

KEMENTERIAN PERHUBUNGAN  
DIREKTORAT JENDERAL PERHUBUNGAN UDARA

PERATURAN DIREKTUR JENDERAL PERHUBUNGAN UDARA  
NOMOR : KP 057 TAHUN 2018  
TENTANG  
PETUNJUK TEKNIS PERATURAN KESELAMATAN PENERBANGAN SIPIL BAGIAN  
8900-6.3 (*STAFF INSTRUCTION 8900-6.3*) TENTANG  
PROSEDUR AUDIT DAN SURVEILLANCE PEMEGANG SERTIFIKAT  
OPERATOR PESAWAT UDARA  
(*AUDITING AND SURVEILLANCE PROCEDURE FOR  
AIR OPERATOR CERTIFICATE (AOC) HOLDERS*)

DENGAN RAHMAT TUHAN YANG MAHA ESA

DIREKTUR JENDERAL PERHUBUNGAN UDARA,

- Menimbang :
- a. bahwa dalam rangka menyeragamkan seluruh petunjuk teknis yang ada di lingkungan Direktorat Jenderal Perhubungan Udara untuk memberikan petunjuk teknis yang terstruktur, sistematis dan terorganisir maka perlu disusun suatu petunjuk teknis;
  - b. bahwa untuk melaksanakan ketentuan sebagaimana dimaksud pada huruf a, perlu menetapkan Peraturan Direktur Jenderal Perhubungan Udara tentang Petunjuk Teknis Peraturan Keselamatan Penerbangan Sipil Bagian 8900-6.3 (*Staff Instruction 8900-6.3*) tentang Prosedur Audit dan Surveillance Pemegang Sertifikat Operator Pesawat Udara (*Auditing and Surveillance Procedure For Air Operator Certificate (AOC) Holders*);
- Mengingat :
1. Undang-Undang Nomor 1 Tahun 2009 tentang Penerbangan (Lembaran Negara Republik Indonesia Tahun 2009 Nomor 1, Tambahan Lembaran Negara Republik Indonesia Nomor 4956);

2. Peraturan Presiden Nomor 7 Tahun 2015 tentang Organisasi Kementerian Negara (Lembaran Negara Republik Indonesia Tahun 2015 Nomor 8);
3. Peraturan Presiden Nomor 40 Tahun 2015 tentang Kementerian Perhubungan (Lembaran Negara Republik Indonesia Tahun 2015 Nomor 75);
4. Peraturan Menteri Perhubungan Nomor KM 18 Tahun 2002 tentang Persyaratan-Persyaratan Sertifikasi Dan Operasi Bagi Perusahaan Angkutan Udara Niaga Untuk Penerbangan Komuter dan Charter sebagaimana telah diubah terakhir dengan Peraturan Menteri Perhubungan Nomor PM 63 Tahun 2017;
5. Peraturan Menteri Perhubungan Nomor PM 59 Tahun 2015 tentang Kriteria, Tugas dan Wewenang Inspektur Penerbangan sebagaimana telah diubah terakhir dengan Peraturan Menteri Perhubungan Nomor PM 142 Tahun 2016;
6. Peraturan Menteri Perhubungan Nomor PM 189 Tahun 2015 tentang Organisasi dan Tata Kerja Kementerian Perhubungan sebagaimana telah diubah terakhir dengan Peraturan Menteri Perhubungan Nomor PM 117 Tahun 2017;

MEMUTUSKAN:

Menetapkan : PERATURAN DIREKTUR JENDERAL PERHUBUNGAN UDARA TENTANG PETUNJUK TEKNIS PERATURAN KESELAMATAN PENERBANGAN SIPIL BAGIAN 8900-6.3 (*STAFF INSTRUCTION 8900-6.3*) TENTANG PROSEDUR AUDIT DAN SURVEILLANCE PEMEGANG SERTIFIKAT OPERATOR PESAWAT UDARA (*AUDITING AND SURVEILLANCE PROCEDURE FOR AIR OPERATOR CERTIFICATE (AOC) HOLDERS*).

Pasal 1

Memberlakukan Petunjuk Teknis Peraturan Keselamatan Penerbangan Sipil Bagian 8900-6.3 (*Staff Instruction 8900-6.3*) tentang Prosedur Audit dan Surveillance Pemegang Sertifikat

Operator Pesawat Udara (*Auditing and Surveillance Procedure For Air Operator Certificate (AOC) Holders*) sebagaimana tercantum dalam Lampiran yang merupakan bagian tak terpisahkan dari Peraturan ini.

Pasal 2

Direktur Kelaikudaraan dan Pengoperasian Pesawat Udara mengawasi pelaksanaan Peraturan ini.

Pasal 3

Peraturan ini mulai berlaku sejak tanggal ditetapkan.

Ditetapkan di : JAKARTA

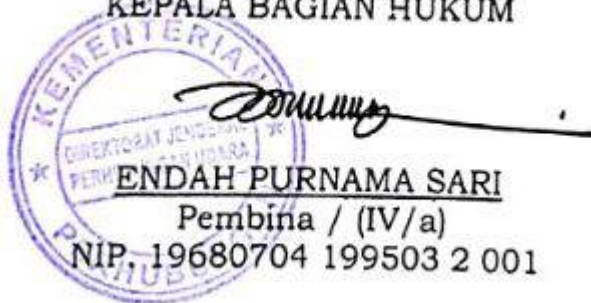
Pada tanggal : 6 MARET 2018

DIREKTUR JENDERAL PERHUBUNGAN UDARA

ttd

Dr. Ir. AGUS SANTOSO, M. Sc

Salinan sesuai dengan aslinya  
KEPALA BAGIAN HUKUM



LAMPIRAN PERATURAN DIREKTUR JENDERAL  
PERHUBUNGAN UDARA  
NOMOR : KP 057 TAHUN 2018  
TANGGAL : 6 MARET 2018

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# Staff Instruction

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SI 8900-6.3

Auditing and Surveillance Procedure for Air  
Operator Certificate (AOC) Holders

Edition : 1

Amendment : 0

Date :

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REPUBLIC OF INDONESIA – MINISTRY OF TRANSPORTATION  
DIRECTORATE GENERAL OF CIVIL AVIATION  
JAKARTA – INDONESIA

### AMENDMENT RECORD LIST

<b>Amendment No.</b>	<b>Issue Date</b>	<b>Reference</b>
0		

## FOREWORD

1. PURPOSE : This Staff Instruction has been prepared to guide and assist all Directorate of Airworthiness and Aircraft Operation personnel, Directorate General of Civil Aviation, operators (AOC) or applicants dealing with DGCA, in properly discharging their responsibilities and efficiently accomplishing audit and surveillance task
2. REFERENCES : This Staff Instruction should be used in accordance with the applicable regulations.
3. CANCELLATION : The SI 120-02 Revision 1 dated August 2001, SI 8300 revision 4 volume 1 chapter 7 dated March 2010 and SI 8400 Revision 4 Volume 3 chapter 1 dated March, 2010 have been cancelled.
4. AMENDMENT : The amendment of this Staff Instruction shall be approved by the Director General of Civil Aviation.

DIRECTOR GENERAL OF CIVIL AVIATION

ttd

Dr. Ir. AGUS SANTOSO, M.Sc.

Salinan sesuai dengan aslinya  
KEPALA BAGIAN HUKUM



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## CHAPTER I. DEFINITIONS

The following terminology is specific to the audit and surveillance procedure for AOC:

- **Additional/Amendment approval** means extension to the existing scope of approval.
- **Audit** means an in-depth review and evaluation of the activities of an organization to verify conformance to DGCA regulations and standards.
- **Audit activities** mean those activities and procedures through which information is obtained to verify the auditee's conformance to applicable regulations and standards. Such activities may include, but are not limited to: interviews, observations, inspections and the review of files and documents.
- **Auditee** means the organization to be audited. This term may be interchanged with "organization", "company", "operator", "air operator", "private operator" or "flight training unit operator".
- **Audit Finding** means the determination of non-conformance of a product, process, practice, or procedure or a characteristic thereof to a specified regulation or standard. This will be documented on the Audit Finding Form.
- **Audit Manager** means the individual, designated by the DGCA, responsible for the planning and conduct of an audit, including the production of the audit report.
- **Audit Member** means the individual appointed by the respective directorate to participate in either the Airworthiness or the Operations or the safety portion of the audit.
- **Audit Report** means a report that outlines the audit process and provides a summary of the audit findings.
- **Audit Program (AP)** means the Annual program that promotes conformance with the aviation regulations and standards that collectively prescribe an acceptable level of aviation safety. The AP ensures that DGCA audit policies and procedures are applied uniformly
- **AuditPlan** means the annual plan of scheduled audits intended to measure the level of an organization's conformance. These organizations include designated airworthiness organizations and air operator.

- **Certification** means the process of determining competence, qualification, or quality on which the issuance of an AOC and/or Operation Specifications is based. This includes the original issuance, denial, renewal or Amendments/revision of that document.
- **Characteristic** means any distinct property or attribute of a product, process, service or practice of which the conformance to a regulation or standard can be measured.
- **Combined Audit** means an audit that targets both Airworthiness and Operations functional areas.
- **Compliance** means the state of meeting regulatory requirements.
- **Confirmation** means the assurance that audit findings are in accordance with data obtained from different sources.
- **Confirmation Request Form (CRF)** means a form issued during the inspection portion of an audit to the auditee by DGCA inspector requesting information that is not readily available. The auditee will be requested to respond within a specified time period.
- **Conformance** means the state of meeting the requirements of a regulation or standard.
- **Convening Authority (CA)** means the individual responsible for authorizing and overseeing the regulatory audit. The CA is also responsible for ensuring that the follow-up is completed.
- **Corrective Action Plan (CAP)** means a plan submitted to the CA or to his or her delegate by the auditee, following receipt of the audit report. This plan outlines the manner in which the company proposes to correct the cause(s) of deficiencies identified by the audit findings based on the root cause analysis. Carrying out the plan should bring the auditee into full conformance with regulatory requirements.
- **Depth** means the period of time over which a company will be audited, normally from the last audit up to the present day.
- **Documented** means that which has been recorded in writing, photocopied or photographed and then signed, dated and retained so as to ensure the continuity of the evidence secured. Documented (evidence) recorded in writing,

by photocopy or by photography and signed, dated and retained in a manner to ensure continuity of the evidence secured.

- **Follow-Up** means the activity following an audit that is dedicated to program modification based on an approved Corrective Action Plan. Follow-up ensures that the document holder meets regulatory requirements.
- **Immediate Action** means any necessary action taken by DGCA upon finding of non-compliance against Civil Aviation Safety Regulations or Aviation Act by air operator resulting from an audit
- **Inspection** means the basic activity of an audit, involving examination of a specific characteristic of a company.
- **In-Depth** means extensively, completeness or thoroughly.
- **Non-Compliance** (immediate corrective action/Level 1) means a deficiency in characteristic, documentation, or procedure with respect to provisions of the Aviation Act No. 01 of 2009 or a CASR. This is action must be taken immediately but not exceed than 15 days upon identification of the audit and surveillance finding. Audit findings that have direct impact on aviation safety may be taken to stop the operation of aircraft, maintenance, suspend of personnel licensing or termination of AOC activities.
- **Non-Conformance** (Short-Term Corrective Action/Level 2) means a deficiency in a characteristics, documentation, or procedures. which renders the quality of a product or service unacceptable or indeterminate, or not according to specified requirements, e.g. physical defects, test failures. Inadequate documentation. This is short-term action to correct a non-conformance that does not pose an immediate threat to aviation safety, which ensures that conformance is established quickly until long-term action is completed to prevent recurrence of the problem. Short-term corrective action will maximum take place within 30 days.
- **Non-adherence** (Long-Term Corrective Action/Level 3) means a deficiency in characteristic, documentation, or procedure with respect to a recommended practice, procedure, guideline or good aviation safety. This is longer-term action and has two components. The first will involve identifying the cause of the problem and indicating the measures the company will take to prevent a recurrence. These measures should focus on a system change. The second component will include a timetable for company

implementation of the long-term corrective action. Long-term corrective action will maximum take place within 60 days. Non adherence finding including safety observation is linked to safety and evaluation of the risks linked to operational hazards and raised when the risk pertaining to a specific hazard is evaluated by DGCA as non acceptable for safety.

- **Observers** means a person(s) other than certified and approved auditors, assigned to participate in the audit for training purposes in an audit program. Observer is not an audit team member.
- **Principle Airworthiness Inspector (PAI)** means The individual Airworthiness Inspector the DGCA has assigned certificate management and surveillance responsibility of a particular company or Air Operator Certificate holder.
- **Principle Operation Inspector (POI)** means The individual Flight Operation Inspector the DGCA has assigned certificate management and surveillance responsibility of a particular company or Air Operator Certificate holder
- **Practice** means the method by which a procedure is carried out.
- **Product** means the end result of a procedure or process.
- **Procedure or Process** means a series of steps followed methodically to complete an activity. This includes: the activity to be done and individual(s) involved; the time, place and manner of completion; the materials, equipment, and documentation to be used; and the manner in which the activity is to be controlled.
- **Root Cause** means the initiating cause in a causal chain that leads to an undesirable situation or condition; the point in the causal chain where corrective action could reasonably be implemented and expected to correct and prevent recurrence of the undesirable situation or condition
- **Sampling** means the inspection of a representative portion of a particular characteristic to produce a statistically meaningful assessment of the whole.
- **Scope** means the number of functional areas within a company that will be audited.
- **Specialist Audit** means an audit that targets either Airworthiness or Operations functional areas.

- **Special-Purpose Audit** means an audit intended to respond to special circumstances beyond initial certification, requests for additional authority or routine conformance monitoring.
- **Standard** means an established criterion used as a basis for measuring an auditor's level of conformance.
- **Surveillance** means routine continuing audit to ensure compliance with the CASR's, standards and approved manuals. The surveillance area is the same as the audit area. Surveillance carry out as a routine continuing inspection to ensure compliance with the CASR's, standards and approved manuals.
- **Surveillance Program (SP)** means the annual program for routine continuing inspections that promotes conformance with the aviation regulations and standards that collectively prescribe an acceptable level of aviation safety. The AP ensures that DGCA audit policies and procedures are applied uniformly
- **Surveillance Plan** means the annual plan of scheduled surveillance intended by routine basis to measure the level of an organization's conformance. These organizations include designated airworthiness organizations and air operator. Surveillance performed by Principle Airworthiness Inspector (PAI) and Principle Operations Inspector.
- **Verification** means an independent review, inspection, examination, measurement, testing, checking, observation and monitoring to establish and document that products, processes, practices, services and documents conform to regulatory requirements. This includes confirmation that an activity, condition or control conforms to the requirements specified in contracts, codes, regulations, standards, drawings, specifications, program element descriptions, and technical procedures.
- **Working Papers** means all documents required by the auditor or audit team to plan and implement the audit. These may include audit schedules, auditor assignments, checklists and various report forms

## **CHAPTER II. AUDIT AND SURVEILLANCE POLICY**

### **1. Purpose**

The audit program (AP) and surveillance program (SP) have been developed to promote conformance with the aviation regulations and standards that collectively prescribe an acceptable level of aviation safety. It also ensures that DGCA audit/ surveillance policies and procedures are applied uniformly.

### **2. Approval**

#### **AOC Certification**

DGCA audits are conducted for the grant of approvals for initial certification, renewal, amendment/additional approval, routine conformance and special purpose audit pursuant to the Indonesia Aviation Act no. 1 year 2009. The Director General of Civil Aviation shall perform the safety oversight functions in respect of matters specified in this Act or the Rules made there under.

#### **Surveillance**

DGCA surveillance is conducting routine continuing inspections and audit to:

- ensure compliance with the CASR's, standards and approved manual.
- detect any significant safety issue within an air carrier, and ensure that the issue is effectively rectified in a timely manner.

The Director General, Civil Aviation (DGCA) is responsible for all regulatory audits and surveillance.

### **3. Audit Types**

The type of audit is determined by the circumstances under which the audit is convened.

#### **a. Initial Certification**

Prior to the issuance of Air Operator Certificate (AOC), all the areas of a company shall be audited by the DGCA to ensure that its conformity to the required regulations and standards results to an approved quality system. Once the company has been issued with an Air Operator Certificate (AOC),

detail procedure regarding initial certification for AOC refers to Staff Instruction (SI) 8900-2.1.

**b. Amendment/ Additional Approval Audit**

An amendment/ additional approval audit may be conducted prior to the granting of amendment/ additional approval. Detail procedure regarding amendment/ additional certification for AOC refers to Staff Instruction (SI) 8900-2.1.

**c. Routine Conformance and Routine Surveillance Audit**

Companies are audited on a regular basis for the AOC renewal purposes and to determine conformance of aviation regulations and standards. This routine conformance audit will be performed every two years before the AOC certificate will be expired.

A company must submit a formal application letter to DGCA for request renewal AOC certificate at least 90 days prior to the expired date of AOC certificate.

Surveillance includes a routine continuing audit program performed by PAI and POI.

**d. Special-Purpose Audit**

A special-purpose audit is one conducted to respond to special circumstances other than those requiring an initial certification audit, an amendment/ additional approval audit or a routine conformance audit. For example, a special-purpose audit may be convened with little or no notice and focus on specific areas of concern arising from safety issues. A “no-notice” audit may preclude certain team-member activities and responsibilities that would be normally associated with other types of audits.

**4. Surveillance**

Surveillance is routine continuing audit performed by PAI and POI. All organizations will be subject to continuing surveillance in between duration of AOC certificate (in between Routine Conformance Audit). The purpose of surveillance is to conduct audit to ensure continuing compliance with the

CASR's, standards, approve manual, appropriate technical and operational approved documents. Surveillance results may indicate the need for a special-purpose Audit of all or part of an organization.

**5. Scope and Convening Authority (CA) Level Matrix**

The following is a matrix of the scope and CA level for each type of audit.

Audit Category		Convening Authority
Combined	All areas of the auditee's operation.	DGCA
Specialist	One or more specific area: Operations, Airworthiness, Safety (SMS)	DGCA

**6. Audit Activities**

The audit process consists of the following four distinct phases of activities:

- a. The pre-audit (desk audit);
- b. The physical audit;
- c. Post-audit; and
- d. The audit follow-up.

**a. Pre-Audit**

Planning and preparation during the pre-audit phase will ensure that the objectives of the audit are achieved effectively, efficiently and economically. The scope and depth of the proposed audit, to be addressed and justified within the audit plan, will determine the time schedule, personnel and financial resources required.

**b. Physical Audit**

The physical audit phase will be implemented in accordance with the audit plan. It includes the entry meeting with the auditee, the determination of audit findings through interviews, inspections and the evaluation and



verification of files and records, functional area debriefings and the exit meeting.

**c. Post-Audit**

Post-audit activities include completion of the audit report and parallel report.

**d. Audit Follow-up**

Audit follow-up includes the development and approval of the auditee's Root cause analysis and Corrective Action Plan (CAP) and ensures full implementation of the corrective action plan (CAP).

**7. Co-ordination**

Audits will be co-ordinated through Sub Directorate Standardization of DAAO – DGCA. The audit manager will ensure that the Sub Directorate Standardization of DAAO – DGCA is informed of all relevant audit matters, and will be accountable for the management of audit resources and the integrity of the audit process.

**8. Scope and Depth**

The scope and depth of the audit is determined by the following:

- a. The size and complexity of the company;
- b. The time since the last audit;
- c. The enforcement record of the company; and
- d. Audit resources available.

**9. Surveillance Activities**

The surveillance process consists of the following four distinct phases of activities:

- a. Developing surveillance plan;
- b. Accomplishing the surveillance plan;
- c. Analyzing surveillance; and
- d. Determining appropriate course of action.

**a. Developing surveillance plan**

The development of a surveillance plan requires planning at the DAAO-DGCA office, and individual PAI/ POI levels. Each PAI/ POI should make an annual surveillance program specific to AOC holder in which the PAI/ POI was assigned. The program must be approved by Director of DAAO for annual surveillance program for AOC, before to be implemented. When developing a surveillance program, a PAI/ POI should consider to the following:

- 1) DAAO-DGCA Annual Surveillance Program (DGCA Form No.120-88“Annual Surveillance Program”), provides a guidance and policy on activities and other resources;
- 2) The data such as previous reports of surveillance and audit, accident/incident information, compliance and enforcement information(DGCA Form No. 120-89 “Risk Analysis Surveillance Form”); and
- 3) Other data such as ongoing certification work activities, the geographic areas where the various types of inspections should be conducted.
- 4) AOC Complexity Rating.

The complexity rating of an AOC holder is determined by the addition of the point rated criteria provided below, which is divided into types of AOC holder.

<b>Criteria</b>	<b>Point Rating</b>
Number of employees	1-10 = <b>1 point</b> 11-100 = <b>2 points</b> More than 100 = <b>3 points</b>
Number of domestic bases	2 or less = <b>1 point</b> 3-10 = <b>2 points</b> More than 10 = <b>3 points</b>
Number of aircraft	3 or less = <b>1 point</b> 4-10 = <b>2 points</b> More than 10 = <b>3 points</b>
Number of aircraft types	1 = <b>1 point</b> 2-5 = <b>2 points</b> More than 5 = <b>3 points</b>

Type of operations (highest certificate only)	AOC 135 other than Commuter= <b>2points</b> AOC 121, AOC 135 Commuter, Mountainous Operation = <b>3points</b>
International operations	Yes = <b>2points</b> No = <b>0points</b>

For each certificate holder, add the number of points and use the total to determine the related complexity rating using the following table.

<b>Complexity Rating</b>	<b>Point Total</b>	<b>Minimum Level for Leader of Inspector</b>
Low Complexity	<b>5 - 9</b>	<b>4</b>
Medium Complexity	<b>10 - 13</b>	<b>5</b>
High Complexity	<b>14 - 17</b>	<b>6</b>

A surveillance program may be based on the need to conduct routine and ongoing surveillance or the need to conduct special emphasis surveillance as a result of certain events such as accidents, related incidents, related violations, and strikes.

Numbers of inspections should be established taking into consideration the current operating environment which the DGCA oversees (such as AOC Complexity rating and the scope of maintenance).

Previous inspection reports, accident/incident information, compliance and enforcement information, and public complaints should also be used to determine both the types and frequency of inspections to be accomplished during a given time frame.

History of compliance with regulations and cooperation within the DGCA may also be considered when developing a surveillance program for a specific airline.

## **b. Accomplishing the surveillance plan**

During the conduct of the surveillance plan inspections, accurate and qualitative inspection reporting is essential. High quality inspection reporting is necessary for the effective accomplishment of the third and fourth phases of a surveillance program. The quality and standardization of inspection reporting will be enhanced through the use of the inspection checklists and report forms.

## **c. Analyzing surveillance**

After the inspection data has been reported, an evaluation of the information obtained from inspection reports and related sources must be conducted. The purpose of this evaluation is to identify the areas of concern and note areas such as the following:

- Non-compliance with regulations or safe operating practices
- Both positive and negative trends
- Isolated deficiencies or incidents
- Causes of noncompliance, trends, or isolated deficiencies

Evaluation of inspection results is a key phase of any surveillance program. The primary purpose of evaluating surveillance data is to identify both negative and positive trends as well as deficiencies which are not associated with an apparent trend.

This evaluation of inspection results is also important in terms of redefining and implementing subsequent surveillance objectives and inspection activity.

The PAI/ POI must adopt systematic methods that permit accurate and effective evaluation of inspection results. Additionally, other related information from incidents, accidents, enforcement actions and other sources may provide valuable trend information which may relate to the operator's safety and compliance status. For example, if in a series of ramp inspection reports a trend of deficiencies in the use of the MEL is identified, but the cause of these deficiencies cannot be identified, the PAI/ POI may need to adjust the emphasis on the types of inspections conducted. In this case, additional training program inspections, manual inspections, maintenance program, or flight control

inspections (flight release procedures) may be more effective in determining the cause of these deficiencies.

#### **d. Determining appropriate course of action**

PAI/ POI must use good judgment when determining the most effective course of action to be taken as a result of unsatisfactory inspection/audit findings. The appropriate course of action often depends on many factors, many of which may be quite subjective.

POI/PAI should evaluate preventive action developed by operator (root cause analysis refer to Chapter 4 of this Staff Instruction) of the finding to prevent recurrence of the undesirable situation or condition.

Various options which may be considered are: informal discussion with the operator and/or airman; formal written request for corrective action; withdrawal of DGCA approval for a program, manual, or document; and initiation of an investigation leading to formal enforcement/disciplinary action.

Corrective action which an operator or airman takes independently of the DGCA should be taken into account.

The DGCA must also decide whether or not the results of a specific inspection should result in a modification of their current surveillance program. As previously mentioned, the DGCA may elect to conduct further inspections to determine if the unsatisfactory finding was an isolated incident or part of a trend

### **10. Frequency Audit and Surveillance**

#### **a. Resource Allocation**

One objective of the audit and surveillance program is to target companies with poor conformance or safety records for more frequent inspection/audits. Accordingly, maximum resources will be directed at those companies where the risk of compromising aviation safety is the greatest.

#### **b. Criteria**

Targeting and frequency will consider the following factors:

1) Risk indicators;

- 2) Scope;
- 3) Depth;
- 4) Personnel resources available;
- 5) Flexibility;
- 6) Time;
- 7) Financing or budgets;
- 8) Accountability; and
- 9) A poor conformance record.

### **c. Risk Indicators**

Risk indicators are very important when determining whether a company should be subject to additional special-purpose or more frequent inspections.

A list of these indicators, with an explanation of each, follows. The ranking of each indicator may vary according to circumstances within the company when it is evaluated.

#### 1) Financial Change

The effects of financial difficulties and the subsequent impact on operations and maintenance actions are potential indicators of operational safety. Examples could be “cash on delivery” demands made by suppliers; delays by the company in meeting financial obligations such as rent, payroll or fuel bills; spare-part shortages; and repossession of aircraft or other equipment.

#### 2) Labour Difficulties

Labour unrest may occur during periods of seniority-list mergers, union contract negotiations, strikes, or employer lockouts, and may warrant increased regulatory monitoring.

#### 3) Management Practices

Management controls employment, salaries, equipment, training and operational/ maintenance processes. It can ensure that operations and maintenance functions are performed in a controlled and disciplined manner, or it can adopt a less active approach. Management can also determine how quickly problems are solved and weak processes rectified. These factors all determine the extent of regulatory monitoring required.

4) Poor Internal Audit or Quality Assurance Program

The absence of internal audit or quality assurance program may influence the frequency of surveillance, inspections or audits.

5) Change in Operational Scope or Additional Authorities

Changes such as a new level of aircraft operations and associated service will require increased regulatory monitoring.

6) Changes in Contracting for Services

Any changes to aircraft handling or maintenance contracts may require increased monitoring to ensure that the company has conformed to regulatory requirements.

7) High Turnover in Personnel

A loss of experienced personnel or lack of employee stability may be the result of poor working conditions or management attitudes that result in operational inconsistencies or the inability to meet or maintain regulatory requirements. This situation will require increased surveillance, inspections or audits.

8) Loss of Key Personnel

The replacement of accountable manager, operations managers, maintenance managers, quality safety manager, chief pilots, chief inspector or other key personnel within a company will require increased regulatory monitoring to ensure a smooth transition.

9) Additions or Changes to Product Line

Any changes to a product line (e.g. the addition of flight routes, the addition of flight frequencies) may require increased monitoring to ensure that appropriate regulatory requirements have been met.

10) Poor Accident or Safety Record

Incidents or accidents that occur during company operations may be an indicator of the company's level of conformance and require additional surveillance, inspection or audits.

11) Merger or Takeover

Any merger or change in controlling management may require additional regulatory surveillance or inspection after initial recertification.

## 12) Regulatory Record

A company's record of previous surveillance, inspections and audits, the promptness with which the company has completed its CAP, and its overall conformance history are indicators that will influence the frequency of surveillance, inspections and audits.

### **d. Periodic Cycle**

Every company holding an AOC certificate will be audited on a periodic cycle every two years. The promptness with which previous non-conformances were corrected and risk indicator should also be a factor in the timing of the next audit.

The scope of audit and surveillance areas refer to this Staff Instruction Chapter 5.

The frequency of surveillance refer to this Staff Instruction Chapter 6.

## **11. Unity of Control**

DGCA inspectors assigned to an audit shall report to the designated audit manager for the duration of the audit. To ensure continuity DGCA inspectors assigned to an audit shall not be released from their audit duties prior to the completion of the audit unless written authorization has been received by the audit manager.

## **12. Qualifications**

The audit team member's and inspector conducted surveillance qualifications will vary according to their respective duties and responsibilities. However, each member of the team and inspector conducted surveillance (except those in training or serving as observers) should undergo the audit procedures Course refers to SI 8900-1.3 (audit process for operations/ FCN 6901 and audit process for airworthiness FCN 61701).

## **13. Principal Inspector Restrictions**

To remain impartial throughout the audit process, Principal Operations Inspectors (POI's) and Principal Airworthiness Inspectors (PAI's) should not participate in audits of their assigned companies except in an advisory capacity to assist the appropriate audit manager. The DGCA, however, may



approve the restrictions for Inspector in-charge participation of the POI or PAI as an active member of the audit team should circumstances and resources dictate.

#### **14. Inconsistencies - DGCA Approvals**

During an audit and surveillance, the auditee may produce letters or approval documents which appear inconsistent with current legislation or policy. The audit manager/ PAI/ POI shall report such documentation to the DGCA immediately and include these inconsistencies in the parallel report. Unless safety is compromised, the auditee will not be required to make immediate program changes. The DGCA is responsible for resolving these inconsistencies and advising the auditee of any required action.

#### **15. Confidentiality**

##### **Discussion of Audit and Surveillance Content**

Owing to the sensitive nature of audits and surveillance, confidentiality is of the utmost importance. Team audit members/ PAI/ POI shall exercise discretion when discussing audit and surveillance matters during an audit or surveillance (whether on or off the site). Discussion of audit or surveillance content shall be limited to the audit team/ PAI/ POI and appropriate DGCA management.

#### **16. Parallel Report**

When audit or surveillance findings are identified against CASR and/ or Aviation Act no. 1 year 2009, the audit manager or PAI/ POI will prepare a parallel report for the DGCA management.

## **CHAPTER III. GENERAL AUDIT, SURVEILLANCE AND INSPECTION PROCEDURES**

### **1. Classes of Audits and Inspection**

#### **a. General**

The two classes of audits are:

- 1) Combined Audit;
- 2) Specialist Audit.

For an audit to be a complete and effective review of a company's operation, it should normally be conducted as a combined audit (i.e., as a joint airworthiness and operations audit). The combined audit should be the norm for air operators of any complexity in operations, airworthiness and safety (SMS).

#### **b. Combined Audit**

This includes airworthiness, operations, quality and safety (SMS) functional areas.

#### **c. Specialist Auditor Inspection**

This auditor inspection focuses on specific functional areas within a company.

##### 1) Airworthiness

An airworthiness specialist audit or surveillance will review the activities of the following areas:

- a) Management and administration;
- b) Approval and Manual Inspection:
  - Operation Specification and ACL
  - Publication/Library;
  - Airworthiness Manual (CMM, Maintenance Program, MEL, and other related manual);
  - Aircraft Documentations;
- c) Training Program and Record (Maintenance personnel);
- d) Maintenance Record System;
- e) Maintenance Facilities;
- f) Maintenance Contractual Arrangement;

- g) Minimum Equipment List (MEL) Management program;
- h) Maintenance Program;
- i) Maintenance Process Inspection;
- j) Continuing Analysis and Surveillance Program;
- k) Reporting Procedure and SDREvaluation
- l) Ramp Inspection.

## 2) Operations

An operations specialist audit or surveillance will review one or more of the following areas:

- a) Management and administration;
- b) Manual Inspection:
  - Operation Specification and ACL
  - Publication/Library;
  - Operation Manual (OM A, OM B, OM C, OM D, MEL, and other related manual);
  - Aircraft Documentations;
- c) Minimum Equipment List (MEL) Management Program;
- d) Operation Control;
- e) Trip Record / Flight Documentation;
- f) Flight and duty time records;
- g) Training Program and Training Record (Flight crew, Flight Attendant, and Flight Operations Officer);
- h) Company Check Pilot Program (Check Pilot);
- i) Cockpit Enroute Inspection;
- j) Cabin Enroute Inspection;
- k) Station facility inspection;
- l) Ramp Inspection;
- m) Flight Crew Member Proficiency and Competency check )

Note: for audit if available

## 3) Safety (SMS)

A Safety (SMS) specialist (Airworthiness or Operations) audit or surveillance will review one or more of the following areas:

- a) Safety management system (SMS) manual;
- b) SMS Implementation (hazard identification and risk management);

- c) Flight data analysis (FDA) if applicable;
- d) SMS Reporting System;
- e) Internal audit process including the contractors.

4) Quality Assurance Program

A specialist (Airworthiness or Operations) audit or surveillance will review one or more of the following areas

- a) Quality assurance organization and management
- b) Audit Program
- c) Auditors training and qualification program
- d) Process for addressing Findings
- e) Quality and audit record

**2. Pre-Audit**

The pre-audit process for audits begins with the selection of a team, followed by the preparation of an audit plan, the gathering of pre-audit documentation and the holding of a pre-audit team meeting. This process is illustrated as follows:



**a. Team Selection**

The audit team, approved by the DGCA management, will normally consist of the audit manager and team member and observers as appropriate. For audits of smaller air operators the team may be reduced in size.

## **b. Convening Authority (CA)**

Convening authority for AOC holder audit is Deputy Director for Standardization of DAAO – DGCA

### 1) Responsibilities

The convening authority shall:

- a) Appoint the audit manager at least one to two months prior to the audit;
- b) Oversee the selection of the audit team;
- c) Approve the covering letter for audit report and ensure that the auditee receives the report within ten working days;
- d) Ensure that action is taken in an appropriate, timely manner for critical safety issues identified by the audit manager during the physical audit;
- e) Ensure that appropriate follow-up action is completed after the physical; and
- f) Send a letter to the auditee confirming that all audit findings and corrective actions are complete and that the audit has been closed.

## **c. Audit Manager**

The CA will appoint an audit manager for each audit. This individual will be an operations or airworthiness inspector. For a large air operator, the audit manager should be appointed at least two months prior to the planned audit. This will allow sufficient time for research, familiarization with the terms of reference, the selection of the audit team and the development of an audit plan.

The audit manager:

- Will report directly to the CA for all audit matters. Team members will report to the Audit Manager until released from their audit duties; and
- Will immediately contact the CA with a recommendation for action in the event of an imminent threat to aviation safety.

### 1) Qualifications

The audit manager shall:

- a) Have completed the audit procedures course;
- b) Have experience related to the type of organization to be audited;
- c) Possess a sound knowledge of aeronautical legislation and regulations;
- d) Have demonstrated communication and management skills; and
- e) Have acted as team member for at least three audits.

## 2) Responsibilities

The audit manager shall:

- a) Plan, organize, direct and control the audit process;
- b) Negotiate dates sufficiently in advance to allow adequate planning prior to the audit;
- c) Select team member in consultation with the CA;
- d) Maintain an audit file, which will include all working notes, copies of audit-related documents and a copy of the audit report;
- e) Develop an audit plan. The plan shall include the audit schedule and an indication of sampling sizes for audit files or records to be used to obtain information during the audit;
- f) Notify the auditee by letter of the planned audit at least one month prior to the audit dates.
- g) Ensure that the pre-audit documentation review is complete;
- h) Ensure that team members are knowledgeable in their assigned functional areas;
- i) Convene a pre-audit team meeting;
- j) Establish contact with the CA to relay fieldwork progress, potential problems, changes in the objectives, scope or depth of the audit, and other significant matters arising during the pre-audit phase;
- k) Co-ordinate and chair the entry meeting with the auditee and maintain a liaison with the auditee's senior management;
- l) Advise the CA immediately of any critical safety issues identified during the physical audit;
- m) Ensure that any decisions to be made by, or approvals required from, the CA during the physical audit are received in a timely manner;

- n) Exercise line authority over audit team members and observers ensure that all audit findings are tied to applicable regulations or standards and supported by specific examples;
- o) Co-ordinate and chair the exit meeting with the auditee's senior management;
- p) Prepare the covering letter and audit report for approval by the CA;
- q) Provide the CA with recommendations for possible enforcement action arising from the audit; and
- r) Ensure that a parallel report, if required, has been completed

**d. Team Member**

1) Terms of Reference

Audit Manager will appoint team members in consultation with the CA.

2) Qualifications

A team member shall:

- a) Have completed the audit procedures course;
- b) Have experience related to the type of organization to be audited; and
- c) Possess a sound knowledge of aeronautical legislation and regulations.

3) Responsibilities

A team member shall:

- a) Become familiar with auditing procedures and associated company documentation;
- b) Become familiar with the auditee's policies and procedures;
- c) Revise the audit checklists applicable to the assigned audit functions;
- d) Conduct audit fieldwork and document audit findings
- e) Liaise with the Audit Manager to ensure that audit progress is reported and potential problems are addressed; and
- f) Review the validity and applicability of audit findings by ensuring that all are tied to applicable regulations or standards and supported by specific examples

**e. Observer**

An observer may join the audit team with the approval of the CA.

**3. Audit Plan**

The Audit Manager will develop an audit plan. This plan ensures that the audit will be conducted in an organized manner and in accordance with predetermined criteria. Appropriate sections of the plan will be distributed to each member of the audit team to provide guidance and direction throughout the audit. The audit plan should address the following items:

**a. Objective**

The audit plan should state the class and type of audit (i.e., combined-routine conformance audit, special audit, amendment/ additional audit, etc.).

**b. Scope and Depth**

The following factors should be considered when determining the scope and depth of an audit:

- 1) The areas of the company to be audited (the entire operation or a specific area);
- 2) The depth (i.e. how far back in time) to which the audit will reach;
- 3) The geographical dispersion; and
- 4) The sample sizes to be used versus the population being sampled.

**c. Company Data**

The audit plan should provide specific information on the company's

- 1) Aircraft types, models, serial numbers and type certificates;
- 2) Approved points of operation, main bases and sub-bases;
- 3) Training facilities and simulators used;
- 4) Maintenance bases, main bases, sub-bases and contract bases;
- 5) Employees and their location (base of operation);
- 6) Company's manual and procedure; and
- 7) Previous audit result.



#### **d. Approach**

The audit plan should describe the Audit Program (AP) approach to auditing by describing:

- 1) The manner in which the audit is to be conducted (i.e. whether it is a combined or specialist audit);
- 2) The specific procedures to be followed (checklists and forms used); and
- 3) The checklist shall be updated and adapted to the audit and previous audit outputs.

#### **e. Specialist Assistance**

The audit plan should address the issue of specialist assistance by determining whether:

- 1) there are team members who understand these systems; and
- 2) Specialists will be required (those with aircraft-type, non-destructive testing, engineering, etc.).

#### **f. Scheduling**

The following points should be considered when scheduling an audit:

- 1) The feasibility of the audit dates and timeframes;
- 2) The sufficiency of time allotted for the completion of the audit;
- 3) The time allotted for the physical audit, with a daily schedule of inspection for each specialist functional area (airworthiness, operations and safety)
- 4) Travel time; and
- 5) The preparation of the audit findings and distribution of the audit report.

### **4. Pre-Audit Documentation**

This includes a thorough review of all company files and documentation and the opening of a company audit file. Information gathered during the pre-audit phase will assist the audit team in determining the specific areas, systems and activities that warrant examination; supplementing audit checklists; or amending the scope of the audit. This audit phase should:

- a. Ensure that all reference manuals and documents to be used during the audit in accordance with the Reference Material Matrix are readily available and include the latest approved amendments;

- b. Review the auditee's approved manuals for conformance to the appropriate Civil Aviation Safety Regulation (CASR's);
- c. Review the auditee's files and records;
- d. Itemize areas which require further review auditee;
- e. Select the appropriate checklist items as applicable, in accordance with the scope he procedural manual of the respective directorates.
- f. Complete all pre-audit sections of the checklists;
- g. Ensure that all audit documentation is chronologically recorded on the company audit sub-file; and
- h. Ensure that each team member has received appropriate portions of the
  - i. Audit plan.
  - j. Previous inspection or Audit Reports;
  - k. Accident or incident data;
  - l. Any enforcement action;
  - m. Appropriate extracts from regulations, standards and policies; and
  - n. Flight permits, waivers, approvals, aircraft type approvals, manufacturing limitations and operations specifications authorizations

## **5. Pre-Audit Team Meeting**

This meeting should:

- a. Confirm individual team members' duties and responsibilities;
- b. Ensure that all team members have received appropriate portions of the audit plan;
- c. Ensure the correct checklist appropriation by the team members;
- d. Ensure that all team members are aware of restrictions regarding audit report distribution;
- e. Outline the overall audit plan;
- f. Clarify any outstanding issues or problems;
- g. Include a briefing by the POI and PAI on current company activities, trends, performance or other information related to previous audits; and
- h. Address the issues of conflict of interest, confidentiality and access to information.

## **6. Physical Audit**

### **a. General**

The physical audit consists of the entry meeting, evaluation and verification, daily briefings and the exit meeting

**b. Entry Meeting**

The entry meeting should discuss the plan of the physical audit. It should be attended by the auditee's senior management and identified members of the audit team. It will outline the audit process to the company and confirm any administrative requirements so that the physical audit may be conducted both effectively and efficiently, while minimizing disruptions to the company's operation. One of the objective of the entry meeting is to obtain the positive participation of the auditee's to the audit activities.

1) The entry meeting should:

- a) Take place on the auditee's premises;
- b) Be attended by the auditee's senior management;
- c) Specify audit details and procedures; and
- d) Be brief, specific and courteous.

2) The Audit Manager shall:

- a) Explain the purpose of the entry meeting;
- b) Introduce audit team members, including specialists and observers;
- c) State the objective, scope and depth of the audit;
- d) Address the means of communication between the audit team and the auditee;
- e) Explain that company officials will be briefed daily on progress of the audit;
- f) Describe the manner in which any audit finding detected will be handled;
- g) Establish a location and time for the exit meeting;
- h) Emphasis that the purpose of an audit is to identify non-conformances and that enforcement action may result from any of these findings; and
- i) Respond to all questions from the auditee's.

3) The auditee may agree to provide:

- a) Adequate, preferably private, working space;
- b) Access to a photocopier and internet line;

- c) Measuring or test equipment;
- d) Access and admission to all facilities;
- e) Access to company files and records,;
- f) Credentials and facility passes;
- g) Selected personnel for interviews; and
- h) Knowledgeable company advisors or liaison officers.

### **c. Evaluation**

In the evaluation phase, the company's level of conformance with regulations and standards contained in existing legislation and company control manuals will be assessed. The following are possible means of evaluation:

#### 1) Pre-Audit Checklists

Pre-audit checklists will determine whether all essential controls appear to be in place and are properly designed. Based on the results of the checklist, a summary of the strengths and weaknesses of the auditee's control system will be developed. This system will be most effective if all questions are answered.

#### 2) Interviews

Interviews with company personnel are important during the evaluation phase to determine whether the control system documented in company manuals is that in use, and to assess the knowledge of supervisory personnel of their duties and responsibilities. Interviews may also confirm the validity of audit findings reached through observation or sampling. The following guidelines will be useful when preparing for an interview:

- a) Prepare carefully prior to the interview by defining the areas to be explored and setting specific objectives;
- b) Explain why the interview is taking place;
- c) Use open questions and avoid complex questions or phrases;
- d) Listen carefully to answers and allow interviewee to do most of the talking;
- e) Avoid being side-tracked from your original objectives;
- f) Ensure that questions are understood;
- g) Terminate the interview if the atmosphere becomes highly negative;

- h) Document all responses; and
- i) Thank the interviewee at the conclusion of the interview.

### 3) Sampling

The sample size of a population and selection criteria have a direct impact on the validity and confidence level of the results. The following guidelines should be used:

- a) Each sample group must stand alone. If there are 1400 pilots, 2800 flight attendants, 180 maintenance personnel, and 15 dispatchers, each of the four groups must be considered separately;
- b) The AP goal is to achieve a 95 per cent confidence level with the results of the sample tested. Often, this goal may not be appropriate; therefore, the audit team must carefully consider both the sample size and the time devoted to the task. Random sampling may be considered an acceptable alternative;
- c) The table below will help determine the sample size needed to achieve a 95% confident level for populations of 400 or more. For smaller populations, a larger sample must be examined and the following guide should be used:

<b>Populations</b>	<b>Sample</b>
100:	50 per cent
199:	40 per cent
399:	35 per cent

#### **d. Verification**

- 1) During this phase, the audit team will gather information to determine the company's level of conformance. Specifically, verification will:
  - a) Determine whether company controls are operating effectively and as intended;

- b) Determine whether the auditee's operation conforms to the Civil Aviation Safety Regulation (CASR) and standards contained in the audit checklists; and
  - c) Analyze particular deficiencies to assess their effects and identify the causes.
- 2) Company files or records should not be accessed without appropriate company authorization and, when possible, company representatives should be present during the review of these files and records.
  - 3) If the review and verification phases do not provide sufficient confirmation of the company's level of conformance, further substantiation will be required to ensure that any evidence obtained up to that point supports the audit findings and conclusions. In short, other supporting documentation must be acquired and secured.
  - 4) Verification includes various types of inspections. These may be Aircraft Inspections (of each type of aircraft), Pre-Flight/Ramp Inspections, In-Flight Inspections (sampling of company routes, i.e. domestic, international and new routes) and Base Inspections.

**e. Confirmation Request Form (CRF)**

- 1) The CRF is an effective audit tool in the following cases:
  - a) Where evidence indicates an audit finding, the company will be given the opportunity to show otherwise;
  - b) The auditor will determine the course of action to be adopted based on the auditee's response;
  - c) The auditor will observe the state of the company records management system from the auditee's perspective;
  - d) Arbitrary audit findings based on subjective examples will be eliminated;
  - e) The auditee will not be surprised at the end of the audit, as all contentious issues will have been discussed openly during the physical audit;
  - f) The auditor can concentrate on auditing rather than on researching company files and records, and
  - g) The auditor will receive a signed document from the auditee for inclusion in the supporting documentation package.

- 2) The CRF form (DGCA Form 120-09) will be sent to the Audit Manager at the outset to avoid untimely surprises. All CRFs form will be issued sequentially to ensure that, upon completion of the physical audit, the CRFs have responses and appropriate action has been taken.
- 3) At the end of each day, the CRF form should be compared with the returned CRF to ensure that it is current. For a large audit, this can be done at the daily briefing with the company. In this manner, both the company and the audit team will be updated as to the status of these documents. Regardless of the way in which the CRF form is maintained, all CRFs should be cleared prior to the completion of the physical audit at that site or base.
- 4) When the CRF has been returned and appropriate action taken, this material should be filed according to the appropriate audit area, allowing documentation relating to high-profile items to be maintained for later reference. This file will also provide background and evidence for any enforcement action to be taken at a later date.

**f. Type of Finding**

A finding is generated as the result of a non conformity to a standard: CASR, internal rules or procedure. A finding can be of 3 different types:

- 1) **Non-Compliance (NCP)** (immediate corrective action/Level 1) means a deficiency in characteristic, documentation, or procedure with respect to provisions of the Aviation Act No. 01 of 2009 or a CASR.
- 2) **Non-Conformance (NCF)** (Short-Term Corrective Action/Level 2) means a deficiency in a characteristics, documentation, or procedures. which renders the quality of a product or service unacceptable or indeterminate, or not according to specified requirements, e.g. Physical defects, test failures inadequate documentation.
- 3) **Non-adherence (NAD)** (Long-Term Corrective Action/Level 3) means a deficiency in characteristic, documentation, or procedure with respect to a recommended practice, procedure, guideline or good aviation safety. Non adherence finding including safety observation is linked to safety and evaluation of the risks linked to operational hazards and raised

when the risk pertaining to a specific hazard is evaluated by DGCA as non acceptable for safety

**g. Audit/Surveillance/Inspection Finding Form**

1. Audit/ Surveillance/Inspection finding forms must be completed accurately as they form the basis of the audit report and a successful audit. Audit/ Surveillance finding form use DGCA Form 120-07.
2. Since a number of team members will be completing audit/ surveillance/Inspection finding forms, it is important that a standardized approach to inputting data on the form be taken to reduce the number of data entry errors.
3. All supporting documentation will be included with the completed audit/ surveillance/Inspection finding form for review by the Audit Manager/ PAI/ POI. Although supporting documentation will not be included in the audit/ surveillance report, it will be retained in the audit file.

**h. Daily Briefings**

- 1) Team briefings will normally be held at the end of each day during the audit to:
  - a) Ensure adherence to the audit plan;
  - b) Validate confirmation requests and audit findings;
  - c) Resolve issues or problems arising from the day's activities; and
  - d) Update the CA if necessary.
- 2) Company briefings should be held at the end of each day, following team briefings, to update the auditee's management on audit progress.

**i. Exit Meeting**

The exit meeting with the company's senior management should provide an overview of the audit. The meeting should summarize the audit findings, stating areas of strength and weakness. A controversial discussion with company representatives regarding audit report content must be avoided. The process for the exit meeting is as follows:

- 1) Normally, Audit manager and team members will attend the exit briefing, however, other members may be required for specific briefings.



- 2) If team members other than the Audit Manager and team members are required to speak at the exit meeting, the Audit Manager will advise them in advance.
- 3) All audit findings should have been discussed with company officials as each functional area was completed. New audit findings should not normally be identified at the exit meeting. The meeting should provide an overview of the audit and not become a debate between the team and the organization. The auditee should be advised that the company will have an opportunity to respond formally to the audit report.
- 4) The auditee will be advised of those audit findings that may be subject to enforcement action. The auditee will also be advised of the company's responsibility to take appropriate action to correct all non-conformances and prevent their recurrence.
- 5) The audit manager shall advise the auditee that the audit report will be forwarded to the company within ten working days and that a CAP must be submitted to DGCA within 15 working days after the company has received the report.

## **7. Post-Audit**

### **a. General**

This phase includes preparation of the audit report and the parallel report.

### **b. Audit Report**

- 1) The audit report should normally be presented to the company within ten working days. Any delay must be documented since the validity of the audit will be compromised if the report is not presented in a timely manner. Although draft audit finding forms may be left with the company as a courtesy, this is not mandatory.
- 2) The Audit manager is responsible for the preparation of the audit report.
- 3) A sample covering letter and audit report for combined audits report will include:
  - a) Part I - Introduction, which summarizes the audit process and the content of the audit report;

- b) Part II - Executive Summary of Findings, which summarizes the most significant findings for the information of the senior management of the audit and DGCA;
  - c) Part III - Airworthiness, which contains the functional summaries for airworthiness;
  - d) Part IV - Operations, which contains the functional summaries for operations;
  - e) Part V - Safety, which contains the functional summaries for safety; and
  - f) An Appendix, which contains the audit findings for both airworthiness and operations.
- 4) The audit report will be a factual account of the audit and will not include subjective statements, suggestions or recommendations.
  - 5) The CA will sign the covering letter and forward it, with a copy of the audit report, to the company. The letter will outline the procedure for responding to audit findings and specify the required response time of 15 working days from the time the company receives the report

**c. Parallel Report**

- 1) An audit may identify observations and/or deficiencies in, or the misapplication of, Civil Aviation Safety Regulation and Aviation Act no. 1 year 2009. Where a non-conformance to a regulatory requirement is found, and that requirement requires approval (i.e., document or manual approval), a finding shall be made against the auditee (so that the non-conformance is resolved through the CAP).
- 2) Findings against Civil Aviation Safety Regulation and Aviation Act no. 1 year 2009 will be described in a document called the parallel report. The audit manager will forward the parallel report to the CA within 15 days of the completion of the audit and shall identify the problem, cause, responsibility and recommended solution for each finding. All supporting documentation shall be included in the parallel report.

**d. Parallel Report Follow-Up**

Parallel report items shall be forwarded to CA who will co-ordinate and follow-up of those deficiencies.

## **8. Audit/ Surveillance/Inspection Follow-Up**

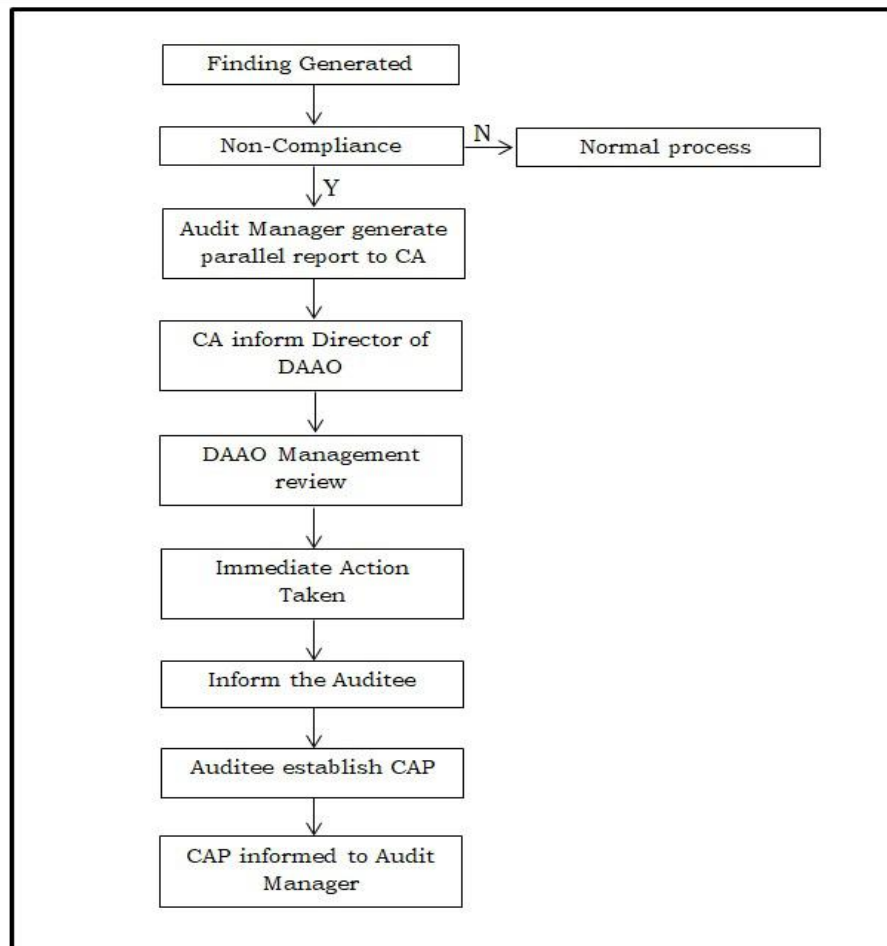
### **a. General**

Upon completion of the audit, the CA will delegate follow-up responsibilities to the Audit Manager who will then ensure that all audit findings have been resolved in accordance with an approved CAP.

### **b. Immediate Action**

Immediate action will be taken by DGCA upon finding of non-compliance against Civil Aviation Safety Regulations or Aviation Act.

After generate the finding, the Audit Manager shall immediately informed the CA using the parallel report mechanism. Based on that report, CA will inform Director of DAAO to determine the type of immediate actions taken. Determination of the type of immediate action is based on management review of DAAO, which will be convened by the Director. The type could vary, from issuing warning letter, restriction or limitation of operation, suspension, recommendation of revocation, or proceeding to enforcement actions. The decision will then be informed to the auditee, which in turn will need to establish corrective action plan and informed DGCA / DAAO within the time frame established in accordance with the type of associated finding. The schematic process is as follow:



### c. Corrective Action Plan

- 1) The covering letter of the audit report will advise the auditee that it must submit a CAP addressing the audit findings within 15 working days. Normally, this deadline will not be extended without the CA's approval.
- 2) It is important to review the company's CAP to determine whether the company has developed a reasonable timetable for corrective action. It is also essential to ensure that the timetable has prioritized the corrective actions to address the most critical findings first.
- 3) Depending on the nature of the audit findings, the company's CAP should involve:
  - a) **Non-Compliance** (immediate corrective action/Level 1) means a deficiency in characteristic, documentation, or procedure with respect to provisions of the Aviation Act No. 01 of 2009 or a CASR or a major safety risk. This is action must be taken immediately but not exceed than 15 days upon identification of the audit finding. Audit findings that have direct impact on aviation

safety may be taken to stop the operation of aircraft, maintenance, suspend of personnel licensing or termination of AOC activities.

- b) **Non-Conformance** (Short-Term Corrective Action/Level 2) means a deficiency in a characteristics, documentation, or procedures. which renders the quality or the safety of a product or service unacceptable or indeterminate, or not according to specified requirements, e.g. Physical defects, test failures. Inadequate documentation. This is short-term action to correct a non-conformance that does not pose an immediate threat to aviation safety, which ensures that conformance is established quickly until long-term action is completed to prevent recurrence of the problem. Short-term corrective action will maximum take place within 30 days.
  - c) **Non-adherence** (Long-Term Corrective Action/Level 3) means a deficiency in characteristic, documentation, or procedure with respect to a recommended practice, procedure, guideline or good aviation safety. This is longer-term action and has two components. The first will involve identifying the cause of the problem and indicating the measures the company will take to prevent a recurrence. These measures should focus on a system change. The second component will include a timetable for company implementation of the long-term corrective action. Long-term corrective action will maximum take place within 60 days. Non adherence finding including safety observation is linked to safety and evaluation of the risks linked to operational hazards and raised when the risk pertaining to a specific hazard is evaluated by DGCA as non acceptable for safety.
- 4) Long-term corrective action should be accompanied by the forwarding of supporting documents for review. Short-term corrective action should also be accompanied by the forwarding of supporting documents, which may take the form of logbook entries, purchase orders, memoranda, revised inspection procedure cards, or photograph evident. It is important to verify as much supporting documentation as possible during subsequent surveillance.

- 5) If the company's CAP is not acceptable, the Audit Manager will indicate the reasons, propose changes and negotiate a new target date. Otherwise, an alternative course of action may be pursued.
- 6) Where the audit findings are of a minor nature, no threat to aviation safety exists and the company has a reputable quality assurance or internal audit program, a "paper follow-up" may be acceptable. In this case, the documents are submitted with the CAP and no interim surveillance is required. As the company completes its audit responses as part of the CAP, its progress will be monitored.
- 7) An audit will be formally closed when every audit finding has been corrected through the CAP, the corrections have been found to be acceptable by the follow-up office and post-audit surveillance has been completed.
- 8) Normally, the Audit Manager will ensure that a letter has been sent to the auditee, confirming that all audit findings have been completed and that the audit has been closed.

## **CHAPTER IV. ROOT CAUSE ANALYSIS AND CORRECTIVE ACTION**

### **1. Root Cause**

The initiating cause in a causal chain that leads to an undesirable situation or condition; the point in the causal chain where corrective action could reasonably be implemented and expected to correct and prevent recurrence of the undesirable situation or condition.

#### **a. Root cause analysis**

A method of analysis that focuses on identifying the root cause(s) of an undesirable situation or condition of finding (non-conformities).

It is the responsibility of the auditee (AOC holder) to determine the cause(s) of any finding (non-conformities) and to implement corrective actions after findings have been raised. Clearly, the organisation being audited is best placed to develop a causal analysis as it better understands the environment it operates in, its own operations, methods and personnel, and the events that may have led to the problem.

In some cases, in particular where risks to safety are highest and causes and actions require complex analysis and lengthy implementation, a joint DGCA-AOC holder approach may be required.

The DGCA is responsible for ensuring that the causal factors as determined by the AOC holder are accurate and that the associated actions implemented by the operator are effective.

The root cause analysis is the tool or method designed to help auditee and auditors describe what happened during a particular finding (non-conformities), then determine how it happened and understand why it happened.

A full root cause analysis as used in the more complex situations contains three key components that need to be applied to ensure an effective analysis, namely:

- 1) A method of describing and schematically representing finding (non-conformities) sequence and its contributing conditions.
- 2) A method of identifying the critical events, conditions, and unsafe acts in the sequence. This is where different root cause analysis techniques

come into play (Ishikawa, 5-whys, etc.) with varying degrees of complexity.

- 3) Based on the identification of the critical events, conditions, and unsafe acts, a method for systematically investigating the management and organisational factors that allowed the unsafe acts to occur i.e. a method to uncover the root cause.

In many cases, the issue that has resulted in the finding may be a 'one-off' event with a low consequence or impact and therefore a detailed root cause analysis may not have a significant safety benefit.

The extent to which root cause analysis methods are used and the level of analytical effort spent should be commensurate with the significance of the issue or non-compliance. When determining what tool or methodology is appropriate and whether the auditee (AOC holder) has been thorough in its analysis, the DGCA will rely on the knowledge, experience, and judgement of the auditor.

Risk management methodology should be used to focus on areas known to have a greater effect on aviation safety. This should additionally be weighed against the ability of the operator to carry out an effective analysis in the more serious and complex situations.

It is likely that the majority of findings (minor) will require minimal root cause analysis with increasing depth of analysis and increased involvement of the DGCA as the severity and/or number of findings and the complexity of the causal factors increases.

Ultimately, the auditee (AOC holder) will need to satisfy the DGCA that the root cause has been correctly identified and, in the more complex situations, that the root cause analysis has been appropriately and thoroughly conducted.

## **b. Identification of the Root Cause**

- 1) To ensure that finding (non-conformities) are permanently corrected. it is important to carefully assess the reason(s) for:
  - a) A lack of existence, or only a partial introduction of the Standard, policy, procedures or Recommended Practice;



- b) Failure to conform with the Standard, policy, procedures or Recommended Practice.
  - c) Failure to provide the necessary level of risk management
- 2) This will assist in identifying appropriate and effective corrective actions.
  - 3) The identification of root causes is also an essential input to an effective SMS.

**c. Root cause analysis on DGCA Form No. 120-07**

Auditee must correctly identify and thoroughly conduct root cause analysis of any finding (non-conformities) and written in DGCA Form No. 120-07. Root cause analysis will be evaluated by the Audit Manager and Audit member, as a mandatory requirement for closing finding.

**2. Corrective actions**

Additionally, after findings have been raised and root causes determined the DGCA will agree with the auditee (AOC holder) on corrective actions and/or a corrective action plan. It is the auditee (AOC holder) who has the resources and authority to implement corrective actions.

The fundamental goal of the findings-causes-actions process is to shift from fixing the effects of non-compliances to eliminating, changing, or controlling the causes of problems, hence implementing corrective action and in the context of safety risk management, preventive action.

**a. Types of Corrective Action**

- 1) Immediate corrective action/Level 1 for non-compliance finding.  
This is action must be taken immediately but not exceed than 15 days upon identification of the audit finding. Audit findings that have direct impact on aviation safety may be taken to stop the operation of aircraft, maintenance, suspend of personnel licensing or termination of AOC activities.
- 2) Short-Term Corrective Action/Level 2 for Non-Conformance finding.  
This is short-term action to correct a non-conformance that does not pose an immediate threat to aviation safety, which ensures that conformance is established quickly until long-term action is

completed to prevent recurrence of the problem. Short-term corrective action will maximum take place within 30 days.

3) Long-Term Corrective Action/Level 3 for Non-adherence finding

This is longer-term action and has two components. The first will involve identifying the cause of the problem and indicating the measures the company will take to prevent a recurrence. These measures should focus on a system change. The second component will include a timetable for company implementation of the long-term corrective action. Long-term corrective action will maximum take place within 60 days. Non adherence finding including safety observation is linked to safety and evaluation of the risks linked to operational hazards and raised when the risk pertaining to a specific hazard is evaluated by DGCA as non acceptable for safety

**b. Corrective Action Plan Submission**

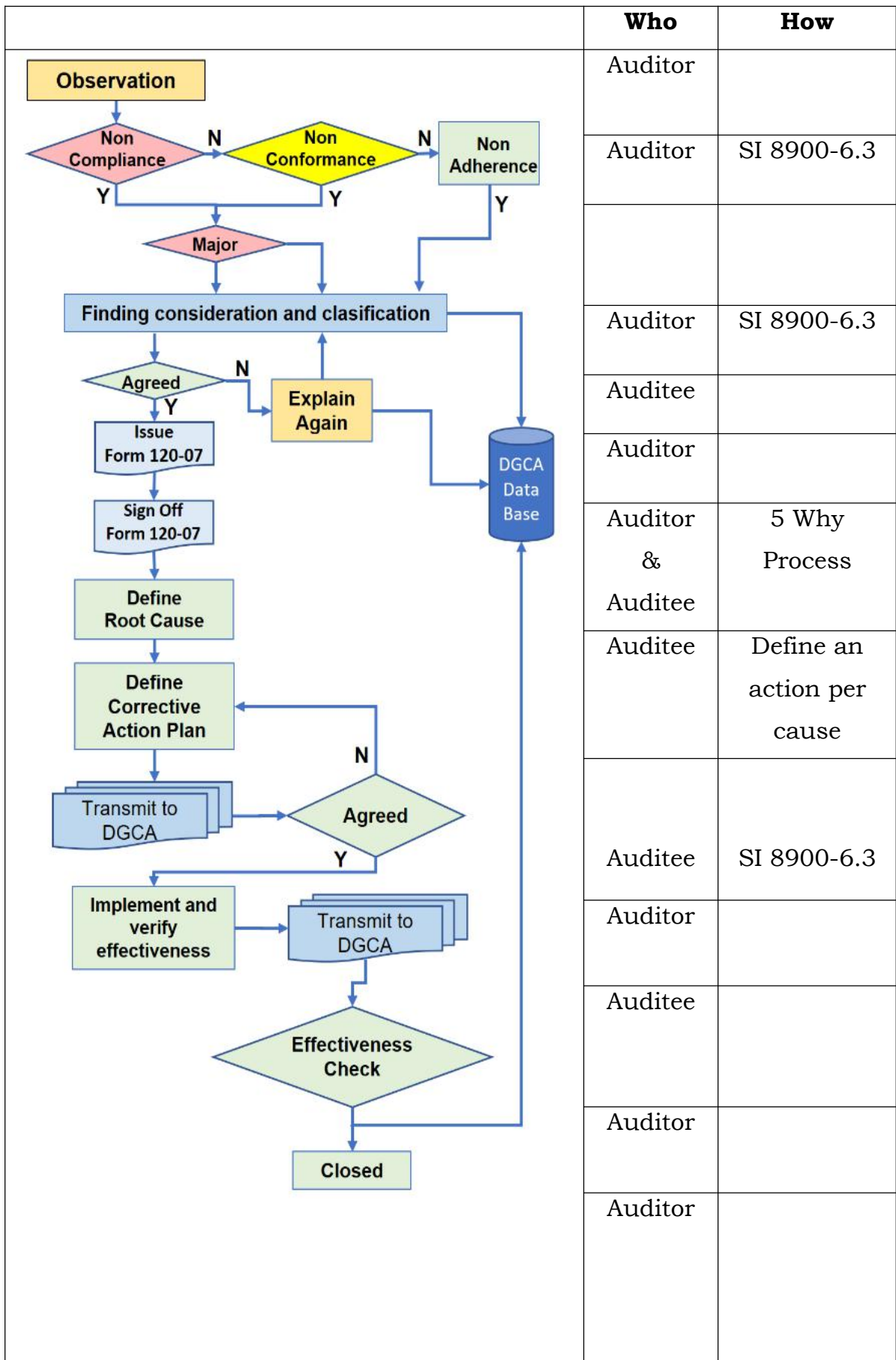
- 1) The covering letter of the audit report will advise the auditee that it must:
  - a) Where applicable, submit root cause analysis and corrective action in Audit Finding forms (DGCA Form no, 120-07) for each audit finding requiring corrective actions by the date specified in the corrective action section of the finding form; and
  - b) Submit a corrective action plan addressing all other audit findings within 15 working days from the date of receipt of the audit report. Normally, this deadline will not be extended without the approval of the DGCA.
- 2) Corrective action plans received from the auditee should include completed corrective action in DGCA form 120-07 and where applicable, supporting documentation that may take the form of memoranda, manual amendments, etc.

**c. Corrective Action Plan Approval**

- 1) Where the corrective action plan is acceptable, the auditee will be so advised and the appropriate information (administrative/on-site follow-up, proposed completion date) will be entered on the corrective action in DGCA form 120-07, for the purpose of follow-up.

- 2) Before approving plans for findings that include long-term corrective actions, the audit manager must be satisfied that the proposed corrective action is reasonable and that safety will not be jeopardised.
- 3) If the auditee's corrective action plan is not acceptable, the DGCA will indicate the reasons, propose changes and negotiate a revised corrective action plan. Where the auditee is unresponsive to this action, an alternative course of action may be pursued; where applicable, such action could include the sending of a Notice of Suspension to the AOC Certificate by the DGCA.

### Audit/ Surveillance/Inspection Follow-Up Process Flow Diagram



## **CHAPTER V. AUDIT, SURVEILLANCE AND INSPECTION AREA**

The DGCA Audit or Surveillance focus on 3 functional as follows:

1. Airworthiness
2. Operations
3. Safety (SMS)
4. Quality Assurance

### **1. Airworthiness**

An airworthiness specialist audit, surveillance or inspection will review the activities of the following areas:

#### **a. Management and administration;**

The certificate holder's staffing must be investigated to determine whether an adequate number of personnel are employed at the executive and other levels to perform necessary functions. Through a sampling questioning process, the DGCA inspector must make a finding that management personnel are qualified, experienced and competent to perform their assigned duties in accordance with CASR and company manual.

The DGCA inspector shall evaluate the effectiveness of the feedback system and its results to manage the company compliance level measured through the monitoring of the activities and their analysis.

Applicable form:

- DGCA Form No.120-15 “Management and Administration Evaluation”

#### **b. Approvals, Manuals and Procedure**

Civil Aviation Safety Regulation requires certificate holders to prepare and keep current various manuals and checklists for the direction and guidance of maintenance personnel conducting air transportation operations. Each operator is required to maintain a complete manual (or set of manuals) at its principal base of operations and to furnish a complete manual (or set of manuals) to DGCA.

A certificate holder's manual must be reviewed by inspectors to ensure adequate content and compliance with applicable regulations, safe operating practices, and the certificate holder's operations specifications

(OpSpecs) and Authorizations Conditions and Limitations (ACL). While inspectors are encouraged to provide guidance and advice to certificate holders in the preparation of their manuals, the development and production of an acceptable manual is solely the responsibility of the certificate holder.

Publication (Library); Civil Aviation Safety Regulation requires certificate holders to have current publication and regulatory manuals available for the scope of work performed.

Applicable form:

- DGCA Form No.120-32 “Evaluation and Approval of Company Maintenance Manual”
- DGCA Form No.120-16 “Operation Specification Evaluation”
- DGCA Form No. 120-34 “Evaluation and Approval of Minimum Equipment List (MEL)”
- DGCA Form No.120-53 “Evaluation of Publication (Library)”

**c. Training Program and Records (Maintenance Personnel);**

The certificate holder's training program should include company indoctrination and technical training (formal and on the job training). The program should contain a list of tasks to be taught and a method for recording the training. Completion of the training must be entered in the individual's training record that includes:

- 1) Company indoctrination;
- 2) Maintenance/inspection technical training;
- 3) Responsibilities for persons other than an Operator's employees;
- 4) Maintenance Personnel Training;
- 5) Recurrent Training;
- 6) Training Records;
- 7) Special Emphasis Training;
- 8) Maintenance personnel qualification.

Applicable form:

- DGCA Form No.120-52 “Maintenance Personnel Training Program, qualification and Record”

**d. Maintenance Record System;**

Review the applicant's recordkeeping system procedures to ensure that the requirements of CASR Part 121/135 are met the following:

- 1) Maintenance Release Records;
- 2) Flight Maintenance Records;
- 3) Total Time In Service Records;
- 4) Life-Limited Parts Status;
- 5) Time Since Last Overhaul Records;
- 6) Overhaul Records;
- 7) Current Aircraft Inspection Status;
- 8) Airworthiness Directive (AD) Compliance;
- 9) Major Alteration Records; and
- 10)Major Repair Records.

Applicable form:

- DGCA Form No. 120-41 “AD Compliance Evaluation”
- DGCA Form No.120-42 “Record System Evaluation”
- DGCA Form No. 120-47 “Major Repair and Alteration Evaluation

**e. Maintenance Facilities;**

The maintenance facility evaluation is performed to determine if adequate housing, equipment, spare parts, technical data, and qualified personnel are available to satisfactorily complete all maintenance functions.

Applicable form:

- DGCA Form No. 120-51 “Maintenance Facility Evaluation”
- DGCA Form No. 120-48 “Fueling and Servicing Evaluation”

**f. Maintenance Contractual Arrangement;**

A certificate holder must ensure that contract maintenance providers are complying with their Maintenance Program and other provided instructions when maintaining the aircraft, airframes, engines, propellers, appliances, emergency equipment, and components thereof and ensure that they are in accordance with the documented policies, procedures, and instructions in the certificate holder’s manual and the applicable CASR.

Applicable form:

- DGCA Form No. 120-43 “Contractual Arrangement Evaluation”

**g. Minimum Equipment List (MEL) Management Program;**

A MEL is required for each type and model of aircraft to be operated, which provides for the operation of the aircraft, subject to specified conditions, with particular equipment inoperative. This list prepared by the applicant in conformity with, or more restrictive than, the master minimum equipment list (MMEL) approved by the State of Design for the aircraft type, is tailored to the applicant's aircraft and installed equipment.

Applicable form:

- DGCA Form No. 120-54 "Evaluation of Minimum Equipment List (MEL) Management program"

**h. Maintenance Program;**

Each certificate holder shall have a maintenance program for each aircraft type including foreign registered aircraft, approved by the DGCA, or state of registry, containing the following:

- 1) Maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilization of the aircraft;
- 2) When applicable, a continuing structural integrity program;
- 3) Procedures for changing or deviating from (1) and (2) above;
- 4) When applicable, condition monitoring and reliability program descriptions for aircraft systems, components and engines;
- 5) Maintenance task as required inspection items.
- 6) Aging Aircraft Program
- 7) Weight And Balance Control Program

Maintenance Inspection System & RII Evaluation; The certificate holder shall ensure aircraft is maintained in accordance with the approved maintenance program.

Required Inspection are items of maintenance and alteration that must be inspected, includes those that could result in a failure, malfunction, or defect endangering the safe operation of the aircraft, if not performed properly or improper parts or materials are used



Applicable form:

- DGCA Form No. 120-33 “Evaluation and Approval of Maintenance Program”
- DGCA Form No. 120-49 “Aging Aircraft Program”
- DGCA Form No. 120-35 “Evaluation And Approval Of Weight And Balance Control Program”
- DGCA Form No. 120-44 “Maintenance Inspection System & RII Evaluation”

**i. Maintenance Process Inspection**

This inspection for observing and analyzing in-progress maintenance operations for compliance with specific methods, techniques, and practices in the operator's inspection and maintenance program.

This inspection also conducting a detailed process/task inspection by analyzing the data, materials and parts used in the repair, overhaul and inspection processes.

A detailed process/task inspection is a surveillance activity that will examine one or more specific tasks that are associated with the overhaul, repair or inspection of a part or product. This inspection will evaluate the data, tooling, equipment, and processes used to complete one or more tasks.

Applicable form:

- DGCA Form No. 120-50” Maintenance Process Inspection”

**j. Continuing Analysis and Surveillance Program;**

The continuing analysis and surveillance system is usually included in the operator's maintenance manual. The system ensures the adequacy of an operator's maintenance program and confirms that the program is properly followed and controlled. CASR Section 121.373 and 135.373 allow the DGCA to require revisions to an operator's maintenance program based on deficiencies or irregularities revealed by the continuing analysis and surveillance system.

Applicable form:

- DGCA Form No. 120-45 “Continuing Analysis and Surveillance Program Evaluation”

- DGCA Form No. 120-36 “Evaluation And Approval Of Approved Reliability Program”

**k. Reporting Procedure And SDREvaluation;**

The certificate holder shall regularly and promptly send a summary report to DGCA in accordance with regulations.

Operators are required by CASR section 121.705 and 135.705 to submit a monthly Mechanical Interruption Summary Report (MISR). This report enables the inspector to evaluate the effectiveness of the operator's maintenance and manual procedures.

Service Difficulty Reports (SDR's) provide a record of occurrences related to airworthiness and safety. This record allows the DGCA to examine the nature of such occurrences and decide if additional analysis or action is required.

Applicable form:

- DGCA Form No. 120-46 “Reporting Procedure and SDREvaluation”
- DGCA Form No. 43-03 “ Mechanical Interruption Summary Report”

**l. Ramp inspections**

Ramp Inspections are planned inspections carried out at ramp to verify the compliance of laid down standards and regulations during operation of commercial air operators. This inspection is carried out by a team of inspectors from Operations and Airworthiness covering respective area as per standard checklist.

Applicable Form

- DGCA Form No.120-13 “Ramp Inspection Checklist”

## **2. Operations**

An operations specialist audit, surveillance or inspection will review one or more of the following areas:

### **a. Management and administration;**

The certificate holder's staffing must be investigated to determine whether an adequate number of personnel are employed at the executive and other levels to perform necessary functions. Through a sampling questioning process, the DGCA inspector must make a finding that management personnel are qualified, experienced and competent to perform their assigned duties in accordance with CASR and operation manual

Applicable form:

- DGCA Form No.120-15 “Management and Administration Evaluation”

### **b. Manual inspections.**

Civil Aviation Safety Regulation requires certificate holders to prepare and keep current various manuals and checklists for the direction and guidance of flight and ground personnel conducting air transportation operations. Each operator is required to maintain a complete manual (or set of manuals) at its principal base of operations and to furnish a complete manual (or set of manuals) to DGCA.

A certificate holder's operation manual must be reviewed by inspectors to ensure adequate content and compliance with applicable regulations, safe operating practices, and the certificate holder's operations specifications (OpSpecs) and Authorizations Conditions and Limitations (ACL). While inspectors are encouraged to provide guidance and advice to certificate holders in the preparation of their manuals, the development and production of an acceptable manual is solely the responsibility of the certificate holder

A complete review of the operations manual (OM Part A, OM Part B, OM Part C , OM Part D), MEL, cabin crew manual, flight dispatch manual, and other related manuals shall be accomplished once annually. In the year of AOC Renewal, Manual Inspection should be accomplished by Audit

AOC. All changes to manuals shall be routed by the operator through the POI for concurrence.

Publication (Library). Civil Aviation Safety Regulation requires certificate holders to have current publication and regulatory manuals as reference flight.

Aircraft documentation. An operator shall ensure that the following documents are carried on each flight:

- 1) Certificate of Registration;
- 2) Certificate of Airworthiness;
- 3) Operation Specification & ACL;
- 4) Aircraft Journey Log;
- 5) Aircraft Aeronautical Station License;
- 6) Attesting Noise certificate or a suitable statement attesting noise certification as contained in another document approved by the DGCA;
- 7) The appropriate licenses for each member of the flight crew
- 8) Copy of the return to service, if any, in force with respect to the aircraft, or technical log, as applicable;
- 9) AFM or RFM, for airplanes or helicopters;
- 10) Operational Flight Plan;
- 11) NOTAMS, AIS information and Meteorological briefing documentation;
- 12) Current and suitable maps and charts for routes of proposed flight or possibly diverted flights;
- 13) Search and rescue information;
- 14) For international flights, a copy of the notified procedures to be followed by the pilot-in-command of an intercepted aircraft, and the notified visual signals for use by intercepting and intercepted aircraft;
- 15) Passenger and cargo manifests;
- 16) Copy of aircraft insurance

Applicable form:

- DGCA Form No.120-31 “Evaluation and Approval of Operations Manual”
- DGCA Form No. 120-34 Evaluation and Approval of MEL
- DGCA Form No.120-06 “Operation Specification Evaluation”
- DGCA Form No.120-53 “Evaluation of Publication/ Library”
- DGCA Form No.8400-19 “Air Operator Aircraft Document Inspections Checklist/Report”

**c. Minimum Equipment List (MEL) Management Program;**

A MEL is required for each type and model of aircraft to be operated, which provides for the operation of the aircraft, subject to specified conditions, with particular equipment inoperative. This list prepared by the applicant in conformity with, or more restrictive than, the master minimum equipment list (MMEL) approved by the State of Design for the aircraft type, is tailored to the applicant's aircraft and installed equipment

Applicable form:

- DGCA Form No. 120-54 "Evaluation of Minimum Equipment List (MEL)' Management Program"

**d. Operation Control;**

An operational control inspection has two primary objectives. The first objective is for the inspector or team to ensure that the certificate holder is in compliance with the minimum requirements of CASR and the operations specifications (Op Specs). The second objective is for the inspector or team to ensure that the certificate holder's system of control provides positive assurance of public safety. To make this determination, the inspector or team must evaluate the operator to ensure that the following criteria are met:

- a) Responsibility for operational control is clearly defined
- b) An adequate number of operational control personnel are provided
- c) Applicable manuals contain adequate policy and guidance to allow operational control personnel and flight crews to carry out their duties efficiently, effectively, and with a high degree of safety
- d) Operational control personnel are adequately trained, knowledgeable, and competent in the performance of their duties
- e) Flight control personnel and flight crews have been provided with the necessary information for the safe planning, control, and conduct of all flights
- f) The certificate holder provides adequate facilities
- g) The certificate holder performs all operational control functions required by the regulations

- h) The certificate holder performs all functions necessary to provide adequate operational control in the environment in which the operations are conducted
- i) Adequate emergency procedures and contingency plans have been formulated

Applicable form:

- DGCA Form No.8400-04 “Operational Control Inspection Checklist/Report”

**e. Trip Record / Flight Documentation;**

The primary objective of trip records inspections is for inspectors to ensure that operators meet the regulatory requirements of CASR Part 121 or 135, as applicable, for the proper use, documentation, and retention of operational trip records. Inspectors can evaluate trip records to reconstruct a particular flight or a series of flights by examining flight plans, dispatch or flight releases, loading and weight documents, weather documents, and other related flight information retained by the certificate holder.

Trip record inspections includes an evaluation of the quality of the recorded data, a check of the calculations for accuracy, and a check of the certificate holder’s compliance with CASR and company procedures.

Applicable form:

- DGCA Form No.8400-05 “Operations and Flight (Trip) Record Inspections Checklist/Report”

**f. Flight and Duty Time Record;**

Operators must develop methods for recording and monitoring flight and duty time for flight crew members to ensure that regulatory limitations are not exceeded. Such a record keeping system should have the following attributes:

- 1) Adequacy : The record keeping forms which the operator uses are adequate for recording essential information which the DGCA requires.

- 2) Practicality. The operator's method for recording flight time for individual crew members should be easy for employees to use. Forms which are developed for this purpose should be unambiguous and easy to complete. If an operator uses ACARS or a similar system for reporting flight and duty time, personnel should be properly trained in its use.
- 3) Accessibility and Security. Data regarding flight and duty time should be readily accessible to personnel which have responsibility for monitoring compliance with various time intervals. Records should be secure from tampering by unauthorized individuals.
- 4) Currency. Data available to personnel responsible for ensuring that individual crewmembers do not exceed regulatory or contractual requirements should be updated expeditiously. The system used by the operator should provide that schedulers and/or flight control personnel are immediately aware when daily totals may be exceeded. Flight time totals from written crew logs must be expeditiously transmitted to the scheduling or flight control office, so that weekly and monthly totals, where required, may be promptly updated.
- 5) Accuracy. The system should faithfully track daily flight and duty time for Crew members, and accurately reflect totals for longer prescribed time intervals.
- 6) Conformity. The records should reflect conformance with regulatory flight and duty time limitations.

Applicable form:

- DGCA Form No.8400-06 “Air Operator Flight and Duty Time Record Inspections Checklist/Report”

**g. Training Program and Training Record (Flight crew, Flight Attendant, and Flight Operations Officer);**

Operations inspectors conduct training program inspections for aircrew, flight attendant, and flight operations officer to ensure that the certificate holder's training program complies with regulatory requirements and that instructional methods are effective. Training program inspections involve five primary inspection areas to be observed:

- 1) Training curriculums,
- 2) Courseware,
- 3) Instructional delivery methods,
- 4) Testing and checking methods, and
- 5) Training Record.

Applicable form:

- DGCA Form No.8400-21 “Evaluation Training Program and Training Record for Flight Crew”
- DGCA Form No.8400-22 “Evaluation Training Program and Training Record for Flight Attendant.
- DGCA Form No.8400-23 “Evaluation Training Program and Training Record for Flight Operation Officer”

**h. Company check program (Check Pilot, FA, and FOO);**

The objective of this task is to determine whether a company check program (designated examiner) continues to meet the requirements for original designation. Completion of this task results in a finding of satisfactory or unsatisfactory performance. A finding of unsatisfactory performance may lead to the cancellation of the examiner's designation.

In addition to the inspections, the following circumstances will also require that an Inspector take appropriate action and document that action:

- 1) An examiner whose practical test passing rate exceeds 90 percent;
- 2) An examiner who conducts three or more complete practical tests on a given day;
- 3) An examiner who tests a student trained by that examiner without approval;
- 4) An examiner whose certification file error rate exceeds 10 percent;
- 5) An examiner who is the subject of a valid public complaint; or
- 6) An examiner who has been involved in an accident, incident, or Directorate General of Civil Aviation (CASR) violation.

Applicable form:

- DGCA Form No.8400-24 “Evaluation of Company Check pilot program



- DGCA Form No.8400-25 "Evaluation of Company Check Flight Attendant program
- DGCA Form No.8400-26 "Evaluation of Company Check FOO program

**i. Cockpit en-route inspections.**

The primary objective of cockpit en route inspections is for an inspector to observe and evaluate the inflight operations of a certificate holder within the total operational environment of the air transportation system. En route inspections are one of the most effective methods of accomplishing air transportation surveillance objectives and responsibilities. These inspections provide the DGCA with an opportunity to assess the following elements of the aviation system that are both internal and external to an operator:

- 1) Elements of the aviation system which are internal to the operator and can be observed during cockpit en route inspections include:
  - Crew members
  - Operator manuals and checklists
  - Use of MEL's and CDL's
  - Operational control functions (dispatch, flight-following, flight-locating)
  - Use of checklists, approved procedures, and safe operating practices
  - Crew coordination/cockpit resource management
  - Cabin safety
  - Aircraft condition and servicing
  - Training program effectiveness
  
- 2) Elements of the aviation system which are external to the operator and can be observed during en route inspections include:
  - Airport surface areas
  - Ramp/gate activities
  - Airport condition and construction
  - Aircraft and vehicle movements
  - ATC and airway facilities
  - ATC and airspace procedures

- Instrument Approach Procedures (IAP's), SID's, and STAR's
- Navigational aids
- Communications

Applicable Form

- DGCA Form No.8400-09 “Air Operator Cockpit Enroute Inspection Checklist/Report”

**j. Cabin en-route inspections.**

Cabin en-route inspections are conducted to assess the level of cabin safety in air transportation by the direct observation and evaluation of operations conducted in the aircraft cabin.

Applicable Form

- DGCA Form No.8400-10 Air Operator Cabin Inspection Checklist/Report

**k. Station facility inspections.**

Inspectors conducting station facilities inspections will encounter a wide range of situations and operational conditions. Types of stations may vary from a large facility with a permanently assigned station manager, numerous employees, and various departments, to a facility consisting of one employee and a counter. A station facilities inspection may be conducted to provide for an overall view of the operator's operation or it may be focused on a specific area of interest. Whenever possible, inspections should be conducted when actual departure or arrival operations are in progress, in order to obtain an overview of the operation of the station and the effectiveness of the equipment, services, procedures, and personnel utilized. The direction and guidance provided in this section is general in nature, not all of which may be appropriate in a given situation.

Applicable Form

- DGCA Form No.8400-11 Air Operator Station Facility Inspection Checklist/Report

## **1. Ramp inspections**

Ramp Inspections are planned inspections carried out at ramp to verify the compliance of laid down standards and regulations during operation of commercial air operators. This inspection is carried out by a team of inspectors from Operations and Airworthiness covering respective area as per standard checklist.

Applicable Form

- DGCA Form No.120-13 Ramp Inspection Checklist

## **m. Flight Crew Member Proficiency and Competency Check Inspection**

This inspection area applies to the knowledge, ability, and proficiency of the flight crew member receiving the proficiency or competency check, as demonstrated by his performance during a series of required maneuvers and flight regimes

Applicable Form

- DGCA Form No.8400-13 Air Operator Pilot/FE Proficiency Check Report

## **3. Safety (SMS)**

An safety specialist (Airworthiness or Operations) audit or surveillance will review one or more of the following areas:

### **a. Safety management system (SMS) manual;**

Certificate holders shall develop and maintain SMS Manual, the SMSM shall document all aspects of the SMS, and its contents shall include the following:

#### 1) Safety policy and objective

- Management commitment and responsibility
- Safety accountabilities
- Appointment of key safety personnel
- Coordination of emergency response planning
- SMS documentation

- 2) Safety risk management
  - Hazard identification
  - Safety risk assessment and mitigation
- 3) Safety assurance
  - Safety performance monitoring and measurement
  - Management of change
  - Continuous improvement of the SMS
- 4) Safety promotion
  - Training and education
  - Safety communication

Applicable form:

- DGCA Form No. 120-90 "Evaluation Manual and Implementation of Safety Management System" Part I

**b. SMS implementation (hazard identification and risk management);**

Certificate holders ensure implementation of SMS comply with SMS Manual

- Gap analysis
- SMS implementation plan
- Safety performance indicator

Applicable form:

- DGCA Form No. 120-90 "Evaluation Manual and Implementation of Safety Management System" Part II

**c. Flight data analysis (FDA);**

- 1) Each service provider, especially an air carrier operating an aircraft of a maximum certificated take-off mass in excess of 27.000kg shall establish and maintain a flight data analysis program as part of its safety management system.
- 2) An air carrier may contract its flight data analysis program to a third party provided it retains overall responsibility for maintenance of the program.
- 3) A flight data analysis program shall be non-punitive and contain adequate safe guards to protect the source(s) of the data.

Applicable form:

- DGCA Form No. 120-95 "Flight Data Analysis Program Surveillance Checklist/Report"

**d. SMS Reporting System;**

- 1) The reporting of occurrences which endangered or which, if not corrected or addressed, would endanger an aircraft, its occupants, any other person, equipment or installation affecting aircraft operations; and the reporting of other relevant safety related information in that context.
- 2) Analysis and follow-up action in respect of reported occurrences and other safety-related information;
- 3) The protection of aviation professionals;
- 4) Appropriate use collected safety information; and
- 5) The dissemination of anonymous information to interested parties for the purpose of providing such parties with the information they need in order to improve aviation safety.

Applicable form:

- DGCA Form No. 120-98 "Evaluation of SMS reporting system"

**e. Internal Audit Process Including the contractors;**

Certificate holders shall develop and maintain the means to verify the safety performance of the organization and to validate the effectiveness of safety risk controls.

Internal audit process is one means to monitor compliance with safety regulations, the foundation upon which SMS is built, and assess the effectiveness of these safety risk controls and the SMS.

The certificate holder shall establish a quality system to ensure continuing compliance with the regulation through an internal quality assurance program ensuring the monitoring of all the processes including those implemented by its contractors and suppliers

Applicable form:

- DGCA Form No. 120-97 "Evaluation of Internal Audit process including the contractors"

#### **4. Quality Assurance Program**

##### **a. Quality assurance organization and management**

The quality assurance program that provides for the auditing of the management system, and of operations and maintenance functions, to ensure the organization is:

- 1) Complying with applicable regulations and standards;
- 2) Satisfying stated operational needs;
- 3) Identifying areas requiring improvement;
- 4) Identifying hazards to operations;
- 5) Assessing the effectiveness of safety risk controls.
- 6) Appointment of a manager with appropriate qualifications, authority and independence that is responsible for:
- 7) Ensuring communication and coordination with operational managers in the management of operational risk
- 8) Process for management review of significant issues
- 9) Evaluations of quality assurance program

Applicable form:

DGCA Form No. 120-83 "Evaluation of Quality assurance organization and management"

##### **b. Audit program**

The audit program that provides for the auditing to ensure:

- 1) Audit planning process and resources
- 2) The process to ensure significant issues arising from the quality assurance program are subject to management review.
- 3) The means for disseminating information from the quality assurance program to management and non-management operational personnel as appropriate to ensure an organizational awareness of compliance with applicable regulatory and other requirements.
- 4) The audit planning process and sufficient resources, including auditors, to ensure audits are:
  - Scheduled at intervals to meet regulatory and management system requirements;
  - Completed within a specified time period.

Applicable form:

DGCA Form No. 120-84 "Evaluation of Audit Program"

**c. Auditors training and qualification program**

The training and qualification program that ensures auditors that conduct auditing under the quality assurance program:

- 1) Have the knowledge, skills and work experience needed to effectively assess areas of the management system and operations that will be audited;
- 2) Maintain an appropriate level of current audit experience;
- 3) Complete initial and continuing auditor training that provides the knowledge and understanding necessary to effectively conduct audits

Applicable form:

DGCA Form No. 120-85 "Evaluation of Auditors training and qualification program"

**d. Process for addressing Findings**

The process for addressing findings that result from audits conducted under the quality assurance program, which ensures:

- 1) Identification of root cause(s);
- 2) Development of corrective action as appropriate to address findings;
- 3) Implementation of corrective action in appropriate operational area(s)
- 4) Evaluation of corrective action to determine effectiveness.

Applicable form:

DGCA Form No. 120-86 "Evaluation of Process for Addressing Findings"

**e. Quality and audit record**

Ensuring quality and audit record are maintained and recommendations effective implementation

Applicable form:

DGCA Form No. 120-87 "Evaluation of Quality and Audit Record"

## **CHAPTER VI. SURVEILLANCE PROGRAM**

### **1. Introduction**

A surveillance program may be based on the need to conduct routine and ongoing surveillance or the need to conduct special emphasis surveillance as a result of certain events such as accidents, related incidents, related violations, and strikes.

PAI/ POI should responsible with surveillance program, surveillance program should determine objectives, evaluate the resources available, and determine the specific types and numbers of inspections to be conducted in support of that program.

DGCA surveillance area are similar with the audit area, frequency surveillance area will developed base on risk base analysis, characteristic operators and previous audit report and surveillance report.

After the inspection data has been reported, an evaluation of the information obtained from inspection reports and related sources must be conducted. The purpose of this evaluation is to identify the areas of concern and note areas such as the following: Noncompliance with regulations or unsafe operating practices

- Both positive and negative trends
- Isolated deficiencies or incidents
- Causes of noncompliance, trends, or isolated deficiencies

### **2. Objective of Surveillance Programs**

The primary objective of surveillance is to provide the DGCA, with an accurate, real time, and comprehensive evaluation of the safety status of the air transportation system. This surveillance program objective is accomplished by inspectors performing the following:

- Determining each operator's compliance with regulatory requirements and safe operating practices;
- Detecting changes as they occur in the operational environment;
- Detecting the need for regulatory, managerial, and operational changes;
- Measuring the effectiveness of previous corrective actions.



### 3. Frequency of Surveillance

When planning a surveillance program, a PAI/ POI should determine the program objectives, evaluate the resources available, and determine the specific types and numbers of inspections to be conducted in support of that program.

As minimum, table 6-1, 6-2, 6-3 and 6-4 illustrates typical inspections and its frequency per year.

For the implementation of risk base analysis, the type of inspections may be varied for each operator, depend to the complexity and size of the operator. Some of the inspections may be combined into one activity. The frequency of inspection per year may be different than these numbers depending on the previous report and confident level of DGCA.

**Table 6-1 Typical Surveillance of Airworthiness**

<b>No.</b>	<b>Type of Inspections</b>	<b>Frequency per year</b>	<b>DGCA Form Number</b>
1	Management and administration;	1	120-15
2	Approvals, Manual and Procedure; <ul style="list-style-type: none"> <li>• Company Maintenance Manual</li> <li>• Operations Specification</li> <li>• Minimum Equipment List</li> <li>• Publication/ Library</li> </ul>	1	120-32 120-16 120-34 120-53
3	Training Program and Record (Maintenance personnel);	1	120-52
4	Maintenance Record System; <ul style="list-style-type: none"> <li>• AD Compliance</li> <li>• Record System</li> <li>• Major repair and alteration</li> </ul>	1	120-41 120-42 120-47
5	Maintenance Facilities; <ul style="list-style-type: none"> <li>• Maintenance facility</li> <li>• Fueling and servicing</li> </ul>	1	120-51 120-48
6	Maintenance Contractual Arrangement;	1	120-43
7	Minimum Equipment List (MEL) Management program;	1	120-54
8	Maintenance Program; <ul style="list-style-type: none"> <li>• Maintenance Program</li> <li>• Aging Aircraft Program</li> </ul>	1	120-33 120-49

	<ul style="list-style-type: none"> <li>• Weight and Balance</li> <li>• Maintenance Inspection System &amp; RII</li> </ul>		120-35 120-44
9	Maintenance Process Inspection;	1	120-50
10	Continuing Analysis and Surveillance Program; <ul style="list-style-type: none"> <li>• CASP</li> <li>• Reliability Program</li> </ul>	1	120-45 120-36
11	Reporting Procedure and SDREvaluation <ul style="list-style-type: none"> <li>• Reporting Procedure and SDR</li> <li>• Mechanical Interruption Summary Report</li> </ul>	1	120-46 43-03
12	Ramp Inspection	1	120-13

**Table 6-2 Typical Surveillance of operations.**

No.	Type of Inspections	Frequency per year			DGCA Form Number
		A	B	C	
1	Management and Administration	1	1	1	120-15
2	Manual Inspection <ul style="list-style-type: none"> <li>• Publication/Library,</li> <li>• Operation Manual</li> <li>• Aircraft Documentation;</li> </ul>	See Explanation			120-31 120-34 120-06 120-53 8400-19
3	Minimum Equipment List (MEL) Management Program	1	1	1	120-54
4	Operation Control;	1	1	1	8400-04
5	Trip Record / Flight Documentation	1	1	1	8400-05
6	Flight and duty time records;	1	1	1	8400-06
7	Training Program and Training Record (Flight crew, Flight Attendant, and Flight Operations Officer); (each group of aircraft of similar type): a. Ground Training b. Simulator and or Flight Training	1 2	1 2	1 2	8400-21 8400-22 8400-23
8	Company check program (Check Pilot, FA, and FOO)	1	1	1	8400-24 8400-25 8400-25
9	Cockpit Enroute Inspection	3	2	N/ A	8400-09
10	Cabin Enroute Inspection	2	If	N/	8400-10

			Applicable	A	
11	Station facility inspection;	2	1	1	8400-11
12	Ramp Inspection	3	2	1	
13	Flight Crew Member Proficiency and Competency check (inspections must be distributed evenly on each group);	3	1	1	8400-13

Remark:

A : Flag, Domestic and Commuter Operation

B : Supplemental Operation

C. : Charter and others

Inspection Classification:

- Main Base : 1,2,3,4,5,6,7
- Out base : 9,10,11,12
- Others : 8,13

The term ‘group of aircraft of similar type’ is defined as follows:

- For turbojet or turbofan airplane, will be divided into two groups, i.e. “Wide Body Airplane” and “Narrow Body Airplane”.
- All propeller driven airplane, either piston or turbine powered, single or multi engine will fall into one group, i.e. “Propeller Airplane”.
- All helicopter, either piston or turbine powered, single or multi engine will fall into one group, i.e. “Helicopter”.

**Explanation table 6-2 for Area Number 2. Manual Inspection**

- A complete review of the operations manual, publication/library, aircraft documentation MEL, cabin crew manual, flight dispatch manual, other related manuals shall be accomplished once every 2 (two) years. All changes to manuals shall be routed by the operator through the POI for concurrence.

**Explanation table 6-2 for Area Number 7. Training Program and Training Record (Flight crew, Flight Attendant, and Flight Operations Officer).**

- Approved training manuals covering all types of training conducted by each operator – ground, simulator and flight must be reviewed for content and

currency within 2 (two) years. All proposed modifications or additions to training programs must be routed through the DGCA for concurrence. One ground training course (crew members or dispatcher), two simulator training periods (flight crew), or two flight training periods (crew member) in case simulator training periods are not available, or a combination of one simulator training period and one flight training period, must be observed annually for each aircraft type of group aircraft of similar type operated by operator. This is to ensure compliance with approved training manual and with company procedures and policies.

**Explanation table 6-2 for Area Number 9. Cockpit Enroute Inspection**

1. For operator holding AOC 121:
  - a. Domestic and Flag air carriers: 3 inspections per year per-type of airplane or group of airplane of similar type operated by operator.
  - b. Supplemental air carrier: twice inspections per year per-type of airplane or group of airplane of similar type operated by operator.
2. For operator holding AOC 135:
  - a. Commuter air carrier: three inspections per year inspections per type of airplane or group of airplane of similar type operated by operator.
  - b. Charter air carrier or operated exclusively for VIP: Not Applicable.

**Explanation table 6-2 for Area Number 10. Cabin Enroute Inspection**

1. For operator holding AOC 121:
  - a. Domestic and Flag air carriers: twice inspection annually per type of airplane or group of airplane of similar type operated by operator.
  - b. Supplemental air carrier: 1 (one) inspections annually (if applicable) per type of airplane or group of airplane of similar type operated by operator.
2. For operator holding AOC 135:
  - a. Commuter air carrier (with Flight Attendant): twice inspection annually per type of aircraft of group of aircraft of similar type operated by operator.
  - b. Charter air carrier (with flight attendant) is 1 (one) inspection annually per type of aircraft or group of aircraft of similar type operated by operator.
  - c. Aircraft with seating of 10 or less or operated exclusively for VIP: Not Applicable

**Explanation table 6-2 for Area Number 11. Station facility inspection;**

1. For operator holding AOC 121:
  - a. Domestic and Flag air carriers: Station Facility Inspections must be conducted annually at a minimum of 3 (three) different stations used by each operator, or as many stations used by the operator if the number are less than 3 (three). The station facility inspection may be conducted with different area of destinations (domestic, regional, international).
  - b. Supplemental air carrier: Station Facility Inspections must be conducted annually at a minimum of one station used by each operator, considering the fact that most of supplemental operators used only its main base as station facility.
2. For operator holding AOC 135:
  - a. Commuter air carrier: Station Facility Inspections must be conducted annually at a minimum of 2 (two) different stations used by each operator, or as many stations used by the operator if the number are only one.
  - b. Charter air carrier: Random Station Facility Inspections must be conducted annually at a minimum of one station used by each operator, considering the fact that most of charter operators used only its main base as station facility.

**Explanation table 6-2 for Area Number 12. Ramp Inspection**

1. For operator holding AOC 121:
  - a. Domestic and Flag air carriers: three inspections annually must be performed for each operator. In the case of operator having more than one aircraft group, the minimum number of inspections must be distributed evenly on each group.
  - b. Supplemental air carrier: Minimum of 2 (two) inspections annually must be performed for each operator. In the case of operator having more than one aircraft group, the minimum number of inspections must be distributed evenly on each group.
2. For operator holding AOC 135:
  - a. Commuter air carrier: Minimum twice inspections annually must be performed for each operator. In the case of operator having more than one aircraft group, the minimum number of inspections must be distributed evenly on each group.

- b. Charter air carrier: Minimum of one inspection annually must be performed for each operator.

**Explanation table 6-2 for Area Number 13. Flight Crew Member Proficiency and Competency check**

1. For operator holding AOC 121: A minimum three inspections annually must be performed on each operator. In the case of operator having more than one aircraft group, the minimum number of inspections must be distributed evenly on each group.
2. For operator holding AOC 135: A minimum of one inspection annually must be performed on each operator.

**Table 6-3 Typical Surveillance of Safety (SMS)**

<b>No .</b>	<b>Type of Inspections</b>	<b>Frequency per year</b>	<b>DGCA Form Number</b>
1	Safety management system (SMS) manual;	1	120-90 Part I
2	SMS implementation	1	120-90 Part II
3	Flight data analysis (FDA) - If Applicable;	1	120-95
4	SMS Reporting System;	1	120-98
5	Internal audit process including the contractors.	1	120-97

**Table 6-4 Typical Surveillance of Quality Assurance Program**

<b>No .</b>	<b>Type of Inspections</b>	<b>Frequency per year</b>	<b>DGCA Form Number</b>
1	Quality assurance organization and management	1	120-83
2	Audit Program	1	120-84
3	Auditors training and qualification program	1	120-85
4	Process for addressing Findings	1	120-86
5	Quality and audit record	1	120-87

**4. SURVEILLANCE PLANNING AND EVALUATION RESPONSIBILITIES**

The organizational elements within the DGCA which are responsible for ensuring that comprehensive surveillance programs are to be developed and maintained are as follows:

- a. Directorate of Airworthiness and Aircraft Operations (DAAO)

- Sub Directorate Maintenance for airworthiness and safety (SMS) areas.
  - Sub Directorate Aircraft Operations for operations and safety areas.
- b. Principal Airworthiness Inspectors, PAIs
- c. Principal Operation Inspectors, POIs

**a. Directorate of Airworthiness and Aircraft Operations (DAAO)**

The Directorate of Airworthiness and Aircraft Operations has the primary responsibility for establishing programs approved by DG and for developing the direction and guidance for inspectors to use when conducting surveillance.

**b. Sub Directorate Aircraft Operation and Sub Directorate Maintenance**

The roles and responsibilities of each Deputy Director regarding Surveillance Program are described as follows:

- 1) Developed surveillance plan which are :
  - Approve any deviations from the approved annual surveillance plan, as recommended by POI/PAI.
- 2) Primary responsibility for the implementation of surveillance programs for operations, airworthiness and safety (SMS) areas.
- 3) Plays a key role in developing effective surveillance programs and is responsible for ensuring that Principal Operations Inspectors or Principle Maintenance Inspector conducting effective surveillance.
- 4) Ensuring that these programs provide high quality surveillance data.
- 5) Assigning available inspectors to conduct the necessary inspections; providing on the job training for assigned inspectors; and for supervising assigned inspectors for efficiency and effectiveness.

**c. Principle Airworthiness Inspectors(PAI) and Principle Operation Inspectors (POI)**

PAIs and POIs are the primary surveillance program planners in the DGCA since they are the focal point for all technical matters between the DGCA and the AOC holder.

PAIs and POIs must ensure that there are periodic reviews of all aspects of the AOC holder's operations. They must specifically determine the operator's compliance status by establishing effective surveillance programs, and evaluating previous surveillance data and other related information.

PAIs and POIs must establish a continuing program for evaluating surveillance data to identify trends and deficiencies and to decide upon and take appropriate courses of action.

Individual PAIs and POIs are responsible for conducting inspections in accordance with the direction, guidance, and procedures. A primary responsibility of each inspector is to report inspection results in a clear, concise, and factual manner.

## 5. SURVEILLANCE PLANNING RESOURCES

The availability of a DGCA surveillance resource (i.e.inspector) is determined using:

- a. Total annual number of inspector Full Time Equivalent (FTE) available days;
- b. Average annual number of training days taken by the inspector;
- c. Average annual number of travel days taken by the inspector;
- d. A deduction for the amount of time used by inspectors for non-oversight activities, this includes tasks such as:
  - 1) Investigation, enforcement and compliance;
  - 2) Promotion, education and interpretation;
  - 3) Policy development;
  - 4) Functional direction;
  - 5) Internal priority; and
  - 6) Workshops and meetings.
- e. A deduction of 5% for unplanned surveillance activities.
- f. Total frequency inspection for each AOC Holder

DIRECTOR GENERAL OF CIVIL AVIATION

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Dr. Ir. AGUS SANTOSO, M.Sc.

Salinan sesuai dengan aslinya  
KEPALA BAGIAN HUKUM

