UK Civil Aviation Authority

Part 21 Subpart G Production Organisation Exposition Guidance

CAP 2967

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Section 0 - Introduction

0.1 Revision History

Issue 1 February 2024

Initial Issue

Issue 2 June 2024

Document updates and implementation of SMS 01/07/2024

0.2 Abbreviations

AMC	Acceptable Means of Compliance
AML	Aircraft Maintenance Licence
AMO	Aircraft Maintenance Organisation
AMTO	Approved Maintenance Training Organisation
ANAC	Brazilian Aviation Authority
AOG	Aircraft On Ground
CAAS	Civil Aviation Authority of Singapore
CAP	Civil Aviation Publication
C/S	Certifying Staff
CC/S	Component Certifying Staff
EU	European Union
ESM	Engine Shop Manual
FAA	Federal Aviation Administration (U.S.A)
GM	Guidance Material
ILAC	International Laboratory Accreditation Cooperation
IORS	Internal Occurrence Reporting System
MOA	Maintenance Organisation Approval
MOAP	Maintenance Organisation Approval Procedures
MOE	Maintenance Organisation Exposition
MOR	Mandatory Occurrence Reporting
NDT	Non-Destructive Testing

NDI	Non-Destructive Inspection
OEM	Original Equipment Manufacturer
PMA	Parts Manufacturer Approval
PPB	Principal Place of Business
SRM	Structural Repair Manual
S/S	Support Staff
STCH	Supplemental Type Certificate Holder
TCCA	Transport Canada Civil Aviation
TCH	Type Certificate Holder
UKAS	United Kingdom Accreditation Service
WH	Working Hours

0.3 Scope & Applicability

The provisions of this user guide are complementary to the requirements of Part 21 Subpart G regulation, as amended, and does not supersede or replace the associated regulatory requirements.

0.4 Purpose

This user guide is designed to be used by:

- Approved Production Organisation - To assist them in the production of their own POE.
- Airworthiness Surveyor – For guidance when conducting routine reviews.

Along with Part-21 Subpart G holders guidance as published on the CAA Website

0.5 Associated Instructions

The CAA has developed associated instructions including Forms and Templates, that detail specific matters for consideration as part of the Production Organisation Exposition and approval.

A complete listing of these documents, together with their applicability to the production organisations, can be found on the CAA website: https://www.caa.co.uk/commercial-industry/aircraft/airworthiness/approval-information-and-guidance/guidance-for-part-21-subpart-g-approval-holders/

Section 1 - General Guidance – Production Organisation Exposition (POE)

1.1 Preliminary Considerations

The POE shall be customised by each organisation to demonstrate how they comply with:

- Part 21 Subparts A, G, K and Q, and
- When within scope Part 21 Subpart O and P

The purpose of a POE is to set forth in a concise format the organisational relationships, responsibilities, terms of reference, and associated authority, procedures, means and methods of the organisation.

The information to be provided is specified in 21.A.143(a) and 21.A.139(b)(1). Where this information is documented and integrated in manuals, procedures and instruction, the POE should provide a summary of the information and appropriate cross-reference.

The CAA requires the POE to be an accurate definition and description of the production organisation.

When changes to the organisation occur, the POE is required to be kept up to date per a procedure, laid down in the POE. Significant changes to the organisation (as identified in GM 21.A.147(a)) should be approved by the CAA prior to update of the POE.

When an organisation is approved against any other implementing rule containing a requirement for an exposition, a supplement covering the differences may suffice to meet the requirements of Part 21 Subpart G except that the supplement should have an index identifying where those parts missing from the supplement are covered. Those items then formally become part of the POE. In any combined documents the POE should be easily identifiable.

1.2 Exposition Format & Language

It is the CAA policy that the POE must be produced in an electronic format, such as a Portable Document Format (PDF). This must then be submitted via the guidance on the UK CAA approvals webpage. (https://www.caa.co.uk/commercial-industry/aircraft/airworthiness/organisation-and-maintenance-programme-approvals/part-21/)

The POE shall be submitted in English as the dominant language and in the case of a multilingual POE, the English text shall precede the second language. The organisation must ensure that translation is accurate.

1.3 Terms of Use

For the purposes of this guidance document, the references to the POE document are identified by the following terms:

- “POE Part” is used to identify the main parts of the POE (e.g., Part 1 – Management, Part 2 - Production Procedures, Part 3 – Management System.) as identified in 21.A.143(a)
- “POE Chapter” is used to identify each chapter within a POE Part (e.g., POE 1.2 – Management Personnel, POE 2.2 – Supplier Control, POE 3.4 – List of Significant Sub-Contractors, etc.).
- “POE Paragraph” is used to identify a paragraph within a POE chapter.

1.4 Structure of the Exposition

GM 21.A.143

The POE should concisely set forth the organisational relationships, responsibilities, terms of reference, and associated authority, procedures, means and methods of the organisation.

Where this information is documented and integrated in manuals, procedures and instruction, the POE should provide a summary of the information and appropriate cross-references to these associated documents.

The POE must cross refer to any associated procedures, documents, appendices, forms or lists which are managed separately (e.g., the list of Certifying Staff, the capability list, the list of sub- contractors, etc). The control and management of these procedures and documents should be summarised in chapter 1.11.

- The associated documents must meet the same rules as described for the POE.
- The associated documents, procedures and forms etc. shall be provided to, and be accepted by the UK CAA (as part of the overall POE acceptance).
- In the case of a referenced document, the POE Chapter shall contain a concise summary of compliance to the relevant areas of standard of the regulation. A simple reference to a separate document is not acceptable.

For any 21.A.143(a) or 21.A.139(b)(1) item that is not applicable, the POE should clearly indicate this point.

1.4.1 Exposition Pages Presentation

The front/cover page of the POE shall be identified as follows:

- the name of the organisation (official name as defined on the UK Form 55 approval certificate);
- the issue number of the POE;
- the issue date;
- the revision number of the POE;
- the revision date;
- the document title and reference number;
- The PART 21 Subpart G organisation's Approval reference;
- The organisation's Principal Place of Business *(CAP1539)* address, telephone, fax numbers and a contact e-mail address which may be generic;

Each page of the POE shall be identified with the following (this information may be added in the header or footer), where applicable:

- document title and reference number;
- the name of the organisation (official name as defined on the UK CAA Form 55 approval certificate).
- issue number and issue date of the POE.
- revision number and revision date of the POE.
- POE Chapter (e.g., 1-5).
- page number.

Section 2 - POE Structure, Content & Format

Part 0 - Introduction

The following section provides AMC for the contents of a POE. The paragraph numbering conforms to that detailed in Part-21 Subpart G.

0.1 Table of Contents

For standardisation purposes and to facilitate the production of the POE by the organisation, the CAA recommends use of the standardised POE table of contents following the structure of this User Guide (POE Part 0 to Part 4). The production organisation should customise the document to suit their organisation and may add parts, chapters and/or paragraphs, as necessary.

Where any chapter or paragraph is not used or not relevant to the applicable organisation, then it shall be shown in the Exposition as 'Not Applicable.'

0.2 List of Effective Pages

The example below uses both an Issue number and Revision number as well as indicating the revision date of each page.

Page no.	Issue no.	Revision no.	Revision Date	Page no.	Issue no.	Revision no.	Revision Date
PART 0				121	**1**	1	01/01/07
001	**2**	**0**	01/01/12	122	**1**	1	01/01/07
002	**2**	**0**	01/01/12			**PART 2**	
003	**2**	**0**	01/01/12	201	**1**	**0**	19/12/06
004	**2**	**0**	01/01/12	202	**1**	**0**	19/12/06
005	**2**	**0**	01/01/12	203	**1**	**0**	19/12/06
006	**2**	**0**	01/01/12	204	**1**	**0**	19/12/06
007	**2**	**0**	01/01/12	205	**1**	**0**	19/12/06
008	**2**	**0**	01/01/12	206	**1**	**0**	19/12/06
009	**2**	**0**	01/01/12	207	**1**	**1**	01/01/07
PART 1				**PART 3**			
101	**1**	**0**	19/12/06	301	**2**	**0**	01/01/12
102	**1**	**0**	19/12/06	302	**2**	**0**	01/01/12
103	**2**	**0**	01/01/12	303	**1**	1	01/01/07
104	**1**	**1**	01/01/07	304	**1**	1	01/01/07
105	**1**	**1**	01/01/07	305	**1**	**0**	19/12/06
106	**1**	**0**	19/12/06	306	**1**	**0**	19/12/06
107	**1**	**1**	01/01/07	307	**1**	**0**	19/12/06
108	**1**	**1**	01/01/07	308	**1**	**0**	19/12/06
109	**2**	**0**	01/01/12				
110	**1**	**1**	01/01/07				
111	**1**	**0**	19/12/06				
112	**1**	**1**	01/01/07				
113	**1**	**0**	19/12/06				
114	**1**	**0**	19/12/06				
115	**1**	**1**	01/01/07				
116	**1**	**0**	19/12/06				
117	**1**	**0**	19/12/06				
118	**1**	**0**	19/12/06				
119	**1**	**0**	19/12/06				

POE **Issue 2, Revision** 0 dated **01/01/12**

POE internal Review by the organisation:

Reviewed by: (name, position and signature)	**Date:** xx/xxx/xxxx

POE Approval[1]:

Approved by: (name, position and signature)	**Date:** xx/xxx/xxxx

[1] The initial issue of the POE will be approved through a formal letter issued by the UK CAA. This letter shall be made available to the final users.

0.3 List of Issues / Amendment Record of Revisions

This paragraph details the changes made in each Issue or Revision change.

Issue number	Issue date	Revision number	Revision date	Revision type	Reason for change
1	19/12/06	0	19/12/06	**INITIAL**	**n/a**
		1	01/01/07	Minor	New procedure for xxxx
2	01/01/12	0	01/01/12	Significant	Change of Quality Assurance Manager and extension of the scope of approval

0.4 Distribution List

This paragraph may define the recipients of the POE.

POE HOLDER	FORMAT
Accountable Manager	PDF
Production Manager	PDF
Supply Chain Manager	PDF
Nominated NDT Level III	PDF
Safety Manager	PDF
UK CAA	PDF
Reserved	
Reserved	

0.5 Abbreviations

This chapter is not necessary if abbreviations are defined within the text of the POE.

0.6 Introduction

This chapter may provide a general overview of the approved organisation, including its history, major industrial sectors.

Part 1 – General

1.1 Statement by the Accountable Manager

21.A.143(a)(1), 21.A.145(c)(1), 21.A.165(b) – Regulation 376/2014

The POE should include a statement, signed by the accountable manager (and countersigned by the CEO, if different), which confirms that the POE and any associated manuals are complied with at all times.

This statement should read as follows, or embrace the intent of the following text:

This exposition defines the organisation and the procedures upon which the CAA's production organisation approval (POA) is based.
These procedures are approved by the undersigned, and must be complied with, as applicable, to ensure that all production activities are performed to an approved standard.
It is understood that the approval of the production organisation (PO) is based on the organisation's continuous compliance with the applicable requirements of Part 21, and with the organisation's procedures that are described in this exposition. The CAA is entitled to limit, suspend, or revoke the approval if the organisation fails to fulfil the obligations that are imposed by Part 21, or any conditions according to which the approval was issued.

Accountable Manager and.. (quote position).....
For and on behalf of..... (quote organisation's name).....

If the Accountable Manager is not the highest level responsible for the organisation, then that person must countersign the statement or there is a letter of delegation sufficient to allow the Accountable Manager to discharge their regulatory responsibilities and duties required under the approval.

Whenever the Accountable Manager is changed it is important that the new Accountable Manager signs the statement at the earliest opportunity as part of his/her acceptance by the UK CAA.

**** Note – A new AM signature is required at each issue of the exposition.***

1.1.1 Access to the Organisation.

Part 21.A.8

For the purpose of determining compliance with the relevant requirements of Assimilated Regulation (EU) 2018/1139, the organisation must;

(a) ensure that access to any facility, product, part or appliance, document, record, data, process, procedure or to any other material in order to review any report, make any inspection, or perform or witness any flight and ground test, as necessary.

(b) make arrangements to ensure the CAA has access, as provided for in point (a) and has access to the facilities of the person's suppliers and subcontractors.

1.1.2 Immediate reaction to a safety problem

21.A.3A

The organisation must implement:

(a) any safety measures mandated by the CAA in accordance with point 21.B.6

(b) any relevant mandatory safety information issued by the CAA

1.2 Safety Policy and Objectives

AMC1 21.A.139(c) (1)

The policy and objectives set out what you want to achieve. Safety objectives defines what an organisation wants to accomplish with the SMS.

Goals or targets should be established to achieve each safety objective. For the purpose of SMS scalability this can be accomplished by the use of S.M.A.R.T goals.

Specific - Each target should be focused on one thing only.

M*easurable - Measure whether or not you hit the target.*

Achievable - Realistic so they can be achieved, the target should be within an organisation's scope.

Relevant - The target should be something of importance or significance to safety. A key benefit to the organisation.

Time-Bound - For the objective to be met. There should be a deadline and final date, evaluate then set a new goal.

For the purpose of the SMS scalability to support the implementation of SMS into the organisation, the Safety Objectives and how it is intended they will be achieved can be included within a simple Safety Plan.

1.2.1 Safety Policy

The Safety Policy sets out what you want to achieve and how you mean to achieve it. In addition to the safety commitment statement, it should outline the safety reporting policy, and also include the key safety objectives.

It is important that everyone sees the Safety Policy. In a Small organisation, it could be circulated and have everyone sign as having read it, as well as having it displayed on notice boards, in an office., or reception.

The Safety policy must be visibly endorsed by Senior Management and the Accountable Manager. "Visible endorsement" refers to making management's active support of the safety policy visible to the rest of the organization.

The Safety Policy should:

- reflect organisational commitments regarding safety, and its proactive and systematic management, including the promotion of a positive safety culture;
- include internal reporting principles by fostering the reporting of organisational threats as well as events, as defined in AMC3 21.A.3A(a);
- be endorsed by the accountable manager (AM);
- be communicated, with visible endorsement, throughout the organisation; and
- be periodically reviewed to ensure that it remains relevant and appropriate to the organisation.

For the purpose of the SMS scalability the following Safety Policy statement may be considered as an example and amended where appropriate to suit the particular Part 21G Organisation.

Safety is important to us as it helps us stay in business.

Our safety objective is simply for no aircraft accidents to occur as a result of our operations.

It is important that we meet all applicable regulations and where appropriate exceed them when a safety risk is identified.

We believe in a reporting system that allows people to report safety issues without fear of unfair reprisals. Everybody makes mistakes, and honest mistakes will be treated fairly. A healthy reporting system gives us the information to address safety issues as they arise, not when it is too late. We expect everyone who works or is connected to our operations to report any safety related events or issues they identify to me or one of our staff. In this respect we will apply just culture principles to any event that is reported to us directly in a timely manner.

This will help our organization to continuously improve our safety performance which is a shared responsibility.

Signed – Accountable Manager

[Insert Company]

[Insert Name]

[Insert Date]

The safety policy is the means for the organisation to state its intention to maintain and, where practicable, to improve the safety levels of all its activities, and to minimise its contribution to the risk of an aircraft accident or serious incident occurring, as far as reasonably practicable. The safety policy reflects the management's commitment to safety and the organisation's philosophy of safety management. It is the foundation on which the organisation's management system is built and serves as a reminder of 'how we do business here'. The creation of a positive safety culture begins with issuing a clear, unequivocal policy statement.

The commitment to apply 'just culture' principles forms the basis for the organisation's internal rules that describe how 'just culture' principles are guaranteed and implemented.

Regulation UK Reg (EU) No 376/2014 defines the 'just culture' principles to be applied (refer, in particular, to Article 16(11) of that Regulation).

Senior management should continuously promote the safety policy to all personnel, demonstrate their commitment to it, and provide the necessary human and financial resources for its implementation. Signed .....

Dated .....

Accountable Manager and.. (quote position).....

For and on behalf of..... (quote organisation's name).....

1.2.2 Safety Objectives

Taking due account of its safety policy, the organisation should define safety objectives. The safety objectives should:

(1) form the basis for safety performance monitoring and measurement;

(2) reflect the organisation's commitment to maintaining or continuously improving the overall effectiveness of safety management;

(3) be communicated throughout the organisation; and

(4) be periodically reviewed to ensure that they remain relevant and appropriate to the organisation.1.3 Management Personnel

21.A.143(a)(2), 21.A.145(c)(1) and (2)

This chapter shall identify the management personnel of the organisation by listing, as a minimum, the title and names of the Accountable Manager plus all the persons nominated to hold a position as required by 21.A.145(c)(2). Deputies may also be identified. The group of "nominated persons" shall be chosen/identified so that all the Part 21 Subpart G functions are covered under their respective responsibilities and their credentials shall be submitted to the CAA using the UK CAA - Details of nominated personnel in an airworthiness organisation (SRG 1769) form.

The POE chapter 1.2 needs to be at any time consistent with the POE chapters 1.4 and 1.5 and shall represent the up-to-date description of the production management structure of the organisation.

For a typical POA the following management personnel should be named in the POE although may not be required to be a nominated postholder.

- Accountable Manager
- Quality Manager *
- Safety Manager *
- Nominated Level III **
- Production Manager ***

The personnel responsible for the following functions may also be listed:

  - Manufacturing & Engineering Functions ***
  - Supply Chain Manager Functions ***

* Required to be nominated postholder

** Required to be nominated postholder if the Scope of Work includes NDT activities.

*** Dependent upon the size of the organisation as well as the duties and responsibilities delegated directly by the Accountable Manager the CAA may consider that these personnel are required to be nominated postholders, GM 21.A.145(c)(2).

Other management personnel that are integral to efficient performance of the organisation should be named, however the CAA may only consider that these personnel require to be nominated dependent upon the duties and responsibilities delegated directly by the Accountable Manager, GM 21.A.145(c)(2).

1.3 Management Personnel

21.A.143(a)(2), 21.A.145(c)(1) and (2)

This chapter shall identify the management personnel of the organisation by listing, as a minimum, the title and names of the Accountable Manager plus all the persons nominated to hold a position as required by 21.A.145(c)(2). Deputies may also be identified. The group of "nominated persons" shall be chosen/identified so that all the Part 21 Subpart G functions are covered under their respective responsibilities and their credentials shall be submitted to the CAA using the UK CAA - Details of nominated personnel in an airworthiness organisation (SRG 1769) form.

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Other management personnel that are integral to efficient performance of the organisation should be named, however the CAA may only consider that these personnel require to be nominated dependent upon the duties and responsibilities delegated directly by the Accountable Manager, GM 21.A.145(c)(2).

1.4 Duties & Responsibilities of Management Personnel

21.A.143(a)(2) and (3), 21.A.145(c)(1) and (2), GM 21.A.145(c)(1), GM 21.A.145(c)(2)

The duties and responsibilities of all management personnel identified in the POE Chapter 1.2 must be detailed in this chapter. It shall be ensured that all Part 21 Subpart G functions are addressed, as applicable to the organisation.

Any Part 21 Subpart G function, which is applicable to the organisation (e.g., to perform the independent audit, to issue the UK CAA Part 21 Subpart G C/S authorisations, to have available appropriate facilities, working conditions, equipment and tools, to issue authorised release certificate, etc.) shall be under the responsibility of a Nominated Person as listed in POE Chapter 1.2 who shall ensure compliance of that function with the relevant Part 21 Subpart G requirements.

The responsibilities of a Nominated Person cannot be delegated to other Manager(s).

The duties of any Nominated Person may be delegated to other Manager(s) who are reporting to him/her.

The POE Chapter 1.3 should remain aligned with the POE Chapters 1.2 and 1.4, to ensure it continually reflects an up-to-date description of the management structure of the production organisation.

1.4.1 Accountable Manager

The Accountable Manager is responsible for:-

- ensuring that all production work carried out by the approved organisation meets the standards required by the UK CAA.
- nominating the management staff with appropriate relevant knowledge and satisfactory experience related to the production activities performed by the production organisation.
- ensuring that the necessary finance, staff resources and facilities are available to enable the organisation to meet Part 21 Subpart G obligations.
- ensuring that a Production Management system is established, implemented and maintained.
- the supervision of the progress of the corrective actions/review of the overall results in terms of quality.
- ensuring the competence of all personnel including management personnel has been assessed and is being monitored for continued compliance.
- ensuring a just culture is established and promoted within the organisation.
- ensuring that any charges, as prescribed by the UK CAA in respect of the Part 21 Subpart G approval, are paid.

Any additional duties and responsibilities may be added provided that they do not conflict with those of the other management personnel. Depending on the structure of the organisation some duties may be distributed differently. In case the accountable manager is not the chief executive officer, the CAA needs to be assured that he/she has direct access to the chief executive officer and has access to sufficiency of necessary financial funding.

1.4.2 Quality Manager / Compliance Monitoring Manager

The Quality Manager/Compliance Monitoring Manager is responsible, under the direct authority of the Accountable Manager, for:- (this is not an exhaustive list)

- establishment, implementation and maintenance of the organisations – Production Management system in compliance with Part 21 and UK CAA requirements.
- establishment, implementation and maintenance of an independent quality assurance function to monitor compliance of the approved organisation with Part 21 and UK CAA requirements.
- they shall have direct access to the Accountable Manager on matters concerning the Production Management system;
- implementation of a quality audit programme in which compliance with all applicable regulations and procedures is reviewed at regular intervals. They should ensure that any observed non-compliances or poor standards are brought to the attention of the person concerned via his/her manager.
- follow up and closure of any reported non-conformance.
- establish regular meetings with the Accountable Manager to appraise the effectiveness of the Production Management system. This will include details of any reported discrepancy not being adequately addressed by the relevant person or in respect of any disagreement concerning the nature of a discrepancy.
- submission of the POE and any associated amendments, to the UK CAA for approval (which includes completion of and submission of online applications, and using the UK CAA - Details of nominated personnel in an airworthiness organisation (SRG 1769)
- assessing Subcontractors and suppliers of new and used components and materials for satisfactory product quality in relation to the needs of the organisation.
- issue /renewal/cancellation of UK CAA Part 21 Subpart G C/S individual authorisations.
- coordinating action on airworthiness occurrences and for initiating any necessary further investigation and follow-up activity.
- the notification to the CAA, as applicable according to the procedures established in the POE, of production activities conducted outside the approved locations.
- Notifying the CAA of quality escapes that have the potential to impact the safe operation of parts, appliances or products.

The quality assurance function is required to be independent from the functions being monitored. This required independence relates to the lines of reporting, authority and access within the organisation and assumes an ability to work without technical reliance on the monitored functions. Thus, the Quality Manager/Compliance Monitoring Manager and the quality assurance staff are not directly involved in the Part 21 Subpart G production function being audited.

Depending on the organisation structure, some of the – Production Management system duties may be delegated to one or several managers who report to the Quality Manager/Compliance Monitoring Manager and are therefore not required to be nominated. .

1.4.3 Nominated NDT Level III

If applicable The Nominated NDT Level III is responsible, under direct authority of the Accountable Manager, for:-

- Control and management of NDT special processes undertaken within the scope of approval.
- Identifying any additional NDT qualified Level 3 personnel necessary for coverage when the Nominated Level 3 is not qualified in all NDT methods used by the Organisation;
- Identify any additional Level 3 personnel necessary to provide adequate day-to-day coverage depending on the size/facilities of the Organisation;
- Approving the Organisation's NDT procedures;
- Approving the Organisation's written practice for the training and qualification of NDT personnel in accordance with UK CAA requirements;
- Ensuring that the organisations NDT procedures are reviewed every 12 months;
- Ensuring that technical audits (both system and product) are carried out or supported by appropriately qualified personnel every 12 months.

Any additional duties and responsibilities may be added provided they do not conflict with those of other management personnel.

1.4.4 Production Manager

The Production Manager is responsible, under the direct authority of the Accountable Manager, for:-

- ensuring that products manufactured within the scope of the Part 21 Subpart G approval are in conformity with the applicable design data and are in a condition for safe operation prior to issuance of an authorised release.
- ensuring that the organisation has facilities appropriate to the planned production.
- ensuring that the organisation has office accommodation appropriate to the management of the planned work.
- ensuring that the organisation has a working environment appropriate to the tasks being undertaken.
- ensuring that the organisation has sufficient competent personnel to plan, perform, supervise, inspect and certify the work being performed.
- ensuring that the organisation has appropriate tools, equipment and materials to perform the planned tasks.
- ensuring that the organisation has storage facilities for parts, tools, equipment and materials of the appropriate standard.
- ensuring that the organisation has all necessary data as required by Part 21.

The Production Manager should notify the Accountable Manager if unable to achieve any responsibilities.

Any additional duties and responsibilities may be added provided that they do not conflict with those of the other management personnel. Depending on the structure of the organisation some duties may be distributed differently.

1.4.5 Supply Chain Function

The Supply Chain function are responsible for:-

- establishment, implementation and maintenance of vendor and subcontractor assessment, audit and control processes in accordance with Part 21 and UK CAA requirements.
- ensuring conformity of all externally provided processes, products, and services, including from sources defined by the customer.
- identifying and managing the risks associated with the external provision of processes, products, and services, as well as the selection and use of external providers.

Any additional duties and responsibilities may be added provided that they do not conflict with those of the other management personnel. Depending on the structure of the organisation some duties may be distributed differently.

1.4.6 Manufacturing & Engineering Function

The Manufacturing & Engineering function are responsible for:-

- Ensuring the production/manufacturing data used by the POA produces products, parts and appliances in conformity with the specified applicable design data and is in a condition for safe operation.

Any additional duties and responsibilities may be added provided that they do not conflict with those of the other management personnel. Depending on the structure of the organisation some duties may be distributed differently.

1.4.7 Safety Manager

For the purpose of SMS scalability, the Safety Manager duties may be added to an existing role, or alternatively this may be a part-time employee or someone working part-time who can take on SMS duties. The structure may be simple, where the CEO (Owner) is the Accountable Manager exercising Safety Manager and Compliance Monitoring Manager roles, or a combination there of may be considered.

The Safety Manager is responsible for :-

- Facilitating hazard identification, as well as risk assessment and management;
- monitoring the implementation of action taken to mitigate risks, as listed in the safety action plan, unless action follow-up is addressed by the independent monitoring function;
- providing periodic reports on safety performance to the safety review board (the functions of the safety review board are defined in AMC1 21.A.139(b);
- ensuring the maintenance of safety management documentation;
- ensuring that there is safety training available, and that it meets acceptable standards;
- providing advice on safety matters; and
- ensuring the initiation and follow-up of internal investigations of occurrences

1.5 Management Organisation Chart.

21.A.145(c) (1), (2) & (4) 21.A.143(a)(4).

An organisation chart is included within this chapter to clearly indicate the associated chains of responsibility and accountability of the "nominated persons" identified in Chapter 1.2. and those reporting directly to the Safety Manager.

When other "Managers" are identified in chapter 1.2 they need also to be reflected in the organisation chart to show that they report ultimately through a "nominated person" to the Accountable Manager. If the approved organisation is a sub-division of a larger entity the organisational chart should show the relationship with the greater organisation.

The organisation chart of this chapter needs to be at any time consistent with the POE Chapters 1.2 and 1.3 and shall represent the up-to-date depiction of the production organisation's structure.

The following is an example of a Part 21 Subpart G Approved Production Organisation structure:

Any post annotated with * requires an SRG 1769 Form

The UK SRG 1769 Post-holders shall be clearly identified in the chart. The names of the management personnel may be included in the boxes of the organisation chart, but this is optional. Quality assurance personnel must be shown to be independent from the Production Managers.

Certifying Staff may report to any of the managers specified depending upon which type of control the approved organisation uses as long as the quality assurance function specified in 21.A.139(b)(2) remains independent.

1.6 List of Certifying Staff.

21.A.143(a)(5), 21.A.145(d), AMC 21.A.145(d)(1)

This chapter shall identify all authorised Certifying Staff, either listed within the section or by cross-reference as well as the details of how the list is managed (in conjunction with chapters 1.9 and 1.10).

1.6.1 Content of the list(s).

AMC1 21.A.5 (d) & (e)

If included within this chapter the list should include at least the following main information:

(a) name;

(b) date of birth

(c) basic training received and standard attained;

(d) specific training received and standard attained;

(e) continuation training received (if appropriate);

(f) experience gained;

(g) scope of the authorisation;

(h) date of first issue of the authorisation;

(i) expiry date of the authorisation (if appropriate);

(j) identification number of the authorisation (or equivalent means to identify the link between the authorisation and the staff member that holds the authorisation); and (k) changes to the data.

1.6.2 Management of the list.

This procedure shall detail the following:

- Identification and management of the list(s).
- Approval of the list in conjunction with POE Chapter 1.9 and 1.10.
- Retention of records:
    - Duration / location.
        - A production organisation (PO) should keep the record for at least 3 years after the staff member is no longer employed by the organisation or has changed their position in the organisation, or after the withdrawal of the authorisation, whichever occurs sooner.
    - Type of documents (evidence).
        - The staff member should be given reasonable access, on request, to their own records as per UK Reg (EU) 2016/679.

The Certifying Staff list may be directly inserted in this chapter of the POE or managed as a separate associated list.

For example, it is possible to cross-refer from this chapter 1.5 to another document (including a computer record) where a list of authorised staff is held.

In this case an explanation of where the list is maintained and how it is updated shall be included in this paragraph thereby meeting the intent of the UK CAA requirements.

This list, whether included in or separated from the basic POE, forms part of the approval. This means that it shall be approved by the organisation, through a procedure which has been agreed by the UK CAA (refer to chapters 1.9, and 1.10).

1.7 Manpower Resources.

21.A.143(a)(6), 21.A.145(a) GM 21.A.145(a)

The organisation must be able to demonstrate that it has sufficient personnel for each function according to the nature of the work and the production rate, a sufficient quantity of qualified personnel to accomplish all specified manufacturing tasks and to attest the conformity. Their number should be such that airworthiness consideration may be applied in all areas without undue pressure.

There is no need to amend this chapter as result of routine fluctuations, however any significant re-deployment or loss of staff or any staff change having impact on the approval shall be captured and notified to the UK CAA according to the criteria specified in the POE Chapter 1.10.

- Summary indication of the total number of staff including all the staff categories below. Where the approval is sub-divided into sites or different major functions the resources should be related to each site and function
- Splitting of the total staff number in the various staff categories. A summary table is expected to include:
    - Management personnel
    - Quality Assurance staff
    - Safety Assurance staff
    - Certifying Staff
    - Design/Engineering staff
    - Production staff
    - Technical support staff, such as
        - Purchasing
        - Training
- The number of contracted staff should be indicated. Additionally, the arrangements for temporary contracting of staff should be detailed.

NOTE: If an organisation chose to "contract in" nominated personnel, details of the arrangement and associated resource plan need to be either listed or referred to within this section.

NOTE: Organisations must declare the <u>total number of staff</u> employed within their approved organisation in the Exposition.

1.8 Facilities.

21.A.143(a)(7), 21.A.145(a) GM 21.A.145(a), 21.A.8(a)

This chapter may be used to describe each and all the facilities, in some detail, at which the organisation intends to conduct production activity[2] under the Part 21 Subpart G approval, thereby providing a clear picture of what the CAA is being asked to approve. A plan of the facility should be included together with approximate floor areas and layout. If more than one site is to be approved the details of each individual site should be clear.

1.8.1 Principal Place of Business (PPB).

The PPB is the head office or the registered office of the organisation within which the principal financial functions and operational control of the activities referred to in Part 21 Subpart G regulation are exercised.

The PPB is the address which will be included in the CAA Form 55 approval certificate together with address(es) of other production sites. Further guidance can be found by referring to CAP 1539 UK Interpretation of Principal Place of Business

1.8.2 Postal (surface mail and e-mail) address

The postal address of the production organisation to be used by the UK CAA for formal mail communication needs to be clearly identified.

In addition, to ensure an efficient and stable communication channel between the UK CAA and the production organisation, the organisation may create a “generic” email address (without reference to a family name) to be used regardless any future personnel changes**.**

[2] Production activities are those listed in 21.A.139(b)(1).

1.9 Scope of Work.

21.A.143(a)(8), 21.A.151 and GM 21.A.151

This chapter must show the range of work conducted at each approved site. When production activities are conducted in multiple locations the corresponding scope of work shall additionally be detailed for each site. This shall also relate to chapters 1.8 in such a way that it can be clearly seen which specific tasks are performed at each location.

The organisation scope of work is determined through applicable design links.

The description of the scope of work in this section should be more specific and more detailed than that quoted on the Approved Certificate but should remain within the scope defined in the certificate. The details given should include the relevant DO/PO arrangements and associated SADDs.

If used a Capability List may be included as an appendix or referenced as a separate document. The list should detail part numbers (or BOM reference) produced by the organisation along with details of the applicable DO/PO arrangement and SADD.

1.9.1 Key Production Processes.

This paragraph may provide a brief overview of the key production processes used by the organisation to support the scope of work detailed in Chapter 1.9. When production activities are conducted in multiple locations the key production processes performed at each site should identified. This shall also relate to chapters 1.7 in such a way that it can be clearly seen which specific tasks are performed at each location.

1.9.2 Notification Procedure to the Authority Regarding Significant Changes to the Production Organisation.

21.A.147(a) GM 21.A.147(a) - 21.A.148 AMC 21.A.148 – 21.A.148 AMC 21.A.148 – 21.A.149 GM 21.A.149, 21.A.153

UK CAA approval is based on the management, organisation, resources, facilities and scope of work described in this Part 1 of the Exposition. Any significant change may therefore affect the conditions under which the approval was granted. This chapter is intended to show the process to be used by the organisation to notify the UK CAA of any change affecting the approval.

1.9.3 Notification

The procedure shall define the changes to be notified directly to the UK CAA using the online application form and the ones that can be notified directly to the Assigned Surveyor.

An Example is shown below:

Note: The term "Quality Plan" is to be interpreted as the planning document being utilised to plan the relevant change within the organisation. The plan will cover but not be limited to ;

- ***Purpose of the change and associated risks,***
- ***maintain integrity of the Production Management system,***
- ***availability of resources,***
- ***responsibility and authority***
- ***timeline***

	Type of change	Examples of change	Change Approval process (1.11)		Documentation to be provided (1.10)	
			Significant Change	Minor Change	To UK CAA: apply@caa.co.uk	To the assigned AW Surveyor
			Direct Approval (UK CAA Approval)	Production organisation approval and UK CAA acknowledgment		
Location	Change of Organisation Name		X		• Online Application • Certificate of Incorporation	• POE and associated documents as applicable • Quality Plan
Location	Change to the locations/facilities of the production organisation with or without amendment to the scope or capability	• PPB address change. • Address change of any production site already approved. • Additional / Removal of production locations • Modification, extension, reduction, or re-organisation of an approved production location.	X		• Online Application • Certificate of Incorporation in the case of PPB change	• POE and associated documents as applicable • Quality Plan
Production Management system	Change of the Accountable Manager	•	X		• Online Application •	• POE and associated documents as applicable. • CV/ SRG 1769 Form
Production Management system	Change in Nominated Post Holder	•	X		• Online Application • SRG 1769 Form	• POE • Competency Assessment
Production Management system	Changes in the organisation structure especially those parts of the organisation in charge of quality.	•	X		• Online Application •	• POE • Quality plan
Production Management system	Changes in the production or Production Management systems that may have an impact on the conformity/airworthiness of the product, part, or appliance.	•	X		• Online Application •	• POE • Compliance checklist

	Type of change	Examples of change	Change Approval process (1.11)		Documentation to be provided (1.10)	
			Significant Change	Minor Change	To UK CAA: apply@caa.co.uk	To the assigned AW Surveyor
			Direct Approval (UK CAA Approval)	Production organisation approval and UK CAA acknowledgment		
Capacity/Methods	Reduction or increase of the staff number when the variation:	• >10% of staff as declared in Section 1.7	X		• Online Application	• POE • Resource plan
	Any change to the manufacturing methods, equipment, tools, materials that could affect the approval.		X		• Online Application	• POE and associated documents as applicable. • Quality plan
	Reduction or increase of the scope of work or scope of approval .	• Addition/removal of a rating. • Extension or removal of an approval limitation. • New production method/technology	X		• Online Application	• POE and associated documents as applicable • FAIR • Internal Audit Report
	Reduction or increase of the scope of work within existing scope of approval.	• Addition/removal of a part or appliance within existing scope of approval, utilising existing production methods.		X		• POE and associated documents as applicable • FAIR • Internal Audit Report
Supply Chain	Any change in the placement or control of significant sub-contracted work or supplied parts	• Change in performance monitoring and/or oversight methods. • Addition of significant sub-contractor/supplier • Additional delegations given to a significant sub-contractor	X		Online Application	• POE and associated procedure • Approved supplier list • Supplier Oversight plan

In addition, this procedure shall also detail:

- When to notify the change
- How to notify the change
- Who in the production organisation is in charge of the notification.
- Where to send the notification (apply@caa.co.uk).

1.9.4 Management of the change with the assigned Surveyor

Once the change has been notified, the production organisation shall detail how the related change is internally managed:

- Internal audit by the Production Management system
- Composition of the package associated to any of the above listed changes (e.g. Online application, POE, internal audit, SRG 1769 Form)
- Who in the production organisation is in charge of monitoring the change with the assigned surveyor?

For initial approval and change of approval applications, the organisation shall conduct an internal audit in accordance with its audit procedures detailed POE Chapter 3.2, prior to the audit by the assigned surveyor, confirming that processes, areas, activities and personnel subject to the application have been reviewed and audited showing satisfactory compliance with all applicable Part 21 requirements. The relevant audit report together with a statement of compliance from the Quality Manager shall be provided to the assigned surveyor.

The requirement to have such internal audit conducted as part of any application for change, shall be addressed in a procedure under this POE Chapter 1.9.

1.10 Exposition Amendment Procedures (including delegated procedures).

21.A.143(a)(10), (b) and 21.A.165(a)

To underpin an approval, the Exposition should be maintained as an up-to-date description of how the organisation achieves compliance with the latest regulations.

The Quality Manager is responsible for the monitoring and amendment of the Exposition, including associated procedures manuals, and the submission of proposed amendments to the CAA.

1.10.1 POE Amendment.

This procedure may be used to demonstrate the Exposition amendment procedure.

- Person responsible for amending the Exposition.
- Definition of criteria for new issue and/or revision
- How amendments are identified and highlighted within the document.
- The record of the Part 21 Subpart G approval certificate and acceptance of the POE and subsequent amendment shall be described:
    - Approval/acceptance letter/email from the CAA
    - Part 21 approval certificate and/or appendix amendments following evolution of the scope of activity and/or evolution of the locations and/or a new issue of the POE.

- Significant change approval and associated POE acceptance

1.10.2 Associated Procedures, Lists and Forms.

The minimum procedures/lists to be considered are all those identified in 21.A.139(b)(1), which are therefore integrally part of the Exposition.

This procedure shall at least address:

- Summary table of associated procedures and lists:

Example:

Type of Document	*Document reference*	*Document internal approved by POA Holder*	*Approved by*	*Scope of minor amendments to may be internally approved.*
Associated Procedures Manual	APM	✓	Quality Manager	Minor amendments Typing errors
Safety Manual	SMS-DOC-1	✓	Safety Manager	Typographical updates to existing processes
Part 21 POA Compliance Checklist		✓	Quality Manager	
Certifying Staff list	POA-DOC-1	✓	Quality Manager	Less than 10% total C/S Staff and do not affect current scope
List of outside parties	POA-DOC-2	✓	Quality Manager	Addition/removal of a subcontractor, supplier or service provider
NDT Written Practice	POA-DOC-3	✓	NDT Lev.3 and Quality manager	Typographical updates to existing methods
Flight Operations Manual	FTOM	X	CAA	

Note: Table above is for example only and not exhaustive.

- The types of amendments that can be made without direct approval by the CAA.
- The personnel responsible for authoring and approval
- Definition of criteria for new issue and/or revision

1.10.3 List of applicable regulations and supporting Documents

This paragraph is optional and may be used to describe how the organisation ensures the POE and associated procedures/lists remain updated with the current regulations and CAA guidance.

This paragraph is aimed to list the applicable regulations and CAA guidance, together with their revision status, which have considered for the development of the current revision of the POE and associated procedures/lists.

The – is responsible to assess any revision of the applicable regulations and user guides for possible impact on the organisation's procedures/lists and to amend them, as necessary.

The POE and associated procedures/lists are expected to be amended before the date of entry into force specified in the applicable regulation or document.

1.11 Overview of the Production Management System and the procedures

21.A.143 (a)(11), 21.A.139(b)(1)

This chapter may provide a general description of the production management system established to meet Part 21 Subpart G requirements and the procedures detailed in the POE, which may use references to a company manual, or to any other document applied in the production management system (e.g. in accordance with ISO 9001, EN 9100, ASTM F2972 or other suitable standards). These references do not need to explicitly include the revision status of these documents.

The paragraph should include the person/department responsible for the production management system and its implementation.

1.12 List of Outside Parties

21.A.143(a)(12), 21.A.139(a)

The list of outside parties, which should contain the outside parties that operate under the Production Management system and the procedures of the manufacturer (i.e. the extended workbench). *Typically known as a Supplier List*

Dependant on the scope of agreement/arrangement, this list could also include service providers i.e. calibration service, archive/record retention etc..

If the list is maintained as a separate document, it is to be listed and controlled as per section 1.10.2.

1.13 Permit to Fly (as applicable)

21.A.163(e)

This chapter may either contain the FTOM directly or contain a refence to the document. If the FTOM is maintained as a separate document, it is to be listed and controlled as per section 1.10.2.

The content of the FTOM and requirement for permit to fly issuance process is defined within 21.A.143(a)(13)(i) to (vi)

Part 2 – Production Procedures

2.1 Airworthiness Co-ordination

21.A.4, 21.A.139(b)(1)(ix), 21.A.145(b)(1), 21.A.165(g)

This chapter should give a general description of processes by which the POA holder obtains airworthiness data from aviation regulatory authorities and applicable design approval holders. Additionally, the details of the data review, distribution and action should be included.

It should also give general details of the procedures and processes to be used when an applicable design approval holder requests assistance with continuing airworthiness actions related to products, parts or appliances that have been produced.

2.1.1 Airworthiness Data from Regulatory Bodies

21.A.145(b)(1)

This paragraph should detail the processes used by the organisation to ensure that all applicable airworthiness data published by regulatory bodies is actively sought, reviewed for relevance and when necessary incorporated into production data.

2.1.2 DO/PO Arrangements

21.A.4, AMC 21.A.4, 21.A.133(b) & (c), AMC 1 & 2 to 21.A.133(b) & (c), 21.A.165(g)

This paragraph should give general details demonstrating the establishment of links to an approved design organisation, and the confirmation of these links via issuance of DO/PO arrangement documents. The minimum content of an arrangement is detailed in AMC No 1 to 21.A.133(b) and (c) and a sample arrangement document with instructions for completion is given in AMC No 2 to 21.A.133(b) and (c). The information detailed in AMC No 1 in either AMC No 2 format or any other dictated by the design organisation, must be obtained prior to release on a CAA Form 1. Failure to obtain such an arrangement will prevent the parts being delivered on an CAA Form 1.

The personnel who are responsible for the establishment of these arrangements as well as those who are responsible for the control of the commitments laid down in the arrangements should be identified.

2.1.3 IPO/PO Arrangements

21.A.4, AMC 21.A.4, 21.A.133(b) & (c), AMC 1 & 2 to 21.A.133(b) & (c), 21.A.165(g)

This paragraph should give details demonstrating the establishment of effective links between the production organisation when acting as an IPO and a sub-tier supplier that also holds a POA and has not established an arrangement with the appropriate design organisation. An “effective link“ means, that the design approval holder (DAH) must have agreed to the IPO acting as an intermediary and this acceptance must be visible to the POA. An example could be an email from the DAH or contract. The DAH is that organisation that holds the TC or STC.

Where the POA is receiving data from the IPO it is its responsibility to ensure the DAH has authorised the IPO to deal with issues such as non-conforming items and direct delivery etc.

A sample intermediary production arrangement template is included in Section 3 of this user guide.

The personnel who are responsible for the establishment of these arrangements as well as those who are responsible for the control of the commitments laid down in the arrangements should be identified.

2.1.4 Monitoring of DO/PO Arrangements and Associated SADDs

AMC 21.A.4

All customer orders will be subject to a defined contract review process and will be assessed to ensure the work is within the scope of approval and that an appropriate interface arrangement with the responsible design organisation is in place. Additionally, that the production organisation holds a valid statement of approved design data (SADD) compliant with AMC 21.A.4.

In addition, this paragraph should give a general description of the regular periodic review of the currency of all DO/PO and IPO/PO arrangements and associated SADDs held by the organisation.

2.1.5 Incorporation of Airworthiness Data into Production Data

GM 21.A.131, 21.A.145(b)(2) and (3)

This paragraph should give a general overview of the processes and procedures used for ensuring that applicable airworthiness data is correctly incorporated into production data and how it is kept up to date. The processes and procedures for ensuring applicable airworthiness data is correctly incorporated into production data shall be defined and documented.

2.1.6 Concessions

21.A.139(a) 21.A.165(c)

Any non-compliance with design data precludes the release of the item on an CAA Form 1 Authorised Release Certificate as the certificate states “Certifies that the items identified above were manufactured in conformity to approved design data/non-approved design data”. In order to be able to release the item it must conform with the design data, this can be achieved by either:-

- Reworking the item
- Amending the design data

Only the responsible design organisation can amend the design data and this usually takes the form of a concession (i.e. an additional piece of design data specific to an individual item, not actually amending a drawing). A concession is only valid if approved under the responsible design organisations procedures. If neither of the two options is appropriate the item is scrapped.

This paragraph should give details of the concession issue request process considering these points and make it clear that the approval of the design organisation is necessary for the implementation of a concession. The concession issue request process shall be defined and documented.

2.2 Acceptance & Inspection of Incoming Materials Parts and Equipment

21.A.139(b)(1)(iii), 21.A.139(d)(2)(iii)

This chapter should give a general overview of the goods receipt inspection process used.

The receipt, inspection and processing of materials, parts, and equipment into the organisation shall be carried out in accordance with defined documented procedure.

All incoming items will be inspected for compliance with the purchase order requirements and applicable design data. This includes items supplied new or used by TCH, primary production organisation or customer.

If an organisation reduces the rate of inspection for incoming parts, then the sampling criteria, statistical data, or risk assessment used in support of the inspection rate is to be detailed in this chapter.

Records will be kept, to ensure that all parts and materials are traceable back from the point of use to source via its release documentation. For materials this means the primary material manufacturer.

2.3 Stores Procedures

21.A.139(b)(1)(iii), (iv), (xiii), 21.A.139(d)(2)(iii), (iv), (xiii),

The control of storage, identification and release of materials and parts to production shall be in accordance with a defined documented procedure. This chapter should give a general overview of the procedure taking into account:

- Materials - clearly identified and stored in designated identified locations.
- Components and parts - stored in designated locations, clearly identified, and segregated from materials.
- The environmental conditions within storage areas shall be monitored and maintained to appropriate standards.

The control of materials and parts throughout the Company, from receipt, through storage and issue, to use and dispatch, will be controlled by the use of appropriate systems.

2.4 Identification and Traceability

21.A.139(b)(1)(iv), 21.A.139(d)(2)(iv)

This chapter should detail an overview of the methods used to ensure identification and traceability of parts and material in stock, in completed parts or in parts in process. These methods shall take into account the part marking requirements detailed in Part 21 Subpart Q.

2.5 Tools, Jigs and Test Equipment

21.A.139(b)(1)(vii), 21.A.145(a), 21.A.139(d)(2)(vii)

This chapter shall describe the procedures related to the receipt, acceptance, control, maintenance, modification, and calibration of the production tooling, jigs, fixtures, and test equipment.

2.5.1 Acceptance of Tools, Jigs and Test Equipment

Procedure for acceptance of tools, jigs and test equipment into the organisation shall be defined and documented. This paragraph shall give general details of the procedure.

Tools, jigs, fixtures and test equipment to be used for production purposes will be those specified by the approved design data except where an appropriately qualified equivalent is available and/or acceptable.

2.5.2 Calibration and Control of Tools, Jigs, and Test Equipment

21.A.139(b)(1)(vii), 21.A.145(a),

This paragraph shall describe the procedures related to the maintenance, calibration and control of production tooling, jigs, fixtures, and test equipment in general terms.

Tools, jigs, fixtures, and test equipment subject to periodic servicing and/or calibration will be uniquely identified with details of servicing/calibration expiry recorded both in the controlling system and on the item involved. The initial inspection and calibration period will initially be set in accordance with manufacturers or design authority's recommendations. Historical data will be maintained to allow for variation to the recommended periods.

Tools, jigs, fixtures, production and test equipment must be calibrated in accordance with procedures compliant with ISO 17025 that demonstrates that they comply with predefined precision and accuracy criteria. The precision and accuracy criteria must be such that the organisation is able to demonstrably determine that each production item conforms to the applicable design data and is in a condition for safe operation.

The description given should include in general terms:

- The method/s used to inform staff of impending expiry of serving/calibration periods.
- Inspection, servicing and calibration programme / equipment and calibrated tool register.
- Establishment of inspection, servicing and calibration frequencies.
- Person/department responsible for the maintenance and/or calibration programmes, the register, the follow-up, time period and frequencies (link between departments if necessary).
- Identification of servicing / calibration due dates.
- Management of personal or loaned tooling and test equipment
- Process of verifying the calibration results meet the predefined precision and accuracy criteria.
- Procedure for tooling, jigs, fixtures, and test equipment found out of tolerance during calibration (e.g., feedback to production, safety assessment, process to identify affected components/products and to inform the customer for further actions in case of safety concerns, etc.)
- Procedures for control and deposal of non-conforming tooling, jigs, fixtures, and test equipment.

Outside parties conducting calibration services should be controlled in accordance with chapter 3.3 unless the outside party is the OEM of the tool or equipment, or the outside party is accredited in accordance with ISO 17025 and reports the results of the calibration on an ILAC/UKAS certificate.

2.5.3 Use of Tools, Jigs and Test Equipment

21.A.145(a), AMC1 21.A.145(a),

The use of tools and equipment by staff shall be defined and documented and described in general terms within this paragraph.

All tools and equipment used in the workshop will be stored and held on site, under the control and protection of the production staff. When not in use, tools and equipment shall be held in an environment suited to the prevention of deterioration and damage.

Staff required to use complex or specialist items of tooling or equipment must demonstrate competency in the use of such tooling/equipment.

2.6 Production Processes

21.A.139(b)(1)(v)

This chapter shall describe in general terms the processes and procedures used to control the manufacture of parts. The processes and procedures shall be fully defined and documented, making clear the various responsibilities and activities of staff involved in the production processes:

- Establishment of the production process that produces parts that conform to the design data.

- Verification that the production process continues to produce parts that conform to the design data.
- Processes and procedures for despatch and receipt of items that are processed by outside parties.
- Control of fixed/frozen production practices (Critical Part production procedures).
- Roles and responsibilities of staff involved in production.

2.7 Inspection and Test

21.A.139(b)(1)(vi)

The inspection and test processes and procedures that confirm manufacturing processes are with in established control limits as well as those that confirm items are compliant with the applicable design data shall be defined and documented. These procedures as a minimum will demonstrate:

- Clear technical instructions to complete the inspection/test so that the appropriate accurate results may be obtained.
- Clear definition of the target of the inspection/test.
- The qualification/competency level required of the operative to perform the inspection/test.
- Recording of the inspection status of the target item.
- Individual/department responsible for authoring and approval.

This chapter shall give the general description of the control of inspection and test activity within the POA.

2.8 Control of Non-Conforming Items

21.A.139(b)(1)(viii)

The procedures and processes used to prevent the release of identified non-conforming items should be defined and documented. This chapter should give a general description of these procedures and processes.

The procedures and processes may include but not limited to:

- Identification of the items.
- Storage of the items, this should be within a designated controlled location.
- Control of the designated storage location.
- Assessment of non-conformity.
- Recording of results of assessment.
- Actions to be taken to address non-conformity.
- Disposal of items declared as scrap.

2.9 Record Completion

21.A.139(b)(1)(x), 21.A.165(d)

This chapter shall give details of the processes and procedures used to record all work carried out during production of a product part or appliance. These records shall be sufficiently detailed to demonstrate that the production item conforms to the applicable design data at the time of release.

2.9.1 Control of Electronic/Computer Records

This chapter shall refer to the computer systems used to manage and/or record information regarding production activities conducted during the manufacture of a product, part or appliance.

- Description of the computer records system in use and relative objectives
- Information retrieval
- Verification of Back-up systems (frequency, means, and delay) and second site storage (frequency, means and delay)
- Security and safeguards to unauthorised access, refer to FAA AC 21-43A 4.3 for further guidance.

2.10 Handling, Storage and Packing

21.A.139(b)(1)(xiii)

The handling, storage and packing processes and procedures for raw materials, consumable materials, tooling, inspection and test equipment, in process items, non-conforming items, and finished items shall be defined and documented. These processes and procedures should address as a minimum, prevention of damage/degradation, storage environment control, storage life limit control, continuity of identification/traceability.

This chapter should give general description of the handling, storage and packing controls established by the POA.

2.11 Off-Site/Out Located Work

21.A.139(b)(1)(xv)

Where an organisation has the need to undertake production activity away from an approved location the control this activity shall be defined and documented with in the Production Management system The procedure should address:

- Planning
- Working environment assessment
- Execution (including tool control)
- Recording
- Inspection
- Certification

Personnel involved should also be described regarding competency and authorisation through the Production Management system.

Off-site/out located work could be required for rectification on an item (e.g., after incorporation of a design change, correction of a defect, inspection or test), completion of shortages etc.

A register of of-site working activity should be established and maintained.

This chapter should give general details of the off-site working procedure

2.12 Technical Records

21.A.139(b)(1)(x), 21.A.165(d), (h)

This chapter should give an overview of the procedures and internal requirements for the archiving of technical records, that is those records that demonstrate the items produced conformed to the applicable design data relevant at the time of release. The procedure may include but not limited to as a minimum:

- The data/records required to be retained.
- Security of the record/data.
- Ability to recall and read the record/data.
- Period of retention.
- The personnel responsible for record retention.
- Flow down of requirements to outside parties.

If the archiving is sub-contracted to an outside party then details of how continuity of the archive is to be included when the contract is terminated for any reason, including liquidation of the sub-contractor.

2.13 Control and Handling of Critical Parts

21.A.139(b)(1), 21.A.805

This chapter should give details of how the special requirements for the control and handling, within production environment, of parts designated by the TCH as Critical Parts are obtained and implemented. The control and handling processes and procedures for critical parts within the production organisation must be defined and documented. These procedures need to consider:

- Review and implementation of production section of the DOA's critical parts plan.
- Establishment, implementation and change of frozen manufacturing plans / fixed practice approval.
- Identification of critical parts both physically and within the production data.
- Training of staff with regard to handling of critical parts.

2.14 Release to Service

21.A.139(b)(1)(xii)

The processes and procedures used for the release of aircraft, products, parts and appliances to service, under the privileges detailed in 21.A.163 (b), (c) and (e), shall be defined and documented. This chapter shall give a detailed overview of these procedures.

2.14.1 Aircraft

21.A.163(b) and (e), 21.A.165(c)(1) & (3), 21.A.165(i),

In the case of complete aircraft a statement of conformity (CAA Form 52) is issued by the POA to obtain an aircraft certificate of airworthiness and a noise certificate without further showing.

A statement of conformity is issued when it is determined by the POA that each completed aircraft conforms to the type design and is in condition for safe operation, and additionally, in the case of environmental requirements determine that the completed aeroplane is in compliance with the applicable CO_2 emissions requirements on the date its first certificate of airworthiness is issued.

The POA must define and document the processes and procedures for determination of the above and the items listed in GM No 3 to 21.A.165(c) Obligations of the holder – Condition for safe operation.

This chapter should give general details of the processes and procedures for release of complete aircraft to service.

2.14.1.1 Issue of Permit to Fly

21.A.139(b)(1)(xvii), 21.A.165(j), 21.A.711(c) & (e)

Part 21 allows a production organisation to issue a Permit to Fly for an aircraft it has produced when it is controlling the aircraft configuration under its POA and is attesting conformity with the appropriate design conditions. To obtain and exercise this privilege, 21.A.163(e), the processes and procedures governing the issue of a Permit to Fly shall be defined and documented. These procedures will address the requirements set out in Part 21 Subpart P:

The procedures may include but not limited to:

- Establishing and justifying the flight conditions in accordance with 21A.708 (including completion of CAA Form 18B).
- How conformity with approved conditions is made, documented and attested.
- The preparation and issuance of the permit to fly (including completion of CAA Form 20b).
- Authorised signatories.
- Interface with the responsible Aviation Authority for flights outside the UK.

A flight-test operations manual (FTOM) is required.

2.14.1.2 Pre-delivery Aircraft Maintenance Procedures

21.A.139(a), 21.A.163(d), 21.A.165(c)(1) & (3), 21.A.165(i),

Procedures to maintain a new aircraft that an organisation has produced shall be established and documented for this maintenance and the issue a certificate of release to service (CAA Form 53) in respect of that maintenance.

The POE and the FTOM shall include or reference these procedures.

In accordance with AMC 21.A.163(d) any maintenance activities must be recorded in the Aircraft Logbook. It must be signed by certifying staff for attesting the conformity of the work to the applicable airworthiness data.

Maintenance of parts and appliances required prior to the issue of the aircraft statement of conformity can only be carried out under the control of the aircraft manufacturer's POA.

AMC 21.A.163(d) also addresses maintenance of components outside the POA capability. Such maintenance activity outside the capability of the Aircraft POA holder may still be accomplished under the production approval of the original release organisation. In such circumstances the engine(s), propeller(s), parts and appliances will require re-release in accordance with GM 21.A.163(c) (CAA Form 1). The programme for this maintenance activity is still managed by the aircraft manufacturer's POA.

This chapter should give general details of the processes and procedures for the control of aircraft maintenance prior to release to service.

2.14.2 Products, Parts and Appliances

21.A.163(c), AMC 1 to 21.A.163(c), AMC 2 to 21.A.163(c), 21.A.165(c)(2) & (3), 21.A.165(c)(4)

The ARC for products, parts and appliances is a CAA Form 1. Certifying Staff will ensure that the manufactured item has been completed in accordance with the applicable design data; the procedures specified in this exposition and that the accompanying records are complete, before signing the CAA Form 1. Only personnel authorised as Certifying Staff may sign the ARC. A personal authorisation stamp may also be applied.

The procedure detailing the actions of Certifying Staff when completing a CAA Form 1 should address where applicable:

Qualification for a CAA Form 1 release:

- That the subject parts qualify for release on an CAA Form 1:
- That the subject part number(s) is covered by current POA scope
- That the subject part number(s) is covered by a DOA/POA arrangement
- That the subject part number(s) is permitted for direct delivery to end users if applicable
- Contract / Purchase Order requirements have been addressed
- If producing a part in accordance with foreign approved design data the requirements of bilateral agreements or working arrangements are addressed

Certification of conformity to applicable design data:

- That the subject part number(s) are in compliance with the applicable production documents and applicable design data
- That the applicable design data is approved (e.g. via TC/STC/UKTSO or minor change) for airworthiness purposes or will be subject to such an approval for conformity purposes
- Completeness of all specified and executed production operations
- Approval and execution of concessions - those concessions that affect fit, form or function shall be stated in block 12 of the CAA Form 1
- Valid change status (modification, amendment) is recorded
- That the part(s) (and packaging where applicable) are appropriately identified
- Compliance with applicable airworthiness directives

Condition for safe operation:

- Compliance with specified storage terms and conditions (life limited items/time controls are respected, tamper, alteration, deterioration)
- Completeness of specified tests, (e.g. production acceptance tests and available test records)
- Visual inspection for damage, corrosion, leaks, etc.
- inspections for foreign objects

Issue a release certificate:

- That the CAA Form 1 is completed correctly. Refer to Appendix 1 to Part 21 – Completion Instructions

- Sign the CAA Form 1 when satisfied that the part(s) conform to the applicable design data and that the parts are in a condition for safe operation.
- Where a computer-generated signature and electronic exchange of the CAA Form 1 signature is to be used refer to AMC No 1 to 21.A.163(c)

The CAA Form 1 shall be restricted to one page.

For recertification and correcting errors on a certificate refer to Appendix 1 to Part 21

Where the organisation holds privileges in addition to release of the UK CAA Form 1 these should be addressed in a similar manner.

2.15 Reportable Occurrence Reporting

21.A.165(f), Article 4 of UK Reg (EU) 376/2014 Mandatory Occurrence Reporting

This paragraph may demonstrate the procedure for reporting all cases of products parts or appliances that have been released by the organisation that are potentially non-compliant with the applicable design data to the TCH or DOH and the customer if a POA. If the non-compliance could lead to a potential unsafe condition, then the occurrence must also be reported to the CAA.

The details may include but not limited to:

- The method of reporting.
- The person/department responsible for reporting.
- Reporting timescales.
- Minimum pertinent information.

Part 3 – Production Management System

3.1 Management System Documents

This chapter should give general details of the processes and procedures used to draft, approve, issue, maintain, and amend management system documents. It should name the individual and/or department that is responsible for issuance of the documents. If the production organisation holds one or more additional organisation certificates within the scope of UK Reg (EU) 2018/1139, the production management system may be integrated with that required under the additional certificate held.

3.1.1 Document Distribution

21.A.139(a), 21.A.165(a)

This paragraph should give general details of the methods used to distribute management system documents to relevant staff. This should include the mechanisms used to ensure the relevant staff are made aware of the document content and amendments.

3.1.2 Document Issue, Approval, and Amendment

21.A.139(a), 21.A.139(b)(1)(i), 21.A.165(a), 21.A.139(d)(2)(i)

This paragraph should give general details of the processes and procedures controlling the drafting, approval, issue, periodic review, and amendment of management system documents. This should include the personnel responsible for approval and periodic review of the documents.

3.2 Safety Assurance Monitoring

21.A.139(b)(1)(xiv), 21.A.139(2), GM 1 to 21.A.139(b)(2), GM 2 to 21.A.139(b)(2)

This chapter should give general details of the independent quality assurance function that monitors compliance of the organisation documented quality management system as well as determining it is effectively implemented and maintained. It should detail the methods by which the system is monitored, how non-compliances classified, issued, and resolved, as well as details of the methods used to feedback results to the Accountable Manager and nominated post holders.

The chapter should also include, general details of the system used for process and product audits.

3.2.1 Safety Management Element

21.A.139(c)

It is likely some, if not many of the elements that make up a Safety Management System (SMS) are already in place within an organisation, but perhaps they are not formalised or clearly documented.

Regardless of the activities, size and complexity of the organisation, for the SMS to be effective, all the elements of the SMS framework are necessary. The implementation of the SMS should be tailored to the organisation and its activities.

Components and elements of the ICAO SMS framework

COMPONENT	ELEMENT
1. Safety policy and objectives	1.1 Management commitment
	1.2 Safety accountability and responsibilities
	1.3 Appointment of key safety personnel
	1.4 Coordination of emergency response planning
	1.5 SMS documentation
2. Safety risk management	2.1 Hazard identification
	2.2 Safety risk assessment and mitigation
3. Safety assurance	3.1 Safety performance monitoring and measurement
	3.2 The management of change
	3.3 Continuous improvement of the SMS
4. Safety promotion	4.1 Training and education
	4.2 Safety communication

For the purpose of the SMS scalability, the information contained within the relevant sections of this User Guide document may be considered to support SMS implementation,.

3.2.1.1 SMS documentation.

An SMS ideally should be supported by robust, current controlled and freely available SMS documentation. This provides the basis to share the organisation's Safety Policy and processes so everyone can find detailed information about SMS procedures and processes simply and efficiently.

For the purpose of SMS scalability, as a minimum the following SMS documentation will be necessary for the organisation's SMS.

- Safety policy and objectives of the SMS
- The responsibilities of the accountable manager and key safety personnel
- Safety-related processes, procedures, or checklists (including your ERP)
- Results of, and subsequent actions from, any safety audits or assessments
- Results of any risk assessments and mitigation measures (controls or defences) in place
- A hazard and risk register.

For the purpose of SMS scalability, in small simple organisations, a separate SMS Manual may be used, that is a very concise, simple document mainly referencing existing procedures, or it may be a new section within the POE or other company operating manual. Where a separate SMS Manual is being used, or the details of the SMS processes are contained within other documents, then appropriate cross-referencing to such documents within the POE will be made.

This document ideally may be held as either hard copy or electronic storage, which must be secure and reliable.

3.2.1.2 Coordination of Emergency Response planning.

An emergency response plan (ERP) should be put in place to facilitate management of a hazardous event or major accident and to mitigate the impact on normal operations.

For the purpose of SMS scalability, where a separate SMS Manual is being used, or the details of the ERP processes are contained within other documents, then appropriate cross-referencing to such documents within the POE will be made.

At a minimum the documented ERP procedures should cover;

- The orderly transition from normal to emergency operations
- Designation of your emergency coordinator or authorised emergency leader both within and outside of normal business hours
- Assignment of emergency roles and responsibilities including delegated backups
- Coordination of external communications during the event i.e. who is responsible for contacting and liaising with emergency services, the local media etc.
- Ensuring the safe continuation of other operations.

In a small organisation the ERP could be a simple set of basic checklists designed to be used in various emergency scenarios, alongside an Emergency Contacts List.

While scalable, the ERP should be understood by all key personnel. A regular practice of the ERP should be carried out to ensure it remains up to date, where all emergency contacts (Internal & External) are accurate to ensure any necessary interfacing and coordination remains substantial during such events.

3.2.1.3 Safety action planning

AMC1 21.A.139(a), GM1 21.A.139(c)(2)

This paragraph describes the safety action planning process in place, describing the Safety Review Board (SRB) and Safety Action Group (when applicable) composition, meetings and functions.

For the purpose of SMS scalability, where a separate SMS Manual is being used, or the details of the safety action planning processes are contained within other documents, then appropriate cross-referencing to such documents within the POE will be made.

The Safety Review Board (SRB) is a high-level committee which considers strategic safety functions. The accountable manager should be actively involved in the SRB and normally chairs the meeting. The SRB should normally include the senior management/ nominated persons of the organisation. Membership of the board and frequency of meetings should be defined.

The SRB ensures that appropriate resources are allocated to achieve the established safety performance and gives strategic direction to the safety action group. It should also look to the Safety Action Group (SAG) to highlight significant risk issues and provide an input to the high-level strategy.

The SRB monitors:

- Safety performance against the safety policy and objectives;
- Effectiveness of the SMS;

- Effectiveness of the safety oversight of sub-contracted organisations;
- Corrective or mitigating actions are being taken in a timely manner;
- Effectiveness of the organisation's safety management processes.

The SRB may also be tasked with:

- reviewing the results of compliance monitoring;
- monitoring the implementation of related corrective and preventive actions.

Depending on the size of the organisation and the nature and complexity of its activities, a safety action group may be established as a standing group or as an ad hoc group to assist, or act on behalf of the Safety Manager or the SRB.

More than one SAG may be established, depending on the scope of the task and the specific expertise required. The SAG usually reports to, and takes strategic direction from, the SRB, and may be composed of managers, supervisors and personnel from operational areas.

The SAG may be tasked with or assist in:

- monitoring safety performance.
- defining actions to control risks to an acceptable level.
- assessing the impact of organisational changes on safety.
- ensuring that safety actions are implemented within agreed timescales.
- reviewing the effectiveness of previous safety actions and safety promotion.

This procedure should also specify when/how often SRB meetings and SAG meetings take place.

3.2.1.4 Safety Risk Management

AMC1 21.A.139(c)(3) and (4)

This paragraph used to describe how risks are identified and the mitigating action(s) in place to reduce them.

For the purpose of SMS scalability, where a separate SMS Manual is being used, or the details of the Safety Risk Management processes are contained within other documents, then appropriate cross-referencing to such documents within the POE will be made.

Hazard identification and safety risk management schemes

This paragraph should describe the identification of safety hazards associated with the production activities, the assessment of the associated safety risks and the investigation process, including the mitigation actions to monitor their effectiveness.

Further guidance is available in CAP 795 Safety Management Systems - Guidance to Organisations Chapter 4.

It may be easier to refer to hazards as safety issues, these can be anything that could lead to an aircraft accident. Unless the hazards/safety issues are known, the risk they pose cannot be identified.

Hazard identification process

- Process for safety data collection - proactive and reactive methods.
- Identification of data sources, external and internal.

- Process for safety data analysis.
- Procedure(s) for the identification and classification of hazards relevant to the Organisation/activity.
- Records management (hazard log/register).
- Responsibilities and management of the hazard log.
- Internal communication process.

Safety risk management

The Organisation should describe in detail the risk assessment process in place.

Once hazards are identified, the risk of their consequences should be assessed, analysed and mitigation actions should be implemented accordingly. A formal safety risk management process should be developed and maintained which considers the following:

- Analysis process (e.g. in terms of the probability and severity of the consequences of hazards and occurrences)
- Assessment (in terms of tolerability)
    - The organisation should assess the acceptability of the potential consequences associated with the potential occurrences and hazards identified. This should be done in accordance with the organisation's defined safety performance criteria.
- Control (in terms of mitigation) of risks to an acceptable level.
    - Decision-making process, including responsibilities.
    - Implementation of actions - The responsible person/position in charge of the implementation and management of mitigation measures should be identified (including follow-up procedure).
    - Monitoring of the effectiveness of the implemented actions - When necessary, risk controls should be changed because of that assessment.
- The likelihood and severity should be clearly defined.

Regardless of the method used (ICAO safety risk matrix, ARMS, BOW-TIE, etc.), it is important to customise the risk assessment matrix to reflect the Organisation/activity.

For the purpose of SMS scalability, within a smaller organisation a simple process can be developed to actively look for safety issues, whereby everyone is encouraged to report safety issues. An example of a simple Hazard Log as shown below may put in place.

- *Paper Forms may be used instead of dedicated software.*
- *A simple layered approach may be applied, as per example below:*

Identified Hazard	Associated Risk	Existing Mitigation Measures in Place	Current Level of risk	Further Mitigation Measures	Revised Level of Risk	Action by who & when
Example						
Missing attachment bolt	Connecting fork detaches leading to system failure and control loss	Introduced 2nd Operator	Severity - 5 Likelihood - 3	Change production process to include Operator cross-check	Severity -5	A.N.Other July 2024

'All safety events, issues, or hazards should be reported to [insert name] by e-mail [insert e-mail address], telephone [insert telephone number] or verbally; they will all be documented and assessed as below.

All events and reported issues will be assessed by [insert name] to determine what the issue is, what could happen as a result, and what actions need to be taken (if any) and by whom to manage the risk.

The Hazard Log must be updated and reviewed quarterly, and the updated version will be posted on the (state location i.e., workshop safety notice board). All staff should read the Hazard Log and provide feedback, if they have any issues with the content or feel something is missing.

For organisations with a lower risk level, the risk assessment model used may be very simple in cases in which the identified hazards are easy to mitigate. The organisation should classify risks in a consistent manner, Expert judgement might be sufficient to measure the efficiency of the safety barriers, especially when the volume of data or safety information does not allow to precisely support the evaluation of the likelihood and the severity of the consequences of the hazards.

The mechanism and the type of safety information to report to the relevant bodies will depend on the organisation's size and structure and the process for the decision-making (e.g., which level of authority).

Resources should be allocated as required to reflect the organisation's size and structure to support an effective management system. Some options include:

- *Justification for a full-time safety manager,*
- *a safety action group may be established as a standing group or as an ad hoc group to assist or act on behalf of the Safety Manager or SRB,*
- *a formal SRB may not need to be established. In this case, the tasks normally allocated to the safety review board should be allocated to the safety manager.'*

3.2.1.5 Internal safety reporting and investigations.

AMC1 21.A.139(c) (3) and (4)

For the purpose of SMS scalability, where a separate SMS Manual is being used, or the details of the internal safety reporting and investigation processes are contained within other documents, then appropriate cross-referencing to such documents within the POE will be made.

An example of a Safety Reporting Form for a Small Organisation is shown in the Section 3 - Appendices, 3.2 Safety Reporting Form.

Safety Reporting Scheme

As part of its management system, the organisation shall establish an internal safety reporting scheme to enable the collection and evaluation of occurrences to be reported, as detailed in POE 2.15.

Through this scheme, the organisation shall:

- identify the causes of and contributing factors to any errors, near misses, and hazards reported and address them as part of safety risk management process.
- ensure evaluation of all known, relevant information relating to errors, the inability to follow procedures, near misses, and hazards, and a method to circulate the information as necessary.
- Safety reports should be used to enhance safety rather than apportion blame. To encourage reporting without fear of repercussion, it is important that all staff members understand the open and just culture expressed in the reporting policy.

For the purpose of SMS scalability, a separate reporting policy may not be required if individuals are closely involved in key aspects of the organisation's operations and so employees feel free to report safety-related information.

For the purpose of SMS scalability, an example of the Safety Reporting Policy could be as follows;

Our organisation fully supports and encourages a culture of openness and trust between all personnel. This can only be achieved when all employees feel they are able to report occurrences or hazards without the fear of retaliation.

To that end, personnel reporting safety-related issues shall not be subject to disciplinary action except where there is clear evidence of:

- *Gross negligence;*
- *Intentional disregard of regulations or procedures;*
- *Attempted cover up;*
- *Criminal intent; or*
- *Use of illegal substances.*

This paragraph should include, but not be limited to, the following information, with respect to the internal safety reporting scheme:

Confidentiality and safety promotion

The internal safety reporting scheme should be a confidential reporting system and enable and encourage free and frank reporting of any potentially safety-related occurrence, including incidents such as errors or near misses, safety issues and hazards identified. This will be facilitated by the establishment of a just culture.

Identification of clear policy and objectives

The internal safety reporting scheme should include:

- clearly identified aims and objectives with demonstrable corporate commitment;
- a just culture policy as part of the safety policy (as defined in POE 1.2), and related just culture implementation procedures;

Safety investigation process

When further investigation of a safety issue is necessary to determine the exact cause and the contributing factors, using a root cause analysis method for investigations will help to get to the main element(s) that is causing the issue.

There may not be the time or resources to investigate all that is reported.

In line with its just culture policy, the organisation should define how to investigate incidents such as errors or near misses, to understand not only what happened, but also how it happened, to prevent or reduce the probability and/or consequence of future recurrences.

The scope of internal investigations should extend beyond the scope of the occurrences required to be reported to the CAA in accordance with POE 2.15.

The internal safety reporting scheme should include a detailed process:

- to identify those reports which require further investigation;
- to classify occurrences against the mandatory reportable criteria established in POE 2.18 and decide on further actions accordingly;
- to investigate all the causal and contributing factors, including any technical, organisational, managerial, or Human Factor issues, or any other contributing factors related to the occurrence, incident, error or near miss;
- to analyse the collective data showing the trends and frequencies of the contributing factor;
- to identify, implement and monitor the effectiveness of the appropriate corrective and preventive actions based on the findings of investigations.
- Additional considerations for this chapter include:
- Initial and recurrent training requirements for staff involved in internal investigations;
- Coordination and cooperation with the customer and design approval holder on occurrence investigations by exchanging relevant information to improve aviation safety;
- Recurrent training updates, in accordance with the established training policy and procedures, whilst maintaining appropriate confidentiality;
- Feedback loop to reporters and other production staff
    - Consideration should be given to giving feedback to any relevant subcontractors or suppliers.

For the purpose of SMS scalability, a simple approach is to review the safety reports and occurrences. This may be accomplished by the Safety Manager. The events and reported issues can then be assessed for severity and likelihood and further assessed using definitions within a risk acceptability matrix.

- Gather information - what happened, where, who.
- Speak with those involved - obtained facts from those there.
- Analyse the information - examine facts, has it happened before, contributory factors.

- Identify corrective actions.
- Develop and implement an action plan - apply realistic timescales. Keep employees informed of corrective action plan and implementation progress.

The Five Whys Approach for Root Cause Analysis is a simple method that can be used to aid the investigation and support the necessary corrective action.

An example of the Five Whys method is shown;

Problem Statement – At 3:00 AM on March 1 this year, both aircraft wings were punctured on C-FOX during a retraction test of the nose gear at Prairie Base, even though landing gear safety pins had been installed.

1. Why did the main gear retract with the pins installed?			
A: The apprentice engineer installed the landing gear pins in the wrong hole.			
2. Why did the apprentice install the pins in the wrong hole?			
Organizational Factors	**Supervision**	**Environment**	**Human Factors**
A: These holes had not been filled, as recommended by the aircraft manufacturer's service bulletin (SB).	A: The apprentice had never been shown the correct location for the pins and was completing the work without supervision.	A: The lighting in the hangar was not adequate for night working conditions.	A: The apprentice was working under pressure.
3. Why was the SB not complied with?	**3. Why** was the apprentice completing unsupervised work without adequate direction?	**3. Why** was the lighting in the hangar inadequate?	**3. Why** was the apprentice working under pressure?
A: It was in a pile of SB's that had not been assessed.	A: The supervising engineer was on vacation that week. The apprentice had completed similar tasks to this before and felt qualified to complete this task.	A: The lights were more than 20 years old and some of the fixtures were broken.	A: The aircraft had to fly at 6:00 AM, the aircraft maintenance manual required the retraction test to be done, and the apprentice was fatigued.
4. Why had the SB's not been assessed?	**4. Why** were there no arrangements to ensure alternate supervision?	**4. Why** were the fixtures not repaired or replaced?	**4. Why** was the apprentice fatigued?
A: The company did not have a documented procedure for assessing SB's.	A: Management did not foresee the schedule conflict in time to correct the omission.	A: Management did not upgrade the lighting when the hangar was purchased 15 years ago, and did not act on complaints made about poor lighting.	A: The apprentice was finishing a 12-hour graveyard shift, and did not recognize the cumulative effect of fatigue and pressure on work performance.
5. Why was there no procedure for assessing SB's?	**5. Why** did management not foresee the schedule conflict in time to compensate?	**5. Why** was the lighting not upgraded when complaints were received?	**5. Why** did the apprentice not recognize the effect of these factors on work performance?
A: The Director of Maintenance was over-tasked due to a staff shortage.	A: Although staff must get approval for vacation time, no one in Scheduling followed up to see if there was a conflict.	A: Senior management did not feel there was a need to upgrade the lighting, citing expense reasons.	A: Human factors training had not been provided.

Safety Risk Assessment and Mitigation

Following investigation, the Risk assessment determines whether the identified risk can be accepted as is, or if not the necessary action to reduce it (control or mitigation). Following the assessment, a validation may be carried out independently by the Safety Manager, Accountable Manager, or Quality Manager.

The following tables provide simple definitions for classification of consequences and occurrences.

Severity and Likelihood Definitions

Severity of Consequences		
Definition	**Meaning**	**Value**
Fatal Accident	Results in a serious accident or incident with fatalities	5
Serious Incident	Results in a Serious Incident (without fatalities) that would be reportable to the NAA	3
Negligible	Results in minor incident that would not be reportable to the NAA	1

Likelihood of Occurrence		
Qualitative Definition	**Meaning**	**Value**
Likely	Likely to reoccur or to occur several times in a year	3
Possible	Possibly reoccur or to occur at least once a year	2
Unlikely	Very unlikely to reoccur or occur	1

For the purpose of SMS scalability, the risk matrix may be useful, but in very small organisations may not be deemed as necessary.

Risk Acceptability Matrix

		Likelihood		
Severity		Unlikely (1)	Possible (2)	Likely (3)
	Fatal Accident (5)	Review (5)	Unacceptable (10)	Unacceptable (15)
	Serious Incident (3)	Review (3)	Review (6)	Unacceptable (9)
	Negligible (1)	Acceptable (1)	Acceptable (2)	Review (3)

Risk Acceptance Actions

The actions shall be prioritized by the score from the Risk Acceptability Matrix,

Unacceptable	Risk Intolerable, Accountable Manager immediately informed, and action must be taken to reduce the risk to a tolerable level.
Review	Risk reduction / mitigation must be considered. Where risk reduction / mitigation is not practical or viable acceptance by Accountable Manager is required.
Acceptable	Risk is considered acceptable but would be reviewed if reoccurs

3.2.1.6 Safety performance monitoring and measurement

AMC1 21.A.139(c) (3) and (4)

How the safety performance is measured is dependent upon the organisation. The number of safety issues reported and resolved may be considered a far more useful indicator than the number of accidents, unless there is a large number.

For the purpose of SMS scalability, where a separate SMS Manual is being used, or the details of the safety performance monitoring and measurement processes are contained within other documents, then appropriate cross-referencing to such documents within the POE will be made.

A key function of the SMS is assurance that the system is working and is effective. This involves:

- The setting and monitoring of Safety Performance Indicators (SPIs) to measure the organisation's safety performance;
- Assessing the effectiveness of the SMS by confirming that the mitigations, controls and defences put in place are working and effective to ensure safe operational practices;
- Monitoring compliance with the appropriate regulations and standards.

Note: These all require safety and compliance monitoring to be integrated or working closely together.

Safety Performance Indicators (SPIs)

Are used to monitor how close an organisation is to achieving safety goals, targets, and objectives. These help to determine how effective the SMS is. For effective monitoring, when used alongside annual reviews of applicable numbers, regular monitoring of SPIs allows action to taken when undesirable trends occur.

For the purpose of SMS scalability, there are some generic SPIs that apply to all organisations, others that will apply to specific types of organisations, and those that are bespoke to an organisation.

Generic SPIs include:

- Number of major risk incidents (as defined in your Safety Management Manual),
- Number of mandatory reports,
- Number of voluntary reports,
- Number of overdue safety report closures,
- Number of safety meetings,
- Number of safety briefings, and
- Number of safety audits.

These indicators are all easily monitored and show the health of the organisation's management of safety. Targets will need to be set, perhaps on the basis of number of events in the preceding months or by a calendar date. This should be clearly stated.

For the purpose of SMS scalability, an example of SPIs that may be used for a small organisation is shown in the Section 3 - Appendices, 3.0 Safety Performance Indicators.

Safety objectives need to have been established before setting SPIs. This allows the safety performance of the organisation to be measured against its safety policies and objectives. Organisations should review the CAA Safety Plan as this may provide ideas for SPIs.

Once safety objectives have been set then SPIs can be established. SPIs can be used to measure the performance of the SMS and the operational safety performance. SPIs may require the monitoring of data from various sources such as;

- Occurrences and events;
- Safety reports;
- Safety studies;
- Safety reviews including trend analysis;
- Audits - Safety audits are used to ensure that the structure of the SMS is sound in terms of:
    - Adequate staff levels;
    - Compliance with approved procedures and instructions;
    - Levels of competency and training to carry out specific roles;
    - Maintaining required levels of performance;
    - Achievement of the safety policy and objectives;
    - Effectiveness of interventions and risk mitigations.
- Surveys - Safety surveys may be carried out, to examine elements or procedures of a specific area, such as the following:
    - the problem areas identified;
    - bottlenecks in the daily production management activities;
    - the perceptions and opinions of the production management personnel;
    - any areas of dissent or confusion
- Internal safety investigations.

The organisation should continuously seek to improve its safety performance and the effectiveness of its production management system. Continuous improvement may be achieved through review of the following elements:

- compliance monitoring and audits;
- assessments, including assessments of the effectiveness of the safety culture and of the management system, to assess in particular the effectiveness of the safety risk management processes;
- staff surveys, including safety culture surveys, that can provide useful feedback on how engaged the staff are in the production management system;
- the monitoring of events and their recurrence;

- the evaluation of the safety performance indicators as well as reviews of all the available safety performance information; and
- the identification of lessons learned.

3.2.1.7 The Management of Change.

AMC1 21.A.139(c)(4)(ii)

For the purpose of SMS scalability, where a separate SMS Manual is being used, or the details of the management of change processes are contained within other documents, then appropriate cross-referencing to such documents can be made.

Changes in organisational structure, facilities, scope of work, personnel, documentation, policies and procedures, can result in unintended consequences and the inadvertent introduction of new hazards, exposing the organisation to new or increased safety risk(s).

The SMS should aim to cover the identification of any changes that may pose a risk to aviation safety.

The introduction of a change is the trigger for the organisation to perform their hazard identification and risk management process.

Some examples of change include, but are not limited to:

- changes to the organisational structure.
- the inclusion of a new production/manufacturing method.
- the addition of new rating or increase in limitation of an approval.
- significant changes in personnel (affecting key personnel and/or large numbers of personnel, high turnover).
- new or amended regulations.
- changes in the security arrangements.
- changes in the economic situation of an organisation (e.g. commercial or financial pressure).
- new schedule(s), location(s), equipment, and/or operational procedures; and
- the addition of new subcontractor.

The change management process should consider:

- Identification and description of the change
- Assessment of the criticality and impact
- Existing controls and implementation of new controls
- Change implementation and transition period
- Monitoring the effectiveness of the change implementation

The Organisation must develop and maintain a process to identify and assess changes which may affect the level of safety risk associated with its services and to identify and manage the safety risks that may arise from those changes. The management of change should be a documented process to identify external and internal changes that may have an adverse effect on the safety and compliance of its continuing airworthiness management activities.

Regardless of the magnitude of the change, large or small, its safety implications should always be proactively considered. This is primarily the responsibility of the team that proposes and/or implements the change.

The magnitude of a change, its safety criticality, and its potential impact on human performance should be assessed in any change management process. A change may have the potential to introduce new, or to exacerbate pre-existing, human factors issues.

The purpose of integrating human factors into the management of change is to minimise potential risks by specifically considering the impact of the change on the people within a system.

The process should also consider business related changes (organisational restructuring, resources, IT projects, etc.) and interfaces with other organisations/departments. Responsibilities and timelines should be defined.

Any significant organizational changes will be assessed for safety issues related to the change and documented in the hazard log.

If appropriate, an ad-hoc meeting will be arranged with all available staff to discuss significant changes where their expertise will be beneficial to identify possible safety issues. Any actions or decisions from this meeting will be documented.

For the purpose of SMS scaleability a management of change template is shown in the Section 3 - Appendices, 4.0 Safety Reporting Form.

3.2.1.8 Safety Promotion

AMC1 21.A.139(c)(5)

The Safety training, combined with safety communication and information sharing, forms part of safety promotion. Safety Promotion demonstrates to personnel, and customers the organisations ongoing commitment to safety management.

For the purpose of SMS scalability, where a separate SMS Manual is being used, or the details of safety promotion and training are contained within other documents, then appropriate cross-referencing to such documents within the POE will be made.

Safety Training

The training programme should identify the initial and recurrent training requirements along with the timelines. The main purpose of the safety training programme is:

- to support safety management policies and processes; and
- to ensure that personnel at all levels of the organisation develop and maintain their competency to fulfil their safety roles.

Each organisation may adapt its syllabus to its own needs. Typically, depending on the targeted staff, to contribute to a positive safety culture, the following items may be included:

- the organisational roles and responsibilities related to safety, including the hazard identification and risk management processes;
- the safety objectives and the associated safety performance indicators;
- human factors (HF) principles, including human performance (HP) and limitations;
- legislation, where applicable;

- safety reporting systems and investigations; and
- what safety issues should be reported.

The purpose of the recurrent safety training is:

- primarily to ensure that staff are kept abreast notably of changes to safety management system (SMS) principles, processes, and procedures; and
- also to share feedback on safety issues that are relevant to the organisation or lessons learned.

The organisation should ensure;

- All management staff can demonstrate an understanding of safety management principles along with the safety objectives to ensure continued competency.
- Staff who have been designated safety management responsibilities are familiar with the relevant processes in terms of hazard identification, risk management, and the monitoring of safety performance.
- Categories of other staff that will require safety training are identified.

Safety Communication

The organisation should establish communication about safety matters that:

- ensures that all personnel are aware of the safety management activities, as appropriate, for their safety responsibilities.
- conveys safety-critical information, especially related to assessed risks and analysed hazards.
- explains why particular actions are taken; and
- explains why safety procedures are introduced or changed.

Communication means/information sharing related to safety matters.

Significant events, changes and investigation outcomes should be communicated. Safety policy and objectives should be known by staff.

Regular meetings with personnel at which information, actions, and procedures are discussed, may be used to communicate safety matters. Safety bulletins/communications/newsletters/emails/etc. are other means used to share safety information.

The process should describe what, when, and how safety information needs to be communicated. Subcontracted/Contracted organisations should be included in the communication where appropriate.

The means of communication should be adapted to the audience and the significance of what is being communicated.

3.2.2 System Audits

This paragraph should give general details of the planning, implementation, and maintenance of audit programmes of the safety management system, it should include frequency, methods, responsibilities, planning requirements, and reporting which should take into account the importance of the processes concerned, changes affecting the organisation as well as results of previous audits.

Additionally, details of auditor selection with consideration of ensuring objectivity and impartiality of the audit process should be included.

3.2.3 Process/Product Audits

AMC1 21.A.139(c)(1)

General details of the planning, implementation of process and product audits including the selection of audit subject, frequency, methods, responsibilities, planning requirements, and reporting which should take into account the criticality of the processes and manufactured items as well as changes affecting the manufacturing processes.

Details of auditor selection considering technical competency as well as ensuring objectivity and impartiality of the audit.

3.2.4 Corrective Action Procedure

21.A.158, CAP 1760 Effective Problem Solving and Root Cause Identification

This paragraph should detail the timescales associated with development and implementation of corrective actions for identified nonconformity, as well as the escalation procedures if the timescales are not met. Additionally, general details of how the corrective action process for each identified nonconformity is monitored and who is responsible for monitoring the corrective action process.

The paragraph should give general details of the processes and methods used by the organisation to develop effective corrective actions for identified noncompliance. The details may include but not limited to:

- establishment of a problem statement,
- identification the risks associated with the identified noncompliance,
- development of containment actions,
- identification of root cause and associated contributory factors,
- development, implementation and monitoring of corrective actions.

3.2.5 Quality Management System Review

The Accountable Manager and nominated post holders should review, at planned regular intervals, the quality management system with regard to its continued compliance with regulations as well as its suitability and effectiveness.

Review planning and agenda should consider but not limited to:

- Status of actions from previous management reviews
- Changes in external issues such as regulation amendments
- Data on the performance and effectiveness of the quality management system in maintaining compliance with the regulations, such as:
  - Feedback from customers
  - Process performance and conformity of manufactured items
  - Nonconformities and corrective actions
  - Monitoring and measurement results
  - Internal and external audits
  - Performance of outside parties
  - Adequacy and capability of resources.

3.3 Supplier Evaluation & Control Procedure

21.A.139(b)(1)(ii), AMC 1 to 21.A.139(b)(1)(ii), AMC 2 to 21.A.139(b)(1)(ii) and CAP 562 Leaflet C-180 Control of Production Suppliers and Subcontractors
21.A.8(b), 21.A.139(d)(2)(ii), AMC1 21.A.139 (c)(3) and (4)

The POA holder is responsible for determining and applying acceptance standards for physical condition, configuration status and conformity of not only of products, parts, and appliances manufactured inhouse but also those supplied by outside parties, whether to be used in production or delivered to customers as spare parts. This responsibility also includes buyer furnished equipment, or customer supplied items.

The POA holder is responsible for ensuring that hazard identification and risk management activities are performed on subcontracted activities.

To discharge this responsibility should determine the controls to be applied to parts, appliances, processes, and services supplied by outside parties to ensure conformity of parts and appliances released to design data. In addition, the quality management system needs an organisational structure and procedures to adequately control external suppliers of parts, appliances, special processes, and services.

This chapter shall detail the processes/techniques, as appropriate, for evaluation, selection, monitoring of performance and re-evaluation of outside parties based on their ability to provide parts, appliances, processes, and/or services in accordance with identified and specified requirements that ensure conformity to design data. The detail should include as necessary but not limited to:

- Qualification and auditing of supplier's Production Management system
- Evaluation of supplier capability in performing all manufacturing activities, inspections and tests necessary to establish conformity of parts or appliances to type design.
- First article inspection, including destruction as necessary, to verify that the article conforms to the applicable data for new production line or new supplier.
- Validation and control of special processes.
- Supplier risk assessment and rating system that reflects the quality performance and reliability of the suppliers.
- Include specific provisions in the control procedures for any critical parts.
- Any additional work, tests or inspection which may be needed for parts or appliances which are to be delivered as spare parts and which are not subjected to the checks normally provided by subsequent production or inspection stages.
- Detail how any delegations are managed and controlled. Such delegations are to be indicated / listed on the supplier list, Chapter 1.12.

Where an organisation is part of a wider group, then the outside party surveillance, performance monitoring and oversight plans may be captured at a group level, in such instances the arrangements and feedback methods are to be detailed in this paragraph.

Any arrangements in place to utilise other parties for supplier assessment and surveillance are to be detailed.

Where an Organisation relies on significant subcontractors to be able to support its scope of approval, the CAA may require that these organisations to be separately listed in the POE.

An intention to change such a significant subcontractor may be considered a significant change under 21.A.147(a) and may need to be approved by the CAA.

The below chart must be completed so that the UK CAA can determine the level of supply chain activity and associated risk:

Approximate Percentage of Production Contracted	
Approximate Number of Units delivered by Subcontractors	
Approximate Number of UK Subcontractors	
Number of UK Subcontractors undertaking critical activity	
Approximate Numbers of Overseas Subcontractors	
Number of Overseas Subcontractors undertaking critical activity	
Full Time Equivalent (FTE) Personnel undertaking Supplier QA Activity	
Number of On-Site Audits undertaken annually	

3.4 Staff Competency, Qualification and Authorisation

21.A.139(b)(1)(xi), 21.A.145(a), GM 21.A.145(a)

This chapter shall give a general description of the processes and procedures controlling competency demonstration and authorisation of staff. These processes and procedures shall be defined and documented. Such procedures may address but not limited to the following;

- The methods used to demonstrate competency.
    - Training
    - Experience
    - Examination
    - Job performance assessment
    - Physical examination for example eyesight (all near vision tests should be conduction in accordance with standard ISO 184900) and hearing.
- Determination of competency standard for each role within the approved production organisation.
- Documentation of the competency assessment.
- Authorisation of staff to perform unsupervised production activities.
- Monitoring of staff competency.
- Actions to be taken when assessment is not satisfactory.
- Retention of competency assessment documentation.
- Continuation training.
- Personnel/Departments responsible for competency assessment, competency monitoring, staff authorisation and staff competency record retention.

Competence should be defined as a measurable skill or standard of performance, knowledge and understanding, taking into consideration attitude and behaviour.

3.4.1 Special Processes/Task Operatives

21.A.145(a), GM 21.A.145(a)

Personnel who undertake specialised production activities shall be appropriately qualified in accordance with officially recognised standards or to a procedure and a standard agreed by the CAA. Recognised standards:

ISO 24394	Welding for aerospace applications. Qualification test for welders and welding operators. Fusion welding of metallic components.
EN 4179	Aerospace series. Qualification and approval of personnel for non-destructive testing

Examples of specialised production activities:

- Manufacturing engineering
- Inspection via specialist equipment
- Machining (non-CNC machining)
- Chemical analysis
- Tool Calibration
- Composite Layup

Special processes include procedures that alter or change the mechanical, chemical or physical parts of products within the operation or process, they require rigorous, standard-specific practices as well as qualified personnel or employees.

3.4.2 Certifying Staff

21.A.145(a), 21.A.145(d), AMC 21.A.145(d)(1)

This paragraph should give details of the processes and procedures used to selected, qualify, authorise and monitor performance of Certifying Staff. The processes and procedures shall be defined and documented. The procedures shall address as a minimum:

- Knowledge, background and experience requirements
- Undertaking other functions
- Specific training, examination and competency demonstration requirements
- Evidence of authorisation and scope of authorisation
- Authorisation issue and renewal
- Continuation training
- Performance monitoring
- Actions to be taken when performance is not satisfactory.
- Qualification and authorisation of subcontractor's personnel (if applicable)
- Approval of non-design related flight conditions and Issue of Permit to Fly (if applicable)

3.4.3 Auditors

21.A.145(a), GM 21.A.145(a), 21.A.145(c)(3) GM No 1 to 21.A.139(b)(2)

This paragraph should give details of the processes and procedures used to selected, qualify, authorise and monitor performance of Auditors. The processes and procedures shall be defined and documented. The procedures shall address as a minimum:

- Required experience and competence (professional background and minimum number of audits performed under supervision)
- Required training including audit techniques, SMS, Root Cause/Corrective Action, Regulation
- Continuation training requirements
- Specific experience and/or technical training for authorisation to audit specific technical functions.
- Scope of authorisation
- Authorisation issue, extension, renewal or withdrawal procedures
- Independence of quality audit personnel
- Allocated resource (if not full-time employed).

Part 4 – Documents

4.0 Approval Certificate

A copy of the Production Organisation Approval Certificate should be included in this chapter.

4.1 CAA Form 1 Proforma

A copy of the approved organisation's CAA Form 1 proforma.

4.2 Part 21 POA Compliance Checklist.

A completed and current Part 21 POA Compliance Checklist should be either referenced or included in this chapter.

4.3 NDT Written Practice.

If NDT is relevant to the approved scope of work the NDT Written Practice should be either referenced or included in this chapter.

4.4 Flight Operations Manual.

If the approved organisation conducts flight test the Flight Operations Manual should be either referenced or included in this chapter.

4.5 Sample of Documents.

This chapter must list all the documents and forms in use by the organisation for the purpose of controlling production. Each form shall be uniquely identified with a number and revision date to allow traceability of changes.

EXAMPLE:

- DO/PO Arrangement Template
- IPO/PO Arrangement Template
- Contract Review Form
- Material tags: Quarantine and Scrap labels.
- Critical Part identification labels.
- CAA Form 18B - SRG1728B - Flight Conditions for a Permit to Fly
- CAA Form 52 - Aircraft statement of conformity
- CAA Form 53 - Certificate of Release to Service
- Audit Report Form
- NCR Route Cause Corrective Action Form
- Personnel Training Record
- Personnel authorisation document
- Concession Application and Approval

4.6 List of Significant Sub-Contractors

If used by the production organisation, this chapter should list all Significant Subcontractors performing production activities under of the approved production organisation Production Management system. A definition of a Significant Subcontractor is given in CAP 562 Leaflet C-180 Control of Production Suppliers and Subcontractors

4.7 List of Outside Parties

21.A.139(b)

This chapter should list or give references to lists of all outside parties that undertake production activities on behalf of the approved production organisation.

4.8 List of DO/PO & IPO/PO Arrangements

This chapter may list, cross refer to another document, or be included as an Appendix to the POE all the current DO/PO and IPO/PO arrangements along with the corresponding SADD(s).

Section 3 - Appendices1.0 - IPO/PO Arrangement Template

This is an example of an IPO/PO arrangement that may be used to summarise an arrangement between two production organisations.

<table>
<tr><td>IPO/PO ARRANGEMENT
in accordance with 21.A.133(b) and (c)</td><td>Ref: XXXX
Issue: XX</td></tr>
<tr><td>The undersigned agree on the following commitments:</td><td>Relevant interface procedures</td></tr>
<tr><td>The Intermediary Production Organisation [NAME] takes responsibility to
➢ assure correct and timely transfer of up-to-date applicable design data (e.g., drawings, material specifications, dimensional data, processes, surface treatments, shipping conditions, quality requirements, etc.) to the production organisation approval holder [NAME]
➢ provide visible statement(s) of approved design data.</td><td></td></tr>
<tr><td>The production organisation approval holder [NAME] takes responsibility to
➢ assist the Intermediary Production Organisation [NAME] in dealing with continuing airworthiness matter and for required actions.
➢ assist the Intermediary Production Organisation [NAME] in case of products prior to type certification in demonstrating compliance with certification specifications.
➢ develop, where applicable, its own manufacturing data in compliance with the airworthiness data package.</td><td></td></tr>
<tr><td>The Intermediary Production Organisation [NAME] and the POA holder [NAME] take joint responsibility to
➢ establish an effective link showing authorisation from the design approval holder that addresses all elements of AMC No 1 to 21.A.133(b) and (c) Eligibility – Link between design and production organisations.
➢ deal adequately with production deviations and non-conforming parts in accordance with the applicable procedures of the IPO and the production organisation approval holder.
➢ achieve adequate configuration control of manufactured parts, to enable the POA holder to make the final determination and identification for conformity.</td><td></td></tr>
<tr><td colspan="2">The scope of production covered by this arrangement is detailed in [DOCUMENT REFERENCE/ATTACHED LIST]</td></tr>
<tr><td colspan="2">The IPO [NAME] acknowledges that the approved design data provided, controlled and modified in accordance with the arrangement are recognised as approved by the competent authority and therefore the parts and appliances manufactured in accordance with these data and found in a condition for safe operation may be released certifying that the item was manufactured in conformity to approved design data and is in a condition for safe operation.</td></tr>
<tr><td colspan="2">Direct Delivery Authorisation:
This acknowledgment includes also [OR does not include] the general agreement for direct delivery to end users in order to guarantee continued airworthiness control of the released parts and appliances.</td></tr>
<tr><td>For the [NAME & Approval Number of the IPO]
Signature:
[NAME in block letters]
Date: dd/mmm/yyyy</td><td>For the [NAME & Approval Number of the POA holder]
Signature:
[NAME in block letters]
Date: dd/mmm/yyyy</td></tr>
</table>

2.0 - Safety Reporting Form

This is a suggested example of a safety reporting form that may be used by a small organisation to record the observed safety issues.

Company X Safety Report Form

Part A to be completed by the person identifying the safety issue or hazard.

Date of event		Local time	
Location:			
Name of Reporter		Section / Organization	

Please fully describe the event or identified hazard:
Include your suggestions on how to prevent similar occurrences.

In your opinion, what is the likelihood of such an event or similar happening or happening again?

Unlikely	Probable	Likely
1	2	3

What do you consider could be the worst possible consequence if this event did happen or happened again?

Negligible	Serious Incident	Fatal Accident
1	3	5

Part B To be completed by the *(insert title of responsible person).*
The report has been dis-identified and logged.

Report Reference		
Signature		Date:
Name		

If further investigation is needed, perform that now and document on the investigation form. This information will support the Safety Committees activities.

Part C To be completed by the Safety Committee.
Rate the likelihood of the event occurring or recurring:

Unlikely	Probable	Likely
1	2	3

Rate the most credible worst-case consequences?

Negligible	Serious Incident	Fatal Accident
1	3	5

What action or actions have been or are being taken to prevent the issue or hazard from occurring in the future and/or to mitigate its consequences?

Resources required	
Responsibility for Action	

Agreed and Accepted by

(insert title of responsible person)	Date
Responsible Manager	Date
Accountable Executive	Date

Appropriate Feedback given to staff by Safety Officer Signed:	Date

Follow up action required:

What	
Who	
When	

3.0 - Safety Performance Indicators (SPIs)

The following is a suggested example to give small organisations some ideas for safety performance indicators, target and performance measurement.

The SPIs should be reviewed as part of the Management Review to decide whether they need to be amended or updated.

Company X Safety Performance Indicators
Year 20XX

Performance Indicator	Target	Performance			
		Qtr1	Qtr2	Qtr3	Qtr4
Major Risk Incidents* per 100 flights	0				
Mandatory Reports per 100 flights	3 or less				
Voluntary Reports per employee per year	More than 10				
Overdue safety report closures per year	2 or less				
Safety meetings per year	4				
Safety briefings per year	2				
Safety audits per year	2				
Organization-specific SPIs					
Operator: Flights flown with operational MEL restrictions per 100 flights	Less than 5%				
Aerodrome: Runway incursions per year	Less than 5				
Maintenance: Maintenance errors per year	Less than 5				
ATS: Airspace infringements per 100 movements	Less than 2				

*as defined in Safety Management Manual para XX

4.0 - Management of Change Template

Management of Change

MOC REF:

1. What is the change?

Describe the change

2. Who?

Describe who is responsible to implement the change

3 Describe the major components of the change

This will help you identify the main risks of each component that will be populated in section 7

4 Who does the change affect?

Consider who it affects individuals, departments and organizations?

5 What is the impact of the change?

Consider why the change is taking place and the impact on the organization and its processes and procedures

6 What follow up action is needed? (assurance)

Consider how the change will be communicated and whether additional activities such as audits are needed during the change and after the change has taken place

7 Safety Issues and the risk assessment

What is the issue? *(hazard)*	What could happen as a result? *(consequences)*	How Bad will it be? *(severity)*	How likely is it to occur? *(likelihood)*	Risk rating	What action(s) are we taking? *(mitigations)*	Action by whom and when
1					*There may be more that one mitigation for each issue*	
2						
3						

What is the issue? *(hazard)*	What could happen as a result? *(consequences)*	How Bad will it be? *(severity)*	How likely is it to occur? *(likelihood)*	Risk rating	What action(s) are we taking? *(mitigations)*	Action by whom and when
4						
5						

The Change is acceptable to implement

Final Acceptance Signature	Name Date: