**FT&SC Audit Forms 2014**



***FLIGHT TEST & SAFETY CONSULTANTS, LLC***

|  |  |  |
| --- | --- | --- |
| Operator: |  |  |
| Address: |  |  |
| Date: |  |  |
|  |  |  |

**Flight Test & Safety Consultants, LLC**

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*This Manual has been compiled using the International Standard for Business Aircraft Operations*

*(IS-BAO) Audit Procedures Manual as a primary reference. Other references include the Global Aviation Information Network (GAIN) Operator’s Flight Safety Handbook and the Federal Aviation Administration (FAA) Order 4040.26B, Aircraft Certification Service Flight Test Risk Management Program.*

*The main focus of this Manual is for organizations involved in aircraft flight testing.*

*This protocol is not meant to serve as means for any particular SMS certification program, it is rather a means to conduct evaluations of SMS readiness as a self-evaluation or evaluations by third party auditors.*

**8.1 Audit Report Form**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Audit Date** |  | |  | | **No. of Days on Site** | | |  |  | |
|  |  |  |  | |  |  | |  |  | |
| **Operator Name & Address** | | |  | |  |  | |  | | |
|  | | | | | | **Telephone** | |  |  | |
|  | |  | | |
| **e-mail** | |  | | |
|  |  |  |  | |  |  | |  |  | |
|  | | | | | | | | | | |
|  | | | | | | | | | | |
| **Auditor / Audit Team Leader** | |  | | **Contact Information** | | |  | | |
| **Members** | |  | | **Email and Telephone** | | |  | | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Evaluation of SMS readiness** | | | | | | | | | |  | |  |  |
| **Full Conformity** | | |  |  | **Minor Non-conformity** | |  |  | **Major Non-conformity** | |  |  |  |
|  | | |  |  |  | |  |  |  | |  |  |  |
| **Stage 1** |  | **SMS is documented, approved, resourced, and being implemented.** | | | | | | | | | | | |
|  |  |  | | | | | | | | | | | |
|  |  |  | | | | | | | | | | | |
| **Stage 2** |  | **SMS is functioning and results are being measured; Safety risks are effectively managed;** | | | | | | | | | | | |
|  |  | **Safety management activities are appropriately targeted.** | | | | | | | | | | | |
|  |  |  | | | | | | | | | | | |
| **Stage 3** |  | **Stage 2 performance, plus SMS is sustained and supported by an on-going** | | | | | | | | | | | |
|  |  | **improvement process; Safety management activities are fully integrated into the operator’s business; and a positive safety culture is being sustained.** | | | | | | | | | | | |
|  | | | | | |  | | | |  | | | |
| **Auditor Signature / Date** | | | | | |  | | | | **Operator Representative Signature / Date** | | | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Summary of Audit Including Overall Assessment of the Appropriateness and Effectiveness of the Operator’s Flight Test Safety Program and other Management System Controls** | | | | | | | | | | | | | |
| **Type of Operations Conducted** | | | | | | | | | | | | | |
| Non-commercial | | |  | Commercial | | | | | |  |  |  |  |
|  | | |  |  | | | | | |  |  |  |  |
| Other |  | please specify | | |  | | | | | | | | |
|  | | | | | | | | | | | | | |
| **Total Number of Aircraft Operated** | | | | | | | |  |  | | | | |
| **Total Number of Personnel** | | | | | | | |  |  | | | | |
| **Total Number of Fixed-Wing** | | | | | | | |  |  | | | | |
| **Total Number of Rotor-Wing** | | | | | | | |  |  | | | | |
| **Types of Aircraft Operated** | | | | | |  | | | | | | | |
|  | | | | | | | | | | | | | |
| |  | | --- | | **Home Operating Base** | | | | | | | |  | | | | | | |
| **Additional Operating Bases** | | | | | | |  | | | | | | |
|  | | | | | | | | | | | | | |
| **List of Persons Interviewed and Position or Job Title**  **(Interview a representative sample of line and management personnel)** | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | |
| **Findings and Recommendations** | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | |
| **Additional Comments** | | | | | | | | | | | | | |
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**8.2 Detailed Audit Protocols**

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| **3 Safety Management System** | | | | | |
| **3.2 Safety Management System Requirements** | | | | | |
| **3.2.1** | **Safety Policy and Objectives** | | | | |
| 3.2.1a | **Management Commitment and Responsibility**  **SOUND**: Is there a safety policy that: | | | | |
| * + - Reflects management’s commitment to safety? |  |  |  |  |
| * + - Includes a clear statement about providing necessary resources? |  |  |  |  |
| * + - Includes safety reporting procedures? |  |  |  |  |
| * + - Is signed and dated by the Accountable Executive (AE)? |  |  |  |  |
| * + - Is communicated, with visible endorsement, throughout the organization? |  |  |  |  |
| * + - Indicates which types of behaviours that are unacceptable? |  |  |  |  |
| * + - Includes the conditions under which exemption from disciplinary action would be applicable? |  |  |  |  |
| * + - Is periodically reviewed to ensure it remains relevant and appropriate to the organization? |  |  |  |  |
| **APPROPRIATE** | | | | |
| * Is the safety policy relevant to the scope and complexity of the organization’s operations? |  |  |  |  |
| * Is everyone aware of the safety policy? |  |  |  |  |
| **EFFECTIVE** | | | | |
| * Is the safety policy reinforced by day-to-day decisions? |  |  |  |  |
| * Is everyone committed to enhancing safety performance? |  |  |  |  |
| * Is there visible evidence of management demonstrating by example? |  |  |  |  |
|  | * Have there been significant or frequent changes in ownership or senior management within the past three years? |  |  |  | Ref: GAIN |
|  | * Have there been significant or frequent changes in the leadership of operational divisions within the company in the past three years? |  |  |  | Ref: GAIN |
|  | * Have any managers of operational divisions resigned from the company because of disputes about safety matters, operating procedures or practices? |  |  |  | Ref: GAIN |
|  | * Has the company recently experienced financial instability, a merger, an acquisition or major reorganisation? |  |  |  | Ref: GAIN |
|  | * Was explicit consideration given to safety matters during and following the period of instability, merger, acquisition or reorganisation? |  |  |  | Ref: GAIN |
|  | * Are safety-related technological advances implemented before they are dictated by regulatory requirement, i.e., is the company proactive in using technology to meet safety objectives? |  |  |  | Ref: GAIN |
| 3.2.1.b | **Safety Accountabilities**  **SOUND:** Does the SMS documentation identify the AE and the safety responsibilities, accountabilities and authorities of all personnel, to include a definition of the levels of management with authority to make decisions regarding safety risk tolerability? |  |  |  |  |
| **APPROPRIATE** | | | | |
| * Do the AE’s terms of reference indicate his/her ultimate responsibility for the SMS? |  |  |  |  |
| * Are there clear lines of safety accountabilities throughout the organisation? |  |  |  |  |
| **EFFECTIVE** | | | | |
| * Are the resources available to manage risks effectively? |  |  |  |  |
| * Does everyone know their role in the SMS and participate accordingly? |  |  |  |  |
| 3.2.1c | **Appointment of Key Safety Personnel**  **SOUND:** Does the SMS documentation include an appointment of a safety manager? |  |  |  |  |
| Does the department/safety officer report directly to senior corporate management, to the  CEO or the board of directors? |  |  |  | Ref: GAIN |
| **APPROPRIATE** | | | | |
| Is the safety manager properly trained? |  |  |  | Ref: GAIN |
| Is there a formal management-selection process? |  |  |  | Ref: GAIN |
| Are there well-defined management-selection criteria? |  |  |  | Ref: GAIN |
| Is management selected from inside or outside the company? |  |  |  | Ref: GAIN |
| Is operational background and experience a formal requirement in the selection of management personnel? |  |  |  | Ref: GAIN |
| Are first-line operations managers selected from the most operationally qualified candidates? |  |  |  | Ref: GAIN |
| Do new management personnel receive formal safety indoctrination or training? |  |  |  | Ref: GAIN |
| Is there a well-defined career path for operations managers? |  |  |  | Ref: GAIN |
| Is there a formal process for the annual evaluation of managers? |  |  |  | Ref: GAIN |
| Is the implementation of safety programs a specific management objective considered in  the evaluation? |  |  |  | Ref: GAIN |
| **EFFECTIVE** | | | | |
| Are the results of safety management activities formally recorded and analysed? |  |  |  |  |
| 3.2.1d | **Coordination of ERP**  **SOUND:** Does the SMS documentation include an ERP that is properly coordinated with the emergency response plans of those organizations it must interface with during the provision of its services? |  |  |  |  |
| **APPROPRIATE** | | | | |
| Is there a procedure for periodic review of the ERP to ensure its continuing relevance and effectiveness? |  |  |  |  |
| **EFFECTIVE** | | | | |
| Is the ERP regularly tested and updated including coordination with other organisations as appropriate? |  |  |  |  |
| 3.2.1e | **SMS Documentation**  **SOUND:** Does the SMS documentation include:   * + - A plan that defines the organization‘s approach to meet the safety objectives; |  |  |  |  |
| Are Company safety standards set primarily by the company or by the appropriate regulatory authority? |  |  |  | Ref: GAIN |
| Does the Company set higher safety standards than those required by the regulatory  authority? |  |  |  |  |
| Do the Company’s safety standards meet or exceed U.S. Federal Aviation Regulations  (FARs)/European Joint Aviation Requirements (JARs) criteria? |  |  |  | Ref: GAIN |
| Does the Company have a constructive, co-operative relationship with the regulatory authority? |  |  |  | Ref: GAIN |
| Has the Company been subject to recent safety-enforcement action by the regulatory  authority? |  |  |  | Ref: GAIN |
| Does the regulatory authority refuse to recognise the licenses issued by some other countries? |  |  |  | Ref: GAIN |
| Does the Company evaluate the licensing requirements of other countries when deciding whether to hire personnel who hold licenses issued by those countries? |  |  |  | Ref: GAIN |
| Does the Company consider the differing experience levels and other licensing standards of other countries when reviewing applications for employment? |  |  |  | Ref: GAIN |
| Does the regulatory authority routinely evaluate the Company’s compliance with required  safety standards? |  |  |  | Ref: GAIN |
| * + - Safety policy and objectives; |  |  |  |  |
| * + - SMS requirements; |  |  |  |  |
| * + - SMS processes and procedures; |  |  |  |  |
| * + - Accountabilities, responsibilities and authorities for processes and procedures; and |  |  |  |  |
| * + - SMS outputs? |  |  |  |  |
| **APPROPRIATE** | | | | |
| Is the SMS documentation readily available to ALL personnel? |  |  |  |  |
| **EFFECTIVE** | | | | |
| * Is there evidence that the SMS documentation is regularly reviewed and updated? |  |  |  |  |
| * Does the documentation provide evidence that safety objectives are being met? |  |  |  |  |
| **3.2.2** | **Flight Test Safety Risk Management** | | | | |
| 3.2.2a | **Risk Management Process**  **SOUND**: Is there a formal process to identify risks, hazards, causes, mitigations and emergency procedures for flight test procedures? |  |  |  | Ref: FAA 4040.26B |
| * Is there a Risk Management (RM) Plan (THAs or integral to Test Plans)? |  |  |  | Ref: FAA 4040.26B |
| * Does the RM use internal or external databases? |  |  |  | Ref: FAA 4040.26B |
| * Is there a process to assign Risk levels for flight test maneuvers? |  |  |  | Ref: FAA 4040.26B |
| * Is there a process to require Safety Review Boards (SRB) based on the level of Risk? |  |  |  | Ref: FAA 4040.26B |
| * Is there a standard (agenda, membership, process) for SRBs? |  |  |  | Ref: FAA 4040.26B |
| * Are the SRB results documented? |  |  |  | Ref: FAA 4040.26B |
| * Do the Risk Assessments get approved at appropriate levels depending on the risk category? |  |  |  | Ref: FAA 4040.26B |
| * Is there a standard pre-flight flight test briefing guide? |  |  |  | Ref: FAA 4040.26B |
| * Is the RM plan (THAs, etc.) briefed on each pre-flight briefing? |  |  |  | Ref: FAA 4040.26B |
| * Is there a maximum time established for a valid airplane conformity? |  |  |  | Ref: FAA 4040.26B |
| * Is there a policy/procedure for changes to the approved Test Profile (test cards)?   + Between flights   + In-flight   + When deployed |  |  |  | Ref: FAA 4040.26B |
| * Is there a requirement to install emergency escape provisions for crews in test airplanes?   + New prototypes   + Sustaining fleet |  |  |  | Ref: 14 CFR §21.35(d) |
| * Is there a dedicated life-support (helmets, parachutes, etc.) person in charge? |  |  |  | Ref: FT&SC |
| * Is there a central place to store and maintain life-support equipment? |  |  |  | Ref: FT&SC |
| * Is there a requirement for periodic inspections of life-support equipment?   + For currency   + For functionality |  |  |  | Ref: FT&SC |
| **APPROPRIATE** | | | | |
| * Are flight test personnel (FTP/FTEs) and Management involved in design/review of the company RM data? |  |  |  | Ref: FT&SC |
| * Do training programs include the RM process? |  |  |  |  |
| * Do training programs include:   + Emergency egress   + The use of life-support equipment |  |  |  | Ref: FT&SC |
| * Is there a requirement for recurrent training for:   + Emergency egress   + The use of life-support equipment |  |  |  | Ref: FT&SC |
| * Does the Ops Manual include the RM process? |  |  |  |  |
| * Is there a difference in the flight test safety requirements between new prototypes and follow-on sustaining fleet airplanes? |  |  |  | Ref: FT&SC |
| **EFFECTIVE** | | | | |
| * Is there a requirement to re-assess risks/hazards based on lessons learned from flight tests?   + Post-flight debrief |  |  |  | Ref: FAA 4040.26B |
| * Is there an internal requirement to report Safety Significant Event (other than to the NTSB)   + Confidential   + Non-Punitive |  |  |  | Ref: FAA 4040.26B |
| * Are there prescribed forms for SSEs?   + Electronic   + Handwritten |  |  |  | Ref: FAA 4040.26B |
| * Is there a system to analyse SSEs for trends? |  |  |  | Ref: FAA 4040.26B |
| * Is there a database for SSEs and is this DB readily available to flight test personnel (e.g. electronic)? |  |  |  | Ref: FAA 4040.26B |
| * Are employees confident they can report apparent safety deficiencies without retribution? |  |  |  |  |
| * Are both internal and external information used to update the RM data? |  |  |  |  |
| * Is there a procedure for periodic review of existing risk management records? |  |  |  |  |
| * Is the information indicating the need for change respected, valued, validated, and used? |  |  |  |  |
| * Is the Ops Manual consistently employed by operational managers and staff? |  |  |  |  |
| * Do mitigations take into account Human Factors and Organizational Factors? |  |  |  |  |
| **3.2.3** | **Safety Assurance** | | | | |
| 3.2.3 a | **Safety performance monitoring and measurement**  **SOUND:** Is there a process and/or procedure to:   * Validate the effectiveness of the safety risk controls? |  |  |  |  |
| * To established safety performance indicators and targets? |  |  |  |  |
| **APPROPRIATE** | | | | |
| * Has the organisation developed a series of safety performance indicators that are appropriate to the type of operation? |  |  |  |  |
| * Are safety indicators and targets specific, measurable, agreed to, relevant and time-based? |  |  |  |  |
| * Is the information from occurrences analyzed and where appropriate, used to upgrade policies and procedures? |  |  |  |  |
| * Are priorities regularly reviewed, reassessed and, if required, reassigned to address safety issues? |  |  |  |  |
| **EFFECTIVE** | | | | |
| * Are safety targets being achieved? |  |  |  |  |
| * Is there a means to measure and monitor trends and take appropriate action when necessary? |  |  |  |  |
| * Have the controls for the safety risks been evaluated? |  |  |  |  |
| * Are the results from internal audits used to measure safety performance? |  |  |  |  |
| 3.2.3 b | **Management of Change**  **SOUND:** Is there a process to identify and manage organizational changes that may affect safety? |  |  |  |  |
| **APPROPRIATE** | | | | |
| * Are stakeholders involved in the change management process? |  |  |  |  |
| * Are there procedures for managing the revisions of documents, manuals, and checklists? |  |  |  |  |
| * Are changes to critical documents communicated throughout the organization? |  |  |  |  |
| **EFFECTIVE** | | | | |
| * Does the organisation use the SMS to proactively assess all major changes to the organisation and its operations? |  |  |  |  |
| * Do staff members always use up-to-date documents, manuals, checklists, and/or procedures? |  |  |  |  |
| 3.2.3 c | **Continuous Improvement**  **SOUND:** Is there a process or procedure to ensure continuous improvement of the SMS? |  |  |  |  |
| **APPROPRIATE** | | | | |
| * Is there an internal audit/assessment process and a follow-up procedure to address audit findings? |  |  |  |  |
| **EFFECTIVE** | | | | |
| * Is there evidence of improvements to policies, procedures, and/or processes based on internal audit findings? |  |  |  |  |
| **3.2.4** | **Safety Promotion** | | | | |
| 3.2.4 a | **Training and Education**  **SOUND:** Has the organization developed and maintained safety training programmes that ensure that personnel are competent to perform their SMS duties? |  |  |  |  |
| **APPROPRIATE** | | | | |
| * Does training include human and organisational factors with the intent of reducing human error? |  |  |  |  |
| * Does technical training (i.e. pilot, maintenance, dispatch/scheduling, etc.) reinforce SMS principles (i.e. human factors, organizational factors, risk assessments, risk management, etc.)? |  |  |  |  |
| **EFFECTIVE** | | | | |
| * Is there evidence that all personnel involved in SMS operations have undergone appropriate SMS training? * Are executives, managers, and staff capable of performing their roles to proactively manage safety? |  |  |  |  |
| 3.2.4 b | **Safety Communication**  **SOUND:** Has the organization developed and maintained a formal means of safety communication? |  |  |  |  |
| **APPROPRIATE** | | | | |
| * Are significant events and investigation outcomes from internal and external sources communicated to all personnel? |  |  |  |  |
| **EFFECTIVE** | | | | |
| * Is there evidence that all personnel are aware of the SMS, safety critical information, and their role in respect of aviation safety? |  |  |  |  |
|  | * Does the Company support periodic publication of a safety report or newsletter? |  |  |  | GAIN |
|  | * Does the Company distribute safety reports or newsletters from other sources? |  |  |  | GAIN |
|  | * Is there a formal system for regular communication of safety information between * management and employees? |  |  |  | GAIN |
|  | * Are there periodic company-wide safety meetings? |  |  |  | GAIN |
|  | * Does the Company actively participate in industry safety activities, such as those sponsored * by Flight Safety Foundation (FSF), International Air Transport Association (IATA) and others? |  |  |  | GAIN |
| **3.3 Compliance Monitoring** | |  |  |  |  |
| 3.3.1 | Has the operator established and maintained a system for identifying applicable regulations, standards, approvals, exemptions and demonstrated compliance with them? |  |  |  |  |
| **3.4 Flight Data Analysis** | |  |  |  |  |
| 3.4.1 | *Has the organization established a flight data analysis programme (Recommended Practice)* |  |  |  |  |
| **Comments, Observations, and Recommendations** | | | | | |
|  |  | | | | |
| **Analysis of Non-Conformities/Findings** | | | | | |
|  |  | | | | |

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| **Element** | | **4 Organization and Personnel Requirements** | | | | |
| **4.1 Organization and Personnel** | | | | | | |
| 4.1.1 | Does the operator have an organization structure that clearly defines qualifications, duties, authorities & accountabilities of the:   1. Manager of the operation; | |  |  |  |  |
| 1. Person responsible for managing the flying operations; and | |  |  |  |  |
| 1. A person responsible for aircraft maintenance? | |  |  |  |  |
| 4.1.2 | Where the organization has more than one operating base, has the organization structure addressed the exercise of management of the above responsibilities at all locations? | |  |  |  |  |
|  | Have there been recent layoffs by the Company? | |  |  |  | GAIN |
|  | Are a large number of personnel employed on a part-time or contract basis? | |  |  |  | GAIN |
|  | Does the Company have formal rules or policies to manage the use of contract personnel? | |  |  |  | GAIN |
|  | Is there open communication between employees and management? | |  |  |  | GAIN |
|  | Is there a formal means of communication among management, the work force and labour unions about safety issues? | |  |  |  | GAIN |
|  | Is there a high rate of personnel turnover in operations and maintenance? | |  |  |  | GAIN |
|  | Is the overall experience level of operations and maintenance personnel low or declining? | |  |  |  | GAIN |
|  | Is the distribution of age or experience level within the Company considered in long-term company plans? | |  |  |  | GAIN |
|  | Are the professional skills of candidates for operations and maintenance positions evaluated formally in an operational environment during the selection process? | |  |  |  | GAIN |
|  | Are multicultural processes and issues considered during employee selection and training? | |  |  |  | GAIN |
|  | Is special attention given to safety issues during periods of labour-management disagreements or disputes? | |  |  |  | GAIN |
|  | Are the safety implications of deteriorating morale considered during the planning and implementation of reduction in work force or other destabilising actions? | |  |  |  | GAIN |
|  | Have there been recent major changes in wages or work rules? | |  |  |  | GAIN |
|  | Does the Company have a Company-wide employee health maintenance program that includes annual medical examinations? | |  |  |  | GAIN |
|  | Does the Company have an employee-assistance program that includes treatment for drug and alcohol abuse? | |  |  |  | GAIN |
| **4.2 Aircraft Crew Member Duties and Responsibilities** | | | | | | |
| 4.2.1 | Does the operator have a procedure to ensure that the minimum number of flight crew as specified in the aircraft flight manual or other document associated with the C of A, and the minimum numbers of cabin crew members, as required by State of Registry regulations, are assigned? | |  |  |  |  |
| 4.2.2 | Does the operator have procedure for designation of a pilot-in-command and other aircraft crew positions? | |  |  |  |  |
| 4.2.3 | Have the duties and responsibilities of the PIC been specified. | |  |  |  |  |
| 4.2.4 | Have the duties and responsibilities of the SIC, if required, been specified? | |  |  |  |  |
| 4.2.5 | Have the duties and responsibilities of the cabin crew and other crew members assigned on-board duties specified? | |  |  |  |  |

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| **4.3 Crew Member Qualifications** | | | | | |
| 4.3.1 | a. Are there procedures to ensure that all flight crew members:   1. hold the licence, medical certificate and ratings (including radiotelephony licence unless it is included in the pilot licence) required by national regulations, |  |  |  |  |
| 1. meets all recency requirements of the national regulations, |  |  |  |  |
| 1. meets the licence, medical and rating requirements specified in ICAO Annex 1 when operations are conducted outside of the national airspace of the State of issue of the flight crew licence, |  |  |  |  |
| 1. has fulfilled the requirements of the operator's ground and flight training programme referred to in sections 5.1, 5.2, 5.3 and 5.4, |  |  |  |  |
| 1. have successfully completed the proficiency requirements specified in section 5.5 for that type of aircraft, and |  |  |  |  |
| 1. can demonstrate the capability to speak and understand the language used for aeronautical radiotelephony communications as specified in ICAO Annex 1. |  |  |  |  |
| b. Are there procedures to ensure that each cabin crew member has fulfilled the requirements of the national regulations and the operator's ground and flight training programme referred to in sections 5.1, 5.2 and 5.3, and recommended in section 5.4? |  |  |  |  |
| c. Are there procedures to ensure that each crew member or task specialist, other than a flight crew member or a cabin crew member, has fulfilled the requirements of the operator's ground and flight training programme referred to in section 5.1? |  |  |  |  |
|  | d. Is there a system to record and monitor flight crew currency? |  |  |  | GAIN |
|  | e. Does the record-keeping system include initial qualification, proficiency checks and recurrent training, special airport qualifications, line-check observations and IOE observations for:   1. Pilots in command? 2. Seconds in command? 3. Flight engineers? 4. Instructors and check pilots? 5. Flight attendants? |  |  |  | GAIN |
|  | f. Does the Company permit multiple aircraft qualification for line pilots? |  |  |  | GAIN |
|  | g. Does the Company have specific requirements for pilot-in-command and second-in- command experience in type for crew scheduling? |  |  |  | GAIN |
| 4.3.2. | *Where it is the operator’s practice to fly two crew aeroplanes from the left seat, has the operator established right seat landing and take-off recency and training requirements? (***Recommended Practice*)*** |  |  |  |  |
| **4.4 Maintenance Personnel Qualifications** | | | | | |
| 4.4.1 | Do the maintenance personnel hold the licences and ratings required by the State of the Operator or State of Registry of the aircraft? |  |  |  |  |
| **4.5 Other Personnel** | | | | | |
| 4.5.1 | Are duties, authorities and responsibilities for other personnel involved in the operation described within the operations manual? |  |  |  |  |
| **4.6 Use of Psychoactive Substances** | | | | | |
| 4.6.1 | *Is there a policy to ensure that personnel do not undertake safety related duties while under the influence of any psychoactive substance which might render them unable to safely and properly exercise their licence privileges or carry out their safety related duties?*  *(Recommended Practice)* |  |  |  |  |
| 4.6.2 | *Do policies also address any problematic use of substances?* ***(Recommended Practice)*** |  |  |  |  |
| **4.7 Mobile Phones & PEDs** | | | | | |
|  | *Do policies provide guidance on the use of mobile phones and PED for all personnel, including critical phases of flight and ground operations, operating vehicles, and maintenance work?* ***(Recommended Practice)*** |  |  |  |  |
| **4.8 Fatigue Management** | | | | | |
|  | *Is there a program to assess and manage the inherent risks associated fatigue for ALL personnel and does it include all the elements as described in Section 6.13?*  ***(Recommended Practice)*** |  |  |  |  |
| **Comments, Observations, and Recommendations** | | | | | |
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| **Analysis of Non-Conformities/Findings** | | | | | |
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| **Element** | | **5 Training and Proficiency** | | | | | |
| **5.1 Training Programs** | | | | | | | |
| 5.1.1 | Does the operator have a training programme that ensures that personnel are trained and competent to perform their assigned duties? | |  |  |  |  | |
| 5.1.2 | Is the training program included or referenced, in the company operations manual? | |  |  |  |  | |
|  | Is formal maintenance training provided by the company for all maintenance personnel? Is such training done on a recurrent basis? How is new equipment introduced? | |  |  |  | GAIN | |
| 5.1.3 | **a. Flight Crew Members**:  Does the ground and flight training programme include:  (i). Initial and annual aircraft type and systems training including emergency and abnormal procedures related to the aircraft category and type? | |  |  |  |  | |
| (ii) Initial and every two years thereafter:   1. Emergency Procedures Training? (See Section 5.3.1) | |  |  |  |  | |
| 1. Aircraft Surface Contamination Training? | |  |  |  |  | |
| 1. Dangerous Goods Training? | |  |  |  |  | |
| (iii) Upgrade training program? | |  |  |  |  | |
| *(iv) Periodic first aid training for operators that do not use cabin crew* ***(Recommended Practice)*** | |  |  |  |  | |
| **b. Cabin Crew Members**:  (i) Does the initial and annual training include:   * + - 1. Aircraft Type Training? | |  |  |  |  | |
| 1. Safety Procedures Training (see Section 5.3.2) | |  |  |  |  | |
| (ii) Initial and every two years thereafter:   1. Emergency procedures training (see Section 5.3.1) | |  |  |  |  | |
| 1. First aid training; | |  |  |  |  | |
| 1. Aircraft surface contamination training, and | |  |  |  |  | |
| 1. Dangerous goods training? | |  |  |  |  | |
| c. Is there an initial and recurrent training program for other crew members: (i.e. loadmasters, stewards, HEMS medical teams, observers, etc.)? | |  |  |  |  | |
| d. Is there an initial and recurrent training for schedulers or dispatchers? | |  |  |  |  | |
| e. Does the organization’s training program include all the elements required to ensure a safe operation? | |  |  |  |  | |
| 5.1.4 | Does the operator prohibit simulated emergency or abnormal situations in flight with passengers on board? | |  |  |  | |  |
| 5.1.5 | *Does the operator use flight simulators for training?* ***(Recommended Practice)*** | |  |  |  | |  |
| 5.1.6 | Maintenance Personnel Training   1. Has the operator established a training programme that ensures that the organization’s maintenance personnel have the competencies appropriate to the level of maintenance performed? | |  |  |  | |  |
|  | 1. Is the training course outline referenced in the company operations manual? | |  |  |  | |  |
|  | 1. Does the training programme include both initial and recurrent training appropriate to the aircraft group, type or system and the related procedures for which a maintenance release is to be signed? | |  |  |  | |  |
|  | 1. *Does the training programme include other subjects [See Section 5.1.6d items (i) – (ix)]?*   ***(Recommended Practice)*** | |  |  |  | |  |
|  | 1. *Do persons who hold maintenance release authority undertake recurrent training at least every 2 years on aircraft for which they exercise that authority?* ***(Recommended Practice)*** | |  |  |  | |  |
| **5.2 Crew Resource Management/Human Factors Training** | | | | | | | |
| 5.2.1 | Have aircraft crew members received CRM training? | |  |  |  | |  |
| 5.2.2 | *Have ALL personnel received CRM or Human Factors training and do recurrent training programs include instruction in these subjects? (****Recommended Practice)*** | |  |  |  | |  |

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| **5.3 Emergency and Safety Procedures Training** | | | | | | | | | | | |
| 5.3.1 | | Are there initial and recurrent Emergency Procedures training programs per Standard 5.3.1 and have all aircraft crew members received their training for:   * 1. fire in the air and ground, |  | |  | |  | |  | |
|  | | * 1. use of fire extinguishers, |  | |  | |  | |  | |
|  | | * 1. operation/use of emergency exits |  | |  | |  | |  | |
|  | | * 1. passenger preparation for emergency landing and/or ditching, |  | |  | |  | |  | |
|  | | * 1. emergency evacuation procedures, |  | |  | |  | |  | |
|  | | * 1. donning and inflation of life preservers (if equipped), |  | |  | |  | |  | |
|  | | * 1. removal from stowage, deployment, inflation and boarding of life rafts (when equipped); |  | |  | |  | |  | |
|  | | * 1. pilot incapacitation |  | |  | |  | |  | |
|  | | * 1. unlawful interference, bomb threat, other security procedures, |  | |  | |  | |  | |
|  | | * 1. MEDEVAC or ill or injured passenger transportation in emergency situations, and |  | |  | |  | |  | |
|  | | * 1. passenger health emergencies? |  | |  | |  | |  | |
| 5.3.1.1 | | *Is there a programme to provide emergency procedures training to passengers that fly frequently?* ***(Recommended Practice)*** |  | |  | |  | |  | |
| 5.3.2 | | Are there initial and recurrent Safety Procedures training programmes for all cabin crew members? |  | |  | |  | |  | |
| **5.4 High Altitude Training** | | | | | | | | | | | |
| 5.4.1 | Have flight crew members received high altitude training for aircraft operated above 10,000 feet? | | |  | |  | |  | |  | |
| 5.4.2 | *Is pertinent aircraft type specific high altitude training conducted?* ***(Recommended Practice)*** | | |  | |  | |  | |  | |
| **5.5 Proficiency Certification** | | | | | | | | | | | |
| 5.5.1 | * Is there a process to ensure that all aircraft crew members meet national proficiency requirements? | | |  | |  | |  | |  | |
| * Is there a process to ensure that all crew member training courses meet the training objectives required by the national civil aviation authority? | | |  | |  | |  | |  | |
| 5.5.2 | Has the proficiency of flight crew members been certified at the conclusion of initial type training and on a recurrent basis as required by the national civil aviation authority? | | |  | |  | |  | |  |

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| **5.6 Training and Qualification Records** | | | | | |
| 5.6.1 | Does the operator have a system to record licensing, training and qualifications information for each person who is required to receive training and does it meet the IS-BAO requirements? |  |  |  |  |
| 5.6.2 | Are records retained for the required period? |  |  |  |  |
| **Comments, Observations, and Recommendations** | | | | | |
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| **Analysis of Non-Conformities/Findings** | | | | | |
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| **Element** | | **6 Flight Operations** | | | | |
| **6.1 Standard Operation Procedures** | | | | | | |
| 6.1.1 | 1. Does the operator have a SOP for each aircraft operated with two or more crew members? | |  |  |  |  |
| 1. *Does the operator have a SOP for single pilot aircraft?*   ***(Recommended Practice)*** | |  |  |  |  |
| 6.1.2 | Has the operator ensured that all crew members are trained in use of the SOP and that it is used? | |  |  |  |  |
| 6.1.3 | Is a copy of the SOP issued to each aircraft crewmember? | |  |  |  |  |
| 6.1.4 | Is a copy of the SOP carried onboard the aircraft when it is operated more that 25 nm from home base? | |  |  |  |  |
| **6.2 Flight Planning and Pre-Flight Requirements** | | | | | | |
| 6.2.1.1 | Does the operator have a requirement and procedures for the PIC to be familiar with the available information appropriate for the flight and to ensure that the facilities and services are adequate for the safe operation of the aircraft? | |  |  |  |  |
| 6.2.1.2 | Does the operator have a requirement and procedures for the PIC to:   1. be familiar with all available meteorological information, and | |  |  |  |  |
| * 1. plan an alternative course of action for the eventuality that the flight cannot be completed because of weather conditions? | |  |  |  |  |
| 6.2.2 | Does the operator have procedures for VFR flight operations? | |  |  |  |  |
| 6.2.3 | a. Does the operator have a procedure to ensure that a flight shall not be commenced unless the available information indicates that conditions, at the aerodrome or heliport , of intended landing or at least one destination alternate will, at the estimated time of arrival, be at or above the aerodrome or heliport, operating minima? | |  |  |  |  |
| 1. Does the operator have a procedure to ensure that a take-off alternate aerodrome/heliport is selected and specified in the flight plan if the weather conditions at the aerodrome/heliport of departure are at or below the applicable operating minima or it would not be possible to return to the point of departure for other reasons? | |  |  |  |  |
| 1. Is there a procedure to ensure that the weather conditions for the departure alternate, at the estimated time of use, will be at or above the applicable operating minima for that operation? | |  |  |  |  |
| 6.2.4 | Does the operator have a procedure to ensure that at least one destination alternate aerodrome or heliport, shall be selected and specified in the flight plan, with the following exceptions:  a. The approach at the destination can be flown under VMC | |  |  |  |  |
| 1. The destination is isolated and no alternate is available (See IS-BAO 6.2.4b) | |  |  |  |  |
| 6.2.5A | Does the operator have policies and procedures to ensure that in-flight fuel checks are performed? Do they include:   1. Minimum fuel reserves defined, to include flights with a destination alternate? | |  |  |  |  |
| * 1. *One final reserve fuel value for each aeroplane type figured and published?* ***(Recommended Practice)*** | |  |  |  |  |
| 1. The PIC continually ensuring that the amount of usable fuel remaining on board is not less than the fuel required to proceed to an aerodrome where a safe landing can be made with the planned final reserve fuel remaining upon landing? | |  |  |  |  |
| * 1. Guidance for declaring MINIMUM FUEL? | |  |  |  |  |
| * 1. Guidance for declaring a fuel emergency?   (See IS-BAO 6.2.5A for details) | |  |  |  |  |
| 6.2.6 | Does the operator have a procedure to ensure that a flight is not commenced unless a sufficient quantity of stored breathing oxygen is carried to supply all crew members and passengers in accordance with the national regulations of the State of Registry? | |  |  |  |  |
| 6.2.7A | *Has the operator developed operational and maintenance procedures for extended diversion time operations (EDTO)? EDTO are described in ICAO Annex 6 Part 1, Section 4.7.* ***(Recommended Practice)*** | |  |  |  |  |
| 6.2.8 | Does the operator have requirements that meet the aircraft performance standards of this section? | |  |  |  |  |
| 6.2.9 | Does the operator have requirements that meet the standards prescribed for refuelling with passengers on board, if permitted? | |  |  |  |  |
| 6.2.10 | Does the operator have procedures to ensure that an aircraft does not take off or attempt to take off, that has frost, ice, or snow adhering to any critical surface? | |  |  |  |  |
| **6.3 Operational Control** | | | | | | |
| 6.3.1 | Does the operator’s operations manual contain an operational control system that at least consists of a pilot dispatch system that:   1. identifies the person responsible for release of the flight; | |  |  |  |  |
| 1. specifies flight planning requirements; and | |  |  |  |  |
| 1. specifies when the pilot must advise the operator of the aircraft’s departure and arrival and the associated procedures? | |  |  |  |  |
|  | 1. Are operations during periods of reduced crash, fire and rescue (CFR) equipment availability covered in the company flight operations manual? | |  |  |  | GAIN |
|  | 1. Do dispatchers/flight followers have duty-time limitations? | |  |  |  | GAIN |
|  | 1. Are computer-generated flight plans used? | |  |  |  | GAIN |
| 6.3.2 | Does the operational control system include procedures for ensuring that:   1. all operating requirements specified in the COM have been met; | |  |  |  |  |
| 1. the aircraft is operated within weight/mass and balance limits; | |  |  |  |  |
| 1. the names of persons on board the aircraft are recorded or otherwise know by the operator; and | |  |  |  |  |
| 1. SAR authorities are notified on a timely basis should an aircraft be overdue? | |  |  |  |  |
| 6.3.3 | *Does the operational control system also include procedures for ensuring that the pilot-in-command has access to appropriate information concerning the search and rescue services in the area over which the aircraft will be flown?* ***(Recommended Practice)*** | |  |  |  |  |

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| **6.4 Weather Minima** | | | | | | | | | | |
| 6.4.1 | Does the operator have procedures to ensure the weather minima used for IFR departures and approaches are those specified in the instrument approach procedures approved for use by the operator? | |  | |  | |  | |  | |
| 6.4.2 | 1. Does the operator have procedures in their operations manual for the determination of take-off minima from runways or heliports where no take-off minima are specified? | |  | |  | |  | |  | |
| 1. Does it include a risk analysis? | |  | |  | |  | |  | |
| 6.4.3 | Does the operator have a policy not to use operating minima lower than those which may be established for that aerodrome or heliport by the State in which it is located, except with the specific approval of that State? | |  | |  | |  | |  | |
| 6.4.4 | Does the operator have a policy not to continue towards the aerodrome or heliport of intended landing unless the latest available meteorological information indicates that conditions at that aerodrome or heliport, or at least one destination alternate aerodrome or heliport, will, at the estimated time of arrival, be at or above the specified aerodrome operating minima? | |  | |  | |  | |  | |
| 6.4.5 | 1. Are there procedures to restrict continuing an approach beyond the outer marker for precision approach or below 1000 feet above the aerodrome for a non-precision approach if the reported visibility is less than the specified minima? | |  | |  | |  | |  | |
| 1. Are there procedures for the flight crew if the visibility is reported less than specified minima after passing the outer marker for precision approaches or below 1000 feet above the aerodrome for non-precision approaches? | |  | |  | |  | |  | |
| 1. If the State of Registry and State of Operation allows deviations to the above, is there a policy to ensure that the aircrew do not continue an approach-to-land beyond a point at which the limits of the aerodrome or heliport operating minima would be infringed? | |  | |  | |  | |  | |
| 1. If deviations are allowed, are there procedures to ensure the flight crew files a safety occurrence report to include the details of the event and the outcome? | |  | |  | |  | |  | |
| 6.4.6 | Reserved | |  | |  | |  | |  | |
| 6.4.7 | Does the operator have a policy and procedures for operating in known or expected icing conditions appropriate to the aircraft icing certification and equipment? | |  | |  | |  | |  | |
| **6.5 All Weather Operations** | | | | | | | | | | |
| 6.5.1 | Does the operator have procedures that prohibit conducting an instrument approach or departures below standard Category I weather minima unless all equipment, training and operating requirements and regulatory requirements have been met? | |  | |  | |  | |  | |
| 6.5.2 | If the operator has authority to conduct CAT II & III ops are:   1. there approved Category II or III operating procedures in the company operations manual, 2. the flight crew trained and certified to conduct Category II or III instrument approaches, 3. the aircraft equipped and approved for Category II or III operations? | |  | |  | |  | |  | |
| **6.6 CNS Requirements** | | |  | |  | |  | |  | |
| 6.6.1 | Is there a process to ensure that prior to operations in airspace where special CNS requirements exist such as Performance Based Navigation (PBN) Specifications, Minimum Navigation Performance Specification (MNPS), Reduced Vertical Separation Minimums (RVSM), Controller Pilot Data Link Communication (CPDLC), or Automatic Dependent Surveillance (ADS) B/C:   1. the aircraft and operator has been authorized by the State of Registry and, if required, the State of Operations; | |  | |  | |  | |  | |
| 1. the aircraft meets the aircraft system, airworthiness, continuing airworthiness (including maintenance personnel training) and operational requirements for the operations concerned; and | |  | |  | |  | |  | |
| 1. continuing RVSM height monitoring requirements have been met. | |  | |  | |  | |  | |
| 6.6.2 | 1. Are there procedures to ensure that Flight crews engaged in operations in airspace where special CNS requirements apply (i.e. PBN, RVSM, MNPS, CPDLC, ADS) are authorized by an appropriate manager? | |  | |  | |  | |  | |
| 1. Are there procedures to ensure that each flight crew member authorized to conduct operations under this section complete training in the subject areas as required by the specific State authorizations and as necessary to ensure competency in operations in such airspace? | |  | |  | |  | |  | |
| 1. Are such authorizations included in the pilot training records? | |  | |  | |  | |  | |
| **6.7 Aircraft Operating Requirements** | | | |  | |  | |  | |  |
| 6.7.1 | | Does the operator have a process for identifying and complying with all aircraft operating rules that the operator is subject to, as required by the civil aviation authority of the State of Registry and the States in whose airspace the operations are being conducted? | |  | |  | |  | |  |

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| **6.8 Noise Certification** | | | | | |
| 6.8.1 | Is there documentary proof from the State of Registry attesting noise certification of the aircraft, carried on board the aircraft when such a document has been issued? |  |  |  |  |
| 6.8.2 | Does the operator have procedures to ensure that aircraft adhere to published noise abatement procedures consistent with safety? |  |  |  |  |
| **6.9 Aircraft Airworthiness** | | | | | |
| 6.9 | Does the operator have procedures to ensure that aircraft are maintained and operated in accordance with their C of A and the provisions of the company maintenance program? (Also see 9 Aircraft Maintenance) |  |  |  |  |
| **6.10 Use of Oxygen** | | | | | |
| 6.10.1 | Does the operator have a procedures to ensure that when an aircraft is operated at cabin-pressure-altitudes above 10,000 ft. (700 hPa) but not exceeding 13,000 ft. (620 hPa) each crew member shall wear an oxygen mask and use supplemental oxygen for any part of the flight at those cabin pressure altitudes that is more than 30 minutes in duration? |  |  |  |  |
| 6.10.2 | Where an aircraft is operated at cabin-pressure-altitudes above 13,000 ft. (620 hPa) does each person on board the aircraft wear an oxygen mask and use supplemental oxygen for the duration of the flight at those altitudes? |  |  |  |  |
| 6.10.3 | Does the pilot at the flight controls of an aircraft use an oxygen mask if the aircraft is not equipped with quick-donning oxygen masks, and it is operated at or above FL 250? |  |  |  |  |
| 6.10.4 | *Does the operator have procedures for the pilot at the controls to use an oxygen mask when the aircraft is operated above FL 410, or if one pilot leaves the flight deck for any reason above FL 350?*  ***Recommended Practice*** |  |  |  |  |
| **6.11 Passenger Safety Briefing** | | | | | |
| 6.11.1 | Does the operator have procedures as applicable for the type of operation, to ensure that passenger safety briefings are given for normal operations? (See ISBAO for details) |  |  |  |  |
| 6.11.2 | Are there procedures to modify briefings as appropriate for frequent passengers or mission needs? |  |  |  |  |
| 6.11.3 | Are there procedures to provide individual briefings for special circumstances, i.e. passenger limitations? |  |  |  |  |
| 6.11.4 | Are there procedures to ensure that, in the event of an emergency, where circumstances permit, all passengers are given an emergency briefing covering the following items:  a. safety belts or safety/shoulder harnesses; |  |  |  |  |
| 1. seat backs, seats and tables |  |  |  |  |
| 1. carry-on baggage |  |  |  |  |
| 1. passenger safety briefing cards |  |  |  |  |
| 1. brace position (when to assume, how long to remain) and considerations for side facing seats |  |  |  |  |
| 1. evacuation procedures |  |  |  |  |
| 1. if applicable, life preservers; flotation devices and life rafts; and |  |  |  |  |
| 1. if applicable, evacuation procedures for an occupant of a child restraint system? |  |  |  |  |
| 6.11.5 | Are there aircraft specific passenger safety briefing cards in all aircraft that at least cover:   1. the location and operation of emergency exits; |  |  |  |  |
| 1. the location and use of the passenger oxygen system (when installed); |  |  |  |  |
| 1. the location of life jackets and life rafts(when on board); and |  |  |  |  |
| 1. the location of emergency equipment as required by State of Registry? |  |  |  |  |
| **6.12 Use of Checklists** | | | | | |
| 6.12.1 | Is there a checklist for each type of aircraft operated that covers normal, abnormal and emergency operations and is it available to crew members? |  |  |  |  |
|  | Is the checklist consistent with the aircraft flight manual and any SOP? |  |  |  |  |
|  | Does it have a date of issue that reflects this consistency? |  |  |  |  |
| 6.12.2 | Does the operator have procedures to ensure that every crew member follows the checklist in the performance of their assigned duties? |  |  |  |  |
| **6.13 Fatigue Management** | | | | | |
| 6.13.1 | Does the operator have a fatigue management programme that ensures that all personnel (including maintenance, pilots, cabin crew, other crew) involved in the operation do not carry out their duties when they are fatigued and that includes: |  |  |  |  |
| 1. fatigue management guiding principles, |  |  |  |  |
| 1. appropriate training and education regarding preventive and operational fatigue countermeasures; |  |  |  |  |
| 1. flight crew rest and duty time limitations. |  |  |  | GAIN |
| 1. an evaluation process that assess the effectiveness of the fatigue management system? |  |  |  |  |
| 6.13.2 | If deviations from the flight and duty time limitations are permitted, does the system include:   1. a risk assessment process, |  |  |  |  |
| 1. the identification of the management person authorized to approve the deviation, and |  |  |  |  |
| 1. a record of the deviation, risk assessment and mitigation? |  |  |  |  |
| 6.13.3 | Do deviations require the expressed approval of all personnel involved? |  |  |  |  |
| 6.13.4 | *Are deviations from the limits contained in IS-BAO Implementation Guide supported by a comprehensive risk assessment process?* ***(Recommended Practice)*** |  |  |  |  |
| **6.14 Travel Health Issues** | | | | | |
| 6.14 | *If the operator conducts international operations have they developed procedures for assessment of health risks at out of country destinations and for handling of passengers and crew should they be exposed to infectious disease or significant health risks?* ***(Recommended Practice)*** |  |  |  |  |
| **6.15 Seating Requirements** | | | | | |
| 6.15.1 | Are there procedures to ensure flight crew member seating requirements are met? (See ISBAO for details) |  |  |  |  |
| 6.15.2 | Are there procedures to ensure cabin crew member seating requirements are met? (See ISBAO for details) |  |  |  |  |
| 6.15.3 | Are there procedures to ensure passenger seating requirements are met? (See ISBAO) |  |  |  |  |
| **6.16 Cabin Baggage** | | | | | |
| 6.16 | Does the operator specify procedures to ensure that all baggage carried onto an aircraft and taken into the passenger cabin is adequately and securely stowed? |  |  |  |  |
| **6.17 Microphones and Headsets** | | | | | |
| 6.17 | Does the operator have procedures to ensure that flight crew members of:   1. large or turbojet aeroplanes on the flight deck required to communicate through boom microphones below the transition level/altitude, |  |  |  |  |
| 1. helicopters use headsets and communicate through a boom microphone at all times? |  |  |  |  |
| **6.18 Personnel Qualified to Taxi Aeroplane** | | | | | |
| 6.18 | Is there a procedure to ensure that an aeroplane is not taxied on the movement area of an aerodrome unless the person at the controls is an appropriately qualified pilot or:   * 1. has been duly authorized by the operator; |  |  |  |  |
|  | * 1. is fully competent to taxi the aeroplane; |  |  |  |  |
|  | * 1. is qualified to use the radio if radio communications are required; and |  |  |  |  |
|  | * 1. has received instruction from a competent person in respect of aerodrome layout, and where appropriate, information on routes, signs, marking, lights, ATC signals and instructions, phraseology and procedures, and is able to conform to the operational standards required for safe aeroplane movement at the aerodrome. |  |  |  |  |
| **6.20 Maintenance Check Flights** | | | | | |
| 6.20 | *Are there procedures to effectively manage the risks associated with Maintenance Check Flights?* ***(Recommended Practice)*** |  |  |  |  |
| **6.21 Piloting Competency in Key Safety Areas** | | | | | |
| 6.21 | ***(Recommended Practice)***  *Are there procedures and training requirements to ensure each pilot maintains competency in key safety areas such as:*  *a) Manual Flying Skills* |  |  |  |  |
|  | *b) Stabilized Approaches* |  |  |  |  |
|  | *c) Runway Excursion Prevention* |  |  |  |  |
|  | *d) Automation Management* |  |  |  |  |
|  | *e) Upset Recovery* |  |  |  |  |
| **Comments, Observations, and Recommendations** | | | | | |
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| **Analysis of Non-Conformities/Findings** | | | | | |
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| **Element** | | **7 Operations in International Airspace** | | | | |
| **7.1 Sovereign and International Airspace** | | | | | | |
| 7.1 | 1. Are there procedures to ensure that when operating in the sovereign airspace of a State other than the State of Registry, the flight crew identify and apply the most restrictive requirements regarding the State of Registry and the State where the operations are being conducted? | |  |  |  |  |
| 1. Are there procedures to ensure that the rules in force relating to flight and manoeuvre of aircraft when operating outside the airspace of any sovereign state, i.e. oceanic or high seas, are in accordance with ICAO Annex 2, Rules of the Air”? | |  |  |  |  |
| **7.2 Compliance** | | | | | | |
| 7.2.1 | Has the operator maintained a process to ensure that flight crews are familiar with and comply with the requirements, rules, regulations and procedures in international and the various sovereign airspaces in which they operate? | |  |  |  |  |
| 7.2.2 | Does the operator have procedures for discharging responsibility for disembarking passengers and crew members from the time they leave the aircraft until they are accepted for examination for entry into a State? | |  |  |  |  |
| **7.3 International Airspace Operations Qualifications** | | | | | | |
| 7.3.1 | Is there a process to ensure that flight crew members engaged in international operations are authorized by the chief pilot? | |  |  |  |  |
| 1. Is there a process to ensure that each flight crew member completes training in the subject areas as required by the specific authorizations and as necessary to ensure competency in operations in such airspace? | |  |  |  |  |
| 1. Is there a procedure to ensure such authorizations are included in the pilot training records? | |  |  |  |  |
| 7.3.2 | Does the training programme ensure that crews understand the relationship between State of Registry/Operator operating rules and procedures and the ICAO Rules of the Air when operating in international airspace? | |  |  |  |  |
| **7.4 Reserved** | | | | | | |
| **7.5 Standard Operating Procedures** | | | | | | |
| 7.5.1 | For operations in international airspace involving performance based navigation:   1. Does the operator have standard operating procedures for international airspace operations? | |  |  |  |  |
|  | 1. Are flight crews trained in use of the international operations SOP? | |  |  |  |  |
|  | 1. Are copies of the SOP carried on board the aircraft? | |  |  |  |  |
| **7.6 International Publications Library** | | | | | | |
| 7.6 | *Do the flight crews have access to publications relevant to flight in international airspace?* ***(Recommended Practice)*** | |  |  |  |  |
| **Comments, Observations, and Recommendations** | | | | | | |
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| **Analysis of Non-Conformities/Findings** | | | | | | |
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| **Element** | | **8 Aircraft Equipment Requirements** | | | | |
| **8.1 General Requirements** | | | | | | |
| 8.1.1 | Are the operator’s aircraft equipped in accordance with the requirements set out in ICAO Annex 6, Part II or Part III as applicable, for VFR, IFR and night operations?  (See section 8.10 – 8.14 of this element) | |  |  |  |  |
| 8.1.2 | Is all required aircraft equipment approved or do they otherwise meet the technical specifications prescribed by the State of Registry? | |  |  |  |  |
| **8.2. Instruments and Associated Equipment** | | | | | | |
| 8.2.1 | Are all aeroplanes equipped with the instruments and associated equipment for VFR operations?  (See IS-BAO for details) | |  |  |  |  |
| 8.2.2 | Are all aeroplanes equipped with the instruments and associated equipment for IFR operations?  (See IS-BAO for details) | |  |  |  |  |
| 8.2.3 | Are all aeroplanes equipped with the instruments and associated equipment for Night operations?  (See IS-BAO for details) | |  |  |  |  |
| 8.2.4 | Are all aeroplanes equipped with proper emergency power supply? (See IS-BAO for details) | |  |  |  |  |
| **8.3 Operational Information and Documents** | | | | | | |
| 8.3.1 | Is the following documentation or information available on the flight deck:   1. pertinent aeronautical charts; | |  |  |  |  |
| 1. pertinent enroute, terminal area, and instrument approach procedure charts; | |  |  |  |  |
| 1. aircraft performance data; | |  |  |  |  |
| 1. aircraft checklists; | |  |  |  |  |
| 1. the operator’s operations manual; | |  |  |  |  |
| 1. SOP manual (where established) | |  |  |  |  |
| 1. the aircraft flight manual; | |  |  |  |  |
| 1. the aircraft minimum equipment list (MEL) if aircraft is being operated in accordance with a MEL; | |  |  |  |  |
| 1. aircraft C of A or other flight authority and C of R; | |  |  |  |  |
| 1. aircraft radio licence; | |  |  |  |  |
| 1. insurance certificate; | |  |  |  |  |
| 1. documentation required for the area of operation; | |  |  |  |  |
| 1. interception procedures; and | |  |  |  |  |
| 1. for international commercial air transport operations, a certified true copy of the air operator certificate? | |  |  |  |  |
| **8.4 Seats, Safety Belts and Shoulder Harnesses** | | | | | | |
| 8.4.1 | Are all aircraft equipped with:   1. a seat for each occupant of the aircraft, except for infants under an age specified by the State of Registry; | |  |  |  |  |
| 1. a safety belt, having a metal-to-metal latching device, for each passenger (other than infants); | |  |  |  |  |
| 1. a shoulder harness for each flight crew member and any other person occupying a flight deck seat or a sideways facing seat; and | |  |  |  |  |
| 1. a shoulder harness for each flight attendant seat that is not a regular passenger seat? | |  |  |  |  |
| **8.5 Emergency Equipment - General** | | | | | | |
| 8.5.1 | Are all aircraft equipped with at least:   1. first aid kit; | |  |  |  |  |
| 1. fire extinguishers for use in the crew, passenger and cargo compartments; and | |  |  |  |  |
| 1. a crash axe (aircraft with a seating capacity of more than 19 passengers only, if installed IAW State of Registry requirements). | |  |  |  |  |
| 8.5.2 | *For pressurized aeroplanes is there portable breathing equipment suitable for use when combating fires on board the aircraft?*  ***(Recommended Practice)*** | |  |  |  |  |
| 8.5.3 | *Are there placards that identify the location of aircraft emergency equipment?*  ***(Recommended Practice)*** | |  |  |  |  |
| 8.5.4 | Are aircraft equipped with means of ensuring that the following information and instructions are conveyed to passengers:   1. when seat belts are to be fastened; | |  |  |  |  |
| 1. when and how oxygen equipment is to be used if the carriage of oxygen is required; | |  |  |  |  |
| 1. restrictions on smoking; | |  |  |  |  |
| 1. location and use of life jackets or equivalent individual flotation devices where their carriage is required; | |  |  |  |  |
| 1. location of emergency equipment; and | |  |  |  |  |
| 1. location and method of opening emergency exits? | |  |  |  |  |
| 8.5.5 | a. Does the operator have available for immediate communication to rescue coordination centres, lists containing information on the emergency and survival equipment carried on board the aeroplane? | |  |  |  |  |
| * 1. Does the information include the number, colour and type of life rafts and pyrotechnics, details of emergency medical supplies, water supplies and the type and frequencies of the emergency portable radio equipment? | |  |  |  |  |
| **8.6.A Flight Over Water** | | | | | | |
| 8.6.1 | If aeroplanes are operated on extended flights over water are they equipped with a life preserver or flotation device for each occupant of the aircraft? | |  |  |  |  |
| 8.6.2 | Does the operator of aeroplanes have a process to determine survival risks involved in extended flights over water and based on the risk assessment ensure the aircraft is equipped with:   1. Life rafts available in sufficient numbers to carry all persons on board carried in the aeroplane? | |  |  |  |  |
|  | 1. Are these life rafts provided with distress signalling devices and life-saving equipment, including a means of sustaining life, appropriate to the area of operation? | |  |  |  |  |
| **8.7 Flights Over Remote Land Areas** | | | | | | |
| 8.7 | If aircraft are operated across land areas which have been designated as areas in which search and rescue would be especially difficult, are they equipped with signalling devices and life-saving equipment (including means of sustaining life) as is appropriate to the area overflown? | |  |  |  |  |
| **8.8 High Altitude Flights – Oxygen Requirements** | | | | | | |
| 8.8.1.A | Are aeroplanes that are intended to be operated at high altitudes equipped with sufficient oxygen storage and dispensing apparatus capable of storing and dispensing the oxygen supplies required under section 6.2.6? | |  |  |  |  |
| 8.8.1.H | Do helicopters when intended to be operated at altitudes where the use of oxygen has been prescribed, carry equipment for storing and dispensing the oxygen supplies required in 6.2.6? | |  |  |  |  |
| **8.9 Icing Protection and Weather Detection Equipment** | | | | | | |
| 8.9.1 | Has the operator ensured that only aircraft that are certified and equipped to cope with such conditions are operated into known or forecast icing conditions? | |  |  |  |  |
| 8.9.2. | Are pressurized aeroplanes equipped with operative weather detection equipment, when appropriate? | |  |  |  |  |
| **8.10. ELT** | | | | | | |
| 8.10.1 | Are the operator’s aeroplanes equipped with ELTs except as provided in 8.10.2, with at least one ELT of any type? | |  |  |  |  |
| 8.10.2 | Are all aeroplanes for which the individual Certificate of Airworthiness was first issued after 1 July 2008 shall be equipped with at least one automatic ELT? | |  |  |  |  |
| 8.10.3 | *It is recommended that all aircraft carry an automatic ELT.* ***(Recommended Practice)*** | |  |  |  |  |
| 8.10.4 | Are ELTs carried to satisfy the requirements of 8.10.1 and 8.10.2 capable of operation on both 406 MHz and 121.5 MHz simultaneously in accordance with the relevant provisions of Annex 10, Volume III? | |  |  |  |  |
| **8.11. GPWS** | | | | | | |
| 8.11.1 | Are the operator’s aeroplanes with a maximum certificated take-off mass in excess of 5 700 kg or authorized to carry more than nine passengers equipped with a ground proximity warning system which has a forward-looking terrain avoidance function? | |  |  |  |  |
| 8.11.2 | Does the ground proximity warning system provide automatic timely and distinctive warning to the flight crew when the aeroplane is in potentially hazardous proximity to the earth‘s surface? | |  |  |  |  |
| 8.11.3 | Does the ground proximity warning system provide, as a minimum, warnings of at least the following circumstances: | | | | | |
| a. Excessive descent rate; | |  |  |  |  |
| 1. Excessive altitude loss after take-off or go-around; and | |  |  |  |  |
| 1. Unsafe terrain clearance? | |  |  |  |  |
| 8.11.4 | a. Does the operator have a process to ensure that the data base for the GPWS is current? | |  |  |  |  |
| 1. Are the pilots trained in use of the system? | |  |  |  |  |
| **8.12 ACAS II (TCAS II)** | | | | | | |
| 8.12.1 | Are all turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 15 000 kg or authorized to carry more than 30 passengers, for which the individual airworthiness certificate is first issued after 1 January 2007, equipped with an ACAS II? | |  |  |  |  |
| 8.12.2 | *Are aircraft as described above but with and individual C of A first issued after 1 Jan 2005 equipped with an ACASII?* ***(Recommended Practice)*** | |  |  |  |  |
| 8.12.3 | *Are all turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg, or authorized to carry more than 19 passengers, for which the individual airworthiness certificate is first issued after 1 January 2008, equipped with an ACAS II?* ***(Recommended Practice)*** | |  |  |  |  |
| **8.13 Transponder and Altitude Reporting System** | | | | | | |
| 8.13.1. | Are all aeroplanes equipped with a pressure altitude reporting transponder?  (Exception - VFR only operations that have been exempted by the appropriate civil aviation authorities) | |  |  |  |  |
| 8.13.1. | Are all helicopters equipped with a pressure altitude reporting transponder, unless exempted by the appropriate civil aviation authorities? | |  |  |  |  |
| **8.14. FDR and CVR** | | | | | | |
| 8.14.1 | Are aeroplanes equipped with FDR and /or CVR  TO Mass>27000kg – Type I FDR | |  |  |  |  |
| 8.14.2 | TO Mass>5700kg – Type IA FDR | |  |  |  |  |
| 8.14.3 | *TO Mass>5700kg – Type II FDR*  ***(Recommended Practice)*** | |  |  |  |  |
| 8.14.4 | TO Mass>27000kg - CVR | |  |  |  |  |
| 8.14.5 | *TO Mass>5700kg – CVR*  ***(Recommended Practice)*** | |  |  |  |  |
| 8.14.6 | Are there procedures to ensure that, in the event an aeroplane becomes involved in an accident or incident, the all related flight recorder records, and if necessary the associated flight recorders are preserved, and their retention in safe custody pending their disposition as determined in accordance with ICAO Annex 13? | |  |  |  |  |
| 8.14.7 | Are there procedures to ensure that Flight data and cockpit voice recorders are not switched off during flight time? | |  |  |  |  |
| 8.14.8 | Does the operator have procedures on the post-flight protection and use of flight and cockpit voice recorder data? | |  |  |  |  |
| **8.15 MEL** | | | | | | |
| 8.15.1 | Where a master minimum equipment list (MMEL) is established for the type(s) or aircraft used, has the operator devised a MEL approved by the State of Registry? | |  |  |  |  |
| 8.15.2 | Are flight crews and maintenance personnel trained in its use? | |  |  |  |  |
| Is a copy of the MEL carried on board the aircraft? | |  |  |  |  |
| **8.16 Comm and Nav Equipment** | | | | | | |
| 8.16.1 | Are all aircraft equipped with radio communication equipment to permit the pilot to conduct two-way communications on the appropriate aeronautical frequencies? | |  |  |  |  |
| 8.16.2 | Are all aircraft equipped with sufficient radio navigation equipment to receive radio signals from the transmitting facilities to be used and to permit the aircraft to navigate in the event of the failure of one navigation unit? | |  |  |  |  |
| 8.16.3 | Does the operator have procedures to ensure that electronic data bases are compatible with the intended function of the equipment and are current? | |  |  |  |  |
| 8.16.4. | Are large and turbojet aircraft equipped with boom mikes at all flight crew stations? | |  |  |  |  |
| 8.16.5. | Are helicopters equipped with headset with boom microphone and a transmit button on the flight controls for each required pilot and crew member at his working station? | |  |  |  |  |
| **Comments, Observations, and Recommendations** | | | | | | |
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| **Analysis of Non-Conformities/Findings** | | | | | | |
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| **Element** | | **9 Aircraft Maintenance Requirements** | | | | | |
| **9.1 Maintenance Control System** | | | | | | | |
| 9.1.1 | Does the operator have a maintenance control system that is appropriate to the type and number of aircraft operated and the manner in which the maintenance is conducted? | |  |  |  | |  |
| 9.1.2 | Does the operator have a Configuration Control System to properly manage the status of flight test configurations and conformities? | |  |  |  | | FT&SC |
| The remainder of Element 9.1 applies only to those operators to which section 9.1.1 applies.  *Note 1: It is the owner's/lessee's/operator's (as applicable) responsibility to take all appropriate actions to ensure adequate oversight of the contracted CAMO for the continued airworthiness of its aircraft/fleet.*  *Note 2: The CAMO oversight process should be integrated into the compliance monitoring system* | | | | | | | |
| 9.1.3 | Does the operator have a written description of its maintenance control system in the company operations manual or maintenance manual? | |  |  |  | |  |
| 9.1.4 | Does the maintenance control system documentation contain at least the following information: | | | | | | |
| 1. Where maintenance functions have been assigned:    1. The position or title of the person to whom functions have been assigned? | |  |  |  | |  |
| * 1. A description of the functions and scope of work that have been assigned to each position, person or organization? | |  |  |  | |  |
| * 1. Where necessary for clarity, a chart depicting the distribution of functions and lines of authority (if not depicted in the organizational chart)? | |  |  |  | |  |
| b. For elementary work or preventive maintenance and aircraft servicing: | | | | | | |
| 1. Identification of those standards or maintenance data (aircraft manufacturer’s, CAA’s or other) to be used? | |  |  |  | |  |
| 1. The procedures to confirm that regulatory information and technical data appropriate to the work performed are used; | |  |  |  | |  |
| 1. Details of the methods used to record the maintenance, elementary work/preventive maintenance or servicing performed, and to ensure that any defects are recorded in the aircraft technical record; | |  |  |  | |  |
| c. Has the operator identified a maintenance schedule/ programme authorized by the State of Registry? | |  |  |  | |  |
| d. Is there a detailed description of the procedure used to ensure that any maintenance tasks required by the maintenance schedule/ programme, an airworthiness directive, or any task required for the rectification of a defect is completed within the time constraints specified in national regulations? | |  |  |  |  | | |
| e. Is there a description of the assessment programme for aircraft Service Bulletins and Airworthiness Directives and the associated documentation? | |  |  |  |  | | |
| 1. Are there procedures to ensure that only parts and materials that meet regulatory requirements and manufacturer’s specifications are used in the performance of maintenance, elementary work/preventive maintenance or servicing, including any details respecting part-pooling arrangements that have been entered into? | |  |  |  |  | | |
| 1. Are there procedures to ensure that properly calibrated tools are used in the performance of maintenance, elementary work/preventive maintenance or servicing? | |  |  |  |  | | |
| 1. Is there a description of the maintenance training and required competencies of the maintenance staff? | |  |  |  |  | | |
| 1. Is there a procedure for maintaining personnel and training records? | |  |  |  |  | | |
| 1. Is there a procedure to ensure that the Basic Empty Weight (BEW) of an aircraft is maintained, current and properly documented? | |  |  |  |  | | |
| 1. Is there a process to obtain a Special Flight Permit or Special Flight Authorization? | |  |  |  |  | | |
| 1. Are there procedures for a tool control programme designed to ensure tools, supplies, and test equipment are accounted for following maintenance performed on an aircraft? | |  |  |  |  | | |
|  | 1. Is there a description of the fatigue management system? (See section 6.13 for requirements) | |  |  |  |  | | |
|  | 1. Are there procedures to manage the risks associated with maintenance personnel working alone? | |  |  |  |  | | |
| 9.1.5 | Does the operator have procedures to provide a copy of the relevant manual or maintenance manual section that details the maintenance control system, or relevant portions thereof, to each person or organization who performs or certifies work? | |  |  |  |  | | |
| 9.1.6 | In the part of its manual that describes its maintenance control system, does the operator include defect recording and rectification control procedures for: | | | | | | | |
|  | 1. Recording aircraft defects? | |  |  |  |  | | |
|  | 1. Ensuring that defects are rectified in accordance with regulatory requirements and manufacturer’s specifications? | |  |  |  |  | | |
|  | 1. Detecting defects that recur and identifying those defects as recurring defects? | |  |  |  |  | | |
|  | 1. Scheduling, within the permitted period of deferral, the rectification of defects whose repair has been deferred? | |  |  |  |  | | |
| 9.1.7a | Are there procedures that ensure the aircraft are: | | | | | | | |
|  | * 1. Maintained in an airworthy condition, | |  |  |  |  | | |
|  | * 1. Appropriately equipped, configured and maintained for the intended use, and | |  |  |  |  | | |
|  | * 1. Maintained in accordance with the authorized maintenance program; | |  |  |  |  | | |
| 9.1.7b | Are there procedures to ensure that all MEL requirements are met? | |  |  |  |  | | |
| 9.1.7c | Are there procedures to ensure adherence to State of Registry regulations and standards? | |  |  |  |  | | |
| 9.1.7d | Are there procedures to ensure a maintenance release has been completed following maintenance? | |  |  |  |  | | |
| 9.1.8 | If there have been any deviations from the procedures in the maintenance control system do they conform to national regulations and are substantiated by a risk analysis? | |  |  |  |  | | |
| 9.1.9 | Does the operator have a procedure that ensures that the following records are kept on each aircraft for appropriate periods:  *The records in 9.1.9.a. to 9.1.9.e., shall be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service and the records in 9.1.9.f. for a minimum period of one year after the signing of the maintenance release.*  ***State of Registry requirements for record retention may vary and must be respected.*** | | | | | | | |
| 1. Total time in service for the aircraft and life-limited components? | |  |  |  |  | | |
| 1. Current status of compliance with applicable mandatory continuing airworthiness information, including life limited components? | |  |  |  |  | | |
| 1. Appropriate details of modifications and repairs to the aircraft? | |  |  |  |  | | |
| 1. Time in service since last overhaul of the aircraft or its components subject to a mandatory overhaul life? | |  |  |  |  | | |
| 1. Current status of the aircraft’s compliance with the maintenance programme? | |  |  |  |  | | |
| 1. Detailed maintenance records to show that all requirements for the signing of a maintenance release have been met? | |  |  |  |  | | |
| 9.1.10 | Does the operator have a procedure to ensure that continuing airworthiness information resulting from maintenance and operational experience is transmitted to the State of Registry as required? | |  |  |  |  | | |
| 9.1.11 | For an operator of turbojet-engined aeroplanes OR those with a maximum take-off mass > 5700 kg OR any aircraft engaged in commercial operations, does the maintenance program: | | | | | | | |
| * 1. Observe Human Factors principles according to the State of Registry’s guidance material? | |  |  |  |  | | |
| * 1. Include, if applicable, a continuing structural integrity programme? | |  |  |  |  | | |
| 1. Include, when applicable and approved by the State of Registry, condition monitoring and reliability programme descriptions for aircraft systems, components and power plants? | |  |  |  |  | | |
| **9.2 Maintenance Agreements** | | | | | | | | |
| 9.2.1 | Does the operator have a system that ensures that no person or organization performs maintenance on operator aircraft unless the person is an employee of the operator or has been authorized to perform the work under the terms of a written maintenance agreement or other form of authorization specified in the company operations manual or maintenance manual? | |  |  |  | |  | |
| 9.2.2 | Has the operator included provisions in the company operations manual for flight crew to obtain maintenance services when away from home base? | |  |  |  | |  | |
| 9.2.3 | *Does the operator include provisions in maintenance agreements to ensure that maintenance personnel do not carry out maintenance work when they are fatigued?*  ***(Recommended Practice)*** | |  |  |  | |  | |
| **9.3 Person Responsible for Maintenance** | | | | | | | | |
| 9.3.1a | Has the operator appointed a person to be responsible for its maintenance control system? | |  |  |  | |  | |
| 9.3.1b | Is that person authorized to remove aircraft from operation where the removal is justified because of non-compliance with the requirements of national regulations or because of a threat to the safety of the aircraft, persons or property? | |  |  |  | |  | |
| 9.3.2 | Has the operator provided the person who is responsible for the maintenance control system with the staff, facilities and other resources necessary to ensure that the maintenance is conducted in accordance with the civil aviation authority requirements and meets the safety management goals of the operator? | |  |  |  | |  | |
|  | Does the Company have a formal procedure covering communications between maintenance and flight personnel? | |  |  |  | | GAIN | |
|  | Is there open communication between the maintenance organisation and other operational organisations, such as dispatch? How effective is this communication? | |  |  |  | | GAIN | |
| **9.4 Maintenance Personnel Recency** | | | | | | | | |
| 9.4.1 | Does the operator have a process to ensure that persons who hold maintenance release authority have had at least six months experience in the preceding 24 months? | |  |  |  | |  | |

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| **Comments, Observations, and Recommendations** | |
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| **Analysis of Non-Conformities/Findings** | |
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| **Element** | | **10 Company Operations Manual** | | | | |
| 10.1 | Does the operator provide each person concerned with an operations manual containing all the instructions and information necessary for personnel to perform their duties? | |  |  |  |  |
|  | Is the manual amended or revised as necessary to ensure that the information contained in it is kept up to date? | |  |  |  |  |
|  | Are all amendments or revisions issued to all personnel that are required to use the manual? | |  |  |  |  |
|  | How are revisions distributed? | |  |  |  | GAIN |
|  | How is the issue and receipt of revisions recorded? | |  |  |  | GAIN |
|  | Does the company have a system for distributing time-critical information to the personnel who need it? | |  |  |  | GAIN |
| 10.2 | Does the manual (or set of manuals) contain at least the following (non-commercial ops only) | | | | | |
| 1. Table of contents? | |  |  |  |  |
| 1. Amendment control page and list of effective pages?   (Unless the entire document is re-issued with each amendment and the document has an effective date on it) | |  |  |  |  |
| 1. Duties, responsibilities and succession of management and operating personnel? | |  |  |  |  |
| 1. Safety management system? | |  |  |  |  |
| 1. Operational control system? | |  |  |  |  |
| 1. MEL procedures (if applicable)? | |  |  |  |  |
| 1. Normal flight operations? | |  |  |  |  |
| 1. SOPs (may be a separate manual for each aircraft type)? | |  |  |  |  |
| 1. Weather Limitations? | |  |  |  |  |
| 1. Fatigue Management System for both operations and maintenance personnel? | |  |  |  |  |
| 1. Emergency equipment and operating procedures? | |  |  |  |  |
| 1. Accident/Incident consideration? | |  |  |  |  |
| 1. Personnel qualifications and training? | |  |  |  |  |
| 1. Record Keeping? | |  |  |  |  |
| 1. Maintenance Control System? | |  |  |  |  |
| 1. Security Procedures? | |  |  |  |  |
| 1. Performance operating limitations? | |  |  |  |  |
| 1. use/protection or FDR/CVR records, if installed? | |  |  |  |  |
| 1. Handling of dangerous goods? | |  |  |  |  |

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| 10.3 | Does the company operations manual contain a description of the process to allow deviations (if deviations are allowed) from the provisions contained in it and specify the person who may approve such deviations? |  |  |  |  |
|  | Do deviations identify the associated conditions under which they are permitted or required? |  |  |  |  |
|  | Are deviations based on a risk assessment process? |  |  |  |  |
| 10.4 | *Is the design of the company operations manual and all associated manuals based on good Human Factors principles*?  **(Recommended Practice)** |  |  |  |  |
| **Comments, Observations, and Recommendations** | | | | | |
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| **Analysis of Non-Conformities/Findings** | | | | | |
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| **Element** | | **11 Emergency Response Plan** | | | | |
| 11.1 | Does the operator have a plan detailing the procedures to be followed in the event of an accident, incident or other emergency that is appropriate for the operation? | |  |  |  |  |
| 11.2 | Does the emergency response plan address in-flight incidents involving injuries or serious medical problems suffered by passengers or crew? | |  |  |  |  |
| 11.3 | Does the emergency response plan address accidents and incidents not involving aircraft flight operations? | |  |  |  |  |
| 11.4 | Does the emergency response plan include at least: | | | | | |
| 11.4a | Procedures for the flight crew or organization to notify the appropriate authorities in the State in which the accident occurred, and to seek medical assistance, as required? | |  |  |  |  |
| 11.4b | Procedures for the flight operator personnel to notify organization officials of the accident, incident or event? | |  |  |  |  |
| 11.4c | Procedures for the operator to notify State agencies of the accident, as may be required by law? | |  |  |  |  |
| 11.4d | Procedures for notification of next of kin? | |  |  |  |  |
| 11.4e | On-site procedures to be taken by the flight and cabin crew to assist passengers, prepare visual distress signals (if in a remote area), and preserve the integrity of the accident site? | |  |  |  |  |
| 11.4f | Procedures for dealing with questions from and providing assistance to the families of passengers and crew members? | |  |  |  |  |
| 11.4g | Procedures for dealing with questions from the media? | |  |  |  |  |
| 11.4h | Procedures for participating or co-operating with State agencies and police authorities who may be investigating the accident? | |  |  |  |  |
| 11.4i | Considerations for dealing with the impacts and effects of the accident on the organization’s operations and on employees? (i.e. trauma counselling services and other crises intervention support for persons involved or affected by the event) | |  |  |  |  |

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| 11.5 | Is training and testing on the emergency response plan conducted*?* |  |  |  |  |
|  | Does the company have a system for distributing time-critical information to the personnel who need it? |  |  |  | GAIN |

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| **Comments, Observations, and Recommendations** | |
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| **Analysis of Non-Conformities/Findings** | |
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| **Element** | | **12 Environmental Management** | | | | |
| 12.1 | Does the operator have a process for ensuring compliance with national and local environmental laws and requirements related to: | | | | | |
| 12.1a | Noise abatement procedures, consistent with safety including airport curfews? | |  |  |  |  |
| 12.1b | Ground operations, including aircraft fuelling and de/anti-icing procedures? | |  |  |  |  |
| 12.1c | Spill containment of toxic and flammable materials and chemicals including disposal of collected materials? | |  |  |  |  |
| 12.1d | The disposal of waste materials? | |  |  |  |  |
| 12.1e | The disposal of international garbage? | |  |  |  |  |
| 12.1f | The construction and operation of the operator’s hangars and other facilities including fuel storage facilities? | |  |  |  |  |
| 12.1g | Operations subject to emissions charges, fees, or purchase of credits related to Market Based Measures regulations? | |  |  |  |  |
| 12.2 | *Does the operator have procedures to make flight crews aware of local environmental rules and procedures at destination and en-route airports?* **(Recommended Practice)** | |  |  |  |  |
| **Comments, Observations, and Recommendations** | | | | | | |
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| **Analysis of Non-Conformities/Findings** | | | | | | |
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| **Element** | | **13 Occupational Health and Safety** | | | | |
| 13.1 | Does the operator have a process for identifying and complying with all national and local occupational health and safety laws and requirements related to: | | | | | |
| 13.1a | Development and implementation of workplace safety programs? | |  |  |  |  |
| 13.1b | Compliance with fire safety, first aid and sanitary requirements? | |  |  |  |  |
| 13.1c | Provision of safety and protective clothing, devices and equipment, particularly fall protection for aircraft maintenance personnel? | |  |  |  |  |
| 13.1d | Provision of safety information and training to employees? | |  |  |  |  |
| 13.1e | Ensuring that machinery, tools and equipment, including lifting equipment, meets safety standards? | |  |  |  |  |
| 13.1f | Ensuring that hazardous materials are controlled and that employees have information and training in their handling and storage? | |  |  |  |  |
| 13.2 | Does the operator have procedures to ensure that all company personnel and passengers accessing the aviation environment are made aware of OHS requirements and adhere to the operator’s associated procedures? | |  |  |  |  |
| 13.3 | *Does the operator have procedures to manage the safety risks relating to any person who works alone?* ***(Recommended Practice)*** | |  |  |  |  |
| **Comments, Observations, and Recommendations** | | | | | | |
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| **Analysis of Non-Conformities/Findings** | | | | | | |
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| **Element** | | **15 Security** | | | | |
| 15.1 | Has the operator established, and maintained a security programme that is proportional to the threat against the operator, its personnel, aircraft and facilities? | |  |  |  |  |
| 15.2 | Where a security programme has been established does it include: | | | | | |
| 1. Threat assessment process? | |  |  |  |  |
| 1. Preventive measures designed to deter and prevent the commission of unlawful acts? | |  |  |  |  |
| 1. Responsive measures to be taken when an unlawful act has been committed against the operator? | |  |  |  |  |
| 1. Appropriate training and testing of personnel involved? | |  |  |  |  |
| **Comments, Observations, and Recommendations** | | | | | | |
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| **Analysis of Non-Conformities/Findings** | | | | | | |
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| **Element** | **16 In-Flight Inspection** | | | | |
| An In-Flight inspection is not a required part of the audit. However, should it be agreed with the operator that an In-Flight inspection should be conducted the following protocol may be used.  The objective of an In-Flight inspection is to assess the compliance of aircraft crew members with the provisions of the company operations manual, SOPs and relevant operator directives, as well as with safe operating procedures. | | | | | |
| **Flight Operations** | | | | | |
| 1. Flight Preparation | |  |  |  |  |
| * 1. Weather Briefing | |  |  |  |  |
| * 1. NOTAMs | |  |  |  |  |
| * 1. Other Flight Planning Info | |  |  |  |  |
| * 1. Flight & Duty Time | |  |  |  |  |
| 1. Flight Planning | |  |  |  |  |
| * 1. Route Analysis | |  |  |  |  |
| * 1. Fuel Consumption | |  |  |  |  |
| * 1. Alternates | |  |  |  |  |
| * 1. Weights and Performance | |  |  |  |  |
| 1. Weight & Balance | |  |  |  |  |
| 1. Aircraft Servicing & Ramp | |  |  |  |  |
| * 1. Fuelling Procedures | |  |  |  |  |
| * 1. Load Security | |  |  |  |  |
| * 1. Ground Handling | |  |  |  |  |
| * 1. Aircraft Parking | |  |  |  |  |
| 1. Pre-Flight | |  |  |  |  |
| * 1. External Inspection | |  |  |  |  |
| * 1. Cabin & Flight Deck | |  |  |  |  |
| * 1. Emergency Drills | |  |  |  |  |
| 1. Passenger Safety Briefing | |  |  |  |  |
| 1. Pre-Start | |  |  |  |  |
| 1. Start & After Start | |  |  |  |  |
| 1. Taxi & Take-off | |  |  |  |  |
| 1. Radio Procedures & ATC | |  |  |  |  |

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| 1. Departure Procedures |  |  |  |  |
| * 1. Engine handling |  |  |  |  |
| * 1. ATC Procedures |  |  |  |  |
| * 1. Noise Abatement |  |  |  |  |
| * 1. Lookout |  |  |  |  |
| * 1. Checks |  |  |  |  |
| * 1. Radio Procedures |  |  |  |  |
| 1. Climb Procedures |  |  |  |  |
| 1. Cruise Procedures |  |  |  |  |
| * 1. En-route Comm |  |  |  |  |
| * 1. Navigation |  |  |  |  |
| * 1. Flight Management |  |  |  |  |
| 1. Approach Procedures |  |  |  |  |
| * 1. Planning |  |  |  |  |
| * 1. Descent |  |  |  |  |
| * 1. Final Approach |  |  |  |  |
| * 1. Landing & Taxiing |  |  |  |  |
| 1. Shutdown |  |  |  |  |
| 1. Flight Log, Aircraft Log & Defect Recording |  |  |  |  |
| 1. Passenger Deplaning |  |  |  |  |
| 1. Crew Resource Management |  |  |  |  |
| 1. Crew Discipline |  |  |  |  |

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| **Aircraft** |  |  |  |  |
| 1. Manuals & Related Documents |  |  |  |  |
| 1. MEL |  |  |  |  |
| 1. C of A & C of R and AOC, if required |  |  |  |  |
| 1. Aircraft Log |  |  |  |  |
| 1. Maintenance Release |  |  |  |  |
| 1. Aircraft Equipment |  |  |  |  |
| 1. Emergency Equipment |  |  |  |  |
| 1. Passenger Safety Briefing Card |  |  |  |  |

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| **Comments, Observations, and Recommendations** | |
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| **Analysis of Non-Conformities/Findings** | |
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**8.3 FTSC** **Audit Findin****g Form**

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|  | | |  | |  | |  | | | **Number \_\_\_ of \_\_\_** | | | | | | | | | |
| **Operator Name** | | |  | | **Non-conformity Category** | | | | | | |  | | | | | |  | |
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| **Address** |  |  |  | | **Minor** | | |  | | **Major** | |  | |  | | | | |  |
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| **Element & Ref. #** | | | | | **Operators Manual or Procedure and Reference** | | | | | | | | | | | | | | |
| **Details of Finding [Show Cause/Effect/criticality iaw APM Sections 6.2 & 6.3]** | | | | | | | | | | | | | | | | | | | |
| **Objective Evidence** | | | | | | | | | | | | | | | | | | | |
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| **Auditor’s Name** | | |  | | **Signature** | | | | | | |  | | | | **Date** | | | |
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| **Operator Remedial Action Plan (including estimated date of plan completion)** | | | | | | | | | | | | | | | | | | | |
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| **Manager of the Operation** | | |  | | **Signature** | | | | | | |  | | | | **Date** | | | |
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| **Remedial Action Plan** | | **Acceptable** |  |  | | **Not Acceptable** | | |  | |  | |  | | | |  | | |
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| **Auditor’s Name** | | |  | | **Signature** | | | | | | |  | | | | **Date** | | | |
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| **Auditor Comments and Follow-up – For Major Non-Conformity** | | | | | | | | | | | | | | | | | | | |
| **Comments** |  |  |  | | | |  | | |  | |  | | | | | |  | |
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| **Follow-up Review** | | **Acceptable** |  |  | | **Not Acceptable** | | |  | |  | |  | | | |  | | |
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| **Auditor’s Name** | | |  | | **Signature** | | | | | | |  | | | | **Date** | | | |

**Additional Objective Evidence or Details**