLIGHT (HELICOPTERS) | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | XX | XX | 1:00 | 1:00 | 1:00 | XX |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 082 01 | XX | XX | 05 | 05 | 05 | XX |
| 082 02 | XX | XX | 03 | 03 | 03 | XX |
| 082 03 | XX | XX | 01 | 01 | 01 | XX |
| 082 04 | XX | XX | 12 | 12 | 12 | XX |
| 082 05 | XX | XX | 10 | 10 | 10 | XX |
| 082 06 | XX | XX | 05 | 05 | 05 | XX |
| 082 07 | XX | XX | 05 | 05 | 05 | XX |
| 082 08 | XX | XX | 03 | 03 | 03 | XX |
| Total questions | XX | XX | 44 | 44 | 44 | XX |

| Subject: 091 - VFR COMMUNICATION | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | 00:30 | 00:30 | 00:30 | 00:30 | 00:30 | XX |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 091 01 | 05 | 05 | 05 | 05 | 05 | XX |
| 091 02 | 11 | 11 | 11 | 11 | 11 | XX |
| 091 03 | 02 | 02 | 02 | 02 | 02 | XX |
| 091 04 | 02 | 02 | 02 | 02 | 02 | XX |
| 091 05 | 02 | 02 | 02 | 02 | 02 | XX |
| 091 06 | 02 | 02 | 02 | 02 | 02 | XX |
| Total questions | 24 | 24 | 24 | 24 | 24 | XX |

| Subject: 092 - IFR COMMUNICATION | | | | | | |
|---|---|---|---|---|---|---|
| Theoretical knowledge examination | | | | | | |
| Exam length, total questions and distribution of questions | | | | | | |
| | ATPL(A) | CPL(A) | ATPL(H)/IR | ATPL(H) | CPL(H) | IR(A) & (H) |
| Time allowed (hours) | 00:30 | XX | 00:30 | XX | XX | 00:30 |
| Distribution of questions with regard to the topics of the syllabus | | | | | | |
| 092 01 | 05 | XX | 05 | XX | XX | 05 |
| 092 02 | 11 | XX | 11 | XX | XX | 11 |
| 092 03 | 02 | XX | 02 | XX | XX | 02 |
| 092 04 | 02 | XX | 02 | XX | XX | 02 |
| 092 05 | 02 | XX | 02 | XX | XX | 02 |
| 092 06 | 02 | XX | 02 | XX | XX | 02 |
| 092 07 | XX | XX | XX | XX | XX | XX |
| Total questions | 24 | XX | 24 | XX | XX | 24 |

## SUBPART CC – SPECIFIC REQUIREMENTS RELATING TO CABIN CREW

## SECTION II – ORGANISATIONS PROVIDING CABIN CREW TRAINING OR ISSUING CABIN CREW ATTESTATIONS

### AMC1 ARA.CC.200(b)(2) Approval of organisations to provide cabin crew training or to issue cabin crew attestations

PERSONNEL CONDUCTING EXAMINATIONS

For any element being examined for the issue of a cabin crew attestation as required in Part-CC, the person who delivered the associated training or instruction should not also conduct the examination. However, if the organisation has appropriate procedures in place to avoid conflict of interest regarding the conduct of the examination and/or the results, this restriction need not apply.

## SUBPART ATO – SPECIFIC REQUIREMENTS RELATED TO APPROVED TRAINING ORGANISATIONS (ATOs)

## SECTION I - GENERAL

### AMC1 ARA.ATO.105 Oversight programme

GENERAL

(a) The audit or inspection of an ATO should be conducted on the basis of checking the facility for compliance, interviewing personnel and sampling any relevant training course for its conduct and standard.

(b) In addition to the items required in AMC1 ARA.GEN.310(a), such an audit or inspection should focus on:

(1) information on flight instructors, validity of licences, certificates, ratings and log books;

(2) evidence of sufficient funding;

(3) training aircraft in use, including their registration, associated documents and maintenance records;

(4) aerodromes, operating sites and associated facilities;

(5) facilities with regard to their adequacy to the courses being conducted and number of students;

(6) FSTDs, including their qualification certificates, associated documents and maintenance records;

(7) documentation, in particular documents related to courses, information on the updating system, and training and operations manual(s);

(8) training records and checking forms; and

(9) flight instruction, including pre-briefing, actual flight and debriefing.

### AMC1 ARA.ATO.120 Record-keeping

FSTDs

Records relating to FSTDs should include, as a minimum:

(a) the application for an FSTD qualification;

(b) the FSTD qualification certificate including any changes;

(c) a copy of the evaluation programme listing the dates when evaluations are due and when evaluations were carried out;

(d) initial and recurrent evaluation records;

(e) copies of all relevant correspondence;

(f) details of any exemption and enforcement actions; and

(g) any report from other competent authorities relating to initial and recurrent evaluations.

## SUBPART FSTD – SPECIFIC REQUIREMENTS RELATED TO THE QUALIFICATION OF FLIGHT SIMULATION TRAINING DEVICES (FSTDs)

### AMC1 ARA.FSTD.100(a)(1) Initial evaluation procedure

ASSESSMENT PROCESS LEADING TO THE ISSUE OF AN FSTD QUALIFICATION

(a) FSTDs require evaluation leading to qualification. The required process should be accomplished in two distinct steps. First, a check should be made to determine whether or not the FSTD complies with the applicable requirements. When making this check, the competent authority should ensure that accountability for the issue of an FSTD qualification is clearly defined. In all cases an individual department manager of the competent authority should be appointed under whose personal responsibility the issue of an FSTD qualification is to be considered. The second step should be the grant (or refusal) of an FSTD qualification.

(b) When checking compliance with the applicable requirements, the competent authority should ensure that the following steps are taken:

(1) Once an FSTD is contracted to be built, the organisation that is to operate the FSTD should ensure that the regulatory standard upon which the FSTD will eventually be qualified against is acceptable to the competent authority. This should be the current applicable version of CS-FSTD(A) or CS-FSTD(H) at the time of application.

(2) A written application for an FSTD qualification should be submitted, in a format according to ORA.FSTD.200, at least 3 months before the date of intended operation. However, the qualification test guide (QTG) may be submitted later, but not less than 30 days before the date of intended evaluation. The application form should be printed in English and any other language(s) of the competent authority's choosing.

(3) An individual should be nominated by the department manager of the competent authority to oversee, and become the focal point for, all aspects of the FSTD qualification process, and to coordinate all necessary activity. The nominated person should be responsible to the department manager for confirming that all appropriate evaluations/inspections are made.

(4) The ability of the applicant to secure, in compliance with the applicable requirements and certification specifications, the safe and reliable operation and proper maintenance of the FSTD should be assessed.

(5) The applicant's proposed compliance monitoring system should be scrutinised with particular regard to the allocated resources. Care should be taken to verify that the system is comprehensive and likely to be effective.

(6) The competent authority should inform the applicant of its final decision concerning the qualification within 14 days of completion of the evaluation process irrespective of any temporary qualification issued.

(7) On completion of the evaluation process, the application, together with a written recommendation and evidence of the result of all evaluations or assessments, should be presented to the nominated person responsible for FSTD qualification. The presentation should be made by the person with overall responsibility, nominated in accordance with (b)(3).

(8) The department manager of the competent authority should only issue an FSTD qualification certificate if he/she is completely satisfied that all requirements have been met. If he/she is not satisfied, the applicant should be informed in writing of the improvements that are required in order to satisfy the competent authority.

(9) If an application for an FSTD qualification is refused, the applicant should be informed of such rights of appeal as exist under national regulations.

**AMC2 ARA.FSTD.100(a)(1) Initial evaluation procedure**

GENERAL

(a) During initial and recurrent FSTD evaluations it should be necessary for the competent authority to conduct an appropriate sample of the objective and subjective tests described in Part-ORA and detailed in CS-FSTD(A) and CS-FSTD(H), as applicable. There may be occasions when all tests cannot be completed – for example during recurrent evaluations on a convertible FSTD – but arrangements should be made for all tests to be completed within a reasonable time.

(b) Following an evaluation, it is possible that a number of defects are identified. Generally, these defects should be rectified and the competent authority notified of such action within 30 days. Serious defects, which affect flight crew training, testing and checking, could result in an immediate downgrading of the qualification level I. If any defect remains unattended without good reason for a period greater than 30 days, subsequent downgrading may occur or the FSTD qualification could be revoked.

(c) For the evaluation of an FSTD the standard form as mentioned in AMC5 ARA.FSTD.100(a)(1) should be used.

**AMC3 ARA.FSTD.100(a)(1) Initial evaluation procedure**

INITIAL EVALUATION

(a) The main focus of objective testing is the QTG. Well in advance of the evaluation date, the aircraft manufacturer and the competent authority should agree on the content and acceptability of the validation tests contained in the QTG data package. This will ensure that the content of the QTG is acceptable to the competent authority and avoid time being wasted during the initial qualification. The acceptability of all tests depends upon their content, accuracy, completeness and recency of the results.

(b) Much of the time allocated to objective tests depends upon the speed of the automatic and manual systems set up to run each test and whether or not special equipment is required. The competent authority should not necessarily warn the organisation operating an FSTD of the sample validations tests which should be run on the day of the evaluation, unless special equipment is required.

(c) The FSTD cannot be used for subjective tests while part of the QTG is being run. Therefore, sufficient time (at least 8 consecutive hours) should be set aside for the examination and running of the QTG.

(d) The subjective tests for the evaluation can be found in CS-FSTD(A) or CS-FSTD(H), and a suggested subjective test profile is described in AMC1 ARA.FSTD.100(a)(3). Essentially, 1 working day should be required for the subjective test routine, which effectively denies use of the FSTD for any other purpose.

(e) To ensure adequate coverage of subjective and objective tests and to allow for cost effective rectification and re-test before departure of the inspection team, adequate time (up to 3 consecutive days) should be dedicated to an initial evaluation of an FSTD.

**AMC4 ARA.FSTD.100(a)(1) Initial evaluation procedure**

COMPOSITION OF THE EVALUATION TEAM

(a) The competent authority should appoint a technical team to evaluate an FSTD in accordance with a structured routine to gain a qualification level. The team should normally consist of at least the following personnel:

(1) A technical FSTD inspector of the competent authority, or an accredited inspector from another competent authority, qualified in all aspects of flight simulation

hardware, software and computer modelling or, exceptionally, a person designated by the competent authority with equivalent qualifications; and

(2) One of the following:

(i) a flight inspector of the competent authority, or an accredited inspector from another competent authority, who is qualified in flight crew training procedures and holds a valid type rating on the aeroplane/helicopter (or for flight navigation procedures trainer (FNPT) and basic instrument training device (BITD), class rated on the class of aeroplane/type of helicopter) being simulated; or

(ii) a flight inspector of the competent authority who is qualified in flight crew training procedures, assisted by a type rating instructor holding a valid type rating on the aeroplane/helicopter (or for FNPT and BITD, class rated on the class of aeroplane/type of helicopter) being simulated; or, exceptionally,

(iii) a person designated by the competent authority who is qualified in flight crew training procedures and holds a valid type rating on the aeroplane/helicopter (or for FNPT and BITD, class rated on the class of aeroplane/type of helicopter) being simulated and sufficiently experienced to assist the technical team. This person should fly out at least part of the functions and subjective test profiles.

(3) Where a designee is used as a substitute for one of the competent authority's inspectors, the other person shall be a properly qualified inspector of the competent authority or an accredited inspector from another Member State's competent authority.

(b) For a flight training device (FTD) level 1 and FNPT Type I, one suitably qualified inspector may combine the functions in (a)(1) and (a)(2).

(c) For a BITD this team should consist of an inspector from a competent authority and one from another competent authority, including the manufacturer's competent authority, if applicable.

(d) Additionally, the following persons should be present:

(1) for a full flight simulator (FFS), FTD and FNPT a type or class rated instructor from the ATO operating an FSTD or from the main FSTD user;

(2) for all types, sufficient FSTD support staff to assist with the running of tests and operation of the instructor's station.

## AMC5 ARA.FSTD.100(a)(1) Initial evaluation procedure

FSTD EVALUATION REPORT FOR INITIAL AND RECURRENT EVALUATION

FSTD Evaluation Report

Date:……..

[competent authority]
FSTD EVALUATION REPORT

[Member State] FSTD code (if applicable):
EASA FSTD code (if applicable):
Aircraft type and variant:
Class of aeroplane / type of helicopter:
Engine fit(s) simulated:

Contents



The conclusions presented are those of the evaluation team. The competent authority reserves the right to change these after internal review.

| **1. Flight simulation training device (FSTD)** | |
|---|---|
| (a) Organisation operating the FSTD: | |
| (b) FSTD Location: | |
| (c) FSTD Identification (Member State FSTD code / EASA FSTD Code): | |
| (d) FSTD Manufacturer and FSTD Identification serial number: | |
| (e) First entry into service (month/year): | |
| (f) Visual system (manufacturer and type): | |
| (g) Motion system (manufacturer and type) : | |
| (h) Aircraft type and variant: | |
| (i) Engine fit(s): | |
| **(k) Engine instrumentation:**<br>**Flight instrumentation:** | |
| **2. Evaluation details** | |
| (a) Date of evaluation: | (b) Date of previous evaluation: |
| (c) Type of evaluation: ☐ initial ☐ recurrent ☐ special | |
| (d) FSTD Qualification Level recommended:<br><br>FFS ☐ A ☐ B ☐ C ☐ D ☐ AG ☐ BG ☐ CG ☐ DG ☐ SC<br>FTD ☐ 1 ☐ 2 ☐ 3<br>FNPT ☐ I ☐ II ☐ III ☐ MCC<br>BITD ☐ | |
| Technical criteria primary reference document: | |

| | | | | | |
|---|---|---|---|---|---|
| Validation data roadmap (VDR) ID-No.: | | | | | |
| **3. Supplementary information** | | | | | |
| Company representative(s)<br>(FSTD operator, Main FSTD user) | | | | | |
| FSTD seats available | | | | | |
| Visual databases used during evaluation | | | | | |
| Other | | | | | |
| **4. Training, testing and checking considerations** | | | | | |
| CAT I | RVR | m | DH | ft | |
| CAT II | RVR | m | DH | ft | |
| CAT III (lowest minimum) | RVR | m | DH | ft | |
| LVTO | RVR | m | | | |
| Recency | | | | | |
| IFR-training/check | | | | | |
| Type rating | | | | | |
| Proficiency checks | | | | | |
| Autocoupled approach | | | | | |
| Autoland/Roll out guidance | | | | | |
| ACAS I / II | | | | | |
| Windshear warning system/predictive windshear | | | | | |
| WX-Radar | | | | | |
| HUD/HUGS | | | | | |
| FANS | | | | | |
| GPWS/EGPWS | | | | | |
| ETOPS capability | | | | | |
| GPS | | | | | |
| Other | | | | | |

**5. Classification of items**

**UNACCEPTABLE**

An item that fails to comply with the required standard and, therefore, affects the level of qualification or the qualification itself. If these items will not be corrected or clarified within a given time limit, the *(competent authority)* should have to vary, limit, suspend or revoke the FSTD qualification.

**RESERVATION**

An item where compliance with the required standard is not clearly proven and the issue will be reserved for a later decision. Resolution of these items will require either:

1. a *competent authority* policy ruling; or
2. additional substantiation.

**UNSERVICEABILITY**

A device that is temporarily inoperative or performing below its nominal level.

**LIMITATION**

An item that prevents the full usage of the FSTD according to the training, testing and checking considerations due to the unusable devices, systems or parts thereof.

**RECOMMENDATION FOR IMPROVEMENT**

An item that meets the required standard, but where considerable improvement is strongly recommended.

**COMMENT**

Self-explanatory

**Period of Rectification**

As set out in AMC2 ARA.FSTD.100(a)(1) point (b):

Following an evaluation, it is possible that a number of defects are identified. Generally, these defects should be rectified and the competent authority notified of such action within 30 days. Serious defects, which affect flight crew training, testing and checking, could result in an immediate downgrading of the qualification level, or if any defect remains unattended without good reason for a period greater than 30 days, subsequent downgrading may occur or the FSTD qualification could be revoked.

**6. Results**

**6.1 Subjective/Functional**

| | **A Unacceptable** |
|---|---|
| 1 | |

| | **B Reservation** |
|---|---|
| 1 | |

| | **C Unserviceability** |
|---|---|
| 1 | |

| | **D Restriction** |
|---|---|
| 1 | |

| | **E Recommendation for improvement** |
|---|---|
| 1 | |

| | **F Comment** |
|---|---|
| 1 | |

**6.2 Objective**

| | **A Unacceptable** |
|---|---|
| 1 | |

| | **B Reservation** |
|---|---|
| 1 | |

| | **E Recommendation for improvement** |
|---|---|
| 1 | |

| | **F Comment** |
|---|---|
| 1 | |

**7. Evaluation Team**

| **Name** | **Position** | **Organisation** | **Signature** |
|---|---|---|---|
| | Technical Inspector or person designated by the competent authority | | |
| | Flight Inspector or person designated by the competent authority | | |
| | | [FSTD User] | |
| | | [Organisation operating the FSTD] | |

Signed: ……For the competent authority

## GM1 ARA.FSTD.100(a)(1) Initial evaluation procedure

INITIAL EVALUATION

A useful explanation of how the validation tests should be run is contained in the 'RAeS Aeroplane Flight Simulator Evaluation Handbook' (February 1995 or as amended) produced in support of the ICAO Doc 9625, 'Manual of Criteria for the Qualification of Flight Simulators'.

## AMC1 ARA.FSTD.100(a)(3) Initial evaluation procedure

FUNCTIONS AND SUBJECTIVE TESTS – SUGGESTED TEST ROUTINE

(a) During initial and recurrent evaluations of an FSTD, the competent authority should conduct a series of functions and subjective tests that together with the objective tests complete the comparison of the FSTD with the aircraft, the class of aeroplane or type of helicopter.

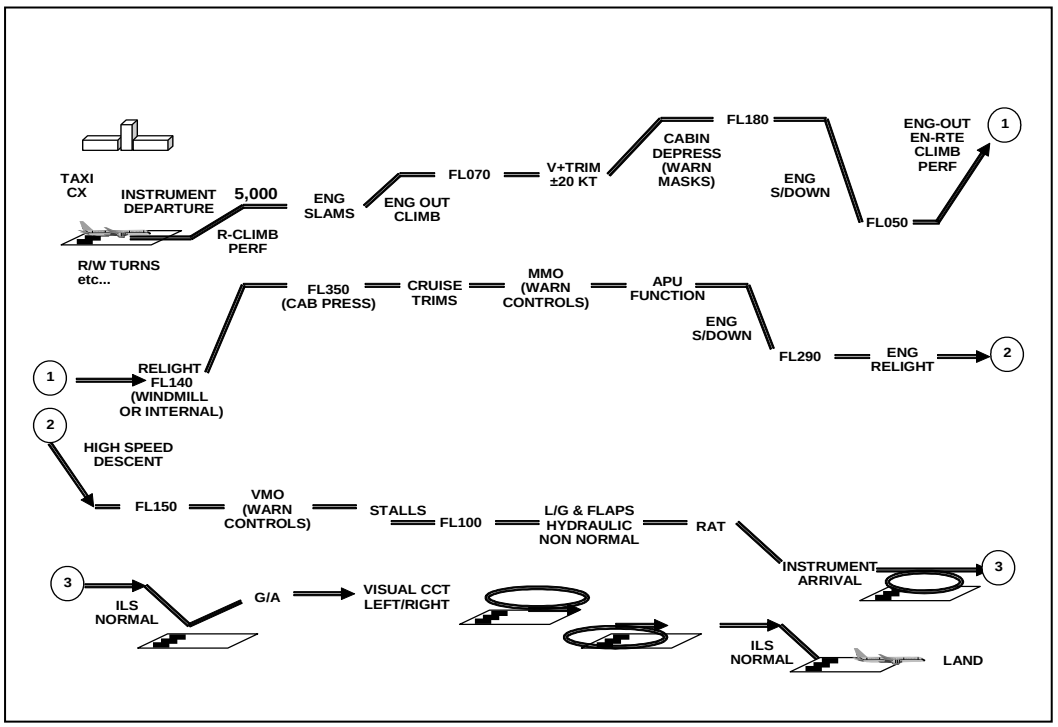
(b) Functions tests verify the acceptability of the simulated aircraft systems and their integration. Subjective tests verify the fitness of the FSTD in relation to training, checking and testing tasks.

(c) The FSTD should provide adequate flexibility to permit the accomplishment of the desired and required tasks while maintaining an adequate perception by the flight crew that they are operating in a real aircraft environment. Additionally, the instructor operating station (IOS) should not present an unnecessary distraction from observing the activities of the flight crew whilst providing adequate facilities for the tasks.

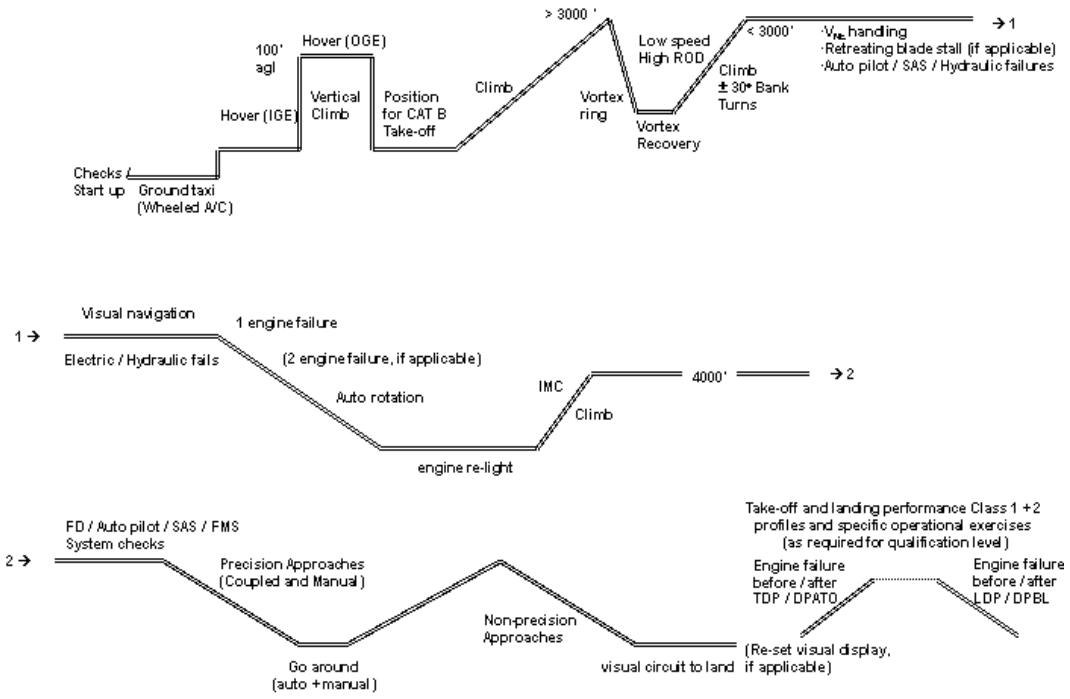
(d) It is important that both the competent authority and the organisation operating an FSTD understand what to expect from the routine of FSTD functions and subjective tests. Part of the subjective tests routine for an FSTD should involve an uninterrupted fly-out (except for FTD level 1) comparable with the duration of typical training sessions in addition to assessment of flight freeze and repositioning. An example of such a profile is to be found under points (f) and (g) (for BITD point (h)).

(e) The competent authorities, and organisations operating FSTD, who are unfamiliar with the evaluation process should contact the Agency or the competent authority of another Member State with adequate expertise in this field.

(f) Typical test profile for an FSTD aeroplane:



(g) Typical test profile for an FSTD helicopter:




(h) Typical subjective test profile for BITDs (approximately 2 hours) - items and altitudes, as applicable:

(1) instrument departure, climb performance,

(2) level-off at 4 000 ft,

(3) fail engine (if applicable),

(4) engine out climb to 6 000 ft (if applicable),

(5) engine out cruise performance (if applicable), restart engine,

(6) all engine cruise performance with different power settings,

(7) descent to 2 000 ft,

(8) all engine performance with different configurations, followed by instrument landing system (ILS) approach,

(9) all engine go-around,

(10) non-precision approach,

(11) go-around with engine failure (if applicable),

(12) engine out ILS approach (if applicable),

(13) go-around engine out (if applicable),

(14) non-precision approach engine out (if applicable), followed by go-around,

(15) restart engine (if applicable),

(16) climb to 4 000 ft,

(17) manoeuvring,

(18) normal turns left and right,

(19) steep turns left and right,

(20) acceleration and deceleration within operational range,

(21) approaching to stall in different configurations,

(22) recovery from spiral dive,

(23) auto flight performance (if applicable),

(24) system malfunctions,

(25) approach.

### GM1 ARA.FSTD.100(a)(3) Initial evaluation procedure

GENERAL

A useful explanation of functions and subjective tests and an example of subjective test routine checklist may be found in the 'RAeS Airplane Flight Simulator Evaluation Handbook' Volume II (February 1995 or as amended) produced in support of ICAO Doc 9625, 'Manual of Criteria for the Qualification of Flight Simulators'.

### AMC1 ARA.FSTD.110 Issue of an FSTD qualification certificate

BASIC INSTRUMENT TRAINING DEVICE (BITD)

(a) The competent authority should only grant a BITD qualification for the BITD model to a BITD manufacturer following satisfactory completion of an evaluation.

(b) This qualification should be valid for all serial numbers of this model without further technical evaluation.

(c) The BITD model should be clearly identified by a BITD model number. A running serial number should follow the BITD model identification number.

(d) The competent authority should establish and maintain a list of all BITD qualifications it has issued, containing the number of the BITD model with a reference to the hardware and software configuration.

### AMC1 ARA.FSTD.115 Interim FSTD qualification

NEW AIRCRAFT FFS / FTD QUALIFICATION – ADDITIONAL INFORMATION

(a) Aircraft manufacturers' final data for performance, handling qualities, systems or avionics are seldom available until well after a new or derivative aircraft has entered service. Because it is often necessary to begin flight crew training and certification several months prior to the entry of the first aircraft into service, it may be necessary to use aircraft manufacturer-provided preliminary data for interim qualification of FSTDs. This is consistent with the possible interim approval of operational suitability data (OSD) relative to FFS in the type certification process under Part-21.

(b) In recognition of the sequence of events that should occur and the time required for final data to become available, the competent authority may accept the use of certain partially validated preliminary aircraft and systems data, and early release ('red label') avionics in order to permit the necessary programme schedule for training, certification and service introduction.

(c) Organisations seeking qualification based on preliminary data should, however, consult the competent authority as soon as it is known that special arrangements will be necessary, or as soon as it is clear that preliminary data will need to be used for FSTD qualification. Aircraft and FSTD manufacturers should also be made aware of the needs and agree on the data plan and FSTD qualification plan. There should be periodic meetings to keep the interested parties informed of the project's status.

(d) The precise procedure to be followed to gain competent authority acceptance to use preliminary data should vary from case to case and between aircraft manufacturers. Each aircraft manufacturer's new aircraft development and test programme is designed to suit the needs of the particular project and may not contain the same events or sequence of events as another manufacturer's programme or even the same manufacturer's programme for a different aircraft. Hence, there cannot be a prescribed invariable procedure for acceptance to use preliminary data. Instead there should be a statement describing the final sequence of events, data sources, and validation procedures agreed by the FSTD operator, the aircraft manufacturer, the FSTD manufacturer and the competent authority. The approval by the Agency of the definition of scope of the aircraft validation source data to support the objective qualification as part of the OSD can also be an interim approval in case of preliminary data. The preliminary data to be used should be based on this interim approval.

(e) There should be assurance that the preliminary data are the manufacturer's best representation of the aircraft and reasonable certainty that final data will not deviate to a large degree from these preliminary, but refined, estimates. First of all there should be an interim approval of OSD relative to flight simulators in the type certification process under Part-21. Furthermore, the data derived from these predictive or preliminary techniques should be validated by available sources including, at least, the following:

(1) *Manufacturer's engineering report*. Such reports explain the predictive method used and illustrate past successes of the method on similar projects. For example, the manufacturer could show the application of the method to an earlier aircraft model or predict the characteristics of an earlier model and compare the results to final data for that model.

(2) *Early flight tests results*. Such data will often be derived from aircraft certification tests, and should be used to maximum advantage for early FSTD validation. Certain critical tests, which would normally be done early in the aircraft certification programme, should be included to validate essential pilot training and certification manoeuvres. These include cases in which a pilot is expected to cope with an aircraft failure mode, including engine failures. The early data available will, however, depend on the aircraft manufacturer's flight test programme design and may not be the same in each case. However it is expected that the flight test programme of the aircraft manufacturer includes provisions for generation of very early flight tests results for FSTD validation.

(f) The use of preliminary data is not indefinite. The aircraft manufacturer's final data should be available within 6 months after the aircraft's first 'service entry' or as agreed by the competent authority, the organisation and the aircraft manufacturer, but usually not later than 1 year. When an organisation applies for an interim qualification using preliminary data, the organisation and the competent authority should agree upon the update programme. This should normally specify that the final data update will be installed in the FSTD within a period of 6 months following the final data release unless special conditions exist and a different schedule agreed. The FSTD performance and handling validation would then be based on data derived from flight tests. Initial aircraft systems data should be updated after engineering tests. Final aircraft systems data should also be used for FSTD programming and validation.

(g) FSTD avionics should stay essentially in step with aircraft avionics (hardware and software) updates. The permitted time lapse between aircraft and FSTD updates is not a fixed time but should be minimal. It may depend on the magnitude of the update and whether the QTG and pilot training and certification are affected. Permitted differences in aircraft and FSTD avionics versions and the resulting effects on FSTD qualification should be agreed between the organisation and the competent authority. Consultation with the FSTD manufacturer is desirable throughout the agreement of the qualification process.

(h) The following describes an example of the design data and sources which might be used in the development of an interim qualification plan:

(1) The plan should consist of the development of a QTG based upon a mix of flight test and engineering simulation data. For data collected from specific aircraft flight tests

or other flights, the required designed model and data changes necessary to support an acceptable proof of match (POM) should be generated by the aircraft manufacturer.

(2) In order that the two sets of data are properly validated, the aircraft manufacturer should compare their simulation model responses against the flight test data, when driven by the same control inputs and subjected to the same atmospheric conditions as were recorded in the flight test. The model responses should result from a simulation where the following systems are run in an integrated fashion and are consistent with the design data released to the FSTD manufacturer:

(i) propulsion,

(ii) aerodynamics,

(iii) mass properties,

(iv) flight controls,

(v) stability augmentation,

(vi) brakes and landing gear.

(i) For the qualification of FSTD of new aircraft types, it may be beneficial that the services of a suitably qualified test pilot are used for the purpose of assessing handling qualities and performance evaluation.

### GM1 ARA.FSTD.115 Interim FSTD qualification

NEW AIRCRAFT FFS/FTD QUALIFICATION – ADDITIONAL INFORMATION

(a) A description of aircraft manufacturer-provided data needed for flight simulator modelling and validation is to be found in the IATA Document *Flight Simulator Design and Performance Data Requirements* (Edition 6 2000 or as amended).

(b) The proof of match should meet the relevant tolerances in AMC1 CS-FSTD(A).300 respectively AMC1 CS-FSTD(H).300.

### AMC1 ARA.FSTD.120 Continuation of an FSTD qualification

GENERAL

(a) *Objective Testing*. During recurrent evaluations, the competent authority should wish to see evidence of the successful running of the QTG between evaluations. The competent authority should select a number of tests to be run during the evaluation, including those that may be cause for concern. Again adequate notification would be given when special equipment is required for the test.

(b) Essentially the time taken to run the objective tests depends upon the need for special equipment, if any, and the test system, and the FSTD cannot be used for subjective tests or other functions whilst testing is in progress.

(c) For a modern FSTD incorporating an automatic test system, four hours would normally be required. FSTDs that rely upon manual testing may require a longer period of time.

(d) *Subjective Testing*. Essentially the same subjective test routine should be flown as per the profile described in AMC1 ARA.FSTD.100(a)(3) with a selection of the subjective tests taken from CS-FSTD(A) or CS-FSTD(H), as appropriate.

(e) Normally, the time taken for recurrent subjective testing is about 4 hours, and the FSTD should not perform other functions during this time.

(f) To ensure adequate coverage of subjective and objective tests during a recurrent evaluation, a total of 8 hours should be allocated, (4 hours for a BITD). However, it should be remembered that any FSTD deficiency that arises during the evaluation could necessitate the extension of the evaluation period.

**AMC2 ARA.FSTD.120 Continuation of an FSTD qualification**

COMPOSITION OF THE EVALUATION TEAM

(a) The composition of the evaluation team for a recurrent evaluation should be the same as for the initial evaluation (see AMC4 ARA.FSTD.100(a)(1).

On a case-by-case basis (except for BITD), when a specific FSTD in operation by a specific organisation is being evaluated, the competent authority may reduce the evaluation team to:

(1) the competent authority's flight inspector; and

(2) a type rated instructor (or class rated instructor for FNPT) from a main FSTD user.

(b) Evaluations with a reduced evaluation team in line with (a) may only take place if:

(1) this composition is not being used prior to the second recurrent evaluation;

(2) such an evaluation is followed by an evaluation with a full competent authority evaluation team;

(3) the competent authority's flight inspector performs some spot checks in the area of objective testing;

(4) no major change or upgrading has been applied since the directly preceding evaluation;

(5) no relocation of the FSTD has taken place since the last evaluation;

(6) a system is established enabling the competent authority to monitor and analyse the status of the FSTD on a continuous basis; and

(7) the FSTD hardware and software has been working reliably for the previous years. This should be reflected in the number and kind of discrepancies (technical log entries) and the results of the compliance monitoring system audits.

(c) In the case of a BITD, the recurrent evaluation may be conducted by one suitably qualified flight inspector only, in conjunction with the inspection of any ATO, using the BITD.

**AMC1 ARA.FSTD.130 Changes**

GENERAL

(a) The organisation operating an FSTD who wishes to modify, upgrade, de-activate or re-locate its FSTD should notify the competent authority. When considering applications for a change of the existing FSTD qualification level, the competent authority should ensure that accountability for the change is clearly defined.

(b) An individual department manager of the competent authority should be appointed under whose personal authority an FSTD qualification may be changed.

(c) The written application for a change, including appropriate extracts from the qualification test guide indicating proposed amendments should be submitted in a format and manner as specified by the competent authority. This application should be submitted no later than 30 days before the date of intended change, unless otherwise agreed with the competent authority.

(d) On receipt of an application for a change of the existing FSTD qualification level, the competent authority should conduct such evaluations and inspections as are necessary to ensure that the full implications of the request have been addressed by the organisation operating the FSTD.

(e) During the processing of a change request, the continued adequacy of the compliance monitoring should be reviewed.

(f) When the request has been considered and examined, the competent authority should decide on the depth of inspection of the FSTD that is required.

(g) The department manager, if satisfied that the organisation operating the FSTD remains competent and the qualification level of the FSTD can be maintained, should issue revised FSTD qualification documentation, as appropriate.

(h) The competent authority should inform the organisation operating the FSTD of its decision within 30 days of receipt of all documentation where no evaluation is required, or within 14 days of any subsequent evaluation.

(i) Such documentation includes the appropriate extracts from the QTG amended, when necessary, to the competent authority's satisfaction.

**GM1 ARA.FSTD.130 Changes**

QUALIFICATION OF NEW TECHNOLOGY OR SYSTEMS

Where an update to an FSTD involves a change of technology or the addition of a new system or equipment that is not covered by the qualification basis used for the existing qualification, an evaluation of such changes may not be possible using this original qualification basis. For these cases, the specific changes can be qualified by using newer Certification Specifications, new AMCs or alternative means of compliance, that apply to these changes, without affecting the overall qualification of the FSTD. This approach should be documented.

**AMC1 ARA.FSTD.135 Findings and corrective actions - FSTD qualification certificate**

GENERAL

(a) The competent authority's inspection and monitoring process should confirm the competent authority's continued confidence in the effectiveness of the compliance monitoring system of the organisation operating an FSTD, and its ability to maintain an adequate standard.

(b) If the competent authority is not satisfied, the organisation operating an FSTD should be informed in writing of the details of the conduct of its operation which are causing the competent authority concern. The competent authority should require corrective action to be taken within a specified period (see AMC2 ARA.FSTD.100(a)(1) point (b)).

(c) In the event that an organisation operating an FSTD fails, in spite of warning and advice, to satisfy the competent authority's concerns, a final written warning should, whenever possible, be given to the organisation together with a firm date by which specified action to satisfy the competent authority should be taken. It should be made clear that failure to comply may result in enforced limitation or suspension of the FSTD's qualification.

(d) Circumstances may, however, preclude recourse to the process described under (a) to (c). In such cases the competent authority's duty to preserve quality of training, testing and checking is of paramount importance and therefore the competent authority may immediately limit or suspend any FSTD qualification which it has issued.

**AMC2 ARA.FSTD.135 Findings and corrective actions - FSTD qualification certificate**

SUSPENSION AND LIMITATION

(a) When a decision has been taken to suspend, or limit, an FSTD qualification certificate, the organisation operating an FSTD should be informed immediately by the quickest available means.

(b) In the event of full suspension of an FSTD qualification certificate, the organisation operating an FSTD should be instructed that the FSTD concerned cannot be used for any credited training, testing or checking. The "quickest available means" will in most situations mean the use of a facsimile or email message.

(c) This should be followed by a formal letter giving notice of suspension, or limitation, restating the requirement to cease operations as applicable, and also setting out the conditions on which suspension may be lifted.

(d) If it becomes apparent to the competent authority that all operations have ceased over a period in excess of 6 months, the competent authority should consider opening the warning process described in AMC1 ARA.FSTD.135, points (a) to (d).

(e) The FSTD qualification certificate should not remain suspended indefinitely. Further steps may be taken by the organisation operating an FSTD to reinstate the FSTD qualification or, in default, should be taken by the competent authority to revoke the FSTD qualification certificate. Should an organisation operating an FSTD wish to dispute the suspension of its FSTD's qualification certificate, it should be informed of such rights of appeal as exist under national regulations. If an appeal is lodged, the FSTD qualification may remain suspended until the appeal process is complete.

(f) Suspension of an FSTD qualification certificate may be lifted on appeal or if the organisation operating an FSTD restores the FSTD to its previously acceptable standard.

(g) In neither case should operations be permitted to restart until it has been demonstrated that the cause of the suspension or limitation has been rectified. The competent authority may require a special evaluation depending on the severity of the problem.

(h) The competent authority should issue a formal notice of the lifting of suspension before the organisation operating an FSTD is permitted to resume use of an FSTD.

**AMC3 ARA.FSTD.135 Findings and corrective actions - FSTD qualification certificate**

REVOCATION

(a) The competent authority should give the organisation operating an FSTD notice that it intends to revoke the FSTD qualification followed by a formal letter of revocation.

(b) Should an organisation operating an FSTD wish to dispute this revocation, it should be informed of such rights of appeal as exist under applicable regulations. Once revoked, there can be no further activities under the terms of the FSTD qualification.

## SUBPART MED - SPECIFIC REQUIREMENTS RELATING TO AERO-MEDICAL CERTIFICATION

## SECTION I - GENERAL

### AMC1 ARA.MED.120 Medical assessors

EXPERIENCE AND KNOWLEDGE

Medical assessors should:

(a) have considerable experience of aero-medical practice and have undertaken a minimum of 200 class 1 medical examinations or equivalent; and

(b) maintain their medical professional competence in aviation medicine. The following should count towards maintaining medical professional competence:

(1) undertaking regular refresher training;

(2) participating in international aviation medicine conferences;

(3) undertaking research activities, including publication of results of the research.

### AMC2 ARA.MED.120 Medical assessors

TASKS

Medical assessors should:

(a) provide lectures in basic, advanced and refresher training courses for aero-medical examiners (AMEs) and aero-medical centres (AeMCs);

(b) carry out supervision and audits of AeMCs, AMEs and AME training facilities; and

(c) perform the aero-medical assessment of applicants for, or holders of, medical certificates after referral to the licensing authority.

### AMC1 ARA.MED.125 Referral to the licensing authority

REFERRAL TO THE LICENSING AUTHORITY

(a) The licensing authority should supply the AeMC or AME with all necessary information that led to the decision on aero-medical fitness.

(b) The licensing authority should ensure that unusual or borderline cases are evaluated on a common basis.

### AMC1 ARA.MED.135(a) Aero-medical forms

APPLICATION FORM FOR A MEDICAL CERTIFICATE

The form referred to in ARA.MED.135 (a) should reflect the information indicated in the following form and corresponding instructions for completion.

LOGO

CIVIL AVIATION ADMINISTRATION/MEMBER STATE

# APPLICATION FORM FOR A MEDICAL CERTIFICATE

MEDICAL IN CONFIDENCE

Complete this page fully and in block capitals - Refer to instructions for completion.

| | | | |
|---|---|---|---|
| (1) State of licence issue: | (2) Medical certificate applied for: class 1 ☐ class 2 ☐ LAPL ☐ | | |
| (3) Surname: | (4) Previous surname(s): | | (12) Application: Initial ☐ Revalidation/Renewal ☐ |
| (5) Forename(s): | (6) Date of birth(dd/mm/yyyy): | (7) Sex: Male ☐ Female ☐ | (13) Reference number: |
| (8) Place and country of birth: | (9) Nationality: | | (14) Type of licence applied for: |
| (10) Permanent address:<br><br>Country:<br>Telephone No.:<br>Mobile No.:<br>E-mail: | (11) Postal address (if different):<br><br>Country:<br>Telephone No.: | | (15) Occupation (principal):<br>(16) Employer:<br>(17) Last medical examination:<br>Date:<br>Place: |

| | | |
|---|---|---|
| (18) Licence(s) held (type):<br>Licence number:<br>State of issue: | (19) Any limitations on licence(s)/medical certificate held No ☐ Yes ☐<br>Details: | |
| (20) Have you ever had a medical certificate denied, suspended or revoked by any licensing authority?<br>No ☐ Yes ☐ Date: Country:<br>Details: | (21) Flight time total: | (22) Flight time since last medical: |
| | (23) Aircraft class/type(s) presently flown: | |
| (24) Any aviation accident or reported incident since last medical examination?<br>No ☐ Yes ☐ Date: Place:<br>Details: | (25) Type of flying intended: | |
| | (26) Present flying activity:<br>Single pilot ☐ Multi pilot ☐ | |
| (27) Do you drink alcohol?<br>☐ No ☐ Yes, amount | (28) Do you currently use any medication?<br>No ☐ Yes ☐ State medication, dose, date started and why: | |
| (29) Do you smoke tobacco? ☐ No, never ☐ No, date stopped:<br>☐ Yes, state type and amount: | | |

**General and medical history: Do you have, or have you ever had, any of the following? (Please tick). If yes, give details in remarks section (30).**

| | Yes | No | | Yes | No | | Yes | No | **Family history of:** | Yes | No |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 101 Eye trouble/eye operation | | | 112 Nose, throat or speech disorder | | | 123 Malaria or other tropical disease | | | 170 Heart disease | | |
| 102 Spectacles and/or contact lenses ever worn | | | 113 Head injury or concussion | | | 124 A positive HIV test | | | 171 High blood pressure | | |
| | | | 114 Frequent or severe headaches | | | 125 Sexually transmitted disease | | | 172 High cholesterol level | | |
| 103 Spectacle/contact lens prescriptions change since last medical exam. | | | 115 Dizziness or fainting spells | | | 126 Sleep disorder/apnoea syndrome | | | 173 Epilepsy | | |
| | | | 116 Unconsciousness for any reason | | | 127 Musculoskeletal illness/impairment | | | 174 Mental illness | | |
| 104 Hay fever, other allergy | | | 117 Neurological disorders; stroke, epilepsy, seizure, paralysis, etc. | | | 128 Any other illness or injury | | | 175 Diabetes | | |
| 105 Asthma, lung disease | | | | | | 129 Admission to hospital | | | 176 Tuberculosis | | |
| 106 Heart or vascular trouble | | | 118 Psychological/psychiatric trouble of any sort | | | 130 Visit to medical practitioner since last medical examination | | | 177 Allergy/asthma/eczema | | |
| 107 High or low blood pressure | | | | | | | | | 178 Inherited disorders | | |
| 108 Kidney stone or blood in urine | | | 119 Alcohol/drug/substance abuse | | | 131 Refusal of life insurance | | | 179 Glaucoma | | |
| 109 Diabetes, hormone disorder | | | 120 Attempted suicide | | | 132 Refusal of flying licence | | | | | |
| 110 Stomach, liver or intestinal trouble | | | 121 Motion sickness requiring medication | | | 133 Medical rejection from or for military service | | | **Females only:** | | |
| | | | | | | | | | 150 Gynaecological, menstrual problems | | |
| 111 Deafness, ear disorder | | | 122 Anaemia/sickle cell trait/other blood disorders | | | 134 Award of pension or compensation for injury or illness | | | 151 Are you pregnant? | | |

(30) **Remarks:** If previously reported and no change since, so state.

(31) **Declaration:** I hereby declare that I have carefully considered the statements made above and to the best of my belief they are complete and correct and that I have not withheld any relevant information or made any misleading statements. I understand that, if I have made any false or misleading statements in connection with this application, or fail to release the supporting medical information, the licensing authority may refuse to grant me a medical certificate or may withdraw any medical certificate granted, without prejudice to any other action applicable under national law.

CONSENT TO RELEASE OF MEDICAL INFORMATION: I hereby authorise the release of all information contained in this report and any or all attachments to the AME and, where necessary, to the medical assessor of the licensing authority, recognising that these documents or electronically stored data are to be used for completion of a medical assessment and will become and remain the property of the licensing authority, providing that I or my physician may have access to them according to national law. Medical confidentiality will be respected at all times.

| Date | Signature of applicant | Signature of AME/(GMP)/(medical assessor) |
|---|---|---|
| ---------- | ---------- | ---------- |

## INSTRUCTIONS FOR COMPLETION OF THE APPLICATION FORM FOR A MEDICAL CERTIFICATE

This application form and all attached report forms will be transmitted to the licensing authority. Medical confidentiality shall be respected at all times.

The applicant should personally complete, in full, all questions (sections) on the application form. Writing should be legible and in block capitals, using a ball-point pen. Completion of this form by typing/printing is also acceptable. If more space is required to answer any questions, a plain sheet of paper should be used, bearing the applicant's name and signature, and the date of signing. The following numbered instructions apply to the numbered headings on the application form for a medical certificate.

Failure to complete the application form in full, or to write legibly, may result in non-acceptance of the application form. The making of false or misleading statements or the withholding of relevant information in respect of this application may result in criminal prosecution, denial of this application and/or withdrawal of any medical certificate(s) granted.

**1. LICENSING AUTHORITY:**
State name of country this application is to be forwarded to.

**2. MEDICAL CERTIFICATE APPLIED FOR:**
Tick appropriate box.
Class 1: Professional Pilot
Class 2: Private Pilot
LAPL

**3. SURNAME:**
State surname/family name.

**4. PREVIOUS SURNAME(S):**
If your surname or family name has changed for any reason, state previous name(s).

**5. FORENAME(S):**
State first and middle names (maximum three).

**6. DATE OF BIRTH:**
Specify in order dd/mm/yyyy.

**7. SEX:**
Tick appropriate box.

**8. PLACE AND COUNTRY OF BIRTH:**
State town and country of birth.

**9. NATIONALITY:**
State name of country of citizenship.

**10. PERMANENT ADDRESS:**
State permanent postal address and country. Enter telephone area code as well as telephone number.

**11. POSTAL ADDRESS (IF DIFFERENT):**
If different from permanent address, state full current postal address including telephone number and area code. If the same, enter 'SAME'.

**12. APPLICATION:**
Tick appropriate box.

**13. REFERENCE NUMBER:**
State reference number allocated to you by the licensing authority
Initial applicants enter 'NONE'.

**14. TYPE OF LICENCE APPLIED FOR:**
State type of licence applied for from the following list:
Aeroplane Transport Pilot Licence
Multi-Pilot Licence
Commercial Pilot Licence/Instrument Rating
Commercial Pilot Licence
Private Pilot Licence/Instrument Rating
Private Pilot Licence
Sailplane Pilot Licence
Balloon Pilot Licence
Light Aircraft Pilot Licence
And whether Fixed Wing / Rotary Wing / Both
Other – Please specify

**15. OCCUPATION (PRINCIPAL):**
Indicate your principal employment.

**16. EMPLOYER:**
If principal occupation is pilot, then state employer's name or if self-employed, state 'self'.

**17. LAST APPLICATION FOR A MEDICAL CERTIFICATE:**
State date (day, month, year) and place (town, country)
Initial applicants state 'NONE'.

**18. LICENCE(S) HELD (TYPE):**
State type of licence(s) held.
Enter licence number and State of issue.
If no licences are held, state 'NONE'.

**19. ANY LIMITATIONS ON THE LICENCE(S)/MEDICAL CERTIFICATE:**
Tick appropriate box and give details of any limitations on your licence(s)/medical certificate, e.g. vision, colour vision, safety pilot, etc.

**20. MEDICAL CERTIFICATE DENIAL, SUSPENSION OR REVOCATION:**
Tick 'YES' box if you have ever had a medical certificate denied, suspended or revoked, even if only temporary.
If 'YES', state date (dd/mm/yyyy) and country where it occurred.

**21. FLIGHT TIME TOTAL:**
State total number of hours flown.

**22. FLIGHT TIME SINCE LAST MEDICAL:**
State number of hours flown since your last medical examination.

**23. AIRCRAFT CLASS/TYPE(S) PRESENTLY FLOWN:**
State name of principal aircraft flown, e.g. Boeing 737, Cessna 150, etc.

**24. ANY AVIATION ACCIDENT OR REPORTED INCIDENT SINCE LAST MEDICAL EXAMINATION:**
If 'YES' box ticked, state date (dd/mm/yyyy) and country of accident/incident.

**25. TYPE OF FLYING INTENDED:**
State whether airline, charter, single-pilot, commercial air transport, carrying passengers, agriculture, pleasure, etc.

**26. PRESENT FLYING ACTIVITY:**
Tick appropriate box to indicate whether you fly as the SOLE pilot or not.

**27. DO YOU DRINK ALCOHOL?**
Tick applicable box. If yes, state weekly alcohol consumption e.g. 2 litres beer.

**28. DO YOU CURRENTLY USE ANY MEDICATION?:**
If 'YES', give full details - name, how much you take and when, etc. Include any non-prescription medication.

**29. DO YOU SMOKE TOBACCO?**
Tick applicable box. Current smokers state type (cigarettes, cigars, pipe) and amount (e.g. 2 cigars daily; pipe – 1 oz. weekly)

**GENERAL AND MEDICAL HISTORY**

All items under this heading from number 101 to 179 inclusive should have the answer 'YES' or 'NO' ticked. You should tick 'YES' if you have ever had the condition in your life and describe the condition and approximate date in the (30) remarks section. All questions asked are medically important even though this may not be readily apparent.

Items numbered 170 to 179 relate to immediate family history, whereas items numbered 150 to 151 should be answered by female applicants only.

If information has been reported on a previous application form for a medical certificate and there has been no change in your condition, you may state 'Previously reported; no change since'. However, you should still tick 'YES' to the condition.

Do not report occasional common illnesses such as colds.

**31. DECLARATION AND CONSENT TO OBTAINING AND RELEASING INFORMATION:**
Do not sign or date these declarations until indicated to do so by the AME/GMP who will act as witness and sign accordingly.

## AMC1 ARA.MED.135(b);(c) Aero-medical forms

MEDICAL EXAMINATION REPORT FORMS

The forms referred to in ARA.MED.135 (b) and (c) should reflect the information indicated in the following forms and corresponding instructions for completion.

## MEDICAL EXAMINATION REPORT FORM FOR CLASS 1 & CLASS 2 APPLICANTS

MEDICAL IN CONFIDENCE

| (201) Examination category | (202) Height (cm) | (203) Weight (kg) | (204) Colour eye | (205) Colour hair | (206) Blood pressure-seated (mmHg) | | (207) Pulse - resting | |
|---|---|---|---|---|---|---|---|---|
| Initial ☐ | | | | | | | Rate (bpm) | Rhythm: regular ☐ |
| Revalidation ☐ Renewal ☐ | | | | | | | | irregular ☐ |
| Special referral ☐ | | | | | Systolic | Diastolic | | |

| **Clinical exam:** Check each item | Normal | Abnormal | | Normal | Abnormal |
|---|---|---|---|---|---|
| (208) Head, face, neck, scalp | | | (218) Abdomen, hernia, liver, spleen | | |
| (209) Mouth, throat, teeth | | | (219) Anus, rectum | | |
| (210) Nose, sinuses | | | (220) Genito-urinary system | | |
| (211) Ears, drums, eardrum motility | | | (221) Endocrine system | | |
| (212) Eyes - orbit & adnexa; visual fields | | | (222) Upper & lower limbs, joints | | |
| (213) Eyes - pupils and optic fundi | | | (223) Spine, other musculoskeletal | | |
| (214) Eyes - ocular motility; nystagmus | | | (224) Neurologic - reflexes, etc. | | |
| (215) Lungs, chest, breasts | | | (225) Psychiatric | | |
| (216) Heart | | | (226) Skin, identifying marks and lymphatics | | |
| (217) Vascular system | | | (227) General systemic | | |

(228) **Notes:** Describe every abnormal finding. Enter applicable item number before each comment.

**Visual acuity**

(229) *Distant vision at 5m/6m*

| | Uncorrected | | Spectacles | Contact lenses |
|---|---|---|---|---|
| Right eye | | Corr. to | | |
| Left eye | | Corr. to | | |
| Both eyes | | Corr. to | | |

| (230) *Intermediate vision* | Uncorrected | | Corrected | |
|---|---|---|---|---|
| N14 at 100 cm | Yes | No | Yes | No |
| Right eye | | | | |
| Left eye | | | | |
| Both eyes | | | | |

| (231) *Near vision* | Uncorrected | | Corrected | |
|---|---|---|---|---|
| N5 at 30-50 cm | Yes | No | Yes | No |
| Right eye | | | | |
| Left eye | | | | |
| Both eyes | | | | |

(232) **Spectacles**

Yes ☐ No ☐

Type:

(233) **Contact lenses**

Yes ☐ No ☐

Type:

| **Refraction** | Sph | Cyl | Axis | Add |
|---|---|---|---|---|
| Right eye | | | | |
| Left eye | | | | |

(313) **Colour perception** Normal ☐ Abnormal ☐

| Pseudo-isochromatic plates | Type: Ishihara (24 plates) |
|---|---|
| No of plates: | No of errors: |

(234) **Hearing**

| (when 239/241 not performed) | Right ear | Left ear |
|---|---|---|
| Conversational voice test (2m) with back turned to examiner | Yes ☐ No ☐ | Yes ☐ No ☐ |

Audiometry

| Hz | 500 | 1000 | 2000 | 3000 |
|---|---|---|---|---|
| Right | | | | |
| Left | | | | |

(236) **Pulmonary function**

$FEV_1/FVC$ _____ %

Normal ☐ Abnormal ☐

(237) **Haemoglobin**

_____ _____ (***unit)***

Normal ☐ Abnormal ☐

(235) **Urinalysis** Normal ☐ Abnormal ☐

| Glucose | Protein | Blood | Other |
|---|---|---|---|
| | | | |

**Accompanying reports**

| | Not performed | Normal | Abnormal/Comment |
|---|---|---|---|
| (238) ECG | | | |
| (239) Audiogram | | | |
| (240) Ophthalmology | | | |
| (241) ORL (ENT) | | | |
| (242) Blood lipids | | | |
| (243) Pulmonary function | | | |
| (244) Other (what?) | | | |

(247) **AME recommendation:**

Name of applicant: Date of birth: Reference number:

---------- ---------- ----------

☐ Fit for class: ----------

☐ Medical certificate issued by undersigned (copy attached) for class: ----------

☐ Unfit for class: ----------

☐ Deferred for further evaluation. If yes, why and to whom?

(248) **Comments, limitations**

(249) **AME declaration:**

I hereby certify that I/my AME group have personally examined the applicant named on this medical examination report and that this report with any attachment embodies my findings completely and correctly.

| (250) Place and date: | AME name and address: | AME certificate No.: |
|---|---|---|
| AME signature: | E-mail:<br>Telephone No.:<br>Telefax No.: | |

**Shaded areas do not require completion**

# MEDICAL EXAMINATION REPORT FORM FOR LAPL APPLICANTS

MEDICAL IN CONFIDENCE

| (201) Examination category | (202) Height (cm) | (203) Weight (kg) | (204) Colour eye | (205) Colour hair | (206) Blood pressure-seated (mmHg) | | (207) Pulse - resting | |
|---|---|---|---|---|---|---|---|---|
| Initial ☐ | | | | | | | Rate (bpm) | Rhythm: regular ☐ |
| Revalidation ☐ Renewal ☐ | | | | | | | | irregular ☐ |
| Special referral ☐ | | | | | Systolic | Diastolic | | |

**Clinical exam:** Check each item

| | Normal | Abnormal | | Normal | Abnormal |
|---|---|---|---|---|---|
| (208) Head, face, neck, scalp | | | (218) Abdomen, hernia, liver, spleen | | |
| (209) Mouth, throat, teeth | | | (219) Anus, rectum | | |
| (210) Nose, sinuses | | | (220) Genito-urinary system | | |
| (211) Ears, drums, eardrum motility | | | (221) Endocrine system | | |
| (212) Eyes - orbit & adnexa; visual fields | | | (222) Upper & lower limbs, joints | | |
| (213) Eyes - pupils and optic fundi | | | (223) Spine, other musculoskeletal | | |
| (214) Eyes - ocular motility; nystagmus | | | (224) Neurologic - reflexes, etc. | | |
| (215) Lungs, chest, breasts | | | (225) Psychiatric | | |
| (216) Heart | | | (226) Skin, identifying marks and lymphatics | | |
| (217) Vascular system | | | (227) General systemic | | |

(228) **Notes:** Describe every abnormal finding. Enter applicable item number before each comment.

**Visual acuity**

(229) *Distant vision at 5m /6m*

| | Uncorrected | | Spectacles | Contact lenses |
|---|---|---|---|---|
| Right eye | | Corr. to | | |
| Left eye | | Corr. to | | |
| Both eyes | | Corr. to | | |

(230) *Intermediate vision* N14 at 100 cm

| | Uncorrected | | Corrected | |
|---|---|---|---|---|
| | Yes | No | Yes | No |
| Right eye | | | | |
| Left eye | | | | |
| Both eyes | | | | |

(231) *Near vision* N5 at 30-50 cm

| | Uncorrected | | Corrected | |
|---|---|---|---|---|
| | Yes | No | Yes | No |
| Right eye | | | | |
| Left eye | | | | |
| Both eyes | | | | |

(232) **Spectacles** Yes ☐ No ☐ Type:

(233) **Contact lenses** Yes ☐ No ☐ Type:

| **Refraction** | Sph | Cyl | Axis | Add |
|---|---|---|---|---|
| Right eye | | | | |
| Left eye | | | | |

(313) **Colour perception** Normal ☐ Abnormal ☐

Pseudo-isochromatic plates No of plates: Type: Ishihara (24 plates) No of errors:

(234) **Hearing** (when 239/241 not performed)

| | Right ear | Left ear |
|---|---|---|
| Conversational voice test (2m) with back turned to examiner | Yes ☐ No ☐ | Yes ☐ No ☐ |

| Audiometry | | | | |
|---|---|---|---|---|
| Hz | 500 | 1000 | 2000 | 3000 |
| Right | | | | |
| Left | | | | |

(236) **Pulmonary function**

$FEV_1/FVC$ _____ %

Normal ☐ Abnormal ☐

(237) **Haemoglobin**

_____ _____ (***unit)***

Normal ☐ Abnormal ☐

(235) **Urinalysis** Normal ☐ Abnormal ☐

| Glucose | Protein | Blood | Other |
|---|---|---|---|
| | | | |

**Accompanying reports**

| | Not performed | Normal | Abnormal/Comment |
|---|---|---|---|
| (238) ECG | | | |
| (239) Audiogram | | | |
| (240) Ophthalmology | | | |
| (241) ORL (ENT) | | | |
| (242) Blood lipids | | | |
| (243) Pulmonary function | | | |
| (244) Other (what?) | | | |

(247) **AME/GMP recommendation:**

Name of applicant: Date of birth: Reference number:

☐ Fit for medical certificate for LAPL
☐ Medical certificate issued by undersigned (copy attached) for LAPL
☐ Unfit for class: ----------
☐ Deferred for further evaluation. If yes, why and to whom?

(248) **Comments, limitations**

(249) **AME/GMP declaration:**

I hereby certify that I have personally examined the applicant named on this medical examination report and that this report with any attachment embodies my findings completely and correctly.

| (250) Place and date: | AME/GMP name and address: | AME certificate No./GMP identification No.: |
|---|---|---|
| AME/GMP signature: | E-mail:<br>Telephone No.:<br>Telefax No.: | |

**INSTRUCTIONS FOR COMPLETION OF THE MEDICAL EXAMINATION REPORT FORMS**

The AME performing the examination should verify the identity of the applicant.

All questions (sections) on the medical examination report form should be completed in full. If an otorhinolaryngology examination report form is attached, then questions 209, 210, 211, and 234 may be omitted. If an ophthalmology examination report form is attached, then questions 212, 213, 214, 229, 230, 231, 232, and 233 may be omitted.

Writing should be legible and in block capitals using a ball-point pen. Completion of this form by typing/printing is also acceptable. If more space is required to answer any question, a plain sheet of paper should be used, bearing the applicant's name, the AME's name and signature, and the date of signing. The following numbered instructions apply to the numbered headings on the medical examination report form.

Failure to complete the medical examination report form in full, as required, or to write legibly, may result in non-acceptance of the application in total and may lead to withdrawal of any medical certificate issued. The making of false or misleading statements or the withholding of relevant information by an AME may result in criminal prosecution, denial of an application or withdrawal of any medical certificate(s) granted.

**Shaded areas do not require completion for the medical examination report form for the LAPL.**

201 EXAMINATION CATEGORY – Tick appropriate box.

Initial – Initial examination for either LAPL, class 1 or 2; also initial examination for upgrading from LAPL to class 2, or class 2 to 1 (notate 'upgrading' in box 248).

Renewal/Revalidation – Subsequent ROUTINE examinations.

Extended Renewal/Revalidation – Subsequent ROUTINE examinations, which include comprehensive ophthalmological and otorhinolaryngology examinations.

202 HEIGHT – Measure height, without shoes, in centimetres to nearest cm.

203 WEIGHT – Measure weight, in indoor clothes, in kilograms to nearest kg.

204 COLOUR EYE – State colour of applicant's eyes from the following list: brown, blue, green, hazel, grey, multi.

205 COLOUR HAIR – State colour of applicant's hair from the following list: brown, black, red, fair, bald.

206 BLOOD PRESSURE – Blood pressure readings should be recorded as Phase 1 for Systolic pressure and Phase 5 for Diastolic pressure. The applicant should be seated and rested. Recordings in mm Hg.

207 PULSE (RESTING) – The pulse rate should be recorded in beats per minute and the rhythm should be recorded as regular or irregular. Further comments if necessary may be written in section 228, 248 or separately.

208 to 227 inclusive constitute the general clinical examination, and each of the boxes should be marked (with a tick) as normal or abnormal.

208 HEAD, FACE, NECK, SCALP – To include appearance, range of neck and facial movements, symmetry, etc.

209 MOUTH, THROAT, TEETH – To include appearance of buccal cavity, palate motility, tonsillar area, pharynx and also gums, teeth and tongue.

210 NOSE, SINUSES – To include appearance and any evidence of nasal obstruction or sinus tenderness on palpation.

211 EARS, DRUMS, EARDRUM MOTILITY – To include otoscopy of external ear, canal, tympanic membrane. Eardrum motility by valsalva manoeuvre or by pneumatic otoscopy.

212 EYES – ORBIT AND ADNEXA; VISUAL FIELDS – To include appearance, position and movement of eyes and their surrounding structures in general, including eyelids and conjunctiva. Visual fields check by campimetry, perimetry or confrontation.

213 EYES – PUPILS AND OPTIC FUNDI – To include appearance, size, reflexes, red reflex and fundoscopy. Special note of corneal scars.

214 EYES – OCULAR MOTILITY, NYSTAGMUS – To include range of movement of eyes in all directions; symmetry of movement of both eyes; ocular muscle balance; convergence; accommodation; signs of nystagmus.

215 LUNGS, CHEST, BREASTS – To include inspection of chest for deformities, operation scars, abnormality of respiratory movement, auscultation of breath sounds. Physical examination of female applicant's breasts should only be performed with informed consent.

216 HEART – To include apical heartbeat, position, auscultation for murmurs, carotid bruits, palpation for trills.

217 VASCULAR SYSTEM – To include examination for varicose veins, character and feel of pulse, peripheral pulses, evidence of peripheral circulatory disease.

218 ABDOMEN, HERNIA, LIVER, SPLEEN – To include inspection of abdomen; palpation of internal organs; check for inquinal hernias in particular.

219 ANUS, RECTUM – Examination only with informed consent.

220 GENITO-URINARY SYSTEM – To include renal palpation; inspection palpation male/female reproductive organs only with informed consent.

221 ENDOCRINE SYSTEM – To include inspection, palpation for evidence of hormonal abnormalities/imbalance; thyroid gland.

222 UPPER AND LOWER LIMBS, JOINTS – To include full range of movements of joints and limbs, any deformities, weakness or loss. Evidence of arthritis.

223 SPINE, OTHER MUSCULOSKELETAL – To include range of movements, abnormalities of joints.

224 NEUROLOGIC – REFLEXES ETC. To include reflexes, sensation, power, vestibular system – balance, romberg test, etc.

225 PSYCHIATRIC – To include appearance, appropriate mood/thought, unusual behaviour.

226 SKIN, IDENTIFYING MARKS AND LYMPHATICS – To include inspection of skin; inspection, palpation for lymphadenopathy, etc. Briefly describe scars, tattoos, birthmarks, etc. which could be used for identification purposes.

227 GENERAL SYSTEMIC – All other areas, systems and nutritional status.

228 NOTES – Any notes, comments or abnormalities to be described – extra notes if required on separate sheet of paper, signed and dated.

229 DISTANT VISION AT 5/6 METRES – Each eye to be examined separately and then both together. First without correction, then with spectacles (if used) and lastly with contact lenses, if used. Record visual acuity in appropriate boxes. Visual acuity to be tested at either 5 or 6 metres with the appropriate chart for the distance.

230 INTERMEDIATE VISION AT 100 CM – Each eye to be examined separately and then both together. First without correction, then with spectacles if used and lastly with contact lenses if used. Record visual acuity in appropriate boxes as ability to read N14 at 100 cm (Yes/No).

231 NEAR VISION AT 30-50 CM. – Each eye to be examined separately and then both together. First without correction, then with spectacles if used and lastly with contact lenses, if used. Record visual acuity in appropriate boxes as ability to read N5 at 30-50 cm (Yes/No).

Note: Bifocal contact lenses and contact lenses correcting for near vision only are not acceptable.

232 SPECTACLES – Tick appropriate box signifying if spectacles are or are not worn by applicant. If used, state whether unifocal, bifocal, varifocal or look-over.

233 CONTACT LENSES – Tick appropriate box signifying if contact lenses are or are not worn. If worn, state type from the following list; hard, soft, gas-permeable or disposable.

313 COLOUR PERCEPTION – Tick appropriate box signifying if colour perception is normal or not. If abnormal; state number of plates of the first 15 of the pseudo-isochromatic plates (Ishihara 24 plates) have not been read correctly.

234 HEARING – Tick appropriate box to indicate hearing level ability as tested separately in each ear at 2 m.

235 URINALYSIS – State whether result of urinalysis is normal or not by ticking appropriate box. If no abnormal constituents, state NIL in each appropriate box.

236 PULMONARY FUNCTION – When required or on indication, state actual $FEV_1$/FVC value obtained in % and state if normal or not with reference to height, age, sex and race.

237 HAEMOGLOBIN – Enter actual haemoglobin test result and state units used. Then state whether normal value or not, by ticking appropriate box.

238 to 244 inclusive: ACCOMPANYING REPORTS – One box opposite each of these sections must be ticked. If the test is not required and has not been performed, then tick the NOT PERFORMED box. If the test has been performed (whether required or on indication) complete the normal or abnormal box as appropriate. In the case of question 244, the number of other accompanying reports must be stated.

247 AME RECOMMENDATION – The applicant's name, date of birth and reference number, should be entered here in block capitals. The applicable class of medical certificate should be indicated by a tick in the appropriate box. If a fit assessment is recommended and a medical certificate has been issued, this should be indicated in the appropriate box. An applicant may be recommended as fit for a lower class of medical certificate (e.g. class 2), but also be deferred or recommended as unfit for a higher class of medical certificate (e.g. class 1). If an unfit recommendation is made, applicable Part-MED paragraph references should be entered. If an applicant is deferred for further evaluation, the reason and the doctor or licensing authority to whom the applicant is referred should be indicated.

248 COMMENTS, LIMITATIONS, ETC. – The AME's findings and assessment of any abnormality in the history or examination, should be entered here. The AME should also state any limitation required.

249 AME DETAILS – The AME should sign the declaration, complete his/her name and address in block capitals, contact details and lastly stamp the relevant section with his/her designated AME stamp incorporating his/her AME number. The GMP identification no. is the number provided by the national medical system.

250 PLACE AND DATE – The place (town or city) and the date of examination should be entered here. The date of examination is the date of the general examination and not the date of finalisation of the form. If the medical examination report is finalised on a different date, the date of finalisation should be entered in section 248 as 'Report finalised on .....'.

## GM1 ARA.MED.135 (b);(c) Aero-medical forms

OPHTHALMOLOGY AND OTORHINOLARYNGOLOGY EXAMINATION REPORT FORMS

The ophthalmology and otorhinolaryngology examination report forms may be used as indicated in the following forms and corresponding instructions for completion.

# OPHTHALMOLOGY EXAMINATION REPORT FORM

Complete this page fully and in block capitals – Refer to instructions for completion.

MEDICAL IN CONFIDENCE

Applicant's details

| (1) State applied to: | (2) Medical certificate applied for: class 1 ☐ class 2 ☐ | | |
|---|---|---|---|
| (3) Surname: | (4) Previous surname(s): | | (12) Application: Initial ☐ Revalidation/Renewal ☐ |
| (5) Forename(s): | (6) Date of birth: | (7) Sex: Male ☐ Female ☐ | (13) Reference number: |

(301) **Consent to release of medical information:** I hereby authorise the release of all information contained in this report and any or all attachments to the AME and, where necessary, to the medical assessor of the licensing authority, recognising that these documents or electronically stored data, are to be used for completion of a medical assessment and will become and remain the property of the licensing authority, providing that I or my physician may have access to them according to national law. Medical confidentiality will be respected at all times.

| Date | Signature of applicant | Signature of AME |
|---|---|---|

(302) Examination category:
- Initial ☐
- Revalidation ☐
- Renewal ☐
- Special referral ☐

(303) Ophthalmological history:

**Clinical examination**

| Check each item | | Normal | Abnormal |
|---|---|---|---|
| (304) Eyes, external & eyelids | | | |
| (305) Eyes, Exterior (slit lamp, ophth.) | | | |
| (306) Eye position and movements | | | |
| (307) Visual fields (confrontation) | | | |
| (308) Pupillary reflexes | | | |
| (309) Fundi (Ophthalmoscopy) | | | |
| (310) Convergence | cm | | |
| (311) Accommodation | D | | |

(312) *Ocular muscle balance* (in prisme dioptres)

| Distant at 5m/6m | Near at 30-50 cm |
|---|---|
| Ortho | Ortho |
| Eso | Eso |
| Exo | Exo |
| Hyper | Hyper |
| Cyclo | Cyclo |
| Tropia Yes No | Phoria Yes No |
| Fusional reserve testing Not performed | Normal Abnormal |

(313) *Colour perception*

| | |
|---|---|
| Pseudo-Isochromatic plates | Type: Ishihara (24 plates) |
| No of plates: | No of errors: |
| Advanced colour perception testing indicated Yes No<br>Method: | |
| Colour SAFE | Colour UNSAFE |

**Visual acuity**

(314) *Distant vision at 5m/6m*

| | Uncorrected | | Spectacles | Contact lenses |
|---|---|---|---|---|
| Right eye | | Corrected to | | |
| Left eye | | Corrected to | | |
| Both eyes | | Corrected to | | |

(315) *Intermediate vision at 1m*

| | Uncorrected | | Spectacles | Contact lenses |
|---|---|---|---|---|
| Right eye | | Corrected to | | |
| Left eye | | Corrected to | | |
| Both eyes | | Corrected to | | |

(316) *Near vision at 30-50cm*

| | Uncorrected | | Spectacles | Contact lenses |
|---|---|---|---|---|
| Right eye | | Corrected to | | |
| Left eye | | Corrected to | | |
| Both eyes | | Corrected to | | |

(317) *Refraction*

| | Sph | Cylinder | Axis | Near (add) |
|---|---|---|---|---|
| Right eye | | | | |
| Left eye | | | | |

Actual refraction examined Spectacles prescription based

(318) *Spectacles*

Yes ☐ No ☐
Type:

(319) *Contact lenses*

Yes ☐ No ☐
Type:

(320) *Intra-ocular pressure*

| Right (mmHg) | Left (mmHg) |
|---|---|
| Method | Normal ☐ Abnormal ☐ |

(321) **Ophthalmological remarks and recommendation:**

(322) **Examiner's declaration:**

I hereby certify that I/my AME group have personally examined the applicant named on this medical examination report and that this report with any attachment embodies my findings completely and correctly.

| (323) Place and date: | Ophth examiner's name and address: (block capitals)<br><br>E-mail:<br>Telephone No.:<br>Telefax No.: | AME or specialist stamp with No.: |
|---|---|---|
| AME signature: | | |

**INSTRUCTIONS FOR COMPLETION OF THE OPHTHALMOLOGY EXAMINATION REPORT FORM**

Writing should be legible and in block capitals using a ball-point pen. Completion of this form by typing or printing is also acceptable. If more space is required to answer any question, a plain sheet of paper should be used, bearing the applicant's name, the name and signature of the AME or ophthalmology specialist performing the examination and the date of signing. The following numbered instructions apply to the numbered headings on the ophthalmology examination report form.

Failure to complete the medical examination report form in full, as required, or to write legibly may result in non-acceptance of the application in total and may lead to withdrawal of any medical certificate issued. The making of false or misleading statements or the withholding of relevant information by an examiner may result in criminal prosecution, denial of an application or withdrawal of any medical certificate granted.

The AME or ophthalmology specialist performing the examination should verify the identity of the applicant. The applicant should then be requested to complete the sections 1, 2, 3, 4, 5, 6, 7, 12 and 13 on the form and then sign and date the consent to release of medical information (section 301) with the examiner countersigning as witness.

302 EXAMINATION CATEGORY – Tick appropriate box.

Initial – Initial examination for either class 1 or 2; also initial examination for upgrading from class 2 to 1 (notate 'upgrading' in section 303).

Renewal/Revalidation – Subsequent comprehensive ophthalmological examinations (due to refractive error).

Special referral – NON-ROUTINE examination for assessment of an ophthalmological symptom or finding.

303 OPHTHALMOLOGICAL HISTORY – Detail here any history of note or reasons for special referral.

304 to 309 inclusive: CLINICAL EXAMINATION – These sections together cover the general clinical examination and each of the sections should be marked (with a tick) as normal or abnormal. Any abnormal findings or comments on findings should be entered in section 321.

310 CONVERGENCE – Enter near point of convergence in cm, as measured using RAF near point rule or equivalent. Tick whether normal or abnormal. Any abnormal findings or comments on findings should be entered in section 321.

311 ACCOMMODATION – Enter measurement recorded in dioptres using RAF near point rule or equivalent. Tick whether normal or abnormal. Any abnormal findings or comments on findings should be entered in section 321.

312 OCULAR MUSCLE BALANCE – Ocular muscle balance is tested at distant 5 or 6 m and near at 30-50 cm and results recorded. Presence of tropia or phoria must be entered accordingly and also whether fusional reserve testing was NOT performed and if performed whether normal or not.

313 COLOUR PERCEPTION – Enter type of pseudo-isochromatic plates (ishihara) as well as number of plates presented with number of errors made by examinee. State whether advanced colour perception testing is indicated and what methods used (which colour lantern or anomaloscopy) and finally whether judged to be colour safe or unsafe. Advanced colour perception testing is usually only required for initial assessment, unless indicated by change in applicant's colour perception.

314–316 VISUAL ACUITY TESTING AT 5 m/6 m, 1 m and 30-50 cm – Record actual visual acuity obtained in appropriate boxes. If correction not worn nor required, put line through corrected vision boxes. Distant visual acuity to be tested at either 5 m or 6 m with the appropriate chart for that distance.

317 REFRACTION – Record results of refraction. Indicate also whether for class 2 applicants, refraction details are based upon spectacle prescription.

318 SPECTACLES – Tick appropriate box signifying if spectacles are or are not worn by applicant. If used, state whether unifocal, bifocal, varifocal or look-over.

319 CONTACT LENSES – Tick appropriate box signifying if contact lenses are or are not worn. If worn, state type from the following list; hard, soft, gas-permeable, disposable.

320 INTRA-OCULAR PRESSURE – Enter intra-ocular pressure recorded for right and left eyes and indicate whether normal or not. Also indicate method used – applanation, air etc.

321 OPHTHALMOLOGICAL REMARKS AND RECOMMENDATION – Enter here all remarks, abnormal findings and assessment results. Also enter any limitations recommended. If there is any doubt about findings or recommendations, the examiner may contact the AMS for advice before finalising the report form.

322 OPHTHALMOLOGY EXAMINER'S DETAILS – The ophthalmology examiner must sign the declaration, complete his/her name and address in block capitals, contact details and lastly stamp the report with his/her designated stamp incorporating his/her AME or specialist number.

323 PLACE AND DATE – Enter the place (town or city) and the date of examination. The date of examination is the date of the clinical examination and not the date of finalisation of form. If the ophthalmology examination report is finalised on a different date, enter date of finalisation on section 321 as 'Report finalised on .....'.

# OTORHINOLARYNGOLOGY EXAMINATION REPORT FORM

Complete this page fully and in block capitals – Refer to instructions for completion.

MEDICAL IN CONFIDENCE

Applicant's details

| (1) State applied to: | (2) Medical certificate applied for: class 1 ☐ class 2 ☐ | | |
|---|---|---|---|
| (3) Surname: | (4) Previous surname(s): | | (12) Application: Initial ☐ Revalidation/Renewal ☐ |
| (5) Forename(s): | (6) Date of birth: | (7) Sex: Male ☐ Female ☐ | (13) Reference number: |

(401) **Consent to release of medical information:** I hereby authorise the release of all information contained in this report and any or all attachments to the AME and, where necessary, to the medical assessor of the licensing authority, recognising that these documents, or any electronically stored data, are to be used for completion of a medical assessment and will become and remain the property of the licensing authority, providing that I or my physician may have access to them according to national law. Medical confidentiality will be respected at all times.

| Date | Signature of applicant | Signature of AME |
|---|---|---|

(402) Examination category:

Initial ☐
Special referral ☐

(403) Otorhinolaryngological history:

**Clinical examination**

| Check each item | Normal | Abnormal |
|---|---|---|
| (404) Head, face, neck, scalp | | |
| (405) Buccal cavity, teeth | | |
| (406) Pharynx | | |
| (407) Nasal passages and naso-pharynnx (incl. anterior rhinoscopy) | | |
| (408) Vestibular system incl. Romberg test | | |
| (409) Speech | | |
| (410) Sinuses | | |
| (411) Ext acoustic meati, tympanic membranes | | |
| (412) Pneumatic otoscopy | | |
| (413) Impedance tympanometry including Valsalva menoeuvre (initial only) | | |

| *Additional testing* (if indicated) | Not performed | Normal | Abnormal |
|---|---|---|---|
| (414) Speech audiometry | | | |
| (415) Posterior rhinoscopy | | | |
| (416) EOG; spontaneous and positional nystagnus | | | |
| (417) Differential caloric test or vestibular autorotation test | | | |
| (418) Mirror or fibre laryngoscopy | | | |

(419) *Pure tone audiometry*

dB HL (hearing level)

| Hz | Right ear | Left ear |
|---|---|---|
| 250 | | |
| 500 | | |
| 1000 | | |
| 2000 | | |
| 3000 | | |
| 4000 | | |
| 6000 | | |
| 8000 | | |

(420) *Audiogram*

o = Right – – – = Air
x = Left ..... = Bone

| dB/HL | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| –10 | | | | | | | | |
| 0 | | | | | | | | |
| 10 | | | | | | | | |
| 20 | | | | | | | | |
| 30 | | | | | | | | |
| 40 | | | | | | | | |
| 50 | | | | | | | | |
| 60 | | | | | | | | |
| 70 | | | | | | | | |
| 80 | | | | | | | | |
| 90 | | | | | | | | |
| 100 | | | | | | | | |
| 110 | | | | | | | | |
| 120 | | | | | | | | |
| Hz | 250 | 500 | 1000 | 2000 | 3000 | 4000 | 6000 | 8000 |

(421) **Otorhinolaryngology remarks and recommendation:**

(422) **Examiner's declaration:**

I hereby certify that I/my AME group have personally examined the applicant named on this medical examination report and that this report with any attachment embodies my findings completely and correctly.

| (423) Place and date: | ORL examiner's name and address: (block capitals) | AME or specialist stamp with No: |
|---|---|---|
| AME signature: | E-mail:<br>Telephone No.:<br>Telefax No.: | |

**INSTRUCTIONS FOR COMPLETION OF THE OTORHINOLARYNGOLOGY EXAMINATION REPORT FORM**

Writing should be legible and in block capitals using a ball-point pen. Completion of this form by typing or printing is also acceptable. If more space is required to answer any question, a plain sheet of paper should be used, bearing the applicant's name, the name and signature of the AME or otorhinolaryngology specialist performing the examination and the date of signing. The following numbered instructions apply to the numbered headings on the otorhinolaryngology examination report form.

Failure to complete the medical examination report form in full, as required, or to write legibly may result in non-acceptance of the application in total and may lead to withdrawal of any medical certificate issued. The making of false or misleading statements or the withholding of relevant information by an examiner may result in criminal prosecution, denial of an application or withdrawal of any medical certificate granted.

The AME or otorhinolaryngology specialist performing the examination should verify the identity of the applicant. The applicant should then be requested to complete the sections 1, 2, 3, 4, 5, 6, 7, 12 and 13 on the form and then sign and date the consent to release of medical information (section 401) with the examiner countersigning as witness.

402 EXAMINATION CATEGORY – Tick appropriate box.

Initial – Initial examination for class 1; also initial examination for upgrading from class 2 to 1 (notate upgrading' in section 403)

Special Referral – NON-ROUTINE examination for assessment of an ORL symptom or finding

403 OTORHINOLARYNGOLOGICAL HISTORY – Detail here any history of note or reasons for special referral.

404-413 inclusive: CLINICAL EXAMINATION – These sections together cover the general clinical examination and each of the sections should be marked (with a tick) as normal or abnormal. Any abnormal findings or comments on findings should be entered in section 421.

414-418 inclusive: ADDITIONAL TESTING – These tests are only required to be performed if indicated by history or clinical findings and are not routinely required. For each test one of the boxes must be completed – if the test is not performed then tick that box – if the test has been performed then tick the appropriate box for a normal or abnormal result. All remarks and abnormal findings should be entered in section 421.

419 PURE TONE AUDIOMETRY – Complete figures for dB HL (hearing level) in each ear at all listed frequencies.

420 AUDIOGRAM – Complete audiogram from figures as listed in section 419.

421 OTORHINOLARYNGOLOGY REMARKS AND RECOMMENDATION – Enter here all remarks, abnormal findings and assessment results. Also enter any limitations recommended. If there is any doubt about findings or recommendations the examiner may contact the AMS for advice before finalising the report form.

422 OTORHINOLARYNGOLOGY EXAMINER'S DETAILS – The otorhinolaryngology examiner must sign the declaration, complete his/her name and address in block capitals, contact details and lastly stamp the report with his/her designated stamp incorporating his/her AME or specialist number.

423 PLACE AND DATE – Enter the place (town or city) and the date of examination. The date of examination is the date of the clinical examination and not the date of finalisation of form. If the ORL examination report is finalised on a different date, enter date of finalisation in section 421 as 'Report finalised on .....'.

### AMC1 ARA.MED.150 Record-keeping

RELEASE OF AERO-MEDICAL RECORDS

In accordance with Directive 95/46/EC as implemented under national law, aero-medical records may also be released:

(a) upon written request of the applicant, to management of the competent authority, for review in response to a complaint;

(b) to research institutes for the purpose of scientific research, with assurance of de-identification prior to publication;

(c) to any investigation body (accident, security, police), when required under national law; and

(d) for any other circumstances, as required under national law.

## SECTION II – AERO-MEDICAL EXAMINERS (AMEs)

### AMC1 ARA.MED.200 Procedure for the issue, revalidation, renewal or change of an AME certificate

INSPECTION OF THE AME PRACTICE

Before issuing the AME certificate, the competent authority should conduct an inspection of the AME practice to verify compliance with ARA.MED.200 (a).

## SECTION III – MEDICAL CERTIFICATION

### AMC1 ARA.MED.315(a) Review of examination reports

GENERAL

(a) The process to review examination and assessment reports received from AeMCs, AMEs and GMPs should aim to check all reports received.

(b) The licensing authority should take account of the proportion of inconsistencies or errors found in the assessment process and adapt the sample size accordingly and to review all reports if necessary.