

#### Australian Government

# **Civil Aviation SafetyAuthority**

LEGAL INTERNATIONAL AND REGULATORY AFFAIRS DIVISION

Our Ref: Your Ref: COR 2017 0872 - 0876

9 February 2023

Sofia Hajdari Coroner's Registrar Coroners Court of Victoria 65 Kavanagh Street SOUTHBANK VIC 3006

#### By email

Dear Registrar

#### Finding into Deaths After Having Held an Inquest COR 2017: 0872 – 0876: Maxwell Quartermain, Greg de Haven, Glenn Garland, John Washburn and Russell Munsch (Essendon Plane Crash Inquest)

We refer to the findings and recommendations of the Court dated 28 October 2022 and served upon the Civil Aviation Safety Authority (**CASA**) on 11 November 2022.

In accordance with s 72(3) of the *Coroners Act 2008* (Vic), CASA makes the following response to the Court's four recommendations concerning the Essendon Plane Crash Inquest. CASA responds to the four recommendations in the context of this Court having made no findings that any of its actions (including by its staff who gave evidence in this investigation), were either causative, or directly related to the immediate circumstances, of those deaths.

#### Recommendation 1

CASA consider redoubling emphasis of the essential nature of check-list discipline especially to older pilots perhaps as part of the increased obligations for more frequent IPCs borne by pilots older than 65.

CASA acknowledges and accepts the potential benefits of this recommendation, noting that there is already a significant volume of material and literature for pilots regarding check-list discipline, in addition to the compulsory regulatory obligations imposed by way of operating manuals and aircraft manufacturer instructions.

In so far as this recommendation is directed at "older pilots" (being persons over the age of 65 years), CASA is presently in the process of reviewing appropriate means and methods for reinforcing the importance of check-list discipline in the context of learned behaviours, habits and psychological aspects for this cohort. CASA is also considering publishing an article in its *Flight Safety Australia* magazine, focussed on the Essendon Airport accident and other events where adherence to check-lists have been identified as an issue of critical safety. This follows earlier CASA educational articles designed to improve the awareness and understanding of checklists, including the following:

- 1. *Flight Safety Australia* 3 February 2020: Checklists: why and how | Flight Safety Australia <u>Checklists: why and how | Flight Safety Australia</u>
- 2. Flight Safety Australia 12 November 2018: One thing at a time: a brief history of the checklist <u>One thing at a time: a brief history of the checklist | Flight Safety</u> <u>Australia</u>

In addition, CASA published updated official guidance material in relation to the use of checklists, Advisory Circular AC 91-22 "Aircraft Checklists" (copy **enclosed**). This was timed to coincide with the new *Civil Aviation Safety Regulations 1998* (Cth) (**CASR**) Part 61 (Flight Standards) which commenced on 2 December 2021. The Advisory Circular covers the legislative requirements for the Pilot in Command to operate an aircraft in compliance with the aircraft flight manual instructions, use of checklist, producing checklists, format, etc.

The substantive content of the Advisory Circular was previously contained in the CASA Air Operator's Certificate (**AOC**) Manual, however, it is now expanded to cover both commercial and private operations.

From 2 March 2023, among other changes, all air transport operators will be required to place pilots under their "Training and Checking System". For an air transport operation involving Instrument Flight Rules (**IFR**) operation (equivalent to Mr Quartermain's AOC), pilots will be required to undergo a formal proficiency check flight twice a year.

The ongoing maintenance of pilots' proficiency comes under a joint responsibility between the operator's Head of Flying Operations and the Head of Training and Checking. Operators may choose to manage the proficiency of pilots older than 65 years through additional measures which may include additional checks or supervision.

CASA is also considering providing updated training material to instructors and examiners to include as part of their assessment process an emphasis upon check-list discipline.

#### Recommendation 2

CASA consider promulgating explicit directions to the effect that if a rudder trim tab function test is undertaken as part of pre-flight check that subsequently and prior to take-off the position of the rudder trim tab be checked on more than one occasion.

CASA assumes the intention of this recommendation is to alert a pilot to the risk posed by not ensuring the rudder trim tab is in the neutral position for take-off.

CASA considers that the implementation of such a requirement should be considered in the context of existing aircraft flight manual requirements and check-lists. A pilot is legally obliged to conduct the pre-flight inspection of the aircraft in accordance with the provisions of the flight manual for the relevant aircraft.

In the circumstances of this accident, the manufacturer check-list for the Beechcraft King Air B200 aircraft already required multiple checks of the rudder trim tab position before flight. Further, Mr Quartermain did undertake a "walk around" of the aircraft during which the position of the rudder trim tab should have been apparent.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> See, the Court's Findings at [20(b)], [95], [115], [124]-[125], [158].

Please find **enclosed** the manufacturer's checklist applicable to the accident aircraft VH-ZCR, serial number BB-1544. Of note, the checklist already lists and requires the following repeat trim tab checks during the phases prior to take-off:

- Preflight inspection tab wheel positions (Page N-2, "Cabin/Cockpit item 5),
- Preflight inspection tab deflection angles (Page N-6, "Tail items 3 and 5),
- Before takeoff (run-up) tab wheel positions (Page N-11, item 8), and
- Before takeoff (final items) tab wheel positions (Page N-12, item 8)

In light of the existing legal requirements, CASA agrees with the intent of this recommendation and respectfully considers that it is met by the existing operations manual obligations for the aircraft and the current guidance material and the proposed response to Recommendation 1.

CASA is also mindful not to seek to promulgate a further binding legal requirement relating to the conduct of trim tab checks which may distract from the completion of the existing checks prescribed by the manufacturer. In addition, CASA considers that there is a degree of overlap between this specific recommendation and the core aspects of recommendation 1 in that the best results are likely to be achieved in conjunction with an effective education program designed to re-emphasise the need for check list discipline more generally, by reference to the instant accident.

#### **Recommendation 3**

CASA consider instigating a formal "audit trail" for NCNs and their acquittal.

The CASA Surveillance Manual (**CSM**) has been recently updated and includes detailed processes for the monitoring and follow up of Safety Findings (previously referred to as Non-Compliance Notices (**NCNs**)). The current version of the CSM (version 5.0) is **enclosed** for reference.

In particular, section 4.6.4 of the CSM (Surveillance Findings) includes the following note for surveillance staff:

Note: When conducting the post-surveillance review and analysis, if the surveillance team identifies repeated breaches of a similar nature from the review of previous surveillance events and the surveillance team is no longer satisfied that the authorisation holder is willing or able take remedial and corrective actions to address the breaches, the surveillance team, in conjunction with the Surveillance Manager must consider initiating the Coordinated Enforcement Process (CEP) in accordance with section of the Enforcement Manual. Writing Compliance Findings (Level 1 and 2 surveillance types).

CASA has in place an appropriate acquittal process for repeat findings and for consideration of whether repeated findings should trigger enforcement action where there is a lack of will or ability to acquit those findings on the part of the individual/operator.

CASA also now has greater visibility of open Safety Findings across the organisation than previously by reason of updated reporting systems, including Sky Sentinel (CASA's IT system for the issuing and recording of, among other things, Safety Findings by CASA surveillance officers) and the Enforcement and Investigations Case Management System (**EICMS**), which tracks all active enforcement matters referred under the Coordinated

Enforcement Process (**CEP**). The CASA Enforcement Manual is currently under review and includes updated details of the CEP.

In addition to the above, open Safety Findings form part of the discussion at weekly Surveillance Managers' meeting. Open findings are tracked by status and issuing office, with the status classifications being as follows:

- **Issued** the finding has been issued and CASA is awaiting the response;
- **Response received** the operator has replied, and the finding response is being assessed by CASA;
- Objection received the operator has objected to the Safety Finding and this is being assessed by CASA;
- **Extension of time** the operator has asked for, and been given, an extension to the required timeframe to respond;
- **Further evidence required** the operator has replied, and CASA have determined that further evidence is required to acquit the finding;
- **Verification required** the operator has replied, and CASA have determined that the action needs to be verified at the next on-site audit;
- Action Plan the operator has replied, and CASA have determined that an action plan is required to work with the operator to close out the findings.

At management meetings, the status of open Safety Findings are discussed generally, with a more specific and detailed discussion occurring for individual operators who demonstrate a potential lack of ability or willingness to close out findings satisfactorily. Such operators are then either subject to additional activity from the surveillance team, which may include correspondence from the National Manager, and if all surveillance options are exhausted, then a referral to enforcement is then made following the CEP process.

CASA has implemented appropriate systems and processes to ensure that safety findings are appropriately tracked and monitored from the point of issue up until they are acquitted of referred for management through the CEP.

#### **Recommendation 4**

CASA consider requiring pilots to have IPCs conducted by a variety of testers. The extent of variety of testers and time periods within which such variety is required may be best determined by CASA itself.

CASA considers that while there may be potential benefits in requiring pilots to be assessed by a variety of testers over time, this recommendation is also subject to a number of potential limitations. For example, for certain types of more uncommon aircraft there may be only a very small pool of pilots and a smaller pool of testers who operate the aircraft. The cost and expense of requiring a pilot to be tested by someone other than the usual tester may incur significant expense – particularly where the pilot may be situated in a remote location or the type of aircraft is not readily available.

It also needs to be considered that under the flight standards contained in Part 61 of the CASR and the corresponding Manual of Standards, there are prescribed syllabi for the conduct of testing and the regulatory philosophy is that such testing is standardised and outcomes based. That said, providing a pilot with exposure to someone other than their usual tester could assist the pilot in preparing for such testing as well as provide another opinion as to the pilot's competency more generally.

One notable regulatory development since this investigation is that, as noted above, commercial pilots will be required to be assessed under an organisation's check and training facility. This requirement is intended to ensure that pilots are subject to ongoing training and checking at regular intervals and that the organisation certifies them as competent. This additional requirement is likely to ensure that commercial pilots are exposed to competency assessment by a number of different check pilots.

Kindly contact the writer in the first instance if further information or clarification is required.

Yours sincerely

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Australian Government Civil Aviation SafetyAuthority

# ADVISORY CIRCULAR AC 91-22 v2.0

# **Aircraft checklists**

Date	November 2021
Project number	OS 99/08
File ref	D21/382572

# For Flight Operations Regulations commencing on 2 December 2021

Advisory circulars are intended to provide advice and guidance to illustrate a means, but not necessarily the only means, of complying with the Regulations, or to explain certain regulatory requirements by providing informative, interpretative and explanatory material.

Advisory circulars should always be read in conjunction with the relevant regulations.

# Audience

This advisory circular (AC) applies to:

- aircraft operators
- aircraft owners
- aircraft crew.

# Purpose

This AC provides guidance on establishing and using aircraft checklists.

# For further information

For further information, contact CASA's Flight Standards Branch (telephone 131 757).

# Status

This version of the AC is approved by the Manager, Flight Standards Branch.

Note: Changes made in the current version are annotated with change bars.

Version	Date	Details
v2.0	November 2021	This version significantly changes the majority of the AC. These changes have arisen from a legislative adjustment due to a new exemption contained within CASA EX81/21 relating to regulation 91.095 and compliance with flight manuals, and multiple stakeholder queries regarding checklist design.
v1.0	July 2021	This AC is a new issue AC, applicable for Part 91 commencing 2 Dec 2021.

Unless specified otherwise, all subregulations, regulations, Divisions, Subparts and Parts referenced in this AC are references to the *Civil Aviation Safety Regulations 1998* (CASR).

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# **1** Reference material

## 1.1 Acronyms

The acronyms and abbreviations used in this AC are listed in the table below.

Acronym	Description
AC	advisory circular
AFM	aircraft flight manual
AFMI	aircraft flight manual instructions
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998
EFB	electronic flight bag
FCOM	flight crew operations manual
IFR	instrument flight rules
MTOW	maximum take-off weight
NAA	national aviation authority
NVIS	night vision imaging system
PF	pilot flying
PIC	pilot-in-command
PM	pilot monitoring
PNF	pilot not flying
РОН	pilot operating handbook
QRH	quick reference handbook
VFR	visual flight rules

# 1.2 Definitions

Terms that have specific meaning within this AC are defined in the table below. Where definitions from the civil aviation legislation have been reproduced for ease of reference, these are identified by 'grey shading'. Should there be a discrepancy between a definition given in this AC and the civil aviation legislation, the definition in the legislation prevails.

Term	Definition
aircraft checklist	means a concise compilation of the operating procedures published in an aircraft flight manual. This may be limited to normal procedures or may contain abnormal and emergency procedures.
flight	means:

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Term	Definition
	<ul> <li>in the case of a heavier-than-air aircraft, the operation of the aircraft from the moment at which the aircraft first moves under its own power for the purpose of taking-off until the moment at which it comes to rest after being airborne; and</li> </ul>
	<ul> <li>in the case of a lighter-than-air aircraft, the operation of the aircraft from the moment when it becomes detached from the surface of the earth or from a fixed object on the surface of the earth until the moment when it becomes again attached to the surface of the earth or a fixed object on the surface of the earth.</li> </ul>
operator	Operator, of an aircraft, means:
-	<ul> <li>if the operation of the aircraft is authorised by an AOC, a Part 141 certificate or an aerial work certificate—the holder of the AOC or certificate; or</li> </ul>
	<ul> <li>otherwise—the person, organisation or enterprise engaged in aircraft operations involving the aircraft.</li> </ul>

# 1.3 References

#### Legislation

Legislation is available on the Federal Register of Legislation website https://www.legislation.gov.au/

Document	Title
Regulation 91.245	Matters to be checked before take-off
Regulation 121.070	Availability of checklists
Regulation 133.040	Availability of checklists
Regulation 135.050	Availability of checklists
Regulation 138.215	Availability of checklists
Regulation 91.095	Compliance with flight manual
Regulation 121.055	Compliance with flight manual
Regulation 133.030	Compliance with flight manual
Regulation 135.040	Compliance with flight manual
Regulation 138.210	Compliance with flight manual
CASA EX81/21	Section 5 of the Part 91 of CASR – Supplementary Exemptions and Directions Instrument 2021
CASA EX83/21	Section 25 of the Part 121 and Part 91 of CASR – Supplementary Exemptions and Directions Instrument 2021
CASA EX84/21	Section 20 of the Part 133 and Part 91 of CASR – Supplementary Exemptions and Directions Instrument 2021
CASA EX85/21	Section 18 of the Part 135, Subpart 121.Z and Part 91 of CASR – Supplementary Exemptions and Directions Instrument 2021

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Document	Title
CASA EX86/21	Section 15 of the Part 138 and Part 91 of CASR – Supplementary Exemptions and Directions Instrument 2021

#### Advisory material

CASA's advisory material is available at https://www.casa.gov.au/publications-and-resources/guidance-materials

Document	Title
AC 21-34	Aircraft flight manuals
AMC/GM Part 91	Acceptable Means of Compliance / Guidance Material
AMC/GM Part 121	Acceptable Means of Compliance / Guidance Material
AMC/GM Part 133	Acceptable Means of Compliance / Guidance Material
AMC/GM Part 135	Acceptable Means of Compliance / Guidance Material
AMC/GM Part 138	Acceptable Means of Compliance / Guidance Material

#### **Other material**

International Civil Aviation Organization (ICAO) documents are available for purchase from http://store1.icao.int/

Document	Title
ICAO Annex 8	Airworthiness of Aircraft
CS-23/FAR-23	EASA or FAA Airworthiness standards – normal category aeroplanes
CS-25/FAR-25	EASA or FAA Airworthiness standards – transport category aeroplanes
CS-27/FAR-27	EASA or FAA Airworthiness standards – normal category rotorcraft
CS-29/FAR-29	EASA or FAA Airworthiness standards – transport category rotorcraft
CS-VLA	EASA Certification Specification for very light aeroplanes
CS-VLR	EASA Certification Specification for very light rotorcraft designed to carry not more than 2 occupants
FAA	GAMA Specification No. 1
EASA OSD	Common Procedure Document available on the EASA website
FAA AC 25.1581-1	Airplane Flight Manual
FAA AC 27-1B	Certification of Normal Category Rotorcraft
FAA AC 29-2C	Certification of Transport Category Rotorcraft

#### FOR FLIGHT OPERATIONS REGULATIONS COMMENCING ON 2 DECEMBER 2021

# 2 General

## 2.1 Introduction

- 2.1.1 This AC provides information to assist in the preparation of aircraft checklists and procedures for checklist use.
- 2.1.2 Whether operating simple or complex aircraft, human components are an ever-present risk to safety. Despite diligence and competence, circumstances can conspire to cause a procedural lapse or error; possibly leading to an incident or accident. The correct use of aircraft checklists, which depends on the use of valid checklists and effective procedures, is a strong defence against human error. Unfortunately, aircraft accident reports often implicate the incorrect or non-existent use of checklists as a cause.

# 2.2 Legislation

#### 2.2.1 Regulation 91.095

- 2.2.1.1 The requirements for aircraft checklists are derived from regulation 91.095. The regulation requires the pilot in command (PIC) to operate an aircraft in compliance<sup>1</sup> with the aircraft flight manual instructions.
  - **Note:** The term *aircraft flight manual instructions* is defined in the CASR Dictionary as meaning the following documents and information provided by the aircraft's manufacturer <sup>2</sup>:
    - the aircraft's flight manual;
    - checklists of normal, abnormal and emergency procedures for the aircraft;
    - any operating limitation, instructions, markings and placards relating to the aircraft.
- 2.2.1.2 For simplicity in this document, aircraft flight manual instructions are referred to as 'aircraft flight manual' or 'flight manual'.
- 2.2.1.3 On review, regulation 91.095 was found to incorrectly express the intended policy objectives. A correcting amendment will be made in a future set of regulation amendments to Part 91, which will not happen until late 2022 at the earliest. To ensure the intended policy outcomes are in place for the commencement of Part 91 on 2 December 2021, an exemption and direction, contained within the instrument CASA EX81/21, is in place<sup>3</sup>.
  - **Note:** Regulation 91.035 provides that regulation 91.095 does not apply to operations conducted under Parts 133 and 138. These parts contain provisions<sup>4</sup> similar to regulation 91.095, requiring compliance with aircraft flight manual instructions except for certain circumstances as specified in the applicable MOS.

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<sup>&</sup>lt;sup>1</sup> Subregulation 91.095 (2) also requires the PIC to comply with any conditions specified in the aircraft's certificate of airworthiness or special flight permit.

<sup>&</sup>lt;sup>2</sup> Or issued in accordance with a Part 21 approval.

<sup>&</sup>lt;sup>3</sup> This AC is written from the perspective of being in force from 2 December 2021, but at the time of publishing, this exemption had not yet been published as an addition to CASA EX81/21.

<sup>&</sup>lt;sup>4</sup> Under regulations 133.030 and 138.210.

#### 2.2.2 CASA EX81/21 – exemption relating to regulation 91.095<sup>5</sup>

- 2.2.2.1 The exemption and direction relating to regulation 91.095 will change the effect of the regulation in two ways.
- 2.2.2.2 Firstly, it changes 'when' a PIC must comply with the flight manual, from only being the time the aircraft is in flight (which is defined in the Act see the definitions at the front of this AC), to in-flight and on the ground prior to the beginning of a flight, and after the end of a flight. Unsafe conditions may be created if an aircraft is not operated at all times in accordance with the flight manual requirements and limitations.
- 2.2.3 Secondly, it changes '*what*' a PIC must comply with, i.e., which particular pieces of a flight manual. As written, regulation 91.095 requires compliance with **all content** of the aircraft flight manual instructions. Compliance with all content of the flight manual instructions was unintended, as not all content applies to the operation of an aircraft, (e.g., the sections on maintenance, handling or systems description). Also, not all content is approved by an airworthiness certification authority. This means a flight manual consists of approved and unapproved parts. Unapproved parts are included as recommendations or guidance and are not mandatory.
- 2.2.3.1 The direction limits compliance to the *requirements and limitations* mentioned in aircraft flight manual instructions. The expression *requirement or limitation* applies to approved flight manual information.
- 2.2.3.2 While the direction<sup>6</sup> under section 5 of CASA EX 81/21 only applies to the PIC, under other CASR Parts<sup>7</sup>, an operator of an air transport or aerial work aircraft must provide aircraft crew members with the aircraft checklists. Although not mandatory for operators<sup>8</sup> of Part 91 aircraft, checklists should be made available to the PIC. If an operator does not do so, the PIC is still required to comply with the direction. Guidance for the preparation of aircraft checklists is included in this document.

## 2.3 Aircraft flight manuals

#### 2.3.1 Introduction

2.3.1.1 The International Civil Aviation Organization (ICAO) Annex 8 requires each aircraft be provided with a flight manual, placards or other documents stating the approved limitations within which the aircraft is considered airworthy by the applicable airworthiness certification standard. The manual must also contain additional instructions and information necessary for the safe operation of the aircraft. These include operating procedures and performance data. Airworthiness certification standards also specify which parts of a flight manual must be approved by the certifying authority.

<sup>&</sup>lt;sup>5</sup> At the time of publishing this document (v2.0 of this AC), the exemption had not yet been published within CASA EX81/21. Instead, half of the required effect was incorporated as a direction in section 5 of CASA EX81/21. The instrument will be updated before 2 December 2021.

<sup>&</sup>lt;sup>6</sup> As per footnote 5 above.

<sup>&</sup>lt;sup>7</sup> Regulations 121.070, 133.040, 135.050 and 138.210

<sup>&</sup>lt;sup>8</sup> Refer to section 1.2 of this AC - 'Definitions', for a meaning of the term 'operator' or 'aircraft operator'.

**Note:** Aircraft flight manuals are identified by a part number specified in the type certificate data sheet for the aircraft.

- 2.3.1.2 Depending on the relevant airworthiness certification standard, a flight manual may be known by other names. For example, for FAA<sup>9</sup> certified aeroplanes up to 5 700 kg MTOW and manufactured in 1976 or later, the flight manual is titled Pilot's Operating Handbook <sup>10</sup>. Some may include the sub-title 'FAA Approved Airplane Flight Manual'. Flight manuals complying with older airworthiness standards may be titled Owner's Handbook or Owner's Manual.
- 2.3.1.3 Aircraft certificated under special categories or under early certification requirements, may not have a flight manual <sup>11</sup>. In such cases, the information required to safely operate the aircraft is published on fixed placards visible to the PIC. Examples of such aircraft are:
  - aircraft up to a maximum take-off weight (MTOW) of 2 722 kg manufactured and flown prior to 1 March 1979
  - historic and ex-military aircraft
  - amateur-built aircraft
  - experimental aircraft
  - ultralight aircraft.
- 2.3.1.4 With the development of more complex aircraft and equipment, manufacturers and some operators introduced separate operating manuals known as flight crew operating manuals (FCOM) or quick reference handbooks (QRH). FCOM describe in detail, the characteristics and operation of the aeroplane and its systems. When procedures are provided by the manufacturer in a document other than the flight manual, a statement is placed in the appropriate procedures section of the flight manual, referencing where the detailed procedures information can be found.
- 2.3.1.5 QRH typically include checklists for normal, abnormal and emergency procedures. The format is intended to improve efficiency of use of checklists. Although FCOM and QRH contain approved flight manual information, these sources are not approved flight manuals.

#### 2.3.2 Aircraft operating procedures

- 2.3.2.1 A procedure is a step-by-step method for accomplishing a specific task. Aircraft operating procedures are designed by the aircraft manufacturer as step-by-step instructions for operating the aircraft safely.
- 2.3.2.2 Separate sections of a flight manual are dedicated to 'normal', 'abnormal' and 'emergency' procedures. Normal procedures apply when aircraft systems are serviceable and functioning normally. Abnormal procedures are corrective actions for managing a failure of a system or component and are intended to maintain an acceptable level of airworthiness for continued safe flight and landing. Emergency procedures apply when flight crew action, usually immediate, is required to protect the

<sup>&</sup>lt;sup>9</sup> Federal Aviation Administration of the USA

<sup>&</sup>lt;sup>10</sup> GAMA Specification No. 1

<sup>&</sup>lt;sup>11</sup> Refer to AC 21-34 - Aircraft flight manuals – Appendix A

aircraft and occupants from serious harm or catastrophe. An emergency procedure may indicate that actions should be performed immediately, and if so, expeditious action is best performed from memory. Immediate actions are typically identified by bold font or boxed text.

2.3.2.3 Although aircraft operating procedures may be presented as narrative, the checklist format designed for use by flight crew, is the standard for most modern aircraft.

#### 2.3.3 Airworthiness standards

2.3.3.1 Airworthiness standards for a large portion of the Australian registered aircraft fleet<sup>12</sup>, are prescribed in Parts 23, 25, 27 and 29 of CASR. These parts identify and subsume the legislation for airworthiness standards of the two major certifying authorities; the Federal Aviation Administration (FAA) and the European Union Aviation Safety Agency (EASA). The standards prescribe the information an aircraft manufacturer must include in an aircraft flight manual, and also prescribe the information to be approved by the certifying authority.

#### 2.3.4 Required and approved information

- 2.3.4.1 The FAA and EASA airworthiness standards <sup>13</sup> for normal and transport category aircraft, require flight manuals to contain at least:
  - aircraft operating limitations
  - normal, abnormal and emergency operating procedures
  - performance information
  - loading information.
- 2.3.4.2 Other than the following exception, all required flight manual information must be approved by the certifying authority. The exception is that for the following aircraft, only aircraft operating limitations must be approved:
  - FAR Part 23 low speed aeroplanes<sup>14</sup> with less than 7 passenger seats
  - CS-23 piston engine aeroplanes with a maximum weight of 2722 kg or less.
- 2.3.4.3 When approval is only required for aircraft operating limitations, the remainder of flight manual content such as aircraft operating procedures, is unapproved and is for guidance only. Under CASA EX81/21 mentioned above, only approved parts of a flight manual are the *requirements and limitations* subject to operational compliance.
- 2.3.4.4 Flight manual information approved by the FAA or EASA is identified within the manual by notations such as "FAA/AUTHORITY approved" or "EASA Approved". on each page.

#### 2.3.5 Approved operating procedures

2.3.5.1 Approval of flight manual operating procedures by a certifying authority, does not necessarily imply inflexible adherence to approved material. Both the FAA and EASA permit operator development of equivalent operating procedures. For example, FAA

<sup>&</sup>lt;sup>12</sup> Not including sailplanes and balloons which are certified under Part 22 and Part 31 respectively.

<sup>&</sup>lt;sup>13</sup> FAA FAR: 23, 25, 27, 29 or EASA CS: VLA, VLR, 23, 25, 27, 29.

 $<sup>^{14}</sup>$  V\_{MO} less than 250 kt.

policy requires<sup>15</sup> a notation similar to the following, to be placed at the beginning of a flight manual operating procedures section:

The operating procedures contained in this manual have been developed and recommended by the manufacturer and approved by the FAA for use in operating the aircraft. These procedures are provided for guidance in identifying acceptable procedures for safe operation, and FAA approval should not be construed as prohibiting the operator, based on operational experience with the aircraft, from developing equivalent procedures in accordance with the applicable operating rules.

- 2.3.5.2 A caveat<sup>16</sup> to the FAA policy may state that when alternate procedures are used, full responsibility for compliance with applicable airworthiness safety standards rests with the operator.
- 2.3.5.3 EASA policy is similar. EASA's Acceptable Means of Compliance (AMC) cite related FAA Advisory Circulars as adopted material. For example, CS-VLR<sup>17</sup> AMC states '*The AMC consists of the applicable parts of FAA AC 27-1B Change 4 dated 1 May 2014*'. This means EASA has adopted the FAA policy of permitting an operator to develop equivalent procedures.
- 2.3.5.4 Equivalent policy applies to Australian aircraft operators as CASR airworthiness standards subsume the standards of the FAA and EASA. The legislative requirement to comply with the requirements and limitations of AFMI, effected through the direction in CASA EX 81/21, may be met by the use of equivalent procedures and checklists, provided standards for airworthiness are maintained, and approved aircraft operating limitations are complied with.

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<sup>&</sup>lt;sup>15</sup> AC 25.1581 para 2c , AC 27-1B regulation 1585 and AC 29-2C regulation 1585.

<sup>&</sup>lt;sup>16</sup> AC 27-B section 27.1585.

<sup>17</sup> Certification Specification for very light rotorcraft designed to carry not more than 2 occupants.

# 3 Checklists

## 3.1 Introduction

- 3.1.1 Aircraft operating procedures presented in narrative form are unsuitable for use in aircraft. A more suitable presentation style is the checklist format which offers advantages of convenience, efficiency and safety.
- 3.1.2 Procedural checklists serve two functions; firstly, the listing of procedural steps; and secondly, a means for confirming correct completion of procedural steps. To fulfil these functions safely, aircraft checklists need to be accurate and be presented in a suitable format.
- 3.1.3 Separate procedural manuals such as FCOM or QRH may be offered to operators by aircraft manufacturers or other third parties. When FCOM or QRH are not available, an aircraft operator or PIC should ensure suitable checklists based on flight manual operating procedures, are available for each aircraft operated. For further information about preparation of aircraft checklists, please refer to section 2.6 *'Producing aircraft checklists'*.

# 3.2 Use of checklists

- 3.2.1 Under the CASR flight operations regulations<sup>18</sup>, an offence of strict liability applies when an aircraft is not operated in a way that meets the *requirements and limitations* of the flight manual. The obligation applies to an aircraft operator conducting air transport or aerial work operations, and to the PIC of an Australian registered aircraft operating under any of the CASR parts. To ensure the obligation is met, sufficient preparation for compliance should be completed in the flight planning stage.
- 3.2.2 As well as ensuring access to a valid set of aircraft checklists, consideration should be given to matters including, but not limited to, 'how' and 'when' checklists are to be used. For example:
  - Are normal procedure checklists to be used as a 'worklist' or as a 'checklist'?
    - o When used as a worklist, each procedural action is sequentially completed in accordance with the checklist, either by reference to the checklist or from memory.
    - o When used as a checklist, all procedural actions are completed in accordance with a pre-determined sequence or 'flow' across the cockpit and followed by confirmation of correct completion by reference to the checklist.
  - **Note** Contemporary checklist practice, suitable for both single pilot and multi-crew operations, favours the 'checklist' method for normal procedure checklists.
  - Abnormal and emergency procedure checklists are usually completed through use of the 'worklist' method; unless checklist items require immediate actions to be completed from memory.

<sup>&</sup>lt;sup>18</sup> Regulations 91.095 (and CASA EX81/21), 121.055, 133.030, 135.040 and 138.210.

- All emergency actions requiring immediate completion should be identified and committed to memory.
- An *'identify and confirm'* protocol should be established and applied before actioning safety critical controls.
- Definition of checklist initiation and completion limits e.g., before landing checklist to be completed by mid-downwind.
- The procedure for recommencement of a checklist when completion is interrupted.
- Crew competency. Both single pilot and multi-crew operations require specific knowledge and skills to ensure error-free use of checklists:
  - o single pilot operations will predominantly use memorised checklists (for additional information refer to section 3 of this AC)
  - o multi-crew operations will predominantly use challenge and response checklist procedures (for additional information refer to section 4 of this AC).
- Competency in using electronic or mechanical checklists where fitted.
- Checklists stowed securely and with provision for ease of access. Handling and access should be optimised for single pilot operations, particularly when unaided by auto-pilot.
- Ensuring that checklists will be sufficiently legible under all anticipated light conditions.
- Techniques for ensuring lookout and situational awareness are not compromised during checklist use.
- **Note:** Chapter 10 of the Part 91 MOS for regulation 91.245, prescribes checks to be carried out before take-off that relate to mandatory flight planning, documentation and aircraft equipment checks.
- 3.2.3 All aircraft operations are susceptible to adverse events with many attributable to human factors. The severity of an adverse occurrence may be compounded if instructions for checklist use are not well designed, proven and documented, or if crew members are not effectively trained in their use. The instructions should evolve from sound operator policy and be developed systematically in consultation with senior flight crew. The instructions should account for all relevant operational factors such as crew composition, aircraft type, flight rules and terrain proximity.
- 3.2.4 While air transport and aerial work operators have direct obligations for crew competency, including competency in checklist use, PIC of aircraft operated under Part 91 should also ensure safe use of checklists by establishing personal practices and policies for checklist use, and by periodic review of knowledge and skills.

## 3.3 Memorised checklists

3.3.1 Physical handling of checklists is not practical when safe flight demands the use of both hands to control the aircraft e.g., single pilot low level operations including aerial application or stock mustering, and all single pilot operation of helicopters not equipped with autopilot. In circumstances when continuous lookout is vital, and unless audio annunciation of checks is available, checklists should be completed from memory. In such circumstances, it is critical that heightened risks are controlled through faultless and proven procedures and crew competence.

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- 3.3.2 Competency in checklist use, particularly from memory, is fundamental to flight safety and should be included in initial and recurrent training and checking<sup>19</sup>. To assist crew members in refreshing knowledge of checklists, aircraft operators should supply each crew member with controlled copies of checklists for personal use.
- 3.3.3 Operators should also determine if copies of checklists (additional to crew member copies) are to be assigned to and retained in each aircraft. In all circumstances, document control is essential and needs to be managed systematically to maintain the integrity of checklists and the distribution process.

# 3.4 Challenge and response checklist procedures

- 3.4.1 Challenge and response procedures apply to multi-crew operations, where checklist items are called by one crew member and either checked or completed by another. Common methods can be described as either a 'worklist' or 'checklist'. Refer to paragraph 3.2.2 for information about these methods.
- 3.4.2 Correct use of the procedures promotes workload reduction and improved situational awareness.
- 3.4.3 Efficient and safe use of challenge and response procedures depends on detailed protocols defining who does what, when and how. These involve the definition of crew member responsibilities, related tasks, actions and phraseology. Consideration should be given to:
  - Standard phrases for:
    - o initiating a checklist
    - o challenge and response
    - o completion of a checklist
    - o deferring a check
    - o error alerting, and
    - o halting an action.
  - The sequence of actions and calls for actioning a line item. These are influenced by crew configuration or operational circumstances. Different protocols apply to normal, abnormal and emergency checklists
  - The level of detail necessary for accurate delivery of checklist actions, is indicated in the examples below. Examples are:
    - o Normal checklists:
      - To initiate, the pilot flying (PF) calls for a checklist by announcing the checklist title, such as 'before landing checklist'.
      - To execute, the pilot monitoring (PM) responds by reading the checklist title and calls the first line item for example, 'landing gear'. With the PM observing, the PF completes the required action and reports the outcome for example, *'landing gear down'*.

<sup>&</sup>lt;sup>19</sup> For example, an operator can make this a required element of the operator proficiency check.

- If satisfied, the PM continues to the next line item and repeats the cycle. If not satisfied, the PM must engage with the PF via a pre-determined protocol to resolve the matter.
- Completion of the checklist is called by the PM. For example, *'before landing checklist complete'*.
- Protocols should apply for holding or suspending the progress of a checklist.
- o Abnormal checklists:
  - To initiate, the PF calls the abnormal condition and related checklist e.g. *'Inverter 1 Fail annunciator. Inverter failure checklist'.*
  - To execute, the PM, if satisfied, confirms the call and reads the checklist name, followed by the first line item. Completion should then proceed in accordance with the checklist.
- o Emergency checklists:
  - The pilot intended to retain or regain the aircraft controls at the onset of an emergency, should be positively determined before flight.
  - To initiate the checklist, the PF calls the emergency condition and related checklist e.g. *'left engine fire light In-flight engine fire light checklist"*
  - Before proceeding, the PM cross checks to confirm the specifics of the emergency condition e.g. PM 'left fire light confirmed' or 'STOP!' if an error is perceived.
  - When the condition is correctly identified, procedural actions identified as 'immediate' are performed from memory by the PF.
  - An 'identify and confirm' protocol should be applied before actioning each safety-critical control.
  - Subsequent non-immediate checklist items may be read from the checklist by the PM, when called for by the PF.
- 3.4.4 The protocols described above are examples only and aircraft operators should consider all circumstances of their operation when developing and documenting the detail of procedures for checklist use.

## 3.5 Emergency and abnormal procedures checklists

- 3.5.1 While not always explicitly stated in flight manual procedures, the priority at the onset of an emergency or abnormal condition is to fly the aircraft and ensure that required aircraft performance is maintained. Subsequent actions should be based on detailed protocols defining who does what, when and how. These should be proven by practical trial and documented to describe crew member responsibilities, tasks, actions and phraseology.
- 3.5.2 To safeguard against erroneous actions and compounded emergencies, it is critical that the pilot responsible, prior to activating any safety-critical system control such as mixture lever, fire switch or fuel shut-off, conduct an *'identification and confirmation'* protocol applicable to both multi-crew and single pilot operations.
- 3.5.3 Urgent implementation of time-critical emergency procedures is often accompanied by degrees of crew stress and anxiety. These are reduced when individuals possess

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familiarity and confidence developed through regular simulated practice of emergency procedures. Familiarity is particularly important when emergency procedures require prompt memory based immediate actions.

# 3.6 **Producing aircraft checklists**

- 3.6.1 Aircraft operators and PIC may meet CASR obligations related to checklists, by use of FCOM or QRH produced by the aircraft manufacturer or other third parties, e.g., flight crew training organisations. If used, third party checklists must be reviewed for currency and suitability. Irrespective of the source of checklists, operators should provide detailed instructions for use of aircraft checklists to ensure aircraft are operated in a way that meets flight manual requirements and limitations.
- 3.6.2 If suitable off-the-shelf checklists such as FCOM or QRH are not available, operators will need to produce their own aircraft checklists and instructions. Checklists should be developed through a structured activity involving subject matter experts such as senior flight crew. Checklists must be capable of serving the dual purposes of procedural reference and procedural confirmation. Broadly, considerations include content accuracy, layout, format, document control, review and amendment. More detailed information is available in later sections of this AC.
- 3.6.3 Although no requirement exists for regulatory approval of aircraft checklists, the checklists and associated instructions are part of an air transport or aerial work operator's exposition or operations manual. Any changes to checklists and instructions are subject to the operator's change management processes.

## 3.7 Checklist content

- 3.7.1 Whether flight manual operating procedures or operator developed equivalent procedures are used as a basis, aircraft checklists must concisely convey each procedural step in correct sequence. Each step identifies an actionable item followed by the corresponding required outcome. For example, *'Landing gear Up'* or *'Airspeed V2'*.
- 3.7.2 Most flight manual operating procedures are presented in a checklist form with interspersed explanatory information. For effective use by aircraft crew, checklists should be devoid of distracting non-essential information, with any remaining content limited to actionable items and the corresponding required outcomes. While these checklists are sometimes referred to as 'abbreviated checklists', the term should be used with caution to avoid implications that the list of checks is abbreviated or reduced e.g., as with abbreviated circuit training checklists. More accurate terms are 'aircraft checklist' or 'cockpit checklist'. Full-text operating procedures including notes, cautions and warnings as published in a flight manual, are referred to as 'amplified checklists' or 'expanded checklists', and as such are unsuitable for use in aircraft.
- 3.7.3 The physical task of producing an aircraft checklist is made more efficient by the use of modern information technology. Use of an editable electronic copy of flight manual operating procedures is often the best option. Non-essential information may be

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removed and checklist content suitably formatted. Drafts must be carefully proof-read and double checked for technical accuracy and functionality. Due to font size, layout or non-essential information, scanning or copying directly from the flight manual may not be suitable.

3.7.4 For multi-crew operations, and when not included in the flight manual procedures, crew positions responsible for each action or check should be annotated against the line item. For example, *'Landing gear – Up [PF]'* indicating the PF is to report 'up' when retraction of the landing gear is confirmed. Precise instructions describing who *'does'* and *'says' 'what'* and *'when'* should be available to ensure the protocols are understood without ambiguity.

#### 3.8 Checklist format

- 3.8.1 Effective use of checklists is influenced by checklist format and layout. Format design should account for the kind of aircraft operations and related foreseeable circumstances. Simulated trials of prototype checklists are useful to confirm format suitability.
- 3.8.2 Checklists may be in a physical format (i.e., paper or card) or an electronic format such as multi-function displays or electronic flight bags (EFB). If portable devices such as an EFB are used, consideration should be given to device storage, security and accessibility in all flight conditions.
- 3.8.3 Physically formatted checklists may be booklet form or mechanical device. If booklet form is preferred, consideration should be given to:
  - Page size: Page size should provide secure and efficient handling. Generally, A5 is the most suitable page size. Other factors influencing page size are procedural complexity, auto-pilot availability and booklet stowage facilities.
  - Binding: Bindings should allow free page movement and hands-free retention of the selected page. Spiral binding or similar allows page fold-back for ease of handling.
  - Indexing: A front index of checklists, particularly abnormal or emergency procedures, allows for quick review of available checklists and page location.
  - Quick reference tabs: The use of labelled tabs extending beyond the page edge can assist in rapid selection of the required page, particularly under abnormal or emergency conditions.
  - Colour-coded sections: Sections may be colour coded according to checklist type.
  - Font style, size and colour: Font style, size, kerning, leading and colour determine readability. The variables should be considered in the context of operational circumstances, such as night VFR or low-level flight.
  - Durability: Particularly when subject to frequent use, the condition of physical checklists will deteriorate over time. To minimise deterioration, particularly if readability is affected, checklists should be protected with plasticised page coatings, and periodically checked and replaced when required.

# 3.9 Maintaining checklist integrity

- 3.9.1 Integrity of checklists refers to validity of information and functionality, and is maintained through document control, review, amendment and distribution activities.
- 3.9.2 Document control is the outcome of processes to assure the user that each page of the checklist is the current version. Page currency is demonstrated by identifying each page with version control markings such as version number and date, and by the inclusion of a list of effective pages identifying the current version of each page.
- 3.9.3 Checklist amendment is necessary to capture flight manual operating procedure amendments or to implement changes determined by the operator. All aircraft operators should have a process for timely receipt of aircraft flight manual amendments, particularly changes to operating procedures.
- 3.9.4 The amendment process should include procedures to:
  - identify and verify the need for change
  - plan and draft the change
  - confirm or authorise the change
  - manage document control
  - promulgate and distribute the amendment.
- 3.9.5 When aircraft checklists form part of the operator's exposition or operations manual, changes to aircraft checklists must follow the operator's change management process.
- 3.9.6 Distribution of original and subsequent checklists to crew and aircraft should be controlled and recorded. Periodic checks should be conducted to confirm the distribution and condition of checklists.

#### 3.10 Use of checklists under Parts 121, 133, 135 and 138

- 3.10.1 Under the applicable CASR Parts, operators are required to make checklists available to crew<sup>20</sup>. As checklists and associated instructions for use are part of the operator's exposition or operations manual, crew are obliged to comply with relevant material<sup>21</sup>. Effective compliance is dependent on crew proficiency in the use of checklists. Unless refreshed through periodic training and checking, proficiency may diminish to the detriment of safety. To support preparation for training and checking, each crew member should have reliable off-duty access to current versions of aircraft checklists.
- 3.10.2 For compliance with requirements for checklist availability, operators should determine if checklists are to be assigned to and retained in each aircraft, or if personal copies are to be assigned to crew members. In all circumstances, document control is paramount to maintaining checklist integrity.

<sup>&</sup>lt;sup>20</sup> Regulation 121.070, 133.040, 135.050, 138.215.

<sup>&</sup>lt;sup>21</sup> Regulation 119.215 and 138.160.







# **CASA Surveillance Manual**

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This document contains guidance material intended to assist CASA officers, delegates and the aviation industry in understanding the operation of the aviation legislation. However, you should not rely on this document as a legal reference. Refer to the civil aviation legislation including the Civil Aviation Act 1988 (Cth), its related regulations and any other legislative instruments—to ascertain the requirements of, and the obligations imposed by or under, the law.

# Preface

As a Commonwealth government authority, CASA must ensure that the decisions we make, and the processes by which we make them, are effective, efficient, fair, timely, transparent, properly documented and otherwise comply with the requirements of the law. At the same time, we are committed to ensuring that all of our actions are consistent with the principles reflected in our Regulatory Philosophy.

Most of the regulatory decisions CASA makes are such that conformity with authoritative policy and established procedures will lead to the achievement of these outcomes. Frequently, however, CASA decision-makers will encounter situations in which the strict application of policy may not be appropriate. In such cases, striking a proper balance between the need for consistency and a corresponding need for flexibility, the responsible exercise of discretion is required.

In conjunction with a clear understanding of the considerations mentioned above, and a thorough knowledge of the relevant provisions of the civil aviation legislation, adherence to the procedures described in this manual will help to guide and inform the decisions you make, with a view to better ensuring the achievement of optimal outcomes in the interest of safety and fairness alike.

Chief Executive Officer and Director of Aviation Safety

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7.2.4 Information Elements

# Glossary

# Acronyms and abbreviations

Acronym / abbreviation	Description
AEB	Airworthiness and Engineering Branch
AHPI	Authorisation Holder Performance Indicator
ANAA	Air Navigation, Airspace and Aerodromes
AOC	Air Operator's Certificate
ARN	Aviation Reference Number
ASR	Aircraft Survey Report
ATSB	Australian Transport Safety Bureau
во	SAP Business Objects
CAO	Civil Aviation Order
CAR	Civil Aviation Regulations 1988
CASR	Civil Aviation Safety Regulations 1998
CASA	Civil Aviation Safety Authority
CEP	Coordinated Enforcement Process
COA	Certificate of Approval
СОМ	Controlling Office Manager
CSM	CASA Surveillance Manual
DRS	Defect Reporting Service
EAP / EMPIC	European Aviation Processing - IT System
EDRMS	Electronic Document Records Management System
EICMS	Enforcement, Investigations and Case Management System
EVU	Enforceable Voluntary Undertaking
ICAO	International Civil Aviation Organisation
MOS	Manual of Standards
MSM	Management System Model
NM	National Manager
NOP	National Oversight Plan
NSSP	National Surveillance Selection Process
POWER BI	Microsoft Business Intelligence Tool
RAAO	Recreational Aviation Administration Organisations
RMS	Records Management System
RPAS	Remotely Piloted Aircraft Systems
ROD	Regulatory Oversight Division

Acronym / abbreviation	Description
RSR	Regulatory and Safety Review
SA	Safety Alert
SAR	Safety Assurance Review
SF	Safety Finding
SM	Surveillance Manager
SME	Subject Matter Expert
SMS	Safety Management System
SO	Safety Observation
SPM	Surveillance Planning Meetings
SPR	Surveillance Priority Review
SRD	Self-Reported Deficiency
SRI	System Risk Indicator
SRP	System Risk Profile
SSB	Safety Systems Branch
STO	Surveillance Technical Officer
ТМІ	Temporary Management Instruction

# Definitions

Term	Definition
Acquittal	Decision by CASA accepting that the remedial and corrective actions taken by the authorisation holder have satisfactorily addressed the breach
Action Plan	Means by which an authorisation holder demonstrates to CASA those actions and milestones planned to resolve a process/system deficiency
Aircraft Survey Report (ASR)	Document issued by CASA to the Registered Operator providing notice of a potential or actual aircraft defect and generally in the form of a CASR 11.245 Direction.
Authorisation Holder	A holder of a Civil Aviation Authorisation as that term is defined in section 3 of the <i>Civil Aviation Act 1988</i> i.e. "an authorisation under this Act or the regulations to undertake a particular activity (whether the authorisation is called an AOC, permission, authority, licence, certificate, rating or endorsement or is known by some other name)"
Authorisation Holder Assessment (AHA)	A consolidation of information to assist a surveillance team determine the surveillance priority of an authorisation holder
Authorisation Holder Assessment Report	A Power BI report containing a current listing of all authorisation holders within a given business area, with information regarding the most recent AHPI/AHA conducted on the authorisation holder. This report contains flags for overdue or approaching overdue AHPIs/AHAs incorporating the Group A, B or C data.

Term	Definition
Authorisation Holder Performance Indicator (AHPI)	A tool consisting of word pictures used to assess an authorisation holder's behaviour
Breach	An infraction or violation of a legislative provision
Business Day	A day that is not a Saturday, a Sunday or a gazetted public holiday in the relevant location
CASA Surveillance Framework	The framework incorporates policies, processes, IT systems and guidance that support CASA's surveillance functions
Compliance	Actions or activities carried out and which will achieve the requirements of the legislation
Controlling Office	CASA office or branch responsible for oversight of an authorisation holder in accordance with the responsibilities in this manual.
Controlling Office Manager	CASA senior manager responsible for oversight of an authorisation holder outside of ROD. See Surveillance Manager
Corrective Action	Action required by an authorisation holder in response to a breach that reduces the potential of recurrence. The action must address the root cause of the deficiency that caused the breach and indicate how the effectiveness of the action will be tracked
Defect Report Service (DRS)	A system that allows people to report to CASA and view major defects with aircraft or aircraft parts
Digitised AHPI Questionnaire / SharePoint	A SharePoint tool used when contacting AOC/AMO holders
EAP	European Aviation Processing System
Element	A part or component of an authorisation holder's systems that either together or alone contributes to the operation of that system
Enforcement	Strategies adopted by CASA to secure Compliance with aviation safety standards (See Chapter 6 –Enforcement)
Evidence	Information, objects, records, documents or statements of fact used to support findings
Finding	A documented output from a surveillance event resulting from a deficiency
Formal Comment	Are used to record information of significance that may be taken into consideration in scoping future surveillance activities or when conducting the next AHPI on the authorisation holder.
General Comment	Are used to capture intelligence gathered from various sources both from within and outside the organisation and are generally for information only.
Health Check	A systems-based surveillance event with a limited mandated scope with non-mandated scope items able to be added if capacity and resources allow
Issuing Inspector	An Inspector who identifies a Finding, issues the Finding and who subsequently manages that Finding through to Acquittal

Term	Definition
Management Factors	A group of factors within the AHPI tool relating to the management of safety by an authorisation holder. It consists of factors covering documents and procedures, decision making, assurance, training and communication. These factors have the potential to trigger or contribute to adverse safety outcomes
Management System Model (MSM)	A tool used to assess the effectiveness of an authorisation holder's systems and its ability to manage its safety risks and to determine probable root cause when assessing Non-Compliance
National Manager Surveillance	This is the National Manager for Surveillance in ROD. For areas outside ROD the National Manager may delegate responsibilities contained in this manual
National Sector Campaigns	Coordinated surveillance activity focusing on multiple authorisation holders within an identified sector of the industry over a defined period of time
National Surveillance Selection Process (NSSP)	The NSSP is an objective, Evidence-driven approach to creating a national schedule that prioritises planned surveillance activities across CASA.
	It includes:
	<ul> <li>a system for prioritising authorisation holders</li> <li>an annual national planned surveillance schedule</li> <li>a process that facilitates prioritisation, scheduling and monitoring.</li> </ul>
Non-Compliance	Has the same meaning as the term breach and can be used interchangeably
Operational Check	A surveillance event targeted at a specific activity or function used to assure Compliance
Oversight	This is surveillance oversight and is limited to the procedures and responsibilities contained within this manual.
Planned Surveillance	Surveillance scheduled through the NSSP
Post-Authorisation Review (PAR)	A review conducted to ensure entry control standards are being maintained and conducted within six (6) to fifteen (15) months following the initial issue, depending on the type of authorisation issued
Power BI	Microsoft Tool providing combined live data from Sky Sentinel merged with other internal systems
Process Verification	Validation of an authorisation holder's procedures to verify the effectiveness of communications and interactions between various interdependent processes. Process Verification is part of a systems surveillance and should confirm the 'process in practice' including outputs
Ramp Inspection	Inspection of an aircraft, including documentation, equipment and procedures associated with that operation

Term	Definition		
Regulatory Service	The assessment and/or review relating to an approval, variation, exemption or instrument. These are considered separate to a surveillance activity as they are initiated by the authorisation holder and may involve cost recovery or the payment of fees. Although not considered surveillance, the conduct of a Regulatory Service provides CASA with information and insight into an authorisation holder and will form a part of the broader oversight for consideration when planning surveillance		
Remedial Action	Immediate action taken by an authorisation holder in response to a Finding to address the deficiency that caused the breach, and which will return performance to a compliant state		
Response Activities	Activities conducted in direct response to outside events. For example, a safety report or complaint		
Risk	The effect of uncertainty on objectives		
Risk Based Surveillance	A structured process used by CASA in the oversight of an authorisation holder's performance and when prioritising surveillance activities, focused on the effectiveness in managing their Risks and is also a method by which CASA can evaluate that all activities conducted by the authorisation holder are as safe as reasonably practicable		
Risk Framework	Set of interacting activities and rules for coordinating and directing Risk Management Processes (from ISO Guide 73:2009 – Risk Management)		
Risk Management Process	Systematic application of management policies, procedures and practices to the tasks of communication, consulting, establishing the context, identifying, analysing, evaluating, treating, monitoring and reviewing Risk		
Root Cause	The fundamental breakdown or failure of a process or system which, when resolved, prevents a recurrence of the deficiency		
Safety Alert (SA)	A notification used to raise an immediate safety concern regarding a serious breach by an authorisation holder and issued in conjunction with a Safety Finding and may be accompanied by an ASR. The issue of a Safety Alert is also one of the triggers that initiates the Coordinated Enforcement Process (CEP)		
Safety Finding (SF)	A notice issued to an authorisation holder for the purposes of identifying a breach of a legislative provision or a provision of the authorisation holder's written procedures		
Safety Observation (SO)	A notice issued to an authorisation holder to identify:		
	<ul> <li>latent conditions resulting in system deficiencies that, while not constituting a legislative or procedural breach, have the potential to result in such a breach if not addressed and/or</li> </ul>		
	potential areas for improvement in safety performance		
Scoping	Assessing an authorisation holder's activity to establish what is to be covered in a surveillance event		
SharePoint AHPI / Digitised AHPI Questionnaire	A SharePoint tool used when contacting AOC/AMO holders		
Term	Definition		
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Sky Sentinel	CASA's approved IT tool for the management of surveillance activities and information supporting the planning, conducting, analysing, monitoring and reporting phases of surveillance		
Surveillance	Oversight of authorisation holders performed by CASA pursuant to section 9(1)(f) of the Civil Aviation Act 1988 (the Act)		
Surveillance event	Activity by which CASA assesses the safety performance of regulated aviation activities		
Surveillance event team	The team which is made up of Inspectors that may be drawn from various disciplines, who have been assigned to conduct a surveillance event. If the surveillance event is conducted by a sole Inspector, that Inspector assumes all roles and responsibilities for the execution of the surveillance event		
Surveillance lead	CASA officer with the appropriate experience who is responsible for leading a surveillance team. The term also applies to a sole Inspector conducting a surveillance event		
Surveillance Manager	The Surveillance Manager is responsible for oversight of Authorisation Holders assigned to them. This oversight is limited to the procedures and responsibilities contained within this manual.		
	This generic title is to capture all the varying Branch management nomenclature. Some examples are below:		
	<ul> <li>includes Controlling Office Manager - where no Surveillance Manager has been appointed e.g. RPAS, Aerodromes, Sports etc</li> <li>Tech Ops</li> <li>CNS/ATM</li> <li>MTOs</li> <li>in ANAA branch this is equivalent to the Team Leader</li> <li>in AEB this is equivalent to the Manager Design and Manufacturing Oversight</li> </ul>		
	<ul> <li>in RPAS branch this is equivalent to the Manager RPAS Operations.</li> </ul>		
Surveillance Planning Meetings	Teams that conduct surveillance meet on a weekly or monthly basis (dependent of the level of surveillance activity) to manage the surveillance process and plan surveillance activities		
Surveillance Team	A group of Inspectors led by a Surveillance Manager that plan and manage surveillance activities on authorisation holders oversighted by their respective offices/branches		
Surveillance Technical Officer (STO)	Surveillance technical officers are a national resource and are available to assist any branch of CASA with surveillance related services. Surveillance technical officers are available to provide surveillance teams with all the necessary tools to plan, conduct and finalise surveillance. The surveillance technical officers assist with formatting surveillance reports and Findings and the administration of Findings. Surveillance technical officers can provide support to surveillance teams while out in the field. Each surveillance technical officer also provides support for Sky Sentinel as an Advanced User.		

Term	Definition
System	A group of interrelated processes that are a composite of people, procedures, materials, tools, equipment, facilities and/or software operating in a specific environment to perform a specific task, or achieve a specific purpose
Systems surveillance	Seeks to assess an authorisation holder's management system and its ability to manage operational Risks. To achieve this, safety-related processes are assessed to determine they are operating in accordance with the authorisation holder's documentation and Civil Aviation legislation

# Forms

Form no.	Title		
<u>Form 996</u>	Aircraft Survey Report - Front Page		
<u>Form 996</u>	Aircraft Survey Report - Response Page		
Form 1189	Surveillance Planning and Scoping Development		
Form 1288	Surveillance Technical Discipline Summary for use when essential		
Form 1289	Record of Conversation		
Form 1290	Surveillance Event Timetable		
Form 1291	Safety Finding - Further Evidence Requested		
Form 1292	Surveillance Report Covering Letter		
Form 1293	Entry Agenda		
Form 1294	Entry/Exit Attendance		
Form 1295	Exit Meeting Agenda		
Form 1296	Combined Exit/Entry Agenda, Attendance and Checklist (Doc Cat only)		
Form 1297	Surveillance Checklist		
Form 1298	Safety Observation		
Form 1299	Safety Finding - Front Page		
Form 1299	Safety Finding - Response Page		
Form 1300	Safety Alert - Front Page		
<u>Form 1300</u>	Safety Alert - Response Page		
<u>Form 1301</u>	Surveillance Report		
<u>Form 1304</u>	Surveillance Notification		
Form 1305	CSM Amendment Submission		
<u>Form 1308</u>	Surveillance Worksheet		
CASA-04-5686	Surveillance Planning Meeting Agenda – Scheduled/Response		
CASA-04-5688	Surveillance Planning Meeting Agenda - Small Teams		
CASA-04-5685	Weekly Surveillance Planning Meeting Agenda		
Form 1455	Safety Finding - Extension Acceptance Letter		
<u>Form 1456</u>	Safety Finding - Extension Rejection Letter		
Form 1481	Part 145 Oversight Survey		
Form 1521	CAR 30 Oversight Survey		
Form 1524	Air Operators Oversight Survey		
Form 1532	ANAA – CASR 139 Oversight Survey		
Form 1543	Safety Finding - Response to Objection Letter		
CASA-04-4380	Part 21 Manufacturing Oversight Survey		
<u>CASA-04-5522</u>	Part 147 Oversight Survey		

Form no.	Title		
Form 2173	Surveillance AOC Desktop Review Assessment		
Form 3836	Aviation Event Brief		
Form 7642	Occurrence Brief		
CASA-04-5630	Objection Peer Review Form		
CASA-04-5141	COVID-19 Surveillance Notification Letter		
CASA-04-5142	Surveillance COVID19 CASR Part 145 Worksheet		
CASA-04-5143	Surveillance COVID19 CASR Part 42 Worksheet		
CASA-04-5144	Surveillance COVID19 CAR 30 Worksheet		
CASA-04-5145	Surveillance COVID19 Air Operators Certificate		
CASA-04-5145	Surveillance COVID19 Part 141/142 Worksheet		
CASA-04-5535	Surveillance COVID19 CASR 147 Worksheet		
CASA-04-5147	Surveillance COVID19 Safety Management System/Change Management Worksheet		
CASA-04-5149	COVID19 Risk Assessment Guide		
CASA-04-5615	Terms of Reference (TOR) - Safety Assurance Review (SAR)		

# **Revision history**

Version no.	Date	Parts / sections	Details
5.0	January 2022	Throughout manual	Definitions, multiple forms added. Changes to titles and surveillance schedules to reflect the organisational change to a National Model
4.4	January 2021	Throughout manual	<ul> <li>amend the word audit to Surveillance</li> <li>manual sponsorship changes</li> <li>update of Tables/figures.</li> </ul>
		3.3.1.2	Addition of AOCD Desktop review description
		3.3.6.1	Addition of AHPI digitised set of question recommendation
		4.2.4.8	Addition on use of scheduled start dates
		4.4.4.1	Amendments to Process of Level 1 Event
		4.4.4.2	Amendments to Process Details of Level 1 Event
		4.4.5	Addition of Process for AOCD Event
		4.4.5.1	Addition of Process Details for AOCD Event
		4.4.6	Addition of Process - Prepare for AOCD Event
		4.4.7	Addition of Process Details - Prepare for AOCD Event
	4.4.8	Amendment to Accountabilities - Event preparation wording	
		4.5	Amendment to working - Conduct Surveillance Event
		4.5.2	References - Addition of Form 2173
		4.5.15	Amendment to 4.5.15 - Process details - Conduct AOCD
		4.6.12	Addition of use of all fields in Sky Sentinel and using Remote if Desktop
		4.6.13.2	Amendment to wording
	Annex 1 Throughout	Amend the word audit to Surveillance	
	Annex 1 Section 2	Inspector responsibility for currency and competency	
		Annex 1 Section 3	Addition of description regarding AHPI Questionnaire
		Annex 1 Section 6	Addition of Level 2 Desktop Surveillance review information and documentation list

Revisions to this manual are recorded below in order of most recent first.

Version no.	Date	Parts / sections	Details
		Annex 1 Section 7	Aircraft Ramp Inspection added. Taken from the Safety Assurance Branch Inspector Handbook
		Annex 1 Section 8.2	Reference to legislation provisions and written examples
		Annex 1 Section	Addition of Surveillance report and Findings work instructions - Standard wording
		Annex 1 Section 13	Occurrence Management re-write of process
4.3	June 2020	Throughout manual	Addition of NSSP as primary provision of CASA scheduled surveillance events
			Removal of financial year update of mandatory Elements for Health Check.
		WHS for employees	Added Aurion - Employee Self Service
		Glossary	AEB, AHPI, AMTL, ANAA, COM, RPAS
		Definitions	EAP, Scoping
		Section 1	Deleted reference to Safety Systems Manual
		Section 2	<ul> <li>added non-AOC holder ICAO requirement – Annex 9</li> <li>clarified Response Activities in relation to other NOP pillars</li> </ul>
		Section 3	<ul> <li>added use of comment field in Sky Sentinel</li> <li>surveillance Planning and Scoping Form 1189 - now mandatory</li> <li>information about Scoping and conduct for event type "desktop review"</li> <li>AHPI Group A every due every 6 months and 12 months for Group B and C</li> </ul>

Version no.	Date	Parts / sections	Details
			<ul> <li>Ensure scoped Elements not completed are reflected by a double asterisk</li> <li>Peer review if required</li> <li>Update on what the surveillance report should include</li> <li>AEB and Airservices requirements to CC report</li> <li>Surveillance report and Findings work instructions - Standard wording</li> <li>Safety Finding needs to be withdrawn a new event needs to be created if another Safety Finding is being created</li> <li>Safety Finding is objected and that is upheld and therefore withdrawn and a new Safety Finding is created</li> <li>Actions of objection should be carried out by the Surveillance Manager as the system provides a technical log of who is actioning</li> <li>Information regarding self-reported deficiencies and Enforcement</li> </ul>
4.3	June 2020	Section 5	SAP Business Intelligence
		Annex 1	<ul> <li>AHPI Cat A 6 monthly and B &amp; C 12 monthly</li> <li>'Selected to be reviewed' added</li> <li>Clarify records management and saving to EDRMS</li> <li>Do not include penalty units added to Findings standardised regulatory reference</li> <li>ASRs unless specified have a 365-day validity.</li> <li>'after discussion with the COM and AMTL'</li> <li>ASRs updated to reflect CSM</li> <li>Reference to Technical Summary removed</li> <li>Added desktop to safety occurrence review</li> <li>CASA may request the completion of Safety Occurrence Request for Information (Form 997) - to establish the circumstance of the occurrence, before making any further judgement - Added to table for "Minor"</li> </ul>
		Health Check Mandatory Elements	Document amended to reflect the FY 19-20 only.

Version no.	Date	Parts / sections	Details
4.2	July 2019	Throughout manual	Update of Level 2 Operational Check surveillance event types.
			Addition of Surveillance technical officer role.
			Added reference to the use of Surveillance Report Summary - Work Instruction - Standard Wording.
4.1	June 2019	Annex 1	Addition of Regulatory Services and Safety Assurance Reviews (RSS SAR) and Roles and Responsibilities
		Manual preface	Addition of Work health and safety (WHS) for employees
4.0	April 2019	All	Update to include reference to the NSSP and the National Oversight Plan
4.0	April 2019	All	Update to the manual owner and sponsor
4.0	April 2019	1.4.2	Inclusion of the Service Desk form for submitting change requests
4.0	April 2019	1.4.3	Separation of Annexes 2 to 18 from the CSM
4.0	April 2019	2.3	Insertion of CASA Surveillance Policy
4.0	April 2019	4.7.18.2	Expansion on text concerning a return to activities after Voluntary Suspension
4.0	April 2019	4.7.2	Replacement of term "Safety Finding Rejection
		4.7.4.1	Letter" with "Further Evidence Requested
		4.7.6.1	
		4.7.9.1 / 4.7.9.2	
4.0	April 2019	4.7.11.2	Inclusion of text clarifying the start date for extensions, once approved, to implement correction plans for a Safety Finding.
3.2	December 2017	Annex 18	Addition of table - Authorisation Type
3.1	December 2017	Annex 1 & 18	Addition on Annex 18 (DAMP) removal of DAMP form Annex 1
3.0	September	All	Updated naming of Findings:
	2017		- NCN to Safety Finding
			- Observation to Safety Observation
		4.5.13.2 Conduct Exit Meeting	Included text for the disclosure of Findings at the exit meeting
		4.5.14.2 Conduct Exit Meeting	
2.4	April 2017	All	Chapters and annexes revised as part of the regular review and CASA Surveillance Framework Continuous Improvement process

Version no.	Date	Parts / sections	Details
2.3	January 2015	All	Chapters and annexes revised as part of the regular review and CASA Surveillance Framework Continuous Improvement process
2.2	February 2014	All	Chapters and annexes revised as part of the regular review and CASA Surveillance Framework Continuous Improvement process
2.1	August 2013	All	Chapters and annexes revised as part of the regular review and CASA Surveillance Framework Continuous Improvement process
2.0	February 2013	All	Chapters and annexes revised as part of the regular review and CASA Surveillance Framework Continuous Improvement process
1.1	November 2012	All	Chapters and annexes revised as part of the regular review and CASA Surveillance Framework Continuous Improvement process
		Annex 2 to 16	New annexes added expanding the scope of the CSM to cover all parts of CASA with annexes aligning with individual authorisation holder types or groups of authorisation holders
1.0	July 2012	All	First issue

# **1** Introduction

The CASA Surveillance Manual (CSM) sets out the processes to be followed when conducting surveillance on civil aviation authorisation holders (authorisation holders). It also sets out the processes to be followed when conducting surveillance on persons or organisations who are not authorisation holders, namely:

- Non-Air Operator's Certificate (non-AOC) holders for dangerous goods surveillance see Annex 9
- Recreational Aviation Administration Organisations (RAAO) see Annex 14.

In this respect, and for the purposes of this manual only, a reference in this manual to an authorisation holder will include the above persons or organisations who are not authorisation holders.

The CSM is applicable to all aspects of surveillance conducted by CASA. As the CSM is updated regularly, the electronic version published on the CASA website should always be the sole reference point. The website will also contain any relevant Temporary Management Instructions (TMI) that may be current at the time. The TMI should be read in conjunction with the published CSM.

This manual reflects surveillance management concepts and processes that allow for the prioritisation of surveillance activities on the basis of potential Risk and also to determine what areas of a system should be addressed in a surveillance event. This manual also provides the processes required for the conduct of surveillance activities prioritised in accordance with the National Surveillance Selection Process (NSSP). Sky Sentinel, the approved IT surveillance management tool, embodies these concepts and allows CASA to apply a holistic system and Risk management approach to planning, conducting, analysing, monitoring and reporting surveillance across the Australian aviation industry.

Occasionally, the word 'must' is used in this manual when the action is deemed to be critical. CASA does not intend for the use of such language to add to, interpret, or relieve a duty imposed by the civil aviation legislation.

# 1.1 Manual purpose

The CSM contains the processes and instructions necessary for CASA personnel conducting surveillance of the aviation industry when carrying out the Authority's regulatory responsibilities.

The manual is structured in the following way:

- Chapter 1 Introduction
- Chapter 2 CASA's Approach to Surveillance
- Chapter 3 Methodology
- Chapter 4 Surveillance
- Chapter 5 Information Capture and Access.

The manual is a resource to be referred to by staff at all levels, as required. For elaboration on any of the matters contained in the manual, please contact the Manager Surveillance Services via email at <u>surveillance@casa.gov.au</u>.

# 1.2 Manual objectives

The objectives of this manual are to provide:

- an understanding of CASA's surveillance of the aviation industry
- an understanding of CASA's systems and Risk-based surveillance approach
- a description of the roles and responsibilities of CASA staff in conducting surveillance
- guidance and procedures for the surveillance model based on the six surveillance phases:
  - authorisation holder assessment
  - surveillance planning
  - surveillance event preparation
  - conduct surveillance event
  - surveillance event reporting
  - update system information.

### 1.3 Target Audience

The target audience for the CSM is CASA staff involved in surveillance activities.

### **1.4 Document Control**

### 1.4.1 Manual sponsorship

The Executive Manager Regulatory Oversight Division (EM ROD) is the sponsor of the CASA Surveillance Framework that incorporates the CSM and CASA's IT surveillance management tool, Sky Sentinel. The owner of the manual is the National Manager Surveillance. The Surveillance Services Manager is responsible for ensuring the manual is accessible and up to date. For this reason, manuals should not be retained or relied upon as a printed version. An electronic version is maintained on CASA's website.

### 1.4.2 Manual amendment

The Surveillance Services Team is responsible for the management and continuous improvement of the CASA Surveillance Framework. Suggestions for amendments should initially be discussed within work groups/teams and with Controlling Office surveillance management. Formalised requests for amendment should be submitted by the Surveillance Manager to the Surveillance Services Team via the 'Amend Existing Form/Manual/Policy/TMI' form on the Service Desk Portal, or submitted via e-mail to <u>surveillance@casa.gov.au</u> using CASA Surveillance Framework Amendment Submission Form 1305.

Suggested amendments are reviewed by the Surveillance Services Team, and then presented to the Surveillance Managers who, following consultation with the wider Surveillance Branch team members, will either accepted or rejected the amendment. The National Manager will authorise the final publication and the outcome communicated to the submitting business area. If a proposed amendment is rejected, the reason for the rejection is provided to the representative.

### 1.4.3 Annexes

Annex 1 - Surveillance Standard and Protocols remains an integral part of the CASA Surveillance Manual (CSM). As any updates and changes directly affect the CSM, these are to be handled by the Surveillance Services Team.

All other annexes, from Annex 2 to 21, are separate documents for the purposes of updating and including changes. However, the processes, Systems and Elements, as well as the currency guide in each annex remain part of the CSM and are actionable hereunder.

# 2 CASA's Approach to Surveillance

### 2.1 Overview

### 2.1.1 Purpose

This chapter describes the overarching principles for surveillance management within CASA. The chapter details CASA's:

- surveillance obligations
- surveillance policy
- surveillance objectives
- surveillance program
- systems and Risk-based approach to surveillance
- surveillance scheduling.

# 2.2 CASA's surveillance obligations

### 2.2.1 The Civil Aviation Act 1988 requirements

CASA's key role is to conduct the safety regulation of civil air operations in Australian territory and the operation of Australian aircraft outside Australian territory. CASA is also responsible for ensuring that Australian-administered airspace is administered and used safely. The requirement for CASA to perform these roles is contained in the *Civil Aviation Act 1988* (the Act) and the Airspace Act 2007.

The main objective of the Act is to establish a regulatory Framework for maintaining, enhancing, and promoting the safety of civil aviation with particular emphasis on preventing aviation accidents and incidents. The Act provides overarching and high-level obligations regarding CASA's safety and safety-related functions.

### 2.2.2 CASA's functions

CASA's functions are set out in section 9 of the Act. With respect to aviation industry surveillance, the Act relevantly states:

Section 9:

(1) CASA has the function of conducting the safety regulation of the following, in accordance with this Act and the regulations:

by means that include the following:

(f) conducting comprehensive aviation industry surveillance, including assessment of safety-related decisions taken by industry management at all levels for their impact on aviation safety.

CASA encourages the aviation industry to adopt standards higher than the minimum required by regulations.

# 2.3 CASA Surveillance Policy

The policy applies to all CASA personnel engaged in, conducting or managing surveillance activities relating to the aviation industry. Section 3 of the Civil Aviation Act 1988 defines civil aviation authorisation as meaning an authorisation under this Act or the regulations to undertake a particular activity (whether the authorisation is called an AOC, permission, authority, licence, certificate, rating or endorsement, or is known by some other name). The term "authorisation holder" draws reference from the meaning of "civil aviation authorisation" and incorporates all air operators with an "authorisation" under the Act (including national or foreign operators, authorised dangerous goods cargo carriers, or non-authorised dangerous goods cargo carriers).

Surveillance assesses the safety performance of the authorisation holder, as well as their ability and willingness to comply with all applicable legislative obligations.

Surveillance may be scheduled in accordance with the National Surveillance Selection Plan (NSSP), or unscheduled, opportunity based, random, or targeted across all facets of the aviation industry.

The primary objective of conducting surveillance is to determine whether an authorisation holder is fulfilling their obligations under the Civil Aviation Act (1988) and Regulations.

CASA has adopted a systems and Risk-based surveillance approach, utilising a sampling process, to assess the Risk mitigation and Compliance levels of authorisation holders.

The NSSP provides a Risk-based approach to determine, prioritise and schedule surveillance activities.

ICAO requires surveillance for the oversight of entities, other than AOC holders, who are involved in the transport of dangerous goods by air. This is captured within CASA as surveillance of "non-AOC Holders" (e.g., Shippers of dangerous goods) under Annex 9 of the CSM).

All surveillance Findings must be objective and factual. Deficiencies should be provided to authorisation holders through formal documentation.

The surveillance processes used for assessing an authorisation holder's safety performance will depend on, among other things, the nature of the authorisation holder's authorised activity and operational environment.

CASA should ensure that all surveillance processes (including associated checklists and forms) are not only appropriately documented and published, but that, when deployed, they are also conducted in accordance with these documented procedures.

The conduct of surveillance activities includes the acquisition of safety-related data, which may be used to support CASA's other safety-related functions as identified in the Act.

To maintain a meaningful surveillance history of an authorisation holder, data should be recorded and retained in a manner consistent with CASA's broader policies and legal obligations.

Surveillance should be conducted by appropriately qualified, trained and experienced personnel, authorised to carry out the task being performed.

CASA is guided by the following standards to support the Surveillance Program and its commitment to Risk management, quality and Compliance:

- ICAO Manual of Procedures for Operations Inspection, Certification and Continued Surveillance (Doc 8335, AN/879)
- ISO 31000:2018 Risk Management
- AS 3806:2006 Compliance ISO 9001:2015 Quality management systems.

# 2.4 CASA's approach to surveillance

The following diagram provides an overview of CASA's approach to surveillance.



Figure 1: CASA's Surveillance Approach

# 2.5 CASA's Regulatory Philosophy

CASA's Regulatory Philosophy sets out the principles that guide and direct CASA's approach to the performance of its regulatory functions and the exercise of its regulatory powers. CASA's approach to surveillance reflects these guiding principles and extends across all aspects of CASA's engagement with the wider aviation community in conducting surveillance processes. CASA's Regulatory Philosophy can be found on the CASA website.

# 2.5.1 Key considerations for regulatory decision making

In accordance with the CASA Regulatory Philosophy, all CASA staff (dependent on their delegated powers) will ensure that their actions and responses are appropriate and proportionate to the circumstances, and are in accordance with the principles of procedural fairness and natural justice. (Specific processes where these key considerations must be applied are detailed in the relevant processes in Chapter 4.)

## 2.5.2 Use of discretion

In determining whether and how to exercise its regulatory discretion in a particular matter, CASA will have regard to the principles set out in the CASA Regulatory Philosophy.

### 2.5.3 Authorisation holder engagement

Throughout the conduct of any surveillance event, the Inspector must fully engage with the authorisation holder. The Inspector must engage in open dialogue with the authorisation holder when any safety issues are identified, e.g. deficiencies, potential instances of Non-Compliance or deviation from expected performance. Positive language should be used at all times with any observed deficiencies or potential breaches referred to in terms of potential Findings. It must be made clear to the authorisation holder that any safety issue raised during the event could foreshadow a potential surveillance Finding. Exactly when, and with whom, any safety issues should be raised will depend on a variety of circumstances and is left to the Inspector's discretion, drawing on their experience with, and knowledge of, the authorisation holder.

Any disagreement between the Inspector and the authorisation holder during the conduct of the event must be recorded for eventual capture in the surveillance report and the relevant Finding and saved onto RMS. If the authorisation holder indicates disagreement with any matter raised by the Inspector, the Inspector must emphasise (either immediately or at the exit meeting) that, in line with procedural fairness principles, the authorisation holder has the right to object by submitting supporting evidence if a Finding is subsequently issued.

**Note:** Any potential breach that has not been explicitly discussed with the authorisation holder during the conduct of the surveillance event, but which is subsequently identified post-surveillance as part of the assessment of evidence or peer-review process, must be communicated to the authorisation holder prior to the issue of the Surveillance Report.

# 2.6 CASA's surveillance program

CASA's surveillance program uses a systems and risk-based approach. Surveillance events are recorded and tracked in the supporting IT system and the results analysed, which allows CASA to evaluate the authorisation holder's safety performance. The surveillance program is dynamic, regularly reviewed and updated, taking the following issues into consideration:

- substantial changes that could affect an authorisation holder, including changes to management or organisational structure, policy, technology; special projects; changes to authorisation holder's service providers; global and/or local threats and regulatory requirements
- application of the authorisation holder's Safety Management System (SMS) where applicable
- results of previously conducted surveillance and/or investigations
- surveillance resource requirements
- the authorisation holder's willingness and ability to identify and control its aviation safety-related Risks.

CASA's surveillance program also fits within the multi-layered safety Risk Management Process by which CASA meets its state safety Risk management obligations under the State Aviation Safety Program (SSP). CASA's role is not to assume responsibility for managing an individual authorisation holder's safety Risks; rather, its role is to ensure Australia's aviation industry is appropriately managing the Risks associated with its activities. If CASA finds this not to be the case, through its surveillance or otherwise, it takes any appropriate action necessary in the interests of a safer aviation industry.

# 2.7 Systems and Risk-based approach to surveillance

CASA's systems and Risk-based surveillance approach aims to encourage the development of authorisation holders' systems and to encourage and guide the aviation industry to fully understand their responsibility for safety. This is achieved by highlighting the following to industry management:

- management's responsibility for safety as specified in the civil aviation legislation
- deficiencies in existing safety systems with regard to applicable civil aviation legislation
- areas where the authorisation holder should be doing more to reduce the potential for deficiencies.

Risk-based surveillance adopts a structured process and is used by CASA in its oversight of authorisation holders and prioritisation of its surveillance activities based on authorisation holders' Risk profiles. It focuses on an authorisation holder's effectiveness in managing its systems Risks and enables targeted surveillance of high-Risk areas of an authorisation holder's systems. It is also a method by which CASA can evaluate that all activities conducted by an authorisation holder are as safe as reasonably practicable.

CASA must not dictate how an authorisation holder should resolve or reduce the potential for deficiencies. The authorisation holder must be responsible for identifying the cause of the system deficiency and areas of inadequate safety Risk mitigation (identified during surveillance), as well as implementing the necessary changes. The authorisation holder should internally verify changes implemented, and CASA should verify the effectiveness of these changes during future surveillance. CASA may aid an authorisation holder by providing guidance on conducting a Root Cause analysis and highlighting the appropriate guidance material with necessary explanation.

# 2.8 Surveillance scheduling

CASA's surveillance program scheduling is driven by the Risk to safety posed by authorisation holders and is based on an assessment of a number of factors. These factors include the assessment of an authorisation holder's safety performance, taking into account assessment factors indicated by the Authorisation Holder Performance Indicator (AHPI) assessment results and time since the last assessment, outstanding Safety Findings and Findings history, time since the last surveillance event, and safety-related Risks specific to each authorisation holder. Based on this consolidated information, CASA has the ability to prioritise surveillance activities commensurate with resources available.

External intelligence gathered by or provided to CASA may contribute to prioritising or determining a requirement for additional surveillance.

CASA's IT surveillance management tool supports the analysis of the output of these activities to inform the subsequent surveillance schedule.

The National Oversight Plan (NOP) is an overarching approach to safety oversight of the aviation industry. It comprises four pillars:

- Planned Surveillance (National Surveillance Selection Process NSSP)
- Response Activities
- Regulatory Services
- National Sector Campaigns.

Planned Surveillance is conducted using a classification and ranking approach; a prioritised list of authorisation holders is created and used as the basis for the annual development of a CASA-wide Planned Surveillance schedule, which is optimised in collaboration with business areas.

Response Activities are those conducted in direct response to outside events, and which are not NSSP, Regulatory Services or National Sector Campaigns. These may be surveillance events based on response to incidents, accidents or emerging Risks in relation to a specific authorisation holder.

Regulatory Services are the assessment and/or review relating to an approval, variation, exemption or instrument. These are considered separate to a surveillance activity as they are initiated by the authorisation holder and may involve cost recovery or the payment of fees. Although not considered surveillance, the conduct of a Regulatory Service provides CASA with information and insight into an authorisation holder and will form a part of the broader oversight for consideration when planning surveillance.

National Sector Campaigns are coordinated surveillance activities focusing on multiple authorisation holders within an identified sector of the industry over a defined period of time. These are conducted to focus on a particular issue.

# 3 Methodology

### 3.1 Overview

### 3.1.1 Purpose

The purpose of this chapter is to describe CASA's approach to surveillance of aviation authorisation holders throughout Australia's aviation industry. This chapter describes CASA's surveillance methodology, including:

- Surveillance Framework overview
- Management Framework overview
- types of surveillance
- authorisation holder assessment
- systems Risks.

### 3.1.2 Context

Section 9(1)(f) of the *Civil Aviation Act 1988* states that one of CASA's functions is to conduct "comprehensive aviation industry surveillance, including assessment of safety-related decisions taken by industry management at all levels for the impact on aviation safety".

#### 3.1.3 References

- Civil Aviation Act (1988)
- Civil Aviation Regulations (1988)
- Civil Aviation Safety Regulations (1998)
- Civil Aviation Orders.

### 3.2 Surveillance Phases

The surveillance phases set a standardised method of effectively applying data-driven, Risk-based principles to the conduct of surveillance. Surveillance is a continuous process, looping from authorisation holder assessment through to the finalisation of a surveillance event and management of Findings. The surveillance phases are briefly described in the following section and illustrated in the diagram below.



#### Figure 2: Surveillance Cycle

### 3.2.1 Authorisation Holder Assessment (Assess)

The purpose of this process is for the Surveillance Team to assess all available information relating to an authorisation holder's activities. This assessment allows for the identification of areas of concern and the development of proposals for surveillance to be considered in the surveillance priority review process. The output from this process step is the surveillance request. The NSSP is now the primary provision of CASAs scheduled surveillance events.

For more information, see Section 4.2 – Authorisation Holder Assessment.

#### 3.2.2 Surveillance Planning Meetings

The purpose of this process is to review and consider recommendations for non NSSP surveillance contained in surveillance requests submitted by surveillance teams. This is also the forum for reviewing Planned Surveillance schedules, resourcing requirements, and ensuring appropriate management of Findings (Safety Findings, Safety Alerts, Aircraft Survey Reports (ASR) and Safety Observations). Outputs from this process step are the approval or non-approval of non NSSP surveillance requests and the update of surveillance plans. This is achieved through Surveillance Planning Meetings held monthly or weekly and through weekly surveillance team meetings

For more information, see Section 4.3 – Surveillance Planning.

## 3.2.3 Surveillance Event Preparation (Prepare)

The purpose of this process is to develop the strategies, schedules, and work plans for surveillance events, including resources, timetable etc. The output of this process is a detailed surveillance plan that outlines the approved scope and ensures the assignment of appropriate resources to a surveillance event.

For more information, see Section 4.4 – Surveillance Event Preparation.

### 3.2.4 Conduct Surveillance Event (Conduct)

The purpose of this process is to conduct the appropriate level of surveillance. The outcome of this process is the completion of an approved surveillance event, including collecting, collating and evaluating all relevant information.

For more information, see Section 4.5 – Conduct Surveillance Event.

### 3.2.5 Surveillance Event Reporting (Report)

The purpose of this process is to compile a report based on objective Evidence gathered during the surveillance event. This includes deficiencies identified in regard to Compliance and/or safety performance. The outputs of this process are surveillance Findings (Safety Findings, Safety Alerts, ASRs and Safety Observations), raised as applicable, and the Surveillance Report, which forms part of the official record of an authorisation holder's performance. Based on the report, CASA will determine any necessary interventions.

For more information, see Section 4.6 – Surveillance Event Reporting.

### 3.2.6 Update System Information (Update)

The purpose of this process is to collect and validate a wide variety of information to inform the authorisation holder assessment phase. The output from this process step is an information package to enable analysis. This process also includes the management of surveillance Findings, including the Acquittal of Safety Findings and response to Safety Observations etc.

The IT system is updated to include the results of any surveillance event, and there is also a wide variety of information that may be entered, such as third-party intelligence etc. The General Comment field is utilised in most instances under authorisation holder or within the surveillance event whilst the event is occurring to make brief notes.

For more information, see Section 4.7 – Update System Information.

# 3.3 Applied Surveillance Methodology

### 3.3.1 Types of Surveillance

#### 3.3.1.1 Level 1 – Surveillance event

This level of surveillance is a structured, forward-planned, larger-type surveillance event and covers:

Systems Audits

- Health Checks
- Post-authorisation reviews (PAR).

#### **Systems Audits**

A systems audit is surveillance based on a defined scope developed by the surveillance team to consider the specific activities conducted by an authorisation holder, ensuring their Compliance with regulations and the authorisation holder's systems which are associated with the activities surveilled and should include available industry intelligence. The mandatory Surveillance Planning and Scoping Development Form 1189 must be used to capture how the scope was developed and this is then saved to RMS.

While this type of surveillance event will, in many cases, be conducted by a multi-disciplinary team over multiple days, this may not always be the case as some surveillance events may be conducted by individual Inspectors.

#### **Health Checks**

This type of surveillance event is a reduced version of a systems audit and is usually of a shorter duration. The scope for a Health Check is based on a mandatory set of Elements that, over time, have demonstrated substantial Non-Compliance and/or poor safety Risk mitigation across a specific aviation sector. Details of the mandatory Elements for each authorisation type are published separately to the CASA website.

A surveillance team should also look to include additional elective Elements based on the particular authorisation holder's profile or industry sector and industry intelligence. However, these elective Elements cannot replace or impact on the surveillance team's ability to complete the set mandatory Elements. The Surveillance Planning and Scoping Development Form 1189 must be used to capture how the scope was developed and this is then saved to RMS.

A health check allows CASA to focus on specified areas of an authorisation holder's activities and to determine whether there is sufficient Evidence to provide CASA with confidence in the authorisation holder's ability to remain compliant and to effectively control its safety Risks associated with its aviation activity. If a health check does not provide CASA with a satisfactory level of confidence in the authorisation holder's Compliance status, consideration must be given to undertaking a more detailed systems audit.

Resources allocated to health checks are to be determined on a case-by-case basis by the relevant surveillance team and may consist of a multi-discipline surveillance event team or a single Inspector, as applicable.

#### **Remote Surveillance**

A Remote surveillance event utilises a multimedia approach to validate authorisation holder Compliance without physically attending onsite. Unlike a desktop review, it may involve a combination of a manual review, key personnel interview and/or site and facilities inspection using digital solutions. The surveillance team should liaise with the Authorisation Holder for the documentation required for the remote surveillance. A remote surveillance event can also be conducted during situations such as COVID-19 lockdowns where site access is not an option.

There may be circumstances where the surveillance team cannot be satisfied that an Element has been appropriately sampled whilst conducting the surveillance event, and this should be

annotated in the surveillance report. If after review by the surveillance team, it is determined that an onsite activity is required, the Surveillance Manager should be consulted, and consideration given to raising a separate surveillance event such as a Level 2 – site inspection. Additional information can be found in Annex 1.

#### Post-authorisation Reviews (PAR)

Once an initial authorisation has been issued, a Post-Authorisation Review must be conducted to ensure entry control standards are being maintained. Depending on the type of authorisation issued, a Post-Authorisation Review must be conducted within six (6) to fifteen (15) months following the initial issue. The scope of this type of surveillance must be based on the authorisation issued. These are scheduled through the NSSP.

#### 3.3.1.2 Level 2 – Surveillance event

#### **Operational Checks**

This type of surveillance event relates to less formal interactions with authorisation holders and may be in the form of checklist-based Compliance and product check of a specific section of its systems. The Operational Check frequently is used to verify the process in practice of the system being assessed. They are significantly shorter in duration, are generally Compliance assessments and are usually, but not always, scheduled through the normal surveillance planning and approval process based on areas of concern identified by a surveillance team The Surveillance Planning and Scoping Development Form 1189 must be used to capture how the scope was developed and this is then saved to RMS.

Level 2 surveillance events include the following surveillance types:

- AOC Desktop Review This event type is used as an Element of the NSSP to capture the assessment of certain AOC holders that are subject to renewal within an NSSP cycle. The AOCD desktop review requirements apply in preparation and assessment of applications for the subsequent issue of an AOC under section 27 of the Act for the operation of Australian registered aircraft. To avoid doubt this does not apply to foreign aircraft AOC as defined within section 27AE of the Act. Depending on the type of operations the authorisation holder conducts, an AOCD event must be conducted within 3 months of the AOC expiry date. The AOCD event is conducted primarily to inform the decision making surrounding the AOC renewal which is managed as a separate process as outlined in the Air Operator's Certificate Manual. At the conclusion of an AOCD event the SharePoint AOC questions must be completed and an AHPI in Sky Sentinel assessment carried out.
  - for Group A operators, a Level 1 systems audit will be required between 6 and12 months before the date of AOC expiry. The scoping of this level 1 surveillance event will be consistent with the NSSP requirements to ensure comprehensive coverage of the AOC's operations and will be scheduled within the NSSP schedule.
  - for Group B a Level 1 or Level 2 that includes an onsite component with 6-12 months before the certificate expiry date.
  - for Group C operators no action is necessary aside from the normal SPL process.
- **Note:** An AOCD event is conducted as a Level 2 Operational Check AOC Subsequent Issue Desktop for Group A and Group B Operators. The surveillance report is not "Issued" to the

authorisation holder and does not contain any Findings. A Surveillance AOC Desktop Review assessment Form 2173 will be completed by the surveillance lead which will form the record of surveillance along with an internally filed surveillance report. An AOCD event has specific requirements during the preparation and conduct phases which are covered in sections 4.4.6 and 4.5.15 of this manual respectively.

- ramp check inspection of an aircraft, including documentation, equipment and procedures associated with that operation
- site inspection an event comprised primarily of an onsite inspection of an authorisation holder's facilities, equipment, processes in practice or any other purpose other than those covered by other Operational Check event type
- en-route check an event comprised primarily of in-aircraft observation of an authorisation holder's processes and procedures, or the surveillance component associated with an in-aircraft Regulatory Service task. This event type can also be used for simulators
- manual review an event comprised primarily of a review of an operational manual or suite of manuals. This event type will generally be a desktop review, but can include an on-site component if relevant
- key personnel interview an event comprised primarily of an onsite or offsite interview or meeting with an authorisation holder's nominated key personnel for any purpose other than to assess them for the key organisational role
- desktop review a desktop assessment of operational documents, intelligence and/or other surveillance related information CASA may have received, other than a manual review. As the name suggests this event type is conducted without an onsite component. Accordingly, the event should be scoped in order to enable review of Elements that can be assessed/sampled without the surveillance team going onsite. There may be circumstances where, after review of the documentation provided, the surveillance team cannot be satisfied that an Element has been appropriately sampled for the surveillance event. Under these circumstances, if the Element has been scoped but has been unable to be adequately sampled during the event, it should be annotated in the surveillance report. If after reviewing documentation it is determined that an onsite activity is required, the Surveillance Manager should be consulted, and consideration given to raising a separate surveillance event such as a Level 2 – site inspection. Additional information can be found in Annex 1
- safety meeting an event comprised primarily of an onsite or offsite meeting, with an authorisation holder's safety staff for any purpose other than to investigate an incident or occurrence
- target an event type only to be used when conducting targeted surveillance of a limited scope when no other Operational Check event type is applicable to the required activity.

#### Surveillance Events during COVID-19

Due to the evolving nature of the COVID-19 pandemic, Inspectors who cannot conduct surveillance events requiring an onsite component are able to record the events as a Level 2 Desktop. COVID-19 events also have associated worksheets and a Risk assessment guide. See processes for Prepare and Conduct for COVID-19 event.

**Note:** International scheduled surveillance events. Inquiries must be made to determine what their actual level of activity is - Are they maintaining Australian Aircraft? If so, how many? A Risk

Assessment must also be conducted and saved to the RMS File. <u>COVID-19 Risk Assessment</u> <u>Guide</u>

**Note:** Events not listed above are in the process of being removed from the Sky Sentinel process and as such **should not** be selected.

#### Unscheduled

- ATSB occurrence desktop review an event created as a result of a report received via the ATSB occurrence Management Process, involving investigation, education or verification of safety management of an authorisation holder or private aircraft operator
- CIRRIS notification desktop review an event created as a result of a report received via the CIRRIS occurrence Management Process, involving investigation, education or verification of safety management of an authorisation holder or private aircraft operator
- for Response Team use only: occurrence investigation request: desktop an event comprised of a desktop review of any occurrence or intelligence related to an occurrence not captured in the ATSB/CIRRIS occurrence Management Process
- for Response Team use only: occurrence investigation request: site An event comprised of an on-site review of any occurrence or intelligence related to an occurrence not captured in the ATSB/CIRRIS occurrence Management Process
- request from Executive an event conducted as a result of a direction from a CASA executive. This event will be of a limited scope or as directed by the executive.
   Further information refer Annex 1 Section 14

#### 3.3.2 National Sector Campaigns - Campaign Surveillance

National Sector Campaigns are coordinated surveillance activities focusing on multiple authorisation holders within an identified sector of the industry over a defined period of time. These are conducted to focus on an emerging Risk or a particular issue in a specific sector.

These are typically initiated by the EM ROD who will generate a Terms of Reference (TOR) document for the National Manager, Surveillance or the applicable Branch Manager, outlining the following details:

- sector to be surveilled
- surveillance scope
- timeline.

National Manager, Surveillance will introduce the TOR document at the next Surveillance Planning meeting for discussion and actioning which should include:

- appointment of a suitable Surveillance Manager to manage the campaign surveillance program
- review of the timeline to determine the feasibility of accomplishing the requirements in the TOR
- preliminary discussion on resource requirements
- impact on the NSSP schedule.

The appointed Surveillance Manager will plan the surveillance activities in the same way that all surveillance events are planned see Surveillance Process 4.1.2. In Sky Sentinel these must have in the comments with square brackets [CAMPAIGN: Year and THE WHAT].

### 3.3.3 System Risk structure

#### 3.3.3.1 Systems and Elements

Systems-based surveillance puts the focus on the system by:

- understanding all of the Elements of the system
- focusing on how the Elements integrate
- determining whether the system is complete or missing key components
- determining how well the authorisation holder is managing its safety-related Risks
- determining whether the system achieves all Compliance requirements
- determining how the system and its Elements interact with other systems.

The aim of a common set of system and Element descriptions is to build up the surveillance picture over time on the same authorisation type, and then to compare the data on an individual authorisation holder against all other authorisation holders within that sector. Data can then be compared across all authorisation types to identify specific systems and Elements that may be breaking down and the possible causes (see the relevant technical annex).

Taking into consideration the size and complexity of an individual authorisation holder's operation, all systems and Elements must be assessed in a timely manner. As not all system Risks are applicable to all authorisation holders, the surveillance team and an Inspector's judgement should be used in identifying the most appropriate system Risks for which the effectiveness of an authorisation holder's control is to be assessed using the Surveillance Planning and Scoping Development Form 1189 to inform this decision.

### 3.3.4 Risk Systems attributes – Management System Model (MSM)

Systems attributes are the four related areas of the MSM by which an authorisation holder's systems Risks can be assessed.

The following figure shows the external environment influences, including legislation, the company board (or other factors influencing management), and interactions with the public and customer requirements. The four systems attributes operate within the organisation to provide effective control.



Figure 3: System Attributes

The MSM systems attributes are broken down into 12 components to assist in assessment. Some of the components are further broken down into sub-components to facilitate a more detailed evaluation.

### 3.3.4.1 Systems attributes

The following table shows the systems attributes and the components/sub-components.

System attributes	Components	Sub-components
Management	Management commitment	Policy
		Responsibility and authority
		Nominated management representative
	Planning	Objectives and safety/quality planning
		Internal communication and consultation
		Hazard identification and Risk management
	Management review	N/A
Infrastructure	Facilities	N/A
	Tools, equipment and materials	N/A
	Data, information, and records	N/A
	Personnel	N/A
Process in practice	Process in practice	N/A
Monitoring and improvement	Internal audit	N/A
	Internal reporting	N/A
	Investigation	N/A
	Remedial and Corrective action	Remedial Action

The following sections detail the individual systems attributes.

#### 3.3.4.2 Management Attributes

Management attributes ensure accountabilities, responsibilities and authority are defined for the processes and that management has ensured the processes (those for organisational functioning and those for monitoring and improving these) are adequately designed and implemented. Management responsibility consists of:

- management accountability
- management commitment
- planning

/

• management review.

#### Management commitment

- **Policy:** senior management should develop and communicate policy and ensure its dissemination to all levels of the organisation. Safety/Quality Policy should:
  - include a clear declaration of commitment to safety/quality
  - ensure Compliance with legislation

- ensure adequate knowledge, skills and safety awareness at all levels of the organisation.
- Accountability and Responsibility: management should ensure that accountabilities<sup>1</sup> and responsibilities<sup>2</sup> of personnel are appropriately defined and communicated within the organisation through:
  - a clearly defined organisational chart
  - clear documentation
  - effective monitoring tools
  - a clear climate to effectively discharge responsibilities and authority.
- Nominated management representative: management representative(s) should be appointed and given the accountability and responsibility (subject to CASA's approval where required by legislation).

#### Planning

Effective planning should support the 'management commitment' through designing and implementing business processes that meet assigned objectives established for the various functions and levels within the organisation. Processes should include:

- hazard identification and Risk management
- change management.

#### Management review

Periodic review process for evaluating the effectiveness of the monitoring and improvement system.

#### 3.3.4.3 Infrastructure

Infrastructure must be in place, including the various controls, to continuously ensure the updating and suitability in supporting the operation. Infrastructure includes four components:

- **Facilities:** all buildings and workshop facilities required for the satisfactory performance of activities authorised
- **Tools, equipment and materials:** all tools, hardware, software, materials and equipment to perform authorised activities
- Data, information and records: documented policies and procedures, manufacturer's data etc., either in written or pictorial form in hard copy or an electronic system. Records provide Evidence of performance and/or completion of tasks. Organisational policy and procedures should be established for effective control of data, information and records.
- **Personnel:** personnel who are qualified, trained and competent to perform the processes in support of authorised activities.

<sup>&</sup>lt;sup>1</sup> Accountable: A person is accountable to someone, like CASA; means this person is accountable for the effective performance of the process and/or the quality/safety outcomes of the process.

<sup>&</sup>lt;sup>2</sup> Responsibility: A person is responsible for something; means this person has the legitimate power to establish a process and/or modify the process.

### 3.3.4.4 Process in practice

Process in practice assesses:

- Compliance
- the effectiveness of policies and procedures in supporting the processes
- the level of implementation of the policies and procedures
- the adequacy of infrastructure and its effective use in supporting the processes
- the clear identification and workings of the interrelationships and interdependencies between various processes.

To function effectively, an organisation has to identify and manage numerous linked processes:

- Interdependent processes: often outputs from one process form the input to the next process
- **Process interfaces:** there may be interactions between the authorisation holder's processes and those provided by external providers. The external providers might be under the same management, or externally contracted by the organisation.

CASA's surveillance methods view these processes to assess the effectiveness and the interdependencies and interactions between them. Its aim is to assess how well resources are used and managed to bring about safety/quality outcomes.

When evaluating a process, Inspectors will assess the following:

- how well is the process set up?
- is the infrastructure for the process adequate?
- how well does the infrastructure support the process used?
- competence of staff involved in the process.
- how effectively do the procedures used for a particular process translate into Compliance and system effectiveness?
- how well do staff understand the procedures used in the process?
- how well do they comply with the procedures?
- do staff resort to informal practices to complete the task?
- where there are interdependent processes, how well does one support the other and contribute to safe quality outcomes?
- where there are process interfaces, how well does the authorisation holder identify and manage them?

#### 3.3.4.5 Monitoring and improvement

This attribute is at the centre of a safety/quality system. It focuses on finding problems within the system through:

- internal surveillance
- system feedback, including latent conditions through internal reporting
- finding causal factors through investigation
- taking action to remedy the problems, eradicate the causes, and remove the potential for reoccurrence through remedial and corrective actions.

As a result of reviewing and testing a number of processes, an overall assessment of the monitoring and improvement systems can be made.

Monitoring and improvement includes four components:

- Internal audit: must be supported by senior management commitment in terms of an audit policy
- **Internal reporting:** must be supported by management policy and should aim to create a supportive atmosphere to encourage reporting of incidents, errors, defects and serve as a means of identifying process and system deficiencies.
- **Investigations:** includes internal systems used to investigate and arrive at Root Causes of problems
- Remedial and corrective action:
  - Remedial Action: immediate action taken in response to a Finding to address the deficiency that caused the breach, and which will return performance to a compliant state
  - **Corrective action:** action by an authorisation holder in response to a breach that reduces the potential of recurrence. The action must address the Root Cause of the deficiency that caused the breach and must include a review to ensure the action is effective.

### 3.3.5 Verifying processes using MSM

It is important to consider the following when verifying a process (this is not exhaustive):

- do the authorisation holder's processes help achieve Compliance with relevant legislation?
- are the authorisation holder's processes sufficient to address known safety Risks?
- are the procedures describing and supporting the process adequate for the performance of the process and to achieve the safety outcomes?
- are the procedures being complied with? If not, why not?
- have the interdependencies and interactions with other processes been identified and are they working effectively across all systems?
- is the available infrastructure adequate and how does it support the process?
- how does the authorisation holder monitor the performance of the process and make improvements?
- has the organisation assigned a responsible and competent person to ensure the process remains adequate and current?
- is there a competent person with the appropriate authority to change the process?
- are the people involved competent and adequately trained?
- have the materials provided for the process come from an appropriately controlled source?
- does the process achieve the intended outcome(s)?

When a deficiency is found, additional questions should be asked to assist in determining the causal factors.

### 3.3.6 Using the MSM

The MSM is derived from ISO9001 Quality Management System principles and is CASA's tool for understanding a system and what makes the system safe. The MSM describes what must be present in any system for that system to be safe and effective.

The MSM is used during the surveillance process in the following ways:

- preparing for surveillance
- questioning while on site
- assessing systems Risk
- when acquitting a Safety Finding by considering whether the authorisation holder's response addresses the Root Cause.

**Preparing for surveillance**: The MSM is first used during the surveillance preparation phase. This involves reviewing the authorisation holder's documentation in light of the MSM. In reviewing the systems that the authorisation holder must have in place, the systems are considered in light of the four attributes of effective systems. These attributes drive the surveillance questions and the prompts used by the Inspectors on site.

**Questioning on site**: While on site, when verifying an authorisation holder's processes, the surveillance questions must consider the four attributes (see Section 3.3.3.1 – Systems Attributes).

Acquitting a Safety Finding and Safety Alert: In the Acquittal process, an authorisation holder's response is assessed and accepted with the verified Evidence recorded. At this stage, the relevant MSM attribute is selected in Sky Sentinel for data capture and reporting purposes based on the Root Cause analysis provided by the authorisation holder.

### 3.3.7 Authorisation Holder Performance Indicator (AHPI)

#### 3.3.7.1 AHPI assessment

An AHPI assessment is completed in Sky Sentinel using the AHPI tool. For AOC and AMO authorisation types the Sky Sentinel tool works together with information gathered utilising nationally consistent SharePoint set of questions located on the CASA SharePoint site and is one of several factors used to determine if surveillance events are to be proposed. The AHPI tool is questionnaire-based, consisting of a number of factors and sub-factors. These factors are associated with organisational characteristics and performance commonly thought to affect or relate to safety performance behaviour.

The design of the tool is based on the Reason Model of accident causation, safety management systems and commonly identified safety Risk factors, which exist at organisational and operational levels. Each sub-factor is rated using word pictures.

The SharePoint tool is applicable to the AOC and AMO sectors of the aviation industry. Guidance within the tool provides context on how the tool is applied to specific industry sectors.

The Sky Sentinel tool uses AHPI scores to categorise the authorisation holder. These are assessed on a six-monthly basis for authorisation holders classified as Category 1 or Group A under the NSSP or 12-monthly basis for authorisation holders classified as Category 2 or

Group B and C under the NSSP. To view this with the Group A, B or C data you must use the Surveillance Services - AHPI Power BI app as Sky Sentinel is unable to hold the Group Data.

**Note:** For further information regarding Group A, B or C authorisation holders refer to the NSSP manual.

In circumstances where there is not sufficient information about a particular aspect of an authorisation holder's operation, all reasonable steps should be taken by the delegated Inspector to make contact with the operator to provide an opportunity to improve CASA knowledge regarding that part of the operations. In the situation where contact is unable to be made with the authorisation holder the AHPI should not be conducted, and a Formal Comment should be entered in Sky Sentinel to that effect. It should also be determined at this time whether a surveillance event should be proposed.

Inspectors must use the nationally consistent SharePoint set of questions while carrying out an <u>AOC</u> or <u>AMO</u> AHPIs to improve the accuracy of AHPIs. The set of questions will serve as information to support the conduct of the AHPI in Sky Sentinel.

**Note:** The completion of the SharePoint questions, does not replace the AHPI to be conducted in Sky Sentinel.

The SharePoint AHPI question sets provide further information about the authorisation holders current level of activities. This information is in addition to the information required to conduct the Sky Sentinel AHPI. However, the information gathered while conducting the digitised question sets should allow the Inspector to complete the Sky Sentinel AHPI without further contact with the authorisation holder.

The information gathered is used to populate the AHPI data in the Power BI Authorisation Holder Profile reports. These reports are a valuable tool for use by the surveillance team and the information can be used during the Scoping of a surveillance event.

#### 3.3.7.2 AHPI results

The result from an AHPI assessment in Sky Sentinel assigns the authorisation holder to one of two categories:

- **Category 1 (Cat 1**) (NSSP Group A) identifies the need for a higher-level consideration (Top 10% of the Auth Type for the majority)
- **Category 2 (Cat 2)** (NSSP Group B and C) establishes that a normal or lower-level consideration is appropriate.

The AHPI results also contribute to the oversight performance profile assessment of an authorisation holder by ensuring that:

- **Cat 1** authorisation holders and those classified as Group A under the NSSP require an AHPI Assessment at least once every six months
- **Cat 2** authorisation holders and those classified as Group B and C under the NSSP require an AHPI assessment at least every 12 months.

In addition to the above, AHPI Assessments should be carried out in the following circumstances by an Inspector:

- at the completion of a substantial entry control task Regulatory Service
- at the completion of a surveillance event.

# 4 Surveillance

## 4.1 Overview

### 4.1.1 Introduction

This chapter describes CASA's systems and Risk-based approach to surveillance of authorisation holders and the methods for all surveillance event types which support the continuous performance monitoring process. The objective of this chapter is to ensure standardised, efficient and consistent monitoring of all authorisation holders Risk.

Systems and Risk-based surveillance seeks to assess an authorisation holder's management system and its ability to identify and keep operational Risks as low as reasonably practicable while ensuring Compliance with Australian aviation legislation is maintained. Risk-based surveillance adopts a structured process and is used by CASA in its oversight of authorisation holders and prioritisation of its surveillance activities based on authorisation holders' Risk profiles. It focuses on an authorisation holder's effectiveness in managing its systems Risks and enables targeted surveillance of high-Risk areas of an authorisation holder's systems.

Safety-related processes are assessed to determine whether they are functioning in accordance with the authorisation holder's documented systems and any applicable civil aviation legislation.

The systems and Risk-based surveillance approach focuses the authorisation holder's attention on its safety obligations, by providing a visible and understandable analysis and evaluation of the authorisation holder's systems, and the safety Risks that exist in these systems, with specific emphasis on safety outcomes.

### 4.1.2 Surveillance process

The diagram below provides a high-level view of the surveillance process, as well as the associated chapter sections and primary responsibilities for each phase.

**Note:** NSSP follows from Figure 4 - 4.3 onwards.

### **CASA Surveillance Manual**



Figure 4: Surveillance Process and References
# 4.2 Authorisation Holder Assessment

# 4.2.1 Purpose

The assessment process is used when an authorisation holder may have come to the attention of a surveillance team for one of (but not limited to) the following reasons:

- unsafe behaviour/low flying report
- information provided by Inspectors conducting entry control tasks
- ATSB REPCONs
- ATSB/CIRRIS Occurrence report
- intelligence provided by industry
- the resumption of activities after a certificate suspension.

These assessments assist surveillance teams to identify where potential areas of concern may exist in an authorisation holder's activities. Surveillance actions are then proposed to examine the areas of concern.

The Authorisation Holder Assessment is an Inspectors assessment of the apparent Risk to safety presented by an authorisation holder and is completed by taking into account the following information, most of which is presented in Sky Sentinel and from the Authorisation Holder Profile Power BI reports:

- outstanding Safety Findings and Findings history
- date of the last AHPI assessment and AHPI assessment history
- AHPI result category
- time since the last Level 1 and Level 2 surveillance event, particularly when compared to the recommended frequency specified in the NSSP Manual
- any additional surveillance intelligence about the authorisation holder and their operation.

On completing the assessment process, the Inspector believes further action is required the Inspector should put forward a recommendation for a surveillance event to be carried out on the Authorisation Holder on the agenda for the next weekly surveillance team meeting and if approved, the matter should be raised at the next scheduled Surveillance Planning Meeting (SPM).

Recommendations being made to the SPM should be verified against the NSSP schedule to ascertain whether the subject Authorisation Holder appears in the upcoming NSSP schedule and if not, the recommendations should be recorded in Sky Sentinel as surveillance requests.

Note: The assessment process is outside of the NSSP selection process - refer to NSSP Manual.

# 4.2.2 Reference

The following material is applicable to the Authorisation Holder Assessment phase:

• Annex 1: Authorisation Holder Performance Indicators.

# 4.2.3 Process



Figure 5: Surveillance Team Assessment of the authorisation holder for Response Activities

# 4.2.4 Conduct assessment

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The key Elements of the assessment phase outside of the NSSP are set out in the following diagram and should be conducted whilst contacting the Authorisation Holder.



Figure 6: Surveillance Assessment Phases

## 4.2.4.1 Process - Assess authorisation holder

#### Surveillance Inspector

- 1. Review the current status of assigned authorisation holder.
- 2. Accesses the Power BI reports.
- 3. Assesses all available information relating to the assigned authorisation holder obtained since the last AHPI assessment.
- **Note:** Formal comments will also be recorded at the completion of a regulatory service task for a significant change application for an authorisation holder. Including those under voluntary suspension who should be periodically contacted to confirm they seek to maintain the voluntary suspension.

#### Surveillance Technical Officer

- 1. Upon request provides the Authorisation Holder Profile Report Power BI to the Surveillance Inspector for assessment and/or shows the Inspector how to run the report.
- 2. As directed by the Surveillance Manager add comments in relation to the surveillance team meeting decisions to the applicable Surveillance Planning Meeting agenda.

#### Surveillance team meetings

Surveillance team meetings may be conducted with a minimum of half the members and can be conducted via any medium e.g. face to face or vid-con, keeping in mind that the Surveillance Manager still has the final decision on recommending Level 1 and approving Level 2 surveillance requests.

## 4.2.4.2 Authorisation holder discussions

The Discussion field in Sky Sentinel is used by staff to enter a comment about an authorisation holder on their Sky Sentinel page in the Discussion field and these comments may be entered as either a "Formal Comment" or a "General Comment"

#### **General Comments**

As a rule, General Comments are recorded after an interaction with an authorisation holder and are considered "for information only". All Inspectors have access to this function in Sky Sentinel.

These comments would not as a rule be used as information to be considered when Scoping a surveillance event.

#### **Formal Comments**

Formal Comments are a valuable source of information when Scoping a surveillance event and a list of these comments appear on the Authorisation Holder Profile Power BI report,

Formal Comments are recorded in in the authorisation holder's Sky Sentinel page in the following (but not limited to) circumstances:

- at the completion of an AHPI assessment
- an issue identified by an Inspector while conducting an entry control task
- the details of an unsafe behaviour/low flying report

- the details of an ATSB/CIRRIS occurrence
- details of a REPCON

- Key Personnel changes
- Voluntary suspension (to be done at the start of a voluntary suspension and at the expiry of each suspension period)
- a change of location
- addition of new operating ports
- addition of new aircraft types to the operation
- a change to the maintenance services provided by the organisation a change to the permitted training that it is approved to provide.
- receipt of An Prescribed Single Engine Aeroplanes (ASEPTA) or CAMO reliability report.
- **Note:** Details of any significant items must be added as comments in Sky Sentinel and also shared across the surveillance team at the next team meeting. This is done to ensure significant information is appropriately shared with team members.

#### **General Comments**

Are used to capture intelligence gathered from various sources both from within and outside the organisation and are generally for information only.

#### **Formal Comments**

Are used to record information of significance that may be taken into consideration in Scoping future surveillance activities or when conducting the next AHPI on the authorisation holder.

Entering new Formal Comments will update the last discussed date for the authorisation holder.

#### Comment

**Assessor(s):** Conduct AHPI assessments (if relevant to the particular authorisation type being assessed) on each authorisation holder by completing the relevant SharePoint question set (AMO and AOC only) and then evaluating each AHPI sub-factor individually against the associated word pictures informed by the Inspector's knowledge of the authorisation holder:

- 1. Authorisation holders in the Category 1 and NSSP Group A must be conducted six monthly with a formal discussion. For Category 2 and NSSP Group B and C at least every twelve months with a formal discussion. The NSSP classifications are contained in the NSSP manual.
- 2. Where information indicates a substantial operational change has occurred, or an area of concern has arisen.
- 3. When there is enhanced knowledge of or information about the authorisation holder.
- 4. When a Regulatory Service task has been completed.
- 5. at the completion of a Surveillance Event, prior to report Issue.
- **Note:** In completing the AHPI assessment, a conservative approach must be taken with assessor(s) scoring higher if any uncertainty exists. If assessor(s) (Inspector(s) do not have sufficient information or knowledge about a particular aspect of an authorisation holder's operation, a 'Don't know' response must be recorded. A 'Don't Know' must not be recorded unless the Inspector has contacted the authorisation holder first. The name(s) of the Inspector who conducted the assessment must also be recorded in the

'Assessors' field in Sky Sentinel. Where applicable a comment should be added the AHPI assessment to record what type of contact was utilised to inform the assessment (phone calls, site visit etc.).

**Note:** Inspectors must use the nationally consistent SharePoint set of questions located on the CASA Intranet while carrying out an AOC or AMO Authorisation Holder Performance Indicators (AHPIs) to improve the accuracy of AHPIs. This set of questions will serve as information to support the conduct of the AHPI in Sky Sentinel. This does not replace the AHPI to be conducted in Sky Sentinel.

#### Surveillance Technical Officer:

- 1. Provide visibility to the surveillance team of AHPI status via the Authorisation Holder Assessment Report within Power BI.
- **Note:** New authorisation holders will need to have an AHPI conducted once they are added into Sky Sentinel. A list of these authorisation holders is presented at the top of the Authorisation Holder Assessment Report.

## 4.2.4.3 Process Details – Conduct AHPI assessment

An AHPI assessment applies a questionnaire-based tool within Sky Sentinel that focuses on a number of behavioural factors that are commonly recognised as affecting or relating to safety performance. AHPI assessments are conducted to ensure the safety performance of all authorisation holders is appropriately monitored on an ongoing basis. AHPI results also become a consideration in the decision-making process in whether a surveillance request should be proposed.

AHPI assessments must be conducted six-monthly for authorisation holders in Category 1 regardless of their Group. For authorisation holders in Category 2 an AHPI should be conducted at least every six months for authorisation holders classified as Group A under the NSSP or 12-monthly basis for authorisation holders classified as Group B and C under the NSSP; or, additionally, where some substantial operational change has occurred. For example, after completing a surveillance event or a significant change Regulatory Service task or after problematic or ongoing surveillance Findings have been finalised or acquitted. It is at this time that a substantial amount of knowledge and information about an authorisation holder would have been gained.

The assessment should be conducted after the assessor has contacted the authorisation holder to determine their current operational situation AMO and AOC authorisation holders must also have SharePoint question set completed prior to the AHPI in Sky Sentinel being completed.

The assessor must evaluate each factor against a set of word pictures choosing the word picture that best describes the authorisation holder's current status. In completing an assessment, a conservative approach must be taken with assessor(s) scoring higher if any uncertainty exists. Additionally, in circumstances where assessor(s) do not have sufficient information about a particular aspect of an authorisation holder's operation, a 'Don't know' response must be recorded, but only after contacting the authorisation holder. The number of 'Don't know' responses should be taken into account when considering whether a surveillance event should be proposed, as a lack of knowledge by CASA about an authorisation holder's operation is likely to be of significance.

Inspectors must use the nationally consistent SharePoint set of questions while carrying out an AOC or AMO Authorisation Holder Performance Indicators (AHPIs) to improve the accuracy of AHPIs. This set of questions will serve as information to support the conduct of the AHPI in Sky Sentinel. This does not replace the AHPI to be conducted in Sky Sentinel.

The result from an AHPI assessment assigns the authorisation holder to one of two categories:

- Cat 1 identifies the need for a higher-level surveillance focus
- **Cat 2** establishes that a normal or lower-level surveillance focus is appropriate.

Details of AHPI results and history can be found on the 'AHPI Assessment List' page in Sky Sentinel.

#### Note: Instances where no AHPI required

Due to the nature of surveillance conducted on some authorisation types, the usability of the AHPI tool and the usefulness of the results is not considered suitable. As such, no AHPI assessment is conducted on these authorisation types. These few exceptions are shown in the individual technical annex where this applies.

#### New authorisations

As part of the issue of a new authorisation or at the completion of substantial Regulatory Service task, an AHPI assessment must be carried out by the Regulatory Service Inspector that was involved in the Regulatory Service task

## 4.2.4.4 **Process - Consider surveillance (excluding NSSP)**

**Surveillance Team:** Considers a range of factors in deciding whether to propose a surveillance event, including:

- outstanding Safety Findings and Findings history
- date of the last AHPI assessment and AHPI assessment history
- AHPI result category
- time since the last Level 1 and Level 2 surveillance event, particularly when compared to the recommended frequency specified in the NSSP Manual
- any additional surveillance intelligence about the authorisation holder and their operation
- any additional surveillance intelligence about the authorisation holder and their operation.

# 4.2.4.5 Process Details - Consider surveillance (excluding NSSP)

The factors that could be considered in assessing an authorisation holder are extremely broad. While this consideration will be left to the professional judgement of surveillance teams, some examples of factors that could be included in an assessment are:

- triggers requiring additional assessment, e.g. intelligence of concern regarding the performance of the authorisation holder
- inadequately controlled authorisation holder safety Risks
- previous surveillance and entry control history, such as Safety Findings, Safety Observations, entry control changes to personnel, routes and aircraft and refusals to issue certificates
- other safety information, such as formal comments recorded in Sky Sentinel

• organisational changes

- current Enforcement action
- conditions listed on or against the authorisation
- any previous or planned Regulatory Services tasks
- variation to authorisation holder's permission(s) requested
- change of financial situation, ownership or other substantial changes.

#### Surveillance considerations

When a surveillance team is considering their surveillance proposals outside of the NSSP, they must include all available information, not only the AHPI category result. The following details set out the key factors that must be considered when determining whether a surveillance event is to be proposed: Key considerations for surveillance.

#### Table 2: Key considerations for surveillance

Key considerations for surveillance			
Overdue Safety Findings / Findings history	АНРІ	Time since last Level 1 and Level 2 surveillance	3 <sup>rd</sup> party intelligence

#### **Outstanding Safety Findings and Findings history**

The processes for managing outstanding Safety Findings are set down in detail in Section 4.7 – Update System Information. Consideration of outstanding Safety Findings needs to be evaluated on a case-by-case basis as the circumstances of outstanding Safety Findings can vary greatly. Some of the factors that need to be taken into account may include:

- the number and complexity of the outstanding Safety Finding(s)
- the time the Safety Finding(s) has been outstanding
- whether the Safety Finding(s) has been responded to and whether the response was satisfactory or not satisfactory
- whether the Safety Finding(s) has been accepted pending verification.

Factors to consider in relation to Findings history (including Safety Alerts, Safety Findings and ASRs) may include:

- the nature and seriousness of the breach(es)
- any apparent trends in deficiencies observed over time
- whether breach(es) has been finalised within prescribed timeframes
- whether there has been a history of recurrence
- whether the authorisation holder has shown a positive attitude towards regulatory Compliance and safety, or
- whether the Acquittal processes have been generally problematic.

#### AHPI assessment

AHPI assessment result – The result from an AHPI assessment assigns the authorisation holder to one of two categories:

- Cat 1 and NSSP Group A identifies the need for a higher-level consideration
- **Cat 2 and NSSP Groups B & C** establishes that a normal or lower-level consideration is appropriate.

While the AHPI result category is an important consideration, it must not be used as the sole determinant for proposing or prioritising surveillance. The final decision on the surveillance priority for any individual authorisation holder must be based on the full range of considerations.

- 'Don't know' responses In circumstances where the assessor(s), after attempting to contact the authorisation holder, does not have sufficient information about a particular aspect of an authorisation holder's operation when completing an AHPI assessment, the assessor should be considering whether a surveillance event should be proposed
- date of last AHPI assessment and AHPI history AHPI assessments are conducted to ensure that the safety performance of an authorisation holder is appropriately monitored on an ongoing basis. AHPI assessments must be conducted at least every six or twelve months dependent on the Sky Sentinel category or NSSP group, or, additionally, where a substantial operational change has occurred. If the date of the last AHPI assessment is more than the mandatory six or twelve months, this may reflect on the level of oversight being applied to the individual authorisation holder. The AHPI assessment history, which can be viewed for the authorisation holder on the 'AHPI Assessment List' page in Sky Sentinel, may also provide a source of valuable information when considering whether surveillance should be proposed, as well as the type and priority for such surveillance.

#### Time since last surveillance event

Over time, without physically verified Evidence derived from a comprehensive surveillance, CASA's ability to determine if an authorisation holder is able to maintain an acceptable level of Compliance and maintain robust systems capable of combatting identified and latent safety Risks, progressively diminishes. As such, the time since the last (Level 1 or Level 2) surveillance event is an important consideration.

#### Surveillance intelligence

Any available additional intelligence about an authorisation holder and their operation should be taken into consideration in the decision-making process in proposing and prioritising surveillance. Inspectors and staff should be mindful of the importance to capture and record full details of all interactions with authorisation holders, as well as providing the reasoning behind all decisions and assessments. Particular attention must be paid to interactions relating to all authorisation types held by the authorisation holder, not only the type being assessed. This will help ensure a whole-of-CASA oversight perspective is maintained. In evaluating the available information for use in considering surveillance, it should also be kept in mind that the information must be Evidence based, factual and justifiable.

# 4.2.4.6 **Process - Propose surveillance (excluding NSSP)**

## Surveillance Team:

- 1. Proposes a surveillance event by producing a surveillance request in Sky Sentinel prior to the next SPM. The surveillance request will include the event type, scheduled dates and the Surveillance Lead.
- **Note:** A surveillance request can be proposed without conducting an AHPI assessment. While it is not a requirement that an AHPI assessment be completed before proposing a surveillance event, it may assist in identifying the areas of concern.

Note: NSSP events are loaded annually on behalf of Offices/Branches

- 2. Enters details of the proposed surveillance event in Sky Sentinel
- 3. Reviews any unverified self-reported deficiencies
- 4. Reviews any outstanding Safety Findings with a 'Verification Required by CASA' status and considers such Safety Findings for inclusion in the initial surveillance scope and review Authorisation Holder Power BI report using Form 1189.
- 5. Contributes to the prioritisation process in deciding the final recommendations on surveillance requests to be proposed to the SPM for approval by Controlling Office the surveillance manager.

#### Surveillance Manager:

- 1. Confirms that surveillance events have been proposed for all authorisation holders that have been identified in the surveillance consideration process as warranting surveillance.
- Confirms that all surveillance events that are to be proposed are recommended at the correct surveillance level and surveillance type with all Level 1 surveillance events appropriately scoped after review of <u>Form 1189</u>

#### Surveillance Technical Officer:

1. Enter additional surveillance team member details and scheduled surveillance dates of the proposed surveillance event in Sky Sentinel at the request of the Surveillance Manager.

#### 4.2.4.7 **Process Details - Propose surveillance (excluding NSSP)**

If there is agreement within the surveillance team (endorsed by the Surveillance Manager) that a surveillance event is justified, a surveillance request is completed within Sky Sentinel.

Surveillance events must be proposed for all authorisation holders that have been identified in the surveillance consideration process as warranting surveillance. Surveillance teams must consider the NSSP Planned Surveillance schedule when proposing surveillance events.

A surveillance request is specific to an activity or business, e.g. Operational Check – en-route inspection of the authorisation holder.

Surveillance team members should not wait until the formal team meetings to propose a surveillance event and should complete a surveillance request as soon as the requirement to propose a surveillance event is decided, or a potential concern is identified.

A surveillance request includes details of:

- the scheduled surveillance date(s) allowing sufficient time to prepare for the surveillance event and write up the Surveillance Report
- time to be allocated (hours)
- surveillance event type (noting response events need to use specific event types)
- surveillance lead
- surveillance team members
- initial surveillance scope (system Elements to be surveilled) and background behind the determination of the scope (Event File and Form 1189 requested from surveillance@casa.gov.au when the SM recommends event)

• justification for proposing the surveillance event.

When selecting the surveillance scope, any outstanding Safety Findings from prior surveillance events with a 'Verification Required by CASA' status must be included in the surveillance scope as well as reviewing any unverified self-reported deficiencies.

- **Note:** The scheduled start/finish dates are the estimated start and finish dates of a proposed surveillance events and are important to provide forward visibility of surveillance activity.
- **Note:** If a Level 1 surveillance event is to be proposed, the scope of the proposed event must be defined in Sky Sentinel by selecting the appropriate systems and Elements to be covered. A surveillance request may be scoped to the system Risk level if considered appropriate. Use the Sky Sentinel Surveillance Scoping Aid as a reference to show the system Risks for which the effectiveness of an authorisation holder's control has been assessed. Additionally, taking into consideration the size and complexity of an individual authorisation holder's operation, all systems and Elements must be assessed in a timely manner.
- **Note:** The 'Time to be allocated (hours)' entry in Sky Sentinel for both estimated hours and for actual surveillance hours (entered at a later stage) include the total number of hours accumulated by all surveillance team members in conducting the surveillance event. The total must include all pre-event planning and preparation, post-event analysis and production of Findings up to the start of producing the Surveillance Report.

Depending on individual circumstances relating to the current assessment and the results of previous surveillance events, a surveillance team may propose either a Level 1 or Level 2 surveillance.

If a Level 1 surveillance event is proposed, the scope of the event must be defined in Sky Sentinel by selecting the appropriate systems and Elements. Additionally, taking into consideration the size and complexity of an individual authorisation holder's operation, all systems and Elements must be assessed in a timely manner. The determination of the scope selected must be saved to RMS using Form 1189.

It is the Surveillance Manager's responsibility to ensure that surveillance events are proposed for all authorisation holders that have been identified in the surveillance consideration process as warranting surveillance. In all cases where the assessment indicates a surveillance event is required, a surveillance event must be proposed regardless of resourcing constraints at the time of the assessment. It is only in this way that the participants at the SPM can gain a true picture of all their surveillance planning requirements. Events that are not approved by the SPM should be recorded in Sky Sentinel as 'Not Recommended' and then Closed/Not Approved by selecting Reject and Close (Level 1 events) or 'Rejected' (Level 2 events) with the relevant reason selected e.g. 'No resources' with any additional comments added as appropriate and then Rejected and Closed. Decisions on such matters are the responsibility of the SPM and not surveillance team individual Surveillance Managers.

The Surveillance Manager must also ensure that surveillance events are proposed at both the correct surveillance level (Level 1 or Level 2) and the most appropriate surveillance type selected (System Audit, Health Check, Manual Review, En-Route check etc.).

When compiling a surveillance request, particularly in assigning surveillance team members, it should be kept in mind that a surveillance event may be conducted by a sole inspector who has the appropriate qualifications, technical background and or knowledge. In addition, where

a surveillance request requires SME input from outside the surveillance team, i.e. other technical specialisations or disciplines that may assist or be able to provide support, (e.g. Cabin Safety, Dangerous Goods, Alcohol and Other Drugs, Ground Operations, Airways and Aerodromes and/or Manufacturing), the requirement for this input must be discussed with the Surveillance Manager of the relevant technical area prior to the surveillance request being recommended to the SPM.

- **Note:** Surveillance events not assigned through the normal planning and approval process can be initiated (Level 1 or Level 2) based on immediate safety concerns or emerging Risk and may include:
  - requests from the senior management group
  - critical safety imperatives, e.g. volcanic ash
  - on-site, out-of-scope observations, e.g. location specific.

# 4.2.4.8 Process - Prioritise and recommend/approve proposed surveillance (excluding NSSP)

#### Surveillance Team:

1. Prioritises proposed surveillance requests as a group prior to formal endorsement, recommended or otherwise, before being submitted to the SPM (Level 1 events) or approval (Level 2 events) by the Surveillance Manager.

#### Surveillance Manager:

- 1. Endorses the surveillance team's recommendations on Level 1 surveillance requests, including the appropriateness of the proposed scope and confirms resource availability on scheduled dates by noting Sky Sentinel accordingly
- 2. Ensures that justifications for decisions made on all proposed surveillance requests (whether recommended or not recommended) are captured in Sky Sentinel
- 3. Ensures that recommended surveillance requests are available in Sky Sentinel at least three days prior to the scheduled SPM for entry onto Agenda
- 4. Approves Level 2 surveillance events.
  - **Note:** The proposed surveillance dates should be added at this stage. Scheduled start and finish dates must be changed to best reflect when the surveillance event is likely to happen and adjusted proposed dates are refined. The scheduled start date should align with the onsite start date once that date is confirmed.
  - **Note:** Scheduled start and finish dates can be changed in events with a status of "Requested" and "Recommended" or earlier.

# 4.2.4.9 Process Details - Recommend/approve proposed surveillance (excluding NSSP)

The surveillance requests proposed by a surveillance team should be consolidated and prioritised prior to the SPM.

As such, proposed surveillance requests should be consolidated, ideally during the last surveillance team meeting prior to the weekly/ monthly SPM. The proposed surveillance events should be considered by the surveillance team as a group. By undertaking this process as a team, all members are able to provide input into the decision-making process, ensuring that all surveillance requests recommended to the weekly/monthly SPM for approval (Level 1

events only) are justified and achievable. These surveillance requests will be known as recommended surveillance requests pending approval at the monthly SPM.

All proposed surveillance events must be considered and any decision not to recommend a previously proposed surveillance request must have the justification for the decision recorded in Sky Sentinel. The surveillance request is to be again reviewed during the next SPM, if required.

**Note:** The SPM may override the decision made by the reviewing officer not to recommend any particular surveillance request and decide to proceed with the surveillance event.

When a Surveillance Manager needs to make a decision that is inconsistent with the procedures contained within the CSM, the decision will be:

- registered in the Record Management System (RMS)
- raised for approval by the National Manager Surveillance.

Following the SPM, the Surveillance Manager recommends Level 1 surveillance events in Sky Sentinel. This recommendation formally endorses the surveillance team's recommendation and confirms that appropriate resources are available to undertake all proposed events. The Surveillance Manager approves the event.

This recommendation/approval process must be completed no later than three Business Days prior to the scheduled SPM.

Level 2 surveillance events can be approved by the Surveillance Manager at any time. however these surveillance events should be tabled at the next SPM to ensure that they are taken into consideration for resourcing purposes.

Position	Accountabilities
Surveillance Manager	<ul> <li>ensure the relevant assigned authorisation holders are discussed as relevant to the AHPI result category</li> <li>consider the discretionary regulatory decision-making factors set down in this manual when deciding the appropriate further action to be taken following the team discussion process</li> </ul>
	<ul> <li>ensure all authorisation holders have an AHPI assessment conducted at least every six months for authorisation holders classified as Group A under the NSSP or 12-monthly basis for authorisation holders classified as Group B and C under the NSSP; or, additionally, where a change is identified. These classifications are contained in the NSSP manual</li> <li>recommends, or otherwise, Level 1 proposed surveillance request that are submitted to SPM</li> </ul>
	<ul> <li>confirm all resourcing, scheduling and Scoping issues for recommended proposed Level 1 surveillance requests</li> <li>ensure all proposed Level 1 surveillance requests are reviewed and recommended in Sky Sentinel at least three working days prior to the monthly SPM</li> </ul>
	<ul> <li>confirm surveillance events have been proposed for all authorisation holders identified as warranting surveillance</li> <li>confirm proposed surveillance events are recommended at the correct surveillance level and surveillance type</li> </ul>

#### Table 3: Position and accountabilities

Position	Accountabilities
	<ul> <li>approve Level 2 surveillance events</li> <li>report from Sky Sentinel all non-recommended surveillance requests and approved Level 2 surveillance events for tabling at the SPM</li> </ul>
Surveillance Team	<ul> <li>participate in the regular meetings</li> <li>collect all relevant information in regard to the authorisation holders being assessed</li> <li>actively participate in team discussions of assigned authorisation holders</li> <li>enter 'Formal Discussion' or 'General Discussion' into Sky Sentinel</li> <li>contribute technical expertise in applying the AHPI tool and SharePoint questions for assigned authorisation holders</li> <li>participate in the development of proposed surveillance requests for consideration at the monthly SPM</li> <li>input details of estimated resources, schedule and scope into the surveillance request development process</li> <li>actively participate in the prioritisation process in the authorisation management recommendations for surveillance to the SPM</li> </ul>
Surveillance Technical Officer	<ul> <li>provide Authorisation Holder Assessment Reports/Power BI if required</li> <li>enter 'Formal Discussion' or 'General Discussion' into Sky Sentinel if required</li> <li>add comments to the SPM agenda</li> <li>enter details of the proposed surveillance event in Sky Sentinel from SPM meetings.</li> <li>update event details in the SPM (if required)</li> </ul>

# 4.3 Surveillance planning

# 4.3.1 Purpose

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This section provides an overview of the surveillance planning process. This is the management level review of the surveillance requests as well as the coordinated planning and tasking of surveillance events. The function of the SPM is to approve or not approve surveillance requests outside the NSSP approved schedule. The group also review the planned versus achieved surveillance from the previous month and discuss the management of open Findings. The SPM is chaired by the Surveillance Manager and must include all surveillance members from that office or representatives together with relevant representatives from technical specialisations outside of the controlling office. It may also include appropriate invited team members and subject matter experts (SMEs), including those from disciplines outside the core surveillance team.

# 4.3.2 Process



Figure 7: Review of Surveillance Requests through the SPM

# 4.3.3 Surveillance Planning Meeting (SPM)

The SPM meets weekly/monthly and manages the surveillance planning process and reviews surveillance activities, as well as directing surveillance teams and/or individual officers to carry out surveillance. It is also responsible for reviewing surveillance requests provided by each surveillance team and/or individual officers.

The SPM also ensures that appropriate resources are available to conduct the approved surveillance and review the planned versus achieved results of the previous month's approved surveillance activity.

The group must also review and discuss the current status of all open Safety Findings to ensure they are being effectively and actively managed.

# 4.3.3.1 SPM membership

The SPM is appointed and chaired by the National Manager Surveillance or the Surveillance Manager and must include:

• surveillance team members

- relevant representatives from technical specialisations outside of the Controlling Office if required (e.g. Alcohol and Other Drugs, Dangerous Goods, Cabin Safety, Ground Operations).
- **Note:** Any absence from the group must be backfilled by an appropriate replacement if deemed necessary by the National Manager Surveillance.

Where necessary, the Surveillance Manager may also request other team members and subject matter experts to temporarily join the SPM to assist in the assessment of surveillance requests.

## 4.3.3.2 SPM coordination and communication

Given the likelihood of periods of extended travel by individual Inspectors, the Controlling Office SPM must decide how the team is to communicate and coordinate the activities to ensure continuity.

## 4.3.3.3 SPM meetings

The primary activities of the SPM meeting are detailed as follows:

- monitor approved surveillance events from the previous month, tracking the planned versus achieved
- review outstanding surveillance Findings Safety Findings, Safety Alerts, Safety Observations etc.
- evaluate surveillance recommendations from a whole-of-office perspective, recording decisions about surveillance requests in Sky Sentinel as approved or not approved.

The agenda/minutes for SPM meetings are set out in <u>SPM Agenda</u> and <u>Small Teams Agenda</u>.

**Note:** If any individual authorisation holder is discussed and/or a decision made on a surveillancerelated matter by the SPM, but outside the context of a SPM, e.g. another Controlling Office management forum, such discussions and/or decisions can be applied to that authorisation holder by adding all relevant details to the SPM minutes. Cat 1 authorisation holders need not be discussed any more than once per 6 month with duplication of effort to be avoided.

# 4.3.3.4 SPM meeting chair

The National Manager Surveillance or the Surveillance Manager acts as the SPM chair. In periods of absence, they must appoint an alternative chairperson to act in this role. The chair is responsible for managing the oversight of surveillance teams and ensuring a comprehensive review of surveillance requests is undertaken by the SPM.

# 4.3.4 SPM oversight

## 4.3.4.1 Process - SPM oversight

#### Finding **SPM group:**

- 1. Downloads the following Power BI Reports from the Surveillance Overview Power BI app:
  - a. Sky Sentinel Audit Schedule
  - b. Outstanding Safety Findings
  - c. Open ASRs

- d. Open Surveillance Reports
- e. Overdue Surveillance Reports.
- f. From the Surveillance Services AHPI App:
  - i. Controlling Office AHPI Report.

#### **AHPI discussions**

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1. Reviews all overdue authorisation holders with a Cat 1 AHPI result.

Reviews the status of AHPI assessments completed.

#### Level 1 events

- 1. Reviews Level 1 surveillance requests (excluding NSSP) for the next period identifying concerns/deficiencies about the authorisation holder and considering the surveillance team recommendations for proposed surveillance activities.
- 2. Endorses, or otherwise, surveillance requests (excluding NSSP) noting Sky Sentinel with the reasons for not endorsing clearly detailed.
- 3. Reviews the summary of proposed surveillance requests that had not been recommended, noting reasons provided by the Surveillance Manager with the SPM retaining the power to override such decisions as and when deemed appropriate (noting reasons accordingly).

#### Level 2 events

1. Reviews all Level 2 events (excluding NSSP) approved in the previous month by Surveillance Managers. with the possibility of overriding such decisions as and when deemed appropriate (noting reason).

#### Level 1 and 2 events

- 1. Reviews all surveillance events completed in the previous month (planned versus achieved)
- 2. Reviews any previously approved surveillance requests that have been subsequently changed in Sky Sentinel, including requests that have been:
  - a. Cancelled.
  - b. Changed to a 'Not Approved' status.
  - c. Rescheduled.

#### Findings

- 1. Monitors the management of all outstanding Findings and associated Action Plans as well as discussing, as required, any additional action that may be necessary.
- **Note**: Requests for extension for periods greater than three (3) months are referred to the Coordinated Enforcement Process (CEP) see Section 4.7.11 Request for extension.

#### Prioritisation of surveillance activities

- 1. Consider the NSSP Planned Surveillance schedule against other activities when prioritising surveillance.
- 2. Consideration should be given to interaction between the pillars of the National Oversight Plan whereby other activities conducted with the authorisation holder may reduce the scope or preclude the need of NSSP activity.

- 3. Determines if any surveillance reprioritisation is necessary on the basis of changed surveillance priorities, or when oversight or external information identifies concerns.
- 4. Considers using alternative resources to assist in surveillance activities as necessary.
- 5. Consideration of geographic efficiencies, including the allocation of resources, and the consideration of consolidating the surveillance events at a geographic location.
- 6. The CASA executive may give strategic directives in relation to Planned Surveillance methodology. For example, following the identification and/or definition of higher sector Risks, Inspectors may be directed to apply 80% of their effort to the defined high-Risk areas, with the remaining 20% of effort dedicated to the lower Risk areas.

#### **Surveillance Manager**

1. Formally approves or rejects the surveillance request in Sky Sentinel with an autogenerated e-mail sent to the Surveillance Lead, and all allocated surveillance team members.

#### Surveillance Manager

1. Notifies relevant surveillance team members that the surveillance request has been reviewed and either approved or rejected (with a reason).

#### **Surveillance Manager**

- 1. Immediately acts on any identified potential issues and any associated safety Risks.
  - **Note**: All oversight decisions made in the SPM should consider the discretionary regulatory decision-making considerations set down in this manual (see Section 2.5.1 Key considerations for regulatory making)

SPM can access all relevant information at any time generated from Sky Sentinel data through Power BI reports, including reports on active and acquitted Findings. All decisions must be recorded for future reference in Sky Sentinel against the relevant authorisation holder, as well as saving any minutes etc. taken in RMS.

#### Prioritisation of surveillance activities

- 1. Determines whether any surveillance reprioritisation is necessary on the basis of changed surveillance priorities, or when oversight or external information identifies concerns.
- 2. Considers using alternative resources to assist in surveillance activities, as necessary.

#### **Surveillance Manager**

- 1. Formally approves or rejects the surveillance request in Sky Sentinel with an autogenerated e-mail sent to the Surveillance Lead, and all allocated surveillance team members.
- 2. Notifies relevant surveillance team members that the surveillance request has been reviewed and either approved or rejected (with a reason).
- 3. Immediately acts on any identified potential issues and any associated safety Risks.
- 4. Immediately acts on any identified potential issues and any associated safety Risks.

#### Surveillance Technical Officer

- 1. Documents the SPM meeting minutes.
- 2. Stores the SPM meeting minutes in RMS.
- 3. Distribute the SPM meeting minutes to the Surveillance Manager.
- 4. Enters in Sky Sentinel any rescheduled surveillance dates or comments.
- **5.** Check any overdue surveillance reports or surveillance events and ensure a comment is added against the event in Sky Sentinel.
- **Note**: All oversight decisions made in the SPM should take into account the discretionary regulatory decision-making considerations set down in this manual (see Section 2.5.1 Key considerations for regulatory decision making).

SPM can access all relevant information at any time generated from Sky Sentinel data through Power BI reports, including reports on active and acquitted Findings.

All decisions must be recorded for future reference in Sky Sentinel against the relevant authorisation holder, as well as saving Evidence to RMS.

#### 4.3.4.2 Process Details - SPM oversight

The SPM has the responsibility for oversighting the surveillance planning process and review of surveillance activities, including reviewing surveillance requests proposed by surveillance teams and/or individual officers. As part of this responsibility, the SPM also has the responsibility for oversighting authorisation holder assessment process, including formal discussions and regular AHPI assessments, as well as monitoring all outstanding Findings.

Prior to SPM meetings, a range of reports available to all Managers and Inspectors are downloaded from data accessed from Sky Sentinel and/ Power BI for discussion and review. These reports can also be used at weekly team meetings.

#### Review of surveillance requests - Level 1 event

The surveillance request in Sky Sentinel contains recommendations from the surveillance team regarding the proposed surveillance activities of an authorisation holder.

In prioritising surveillance activities, the SPM considers any additional intelligence or requests received from the Executive and/or the SSB, as well as the system Risk profile of individual authorisation holders being considered for surveillance. As part of this review, consideration is also given to the previous month's surveillance events conducted and approved surveillance events scheduled to be conducted in the coming period.

The SPM may override the decision by the reviewing officer not to recommend a particular surveillance request and decide to proceed with a surveillance event.

#### Approval of surveillance request – Level 1 event

If the SPM supports the recommendation, the surveillance request is approved in Sky Sentinel by the Surveillance Manager with the system initiating an auto-generated notification e-mail sent to the surveillance team, the Surveillance Lead and all allocated surveillance team members.

#### Non-approval of surveillance request – Level 1 event

If the SPM does not support the recommendations contained in the surveillance request, the Surveillance Manager rejects the surveillance request in Sky Sentinel with the reason appropriately recorded in Sky Sentinel, and the system will initiate an auto-generated notification e-mail. The notification is sent to the Surveillance Lead, and all allocated surveillance team members. As necessary, instructions are issued to the Surveillance request by a nominated date.

Examples of why a surveillance request may not be approved could include:

- higher priorities within the office
- other tasks are directed

/

- deficiencies in the surveillance request
- insufficient information
- unsupported conclusions
- new intelligence received that needs to be considered.

When the Surveillance Manager makes a decision that is inconsistent with the procedures contained within the CSM, the decision will be:

- registered in the Record Management System (RMS), and
- endorsed or rescinded by the National Manager Surveillance.

#### Previously approved surveillance requests – Level 1 and 2 events

The SPM must review the reasons why any previously approved surveillance requests (Level 1 or Level 2 events) had been subsequently cancelled or changed to a Closed/Not Approved status in Sky Sentinel during the period prior to the SPM. Information on these changes can be accessed via Power BI.

**Note:** NSSP events must not be cancelled.

#### Prioritisation of surveillance activities

A surveillance team must obtain and continually monitor information for their authorisation holders, e.g. experiencing growth, financial distress, personnel reductions, labour unrest, system Risk data and other organisational changes or challenges.

If identified issues and associated Risks require a surveillance event to be conducted before the SPM, the Surveillance Manager is responsible for approving or not approving the proposed surveillance event without reference to the SPM. Any approved activity is to be reported and recorded during the subsequent monthly SPM.

If surveillance reprioritising is appropriate to focus additional resources in an area of concern, the surveillance team must determine which Risks within the authorisation holder's operation are related to the area of concern. The SPM can reprioritise oversight for the entire authorisation holder's operation, for selected systems factors or for indicators (i.e. either the surveillance timeline or the content/Elements may change).

Consideration of entry control changes can also be a reason for reprioritisation of the surveillance plan, e.g. postponement of a surveillance event due to assessment of a variation request.

If an urgent surveillance event cannot be conducted due to resource limitations, a request for support from other offices should be sent via the Surveillance Manager.

#### Surveillance planning reporting

Surveillance planning reporting for the management of authorisation holders is generated in Power BI using information from approved surveillance requests and Findings pages etc. taken from Sky Sentinel. This reporting information can be reviewed by the SPM on a weekly/monthly basis at the SPM or at any time.

The reporting consolidates all proposed surveillance events allowing for a clear understanding of resource commitments in a dynamic format. This reporting recognises the need for surveillance teams to conduct ongoing intelligence reviews throughout the year on significant changes to the authorisation holder's operation to determine if surveillance activities need to be reprioritised and make those recommendations through a surveillance request.

To ensure the usefulness of this reporting information as a planning tool, when entering information into Sky Sentinel, include the assigned personnel, initial scope and proposed dates for the surveillance event.

If a surveillance event needs to be rescheduled for a previously approved event for any reason, the rescheduled dates and the reason for the rescheduling must be recorded in Sky Sentinel either by the surveillance technical officer or Surveillance Manager via the Reschedule Event function.

# 4.3.5 Accountabilities - Surveillance Priority Review

Table 4: Position and accountabilities

Position	Accountabilities
Position National Manager Surveillance	<ul> <li>Accountabilities</li> <li>Ensure: <ul> <li>Surveillance Teams submit surveillance requests to the SPM on a weekly/ monthly basis</li> <li>SPM members act in accordance with the provisions of this manual</li> <li>SPM core members attend meetings as a matter of priority</li> <li>the SPM can continue to operate during the absence of SPM core members</li> <li>recommended response Level 1 surveillance requests are formally accepted or rejected in Sky Sentinel following review by the SPM participants</li> <li>other recommended tasks, e.g. requests from Senior Management Group and SSB, are considered in SPMs</li> <li>planned versus achieved surveillance schedules are reviewed</li> <li>outstanding Safety Findings are appropriately managed by surveillance teams</li> <li>Surveillance Team formal discussions and AHPI assessments are conducted as prescribed</li> <li>surveillance requests are appropriately reviewed and endorsed (or otherwise) by SPM members</li> <li>decisions by Surveillance Manager not to recommend proposed surveillance requests are appropriately reviewed</li> <li>Level 2 events approved by the Surveillance Manager are appropriately reviewed</li> <li>all surveillance events completed in the previous month and previously approved surveillance requests that are subsequently cancelled or changed to Not Approved during the previous month, are appropriately reviewed</li> <li>all oversight decisions made in the SPM consider the discretionary regulatory decision-making considerations set down in this manual (see Section 2.5.1 – Key considerations</li> </ul> </li> </ul>
	<ul> <li>all oversight decisions made in the SPM consider the discretionary regulatory decision-making considerations set down in this manual (see Section 2.5.1 – Key considerations</li> <li>all decisions made that are inconsistent with the procedures contained within the CSM are:         <ul> <li>registered in RMS, and</li> </ul> </li> <li>All overdue events and Findings have appropriate comments from</li> </ul>

Position	Accountabilities
Surveillance Manager	<ul> <li>Ensure:</li> <li>the status of NSSP reports is accurate and all authorisation holders that should be included in the schedule are represented</li> <li>run Power BI reports</li> <li>the status of AHPI assessments conducted are appropriately reported at the SPM</li> <li>authorisation holders with Cat 1 AHPI assessment results are reported to SPM for discussion</li> <li>surveillance requests for Level 1 events are recommended provided to the SPM for endorsement and approval prior to all SPMs (at least 3 working days)</li> <li>Level 2 events conducted and approved in the previous month are appropriately reported at the SPM</li> <li>a summary of 'not-recommended' surveillance requests with reasons for each, as well as previously approved requests that are subsequently cancelled or changed to Not Approved, is provided to the SPM for review</li> <li>status of all active Findings is provided to SPM for review</li> <li>actions are in accordance with the provisions of this manual, the SPM and surveillance team procedures</li> <li>rescheduled surveillance dates and the reason for rescheduling are recorded in Sky Sentinel in the comments section for any previously approved surveillance events.</li> <li>whenever possible contact made with Aviation Safety Advisors to review their schedule.</li> <li>comments are utilised against the event by the surveillance</li> </ul>
Surveillance Technical Officer	<ul> <li>Ensure:</li> <li>agenda/minutes are recorded, distributed and filed for each SPM and are appropriately saved to RMS</li> <li>relevant files are maintained</li> <li>appropriate Power Bi reports are available if required in a timely manner for SPM meetings</li> <li>provide subject matter expertise on the monthly status of NSSP and campaigns</li> <li>rescheduled surveillance dates are recorded in Sky Sentinel, under the direction of the Surveillance Manager for any previously approved surveillance events.</li> </ul>

# 4.4 Surveillance event preparation

# 4.4.1 Purpose

This section describes the procedures for the development of a structured surveillance event plan for an authorisation holder, initially scoped in accordance with SPM, Surveillance Manager direction or through the NSSP.

The requirements will vary according to the particular surveillance event type, the outputs of the surveillance priority review process, and the availability of necessary resources. This process also includes, where appropriate, coordination of the intended surveillance with the authorisation holder.

Thorough preparation before a surveillance event will:

- establish the basis for conducting a successful surveillance event
- confirm initial surveillance event scope
- develop a surveillance worksheet
- define and plan surveillance team activities and expansion of scope using the mandatory Surveillance Planning and Scoping Development Form 1189
- provide a defined structure, including timing and dates to enable the surveillance team to meet its objectives
- ensure all decision making and planning documents are saved in RMS.

# 4.4.2 References

- Reports
  - Systems & Elements (refer to relevant technical annex)
  - previous surveillance reports
  - authorisation holder documentation (held on RMS)
- Forms (Available in Document Catalogue)
  - Form 1189 Surveillance Planning and Scoping Development Form\* (Mandatory excl AOCD)
  - <u>Form 1290</u> Surveillance Event Timetable Form
  - Form 1294 Surveillance Checklist, Entry and Exit and attendance
  - Form 1297 Surveillance Checklist Form\*
  - Form 1304 Surveillance Notification Letter Form\*
  - Form 1481 Part 145 Oversight Survey
  - Form 1521 CAR 30 Oversight Survey
  - Form 1524 Air Operators Oversight Survey
  - Form 1532 ANAA CASR 139 Oversight Survey
  - CASA-04-5522 Part 147 Oversight Survey
  - <u>CASA-04-4380</u> Part 21 Manufacturing Oversight Survey
  - Form 1308 Surveillance Worksheet Form\*
  - Form 2173 Surveillance AOC Desktop Review Assessment (AOCD Only)
  - <u>CASA-04-5141</u> Surveillance Notification Letter COVID-19
  - <u>CASA-04-5142</u> Surveillance COVID19 CASR Part 145 Worksheet
  - <u>CASA-04-5143</u> Surveillance COVID19 CASR Part 42 Worksheet

- <u>CASA-04-5144</u> Surveillance COVID19 CAR 30 Worksheet
- <u>CASA-04-5145</u> Surveillance COVID19 Air Operators Certificate Part 141/142 Worksheet
- CASA-04-5535 Surveillance COVID-19 CASR Part 147 Worksheet
- <u>CASA-04-5147</u> Surveillance COVID19 Safety Management System/Change Management Worksheet
- CASA-04-5149 COVID19 Risk Assessment Guide.

\*Generated in Sky Sentinel

# 4.4.3 Processes



#### Figure 8: Process map - Preparation for a Level 1 Surveillance Event



Figure 9: Process map - Preparation for a Level 2 Surveillance Event

# 4.4.4 Surveillance preparation

## 4.4.4.1 Process - Prepare for Level 1 Surveillance event

#### Surveillance Technical Officer:

- 1. Provides the information available from the CASA systems by populating the Surveillance Planning and Scoping Development Form (Form 1189).
- 2. Ensure any mandatory scope from the Key Focus areas is in Sky Sentinel and on <u>Form 1189</u>.
- 3. Provides reports and administrative assistance to the surveillance lead/ Inspector to support the surveillance preparation (using Power BI App to generate Authorisation Holder Profile Reports).
- 4. Drafts the Surveillance Notification Letter (Form 1304).
- 5. Verifies with the surveillance lead or Inspector the contact details, including the email address of the authorisation holder are correct.
- 6. Verifies with the surveillance lead or Inspector that the surveillance dates are correct.
- 7. Ensures an RMS file has been created and populated with supporting documentation.
- **Note:** While one month's notice should be given to the authorisation holder whenever possible, if circumstances do not allow this notification period, the notification period may be reduced as appropriate with the Surveillance Manager's approval. The Surveillance Manager will consider the impact on the industry participant prior to deciding on any reduced notification period. The Surveillance Manager's approval is to be filed in RMS and an approval statement placed in the Sky Sentinel comments section for that event.
- **Note:** It is usual practice to include the Scoping Elements in the notification letter, however these can be excluded, if approved by the Surveillance Manager.

#### Surveillance lead or Inspector:

- 1. Prepares a Surveillance Checklist Form (Form 1297).
- 2. Contacts the authorisation holder to advise them of the upcoming surveillance event and to discuss a mutually agreeable date for the surveillance event. Discuss oversight survey return requirements if applicable.
- 3. Scopes additional system Elements to be assessed during surveillance by adding such Elements to the Surveillance Event page in Sky Sentinel whilst using the mandatory Surveillance Planning and Scoping Development (Form 1189).
- 4. Develops a Surveillance Worksheet Form (<u>Form 1308</u>) capturing all relevant information, whether it formed part of the original surveillance Scoping or not
- 5. Reviews any outstanding Safety Findings with a 'Verification Required by CASA' status and considers whether the associated system Elements should be included in the surveillance scope and what needs to be verified during the event.
- 6. Review unverified self-reported deficiencies and add to scope where possible
- 7. Review of any audits conducted on the authorisation holders by entities other than CASA (third-party audits or self-audits/internal reviews) if the authorisation holder is willing to share or has shared the information.
- 8. Determines the depth of sampling required to verify each system.
- 9. Plans for the surveillance event, using (Form 1290), which should include:

- a. Entry, exit and progress meetings times and locations.
- b. Key personnel to be interviewed
- c. Specific activities such as aircraft inspections, records inspections and facility inspections.
- d. Specific dates/times/locations for such interviews and activities.
- e. Transportation or other logistical details.
- f. Details of scope items (Elements) to be specifically discussed at interview.
- g. Ensures all documents are saved in RMS.

#### Surveillance technical officer

- Forwards, after confirmation from the Surveillance Lead who to send the Surveillance Notification Letter Form (Form 1304) to, and if available and applicable the associated oversight survey to the authorisation holder at least one month prior to the scheduled surveillance event. The Surveillance lead will be included in the email to the authorisation holder (by cc).
- 2. As requested by the surveillance team provide reports and assistance to support the preparation.

#### 4.4.4.2 Process Details - Prepare for Level 1 surveillance event

Surveillance event preparation would generally commence at least one month prior to the Planned Surveillance, with notification of the surveillance event to the authorisation holder. This notification period may be reduced as appropriate with the Surveillance Manager's approval. The Surveillance Manager will consider the impact on the industry participant prior to deciding on any reduced notification period.

Preparation may occur during team briefings where the entry meeting agenda is set and the initial surveillance event scope is reviewed, or, in the case of smaller organisational surveillance, an individual Inspector may prepare without holding formal meetings. The STO may provide reports and assistance to support the preparation process including the provision of available data contained on the Surveillance Planning and Scoping Development Form (Form 1189).

The mandatory Surveillance Planning and Scoping Development Form (Form 1189) must be utilised by the team to provide a more informed scope of the surveillance. The Surveillance Checklist (Form 1297) aids in preparing, conducting and completing a surveillance event. The surveillance lead is responsible for ensuring all items on the checklist have been completed as applicable to the surveillance event type. The checklist is saved in RMS.

During this stage, Inspectors create a Surveillance Worksheet (Form 1308) that lists all relevant system Elements. If in the preparation process an Inspector identifies additional system Elements that should be included in the scope, these items can be added at this stage. The inclusion of scope items associated with any Safety Findings from previous surveillance events with a 'Verification Required by CASA' status must be considered with a view to finalising and acquitting the Safety Finding. The inclusion of scope items associated with any Self-Reported Deficiencies that require a "Follow-up Action". The Surveillance Worksheet is saved in RMS.

If multiple Inspectors are involved, each Inspector creates a worksheet containing system Elements for that part of the surveillance assigned to them. It should also be used to note areas of potential system vulnerability. Worksheets may be populated with key questions and/or prompts to be used as an aid to gather Evidence in order to enable a reliable assessment of an authorisation holder's systems. Sky Sentinel contains Element prompts that align with each Element and a library of questions related to system Risks from which an Inspector is able to select, or, alternatively, write and store personal questions or prompts for whenever there are no appropriate questions available in the library.

**Note:** As long as the Inspector is satisfied that the questions asked will elicit sufficient Evidence to determine the level of control employed by the authorisation holder for all of the MSM attributes scoped, the particular questions asked and the number asked is at the discretion of the Inspector.

To develop a Surveillance Worksheet, the Inspector will need to review a number of sources of information such as the Formal Comments about the authorisation holder Risk recorded in Sky Sentinel, organisational policy and procedures manuals and identify specific areas and Risks to be assessed or reviewed as identified in the Surveillance Checklist. The scope and depth of each surveillance event will vary depending on the information, data and history known about the authorisation holder. See Surveillance Planning and Scoping Development Form (Form 1189) initiated by the STO.

During this stage and utilising the mandatory Surveillance Planning and Scoping Development Form (Form 1189) the surveillance lead and Inspectors should determine the depth of sampling required to verify each system. For example, where history indicates an authorisation holder has adequate systems and sound safety Risk control, a small sampling may be sufficient to confirm the situation has not changed. However, where history indicates recurring problems with a system, or poor safety Risk control, a greater level of sampling would be appropriate. The surveillance lead and Inspectors should also enquire with the authorisation holder if any audits have been conducted by entities other than CASA (thirdparty audits or self-audits/internal reviews) and if they are willing to share the information. If a third-party or internal audit is shared, the CASA surveillance team should assess the results to determine whether it is appropriate to reduce the scope of the Planned Surveillance event or reclassify the event to a desktop assessment only. The assessment should consider any Evidence presented within the audit report(s) to support a mature Safety Management System or Quality Management System.

Substantial efficiencies can be gained by undertaking specific event planning. A detailed surveillance event timetable must be developed and confirmed with the authorisation holder. See Surveillance Event Timetable (Form 1290).

A detailed timetable should incorporate the following Elements.

- entry, exit and progress meeting time and locations
- specific activities such as aircraft inspections, records inspections, facility inspections
- key personnel to be interviewed
- specific activities such as aircraft inspections, records review, facility inspections
- specific dates/times/locations for such interviews and activities
- transportation or other logistical details
- details of scope items (Elements) to be specifically discussed at each interview.

This timetable should then form the basis for any pre-event communication with the authorisation holder to improve the likelihood of the smooth conduct of the surveillance.

# 4.4.5 Process - Prepare for Level 2 surveillance event (excluding AOCD and COVID-19)

#### Surveillance Technical Officer:

- 1. Ensures an RMS file has been created and populated with supporting documentation.
- 2. Ensure any mandatory scope items have been added to Sky Sentinel.
- 3. Provides information available from the CSA systems by populating the Surveillance Planning and Development (Form 1189) (Not required for Ramp Checks).
- 4. Drafts the Surveillance Notification Letter (Form 1304) (not mandatory).
- 5. Verifies with the surveillance lead or inspector the contact details, including the email address of the authorisation holder are correct.
- 6. Verifies with the surveillance lead or inspector that the surveillance dates are correct.
- 7. Forwards Surveillance Notification Letter (Form 1304) and if available and applicable the associated oversight survey to the authorisation holder at least one month prior to the scheduled surveillance event. The surveillance lead will be included in the email to the authorisation holder (by CC).
  - **Note:** If a notification is to be forwarded, it is desirable to give the authorisation holder one month's notice whenever possible. If circumstances do not allow this notification period, the period may be reduced as appropriate with the Surveillance Managers approval. Surveillance Notification Letter Form (Form 1304) can be amended as applicable depending on the nature and scope of the Level 2 event to be conducted. The Surveillance Manager will consider the impact on the industry participant prior to deciding on any reduced notification period. The Surveillance Manager's approval is to be filed in RMS or the approval noted in the comments section of the event in Sky Sentinel.
  - **Note:** Should the authorisation holder have returned an oversight survey in the preceding 6 months, it is at the discretion of the surveillance team to resend another one.

#### Surveillance Lead or Inspector:

- 1. Prepares a Surveillance Checklist (Form 1297).
- 2. Contacts the authorisation holder to advise them of the upcoming surveillance event and to discuss a mutually agreeable date for the surveillance event.
- 3. Discuss return of the oversight survey is applicable.
- 4. Develops the scope after the initial considerations utilising the mandatory Surveillance Planning and Scoping Development Form (<u>Form 1189</u>). To assist this, the STO will have added relevant documentation to the RMS file and populated the Form 1189 which is reviewed by the surveillance team
- 5. Develops a Surveillance Worksheet (<u>Form 1308</u>) capturing all relevant information, whether it formed part of the original surveillance Scoping or not, if required depending on the complexity of the event.
- 6. Determines the depth of sampling required to verify each system.
- 7. Gather any relevant documentation needed to support the surveillance event
- 8. Reviews any outstanding Safety Findings and considers whether the associated system Elements should be included in the surveillance scope and what needs to be verified during the event.

- Reviews any unverified self-reported deficiencies and include in scope if possible.
   Ensure data and correspondence gathered is saved into RMS.
- 4.4.5.1 Process Details Prepare for Level 2 surveillance event

A Level 2 event is typically less comprehensive and shorter in duration than a Level 1 event and will usually only involve an individual Inspector. While prior notification to the authorisation holder is not mandatory for a Level 2 event, if appropriate to the particular surveillance event, one month's prior notification should be given if possible.

The assigned Inspector must still develop the scope of the surveillance utilising the partially completed by the STO - Surveillance Planning and Scoping Development Form (Form 1189) and also prepare a Surveillance Checklist ensuring all items on the checklist have been completed as applicable to the particular surveillance event type.

This may not apply to all events such as a Level 2 ramp check.

The Surveillance Worksheet may also be used to assist the Inspector in conducting the surveillance. All relevant information, whether included in the original surveillance event Scoping or not, should be recorded on the worksheet.

To develop a Surveillance Worksheet, the Inspector will need to review a number of documents such as authorisation holder organisational policy and procedures manuals besides identifying specific areas to be assessed or reviewed as identified in the Surveillance Checklist. The Surveillance Worksheet is used to note areas of potential system vulnerability and may be used in conjunction with the applicable entry control checklists.

The scope and depth of each surveillance event will vary depending on the information, data and known history about the authorisation holder. See Surveillance Planning and Scoping Development Form (Form 1189).

Depending on the size and complexity of the surveillance event, detailed planning should be undertaken similar to that necessary for a Level 1 event. If appropriate, a surveillance event timetable, as detailed above, should form the basis for such planning. See Surveillance Event Timetable (Form 1290).

The inclusion of scope items associated with any Safety Findings from previous surveillance events with a 'Verification Required by CASA' status must be considered with a view to finalising and acquitting the Safety Finding. A check of outstanding self-reported deficiencies should also occur to ensure inclusion in the event.

# 4.4.6 Prepare for Level 2 - Operational Check - AOC Subsequent Issue -Desktop Review (AOCD)

# 4.4.6.1 Process – Prepare for Level 2 - Operational Check - AOC Subsequent Issue - Desktop Review

## Surveillance Technical Officer

- 1. Ensures an RMS file has been created for the event.
- 2. Within three months of the renewal date preparation of initial surveillance information (Form 1189 is not required for an AOCD event).
- 3. Form 2173 is added to the Surveillance file and the basic data populated.
- 4. Provide additional reports/assistance to the surveillance lead as required.

#### Surveillance Lead

1. Recommends event for approval after review of authorisation holder intelligence.

#### Surveillance Manager

1. Approves surveillance event.

#### Surveillance Technical Officer

- 1. Adds file number to Sky Sentinel.
- 2. Adds the authorisation holder profile report to the event file.

## 4.4.6.2 Process Details – Prepare for Level 2 - Operational Check - AOC Subsequent Issue - Desktop Review

In preparation for the conduct of an AOCD event, within 3 months of the renewal date, data gathering activities are conducted by the Surveillance Technical Officer to include the following items in the Event RMS file:

- Authorisation Holder Profile Power BI report:
  - previous surveillance history (~2 years)
  - ATSB/CIRRIS occurrence reports, low flying and unsafe behaviour reports
  - list of Regulatory Services tasks (~12 months)
  - list of exemptions and instruments held by the authorisation holder
- copies of CAMO/third party audit reports provided by the authorisation holder (if applicable)
- details of the authorisation holder's ASIC
- Event file is linked to the Manuals/expositions file that can be located on RMS.
- other applicable forms, transition, Compliance etc.

Once gathered, this information is filed within the appropriate surveillance event folder for the Surveillance Lead to review and completion.

The surveillance lead is responsible for ensuring the event is submitted for approval to the Surveillance Manager.

Once the event is approved, the event moves into the conduct phase (refer section 4.5.15).

# 4.4.7 Process– Prepare for Level 2 - Operational Check - COVID-19 Event

# 4.4.7.1 Process – Prepare for Level 2 - Operational Check - COVID-19

## Surveillance Technical Officer

- 1. Ensures an RMS file has been created and populated with supporting documentation.
- 2. Adds the applicable COVID-19 worksheet to the file.
- 3. Adds the COVID-19 Safety Management System/Change Management worksheet to the file.
- 4. Partially populates Form 1189.
- 5. Drafts the COVID-19 notification letter.

- 6. Verifies with the surveillance lead or Inspector the contact details, including the email address of the authorisation holder are correct and if they require an oversight survey to be sent.
- 7. Forwards draft COVID-19 notification letter and the applicable worksheet to the Surveillance Lead who will review and authorise the STO to send to authorisation holder.
- 8. Provides additional reports/assistance to the surveillance lead as required.
- 9. Forwards the COVID-19 surveillance notification letter, COVID-19 worksheet, and if applicable the oversight survey to the authorisation holder at least one month prior to the scheduled surveillance date.
- 10. Update Sky Sentinel with the on-site commencement date which is considered to be the date the notification letter is sent.
- **Note:** If a notification is to be forwarded, it is desirable to give the authorisation holder one month's notice whenever possible. If circumstances do not allow this notification period, the period may be reduced as appropriate with the Surveillance Managers approval. Surveillance Notification Letter Form (Form 1304) can be amended as applicable depending on the nature and scope of the Level 2 event to be conducted. The Surveillance Manager will consider the impact on the industry participant prior to deciding on any reduced notification period. The Surveillance Manager's approval is to be filed in RMS or the approval noted in the comments section of the event in Sky Sentinel.
- **Note:** Should the authorisation holder have returned an oversight survey in the preceding 6 months, it is at the discretion of the surveillance team to resend another one.

#### Surveillance lead or Inspector

- 1. Prepares a Surveillance Checklist (Form 1297).
- 2. Contracts the authorisation holder to advise them of the upcoming surveillance event and to discuss a mutually agreeable date for the surveillance event.
- Develops the scope after the initial considerations utilising the mandatory Surveillance Planning and Scoping Development Form (Form 1189). To assist this, the STO will have added relevant documentation to the RMS file and populated the Form 1189 which is reviewed by the surveillance team.
- 4. Develops a Surveillance Worksheet (Form 1308) capturing all relevant information, whether it formed part of the original surveillance Scoping or not, if required depending on the complexity of the event.
- 5. Determines the depth of sampling required to verify each system.
- 6. Gather any relevant documentation needed to support the surveillance event
- 7. Reviews any outstanding Safety Findings and considers whether the associated system Elements should be included in the surveillance scope and what needs to be verified during the event.
- 8. Ensure data and correspondence gathered is saved into RMS.

# 4.4.7.2 Process Details – Prepare for Level 2 - Operational Check - COVID-19

Where a desktop surveillance event has been considered suitable by the NM and SM, the Surveillance Lead will contact the authorisation holder by phone to discuss the surveillance process and CASA's expectations and make a written entry in Sky Sentinel comments field reflecting that this has taken place.

A COVID-19 Level 2 surveillance event will typically be less comprehensive and shorter in duration than a Level 1 event and will usually only involve an individual Inspector. While prior notification to the authorisation holder is not mandatory for a Level 2 event, if appropriate to the particular surveillance event, one month's prior notification should be given if possible.

The assigned Inspector must still develop the scope of the surveillance utilising the partially completed - Surveillance Planning and Scoping Development Form (Form 1189) and also prepare a Surveillance Checklist ensuring all items on the checklist have been completed as applicable to the particular surveillance event type.

The Surveillance Worksheet may also be used to assist the Inspector in conducting the surveillance. All relevant information, whether included in the original surveillance event Scoping or not, should be recorded on the worksheet.

To develop a Surveillance Worksheet, the Inspector will need to review a number of documents such as authorisation holder organisational policy and procedures manuals besides identifying specific areas to be assessed or reviewed as identified in the Surveillance Checklist. The Surveillance Worksheet is used to note areas of potential system vulnerability and may be used in conjunction with the applicable entry control checklists.

The scope and depth of each COVID-19 event will vary depending on the information, data and known history about the authorisation holder. See Surveillance Planning and Scoping Development Form (Form 1189).

Depending on the size and complexity of the surveillance event, detailed planning should be undertaken similar to that necessary for a Level 1 event. If appropriate, a surveillance event timetable, as detailed above, should form the basis for such planning. See Surveillance Event Timetable (Form 1290).

The inclusion of scope items associated with any Safety Findings from previous surveillance events with a 'Verification Required by CASA' status must be considered with a view to finalising and acquitting the Safety Finding. A check of outstanding self-reported deficiencies should also occur to ensure inclusion in the event.

# 4.4.8 Accountabilities - Surveillance event preparation

Position	Accountabilities
National Manager Surveillance	<ul> <li>ensure adequate resources are provided for preparation and, ultimately, for the conduct of the surveillance event.</li> </ul>
Surveillance Manager	<ul> <li>ensure adequate preparation is carried out by surveillance teams</li> <li>provides assistance and guidance in the preparation phase</li> <li>ensure all team members are aware of their record keeping responsibilities.</li> </ul>
Surveillance Lead	<ul> <li>contacts the authorisation holder to discuss a mutually agreeable date for the surveillance event</li> <li>ensure authorisation holder receives a surveillance notification letter at least one month prior to the scheduled</li> </ul>

Table 5: Position and accountabilities

Position	Accountabilities
	<ul> <li>event date for Level 1 events and for Level 2 events if appropriate (not mandatory for Level 2)</li> <li>review the information on the Surveillance Planning and Scoping Development Form (Form 1189) and complete the relevant sections, to show its been reviewed</li> <li>determine if any additional system Elements need to be added to the event scope using mandatory Surveillance Planning and Scoping Development Form (Form 1189)</li> <li>determine the depth of sampling required to verify each system</li> <li>consider any third-party audit results when reviewing the surveillance scope</li> <li>ensure the surveillance is appropriately planned by developing a timetable, for all Level 1 events and for Level 2 events as appropriate</li> <li>ensure surveillance preparation is carried out by the surveillance team and assist surveillance team members where necessary</li> <li>ensure the surveillance team has the necessary surveillance documentation, e.g. checklist, worksheet etc.</li> <li>ensure documentation is saved onto RMS.</li> </ul>
Surveillance team member	prepare for the surveillance event.
Surveillance Technical Officer	<ul> <li>ensures an RMS file has been created and populated with relevant supporting documentation</li> <li>verifies with the Surveillance Lead whether the Surveillance Notification is required for the surveillance event (Not required for AOCD event), contact details of the authorisation holder and surveillance dates are correct and any additional forms to be sent out.</li> <li>drafts the Surveillance Notification Letter (Form 1304) (not mandatory for Level 2)</li> <li>forwards Surveillance Notification Letter (Form 1304) to the authorisation holder together with the oversight survey if applicable/appropriate</li> <li>compiles the information on the Surveillance Planning and Scoping Development Form (Form 1189), if appropriate</li> <li>provides reports and administrative assistance to the Inspector to support the surveillance preparation (using Power BI App to generate Operator Profile Reports)</li> <li>verifies information provided by the authorisation holder upon return of the relevant survey form and updates Sky Sentinel and RMS (also EAP when appropriate) as necessary.</li> </ul>

# 4.5 Conduct surveillance event

# 4.5.1 Purpose

This section describes the process for assuring the level of the authorisation holder's Compliance and for Level 1 surveillance events, its ability to control its safety Risks within the scope of the surveillance event.
During a Level 1 surveillance event, an authorisation holder's systems, safety Risk control and processes will be critically examined. Evidence is gathered to verify Compliance with Civil Aviation legislation and assess the level of control the authorisation holder exercises over its operational safety Risks. The effectiveness of authorisation holder's systems will be assessed using a variety of surveillance techniques available to surveillance team members, e.g. documentation review, control effectiveness process, sampling, staff interviews and observation.

During a Level 2 surveillance event, an authorisation holder's processes will be critically examined. Evidence is gathered to verify Compliance with Civil Aviation legislation. The effectiveness of authorisation holder's processes will be assessed using a variety of surveillance techniques available to surveillance team members, e.g. documentation review, process sampling using appropriate checklists, staff interviews and observations.

This procedure also describes how to conduct the on-site Element of a surveillance event.

**Note:** Onsite Start Date - The onsite start date is the date that an event has been agreed to with an authorisation holder and is important to ensure that surveillance reporting is accurate. The onsite start date must be entered as soon as it is confirmed. If the event has been postponed or cancelled the onsite start date will need to be amended or removed.

Onsite start dates not updated correctly by the end of the month will affect NSSP reporting.

**Note:** Onsite Finish Date - The onsite finish date is the date that the onsite component of the surveillance event concluded and is important for reporting on metric such as surveillance report issuing timeframes. The onsite finish date must be put into sky sentinel as soon as is practical after completion of the onsite component of the event.

## 4.5.2 References

The following materials are applicable to the Conduct Surveillance Event Phase:

Manuals

- <u>Enforcement Manual Chapter 13</u>
- <u>Enforcement Manual Chapter 14</u>
- Forms (Available in the Document Catalogue)
  - <u>Form 1189</u> Surveillance Planning and Scoping Development Form
  - Form 1288 Surveillance Technical Discipline Summary Form\*
  - Form 1289 Surveillance Event Record of Conversation
  - <u>Form 1290</u> Surveillance Event Timetable
  - Form 1293 Entry Meeting Agenda Form\*
  - Form 1294 Surveillance Checklist Entry/Exit Meeting Attendance List Form
  - <u>Form 1295</u> Exit Meeting Agenda Form\*
  - Form 1301 Surveillance Report Form\*
  - Form 1304 Surveillance Notification Letter
  - Form 1308 Surveillance Worksheet Form\*
  - Form 2173 Surveillance AOC Desktop Review Assessment
  - Operational Check resources, e.g. approved checklists
  - <u>CASA-04-5141</u> Surveillance Notification Letter COVID-19
  - <u>CASA-04-5142</u> Surveillance COVID19 CASR Part 145 Worksheet

- <u>CASA-04-5143</u> Surveillance COVID19 CASR Part 42 Worksheet
- <u>CASA-04-5144</u> Surveillance COVID19 CAR 30 Worksheet
- <u>CASA-04-5145</u> Surveillance COVID19 Air Operators Certificate Part 141/142 Worksheet
- CASA-04-5535 Surveillance COVID19 CASR Part 147 Worksheet
- <u>CASA-04-5147</u> Surveillance COVID19 Safety Management System/Change Management Worksheet
- CASA-04-5149 COVID19 Risk Assessment Guide.

\*Generated in Sky Sentinel

## 4.5.3 Processes



Figure 10: Level 1 Surveillance Event



Figure 11: Level 2 - Surveillance Event

## 4.5.4 Level 1 Surveillance event activities

All Level 1 surveillance events must include the following activities:

- notification to the authorisation holder
- a structured surveillance event timetable
- an entry meeting
- regular contact with the authorisation holder representative during the surveillance event, as required
- an exit meeting
- saving of all documentation and communication to RMS
- an Onsite Start date in Sky Sentinel
- an Onsite Finish date in Sky Sentinel
- a Location ("Remote" if a desktop)
- a list of manuals and documents and databases (eg. Air Maestro) reviewed
- key people interviewed.

## 4.5.5 Level 1 Surveillance event - Conduct entry meeting

## 4.5.5.1 Process - Conduct entry meeting

## Entry meeting chair:

1. Conducts the meeting in accordance with the Entry Meeting Agenda (<u>Form 1293</u>) normally at the authorisation holder's premises.

 Explains CASA's approach to authorisation holder engagement during the conduct of a surveillance event (as detailed in Section 2.5.4 – Authorisation holder engagement), as well as any other procedural matters that may arise during the surveillance event as appropriate.

## Surveillance team members:

- 1. Participate in the entry meeting.
- 2. Record all matters of significance discussed during the meeting.
- 3. If there are no issues, or if any issues are not discussed, note the minutes accordingly.

## 4.5.5.2 Process Details – Conduct entry meeting

The entry meeting is normally conducted on an authorisation holder's premises, but some circumstances may require the use of a CASA office or it is achieved remotely.

The chair (normally the surveillance lead) must conduct the entry meeting in accordance with the Entry Meeting Agenda form. The form provides guidance, prompts and space for recording meeting minutes. The completed Entry Meeting Agenda (Form 1293) must be placed on the relevant surveillance file. Entry/Exit Meeting Attendance List (Form 1294) should also be used.

The purpose of the entry meeting is to finalise the logistics of the surveillance, as well as to clarify the scope, timetable and availability of key personnel. Matters that relate to the subject of the surveillance should not form part of the entry meeting processes, but rather should be conducted as part of the subsequent surveillance activities.

To provide appropriate support to the surveillance team, and if circumstances warrant, consideration should be given to the attendance of the Surveillance Manager (if they are not already part of the surveillance team) at the entry meeting if it is considered appropriate and/or necessary. All attendees should be recorded in the minutes.

## **Recording notes/minutes**

The surveillance team must record all matters of significance discussed during a surveillance entry meeting. Matters of significance could include significant changes to the organisation not identified during surveillance preparation that have either taken place or are planned, or due to the non-availability of important organisation position holders. Where issues are identified, a resolution must be agreed upon and actions recorded. This could be as simple as adjusting the surveillance timetable.

Where no issues were identified during an entry meeting, the minutes should state "Discussed – no issues raised" or if applicable "Not discussed". No agenda items should be left unaddressed on the Entry Meeting Agenda (Form 1293).

## 4.5.6 Level 1 Surveillance event - Onsite familiarisation procedure

## 4.5.6.1 Process - conduct onsite familiarisation

## Surveillance team:

1. Carries out a tour of the authorisation holder's facility if unfamiliar with the authorisation holder's operation.

- 2. Identifies any changes to the authorisation holder's authorised activities since the last surveillance event.
- 3. Updates the Surveillance Worksheet (<u>Form 1308</u>) for any areas requiring special attention, where appropriate.
- 4. Confirms authorisation holder escort where required.

## 4.5.6.2 Process Details - Conduct onsite familiarisation

If the surveillance team is not familiar with the authorisation holder, an informal on-site familiarisation tour will assist in not only developing a rapport with the authorisation holder, but also in obtaining a general appreciation of their activities. All health and safety matters, identified in the entry meeting, need to be addressed at this time, including identifying the location of emergency exits and assembly areas etc.

## 4.5.7 Level 1 Surveillance event - Conduct surveillance

## 4.5.7.1 Process - Conduct surveillance

## Surveillance team members:

- 1. Gathers Evidence to determine the effectiveness of an authorisation holder's systems.
- 2. Gathers objective Evidence to support surveillance Findings.
- Records all Evidence collected during the conduct of the surveillance in the Surveillance Worksheet (<u>Form 1308</u>).
- 4. Keeps the surveillance lead and team informed.
- 5. Ensures all Evidence is saved into RMS as it is collected and titled appropriately, or immediately on return to office.

## Surveillance Lead:

- 1. Leads and assists the surveillance team.
- 2. Chairs the relevant briefings and entry/exit meetings.
- 3. Escalates issues to the appropriate Surveillance Manager, if necessary.
- 4. Keeps the Surveillance Manager and other surveillance team members progressively informed as necessary.
  - **Note:** The instructions on the appropriate engagement with the authorisation holder during the conduct of a surveillance event detailed in Section 2.5.4 Authorisation holder engagement must be applied throughout the surveillance event.
  - **Note:** If the surveillance event is conducted by a sole Inspector, that Inspector assumes all roles and responsibilities for the execution of the surveillance event, i.e. surveillance team member and surveillance lead.

## Surveillance Manager:

- 1. Provides assistance and advice to the surveillance lead and surveillance team members.
- 2. Escalates issues, where required, to the National Manager Surveillance/Branch Manager.

## 4.5.7.2 Process Details - Conduct surveillance

Evidence is collected while conducting a surveillance event with relevant information recorded in the Surveillance Worksheet (Form 1308) to support any associated Findings.

Evidence must be:

- obtained with the consent of the authorisation holder
- and a record of where it was obtained from
- verified for correctness, completeness and indicated as a true copy where applicable
- recorded accurately and concisely
- collected in a manner that will aid in writing the Surveillance Report and any associated Findings.
- saved into RMS as soon as possible upon collection and titled appropriately.

Evidence includes:

- oral Evidence record date, time, details of conversation on the Surveillance Worksheet (<u>Form 1308</u>), or Surveillance Event Record of Conversation (<u>Form 1289</u>)
- notes taken during any surveillance event
- documents sighted during the surveillance event always reference the document and page numbers
- copies of documents and records.
- **Note:** Where possible ensure documents are certified by the person making the copy and have the person who has custody of the original document counter sign the copies.
  - photographs (record time, date, place and photographer on worksheet)
  - video recordings (record time, date, place, and video operator on worksheet)
  - physical Evidence, such as original document, records or defective parts, receipted appropriately as required.
- **Note:** It is imperative that clear and perceptive notes are recorded during the conduct of the surveillance. These notes must be scanned and stored in the RMS for future reference and/or potential Enforcement action. (See <u>Enforcement Manual Chapter 14</u> for further advice on note taking.)
- **Note:** More details about collecting Evidence can be found in <u>Enforcement Manual Chapter 13</u>. Evidence of a serious contravention, including copies of documents and relevant photographs, must be obtained during the surveillance keeping in mind that Evidence may be tested in the Administrative Appeals Tribunal, the Federal Court or a criminal court should Enforcement action be initiated.

## Immediate rectification of breaches

It is not uncommon for authorisation holders to immediately rectify breaches on-site at the time of the surveillance event. In such instances, the rectification must be acknowledged and recorded as a positive measure. While this immediate rectification is accepted in a positive light, the breach must still be captured as a Safety Finding and issued with the associated Surveillance Report. The Safety Finding should note the breach was rectified at the time.

## 4.5.8 Level 1 Surveillance event – Process Verification procedure

## 4.5.8.1 **Process - Conduct Process Verification**

## Surveillance team:

- 1. Asks the authorisation holder to walk through the processes that have been nominated as part of the surveillance scope, i.e. use 'show me' to verify the process (All levels of an authorisation holder's operation should be considered in sampling.).
- 2. Confirms and verifies that supporting infrastructure is appropriate and in place
- 3. Examines the effectiveness of the system controls being reviewed through well considered questioning applying MSM attributes.
- 4. Records responses on the Surveillance Worksheet Form 1308, identifying personnel interviewed.
- 5. Compares actual process against documented procedures.
- 6. Determines what systems and/or processes have failed to be adequately controlled and continues questioning in that direction irrespective of what had previously been prepared on the Surveillance Worksheet. If outside the surveillance scope, it must be recorded accordingly
- 7. Confirms and adjusts the level of sampling required to verify the process
- 8. Validates areas of safety concern with the authorisation holder to ensure all aspects of the area of concern are covered before concluding Process Verification (Verification may be covered at a periodic meeting with the authorisation holder.).
- 9. Collects or records results of sampling, including what was sampled and how many, on the Surveillance Worksheet Form 1308 and saved into RMS as soon as possible upon collection.
- 10. Records the results of the verification process in the comments section of the Surveillance Worksheet.

## 4.5.8.2 Process Details – Conduct Process Verification

During verification Inspectors should actively confirm the 'process in practice' including outputs.

All levels of an authorisation holder's operation must be considered in sampling of the relevant scoped items.

**Note:** While the responsibility for conducting Root Cause analysis on any documented Findings rests with the authorisation holder, the Issuing Inspector should conduct a basic or rudimentary Root Cause analysis on any possible Findings for themselves so that they are better able to discuss their areas of safety concern at the exit meeting. This basic analysis will also assist the Inspector to assess the authorisation holder's response to ensure the response focuses on the true cause of the identified deficiency.

## 4.5.9 Level 1 Surveillance event – Periodic meetings

When the surveillance extends for more than one day, periodic meetings should be convened with the surveillance team and the authorisation holder.

# 4.5.10 Level 1 Surveillance event – Periodic meetings (Team coordination meeting)

## 4.5.10.1 Process - Conduct team coordination meeting

## Surveillance team:

- 1. Discusses any areas of immediate safety concern to be raised with the authorisation holder, e.g. Safety Alerts (see Section 4.6.9 Safety Alerts).
- 2. Discusses any areas of safety concern and any systems safety aspects and, if required, escalates the matter to the Surveillance Manager.
- 3. Agrees on any information that needs to be presented to the authorisation holder prior to the exit meeting.
- 4. Identifies any additional information required.
- 5. Shares any information gathered.
- 6. Ensures all information is gathered from staff, including specialist staff who may not be available for the entire surveillance event.
- 7. Plans further activities based on the above steps and the existing surveillance timetable.
- 8. Ensures meeting notes and associated documents are saved to RMS.

## 4.5.10.2 Process Details - Conduct team meeting

Surveillance team meetings are designed for surveillance events where there is more than one Inspector. These meetings should take the form of a debriefing to allow members of the surveillance team to exchange information and discuss Findings.

# 4.5.11 Level 1 Surveillance event – Periodic meetings (Authorisation holder progress meeting)

## 4.5.11.1 Process – Conduct authorisation holder progress meeting

## Surveillance team

- Raises any areas of immediate safety concerns (e.g. Safety Alerts see Section 4.6.9 – Safety Alerts) with the authorisation holder after consultation with the Surveillance Manager
- **Note:** By immediately raising areas of safety concern, this may enable the authorisation holder to review and take appropriate Remedial Action. However, the surveillance team's primary focus should be on the surveillance as scoped and not on the authorisation holder's immediate rectification of the safety concerns.
- 2. Uses such meetings to engage and keep the authorisation holder informed on the surveillance progress.
- 3. Raises all observed deficiencies or breaches with the authorisation holder to check relevant facts and clarify any necessary points.
  - **Note:** When checking and clarifying any other such areas of concern raised, an authorisation holder may present additional information to be considered before any possible subsequent Findings are formally issued; however, all Evidence should still be recorded.

- 4. Advises of any outstanding requested information and any additional information required.
- 5. Discusses all matters that have been covered to date.
- 6. Advises any changes to the surveillance direction and/or duration.

## 4.5.11.2 Process Details - Conduct authorisation progress meeting

The purpose of these meetings is to provide communication between the surveillance team and the authorisation holder. On a periodic basis, ideally daily, the surveillance team should discuss their areas of safety concern or unresolved issues/enquiries with the authorisation holder.

## 4.5.12 Level 1 Surveillance event - Pre-exit meetings

## 4.5.12.1 Process Details - Conduct pre-exit meeting

## Surveillance team:

/

- 1. Assesses all Evidence gathered during the surveillance event.
- 2. Drafts a brief summary of areas of safety concern for the team's final analysis of the surveillance (Consolidate areas of safety concern against processes that have failed, rather than for individual breaches of the applicable Civil Aviation legislation.).
- 3. Ensures a copy of the Exit Meeting Agenda Form 1295 is available.
- 4. Discusses results of the surveillance and records individual discipline results on the Surveillance Technical Discipline Summary Form 1288 to assist when presenting to the authorisation holder at the exit meeting.
- 5. Discusses the delivery of the exit meeting agenda to ensure a coordinated approach.

## 4.5.12.2 Process Detail - Conduct pre-exit meeting

The purpose of this meeting is for the surveillance lead and surveillance team members to analyse the results of the surveillance and to determine what will be presented at the exit meeting. The individual discipline results are recorded on the Surveillance Technical Discipline Summary (Form 1288). This will be used to assist with presenting the consolidated information to the authorisation holder at the exit meeting, as well as being helpful when formulating the Surveillance Report. This meeting is designed for surveillance events where there is more than a single Inspector although some of the steps may be applicable for individual Inspectors to prepare for the exit meeting.

## 4.5.13 Level 1 Surveillance event - Exit meetings

## 4.5.13.1 Process - Conduct exit meeting

## Surveillance Lead

- 1. Chairs the exit meeting in accordance with the Exit Meeting Agenda Form\_1295.
- 2. Explains the subsequent processes to be followed, particularly in applying 'Just culture' principles to be followed, including procedural fairness principles whereby the authorisation holder will be given the opportunity to consider and potentially object to any Findings.

## Surveillance team members:

- 1. Participate in the exit meeting.
- 2. Present details of all identified deficiencies.
- 3. Record all matters of significance discussed during the meeting.
- 4. If there are no issues or none are discussed, note minutes accordingly.

## 4.5.13.2 Process Details - Conduct exit meeting

The surveillance lead chairs the exit meeting in accordance with the Exit Meeting Agenda (Form 1295). The Exit Meeting Attendance List (Form 1294) is also available for use and should include all attendees.

During the exit meeting, results identified during the surveillance event are brought to the authorisation holder's attention; however, specific Findings are formulated and issued after finalisation in conjunction with the final report.

All items listed on the Exit Meeting Agenda (Form 1295) must be covered during the exit meeting.

Consideration should be given to the attendance of the Surveillance Manager (if they are not already part of the surveillance team) at the exit meeting if it is considered appropriate and/or necessary and noted on attendance list.

**Note:** An authorisation holder may, at any time during the surveillance process, suggest some form of written proposal, which in this manual is referred to as an Action Plan (but may also be referred to by the authorisation holder by various names, including recovery program, action management plan etc.) to rectify issues. These issues may have been discussed generally during the surveillance event or may be issues that the authorisation holder has realised, while conducting the surveillance event, need to be addressed. An Action Plan may form part of a request for extension of time to complete the required actions associated with acquitting a Safety Finding (see 4.7.11 Request for extension).

## Disclosure at exit meeting

When consulting with and providing feedback to the authorisation holder at the exit meeting, the surveillance team must provide full disclosure while being open and transparent when discussing any observed deficiencies or breaches. If there are breaches, it should be explained that finalised written Findings will not be provided at the exit meeting, and discussion should focus on explaining the procedural fairness and peer-review processes that will be applied. It is, however, appropriate to advise the authorisation holder, on a provisional basis, of any potential surveillance related Findings, including Safety Alerts, Safety Findings or Safety Observations, that have been identified and may be issued. However, it must be made

clear that these provisional Findings are subject to written confirmation and may change following the analysis of Evidence collected and the peer-review process.

The reasons for this approach should be explained in the following terms:

- allows time to review Evidence collected to confirm whether any breaches have occurred
- allows for time to consider the most appropriate action to take once the surveillance information has been assessed
- ensures the correct type of Finding is used in relation to any breaches or deficiencies
- allows the opportunity for peer review of surveillance Findings prior to release, ensuring standardisation of surveillance Findings
- ensures observed deficiencies and breaches are properly consolidated into appropriate Findings.

It must be explained that the authorisation holder will have the opportunity to consider and potentially object to any Findings. It should also be made clear that no additional deficiencies or breaches will be reported on unless prior advice is given, and that the authorisation holder will be specifically contacted if any additional breaches are identified, e.g. in the review process.

In addition, the authorisation holder must be advised that the Surveillance Report will be produced within a maximum of twenty (20) Business Days from the date of the exit meeting and, if there are any delays expected, they will be notified before this time.

**Note:** Any breach that has not been explicitly discussed with the authorisation holder during the conduct of the surveillance event, but which is subsequently identified post-surveillance as part of the assessment of Evidence or peer-review process, must be communicated to the authorisation holder prior to the issue of the Surveillance Report.

## **Recording notes/minutes**

The surveillance team must record all matters of significance discussed during an exit meeting. Where matters of significance are identified, they must be appropriately recorded in the exit meeting minutes. (See the Enforcement Manual for further advice on note taking.)

Matters of significance could include:

- non-availability of important organisation position holders or documentation during the surveillance event, which were brought to the notice of the authorisation holder
- any problems encountered during the surveillance, e.g. failure to supply documentation
- significant views expressed by the authorisation holder regarding the surveillance
- intended changes or improvement actions as a result of Findings from the surveillance event
- points of disagreement between CASA and the authorisation holder, from both points of view, must be recorded in the exit meeting minutes.

Where no issues were identified during an exit meeting, the minutes should state "Discussed – no issues raised" or if applicable "Not discussed". No agenda items should be left unaddressed on the Exit Meeting Agenda (Form 1295). Once completed save in RMS.

## 4.5.14 Level 2 Surveillance event (Excluding AOCD and COVID-19)

## 4.5.14.1 Process - Conduct Level 2 Surveillance event

## Surveillance lead and surveillance team:

- 1. Conducts the entry meeting, if appropriate, in accordance with the Entry Meeting Agenda Form 1293, normally at the authorisation holder's premises.
- 2. Presents CASA identification to the authorisation holder prior to commencing the Level 2 event.
- 3. Explains CASA's approach to authorisation holder engagement during the conduct of a surveillance event (as detailed in Section 2.5.4 Authorisation holder engagement), as well as any other procedural matters that may arise during the surveillance event as appropriate.
- 4. Confirms and adjusts the level of sampling required to verify the process being surveilled.
- 5. Carries out sampling to verify the effectiveness of a process.
- 6. Determines what systems and/or processes have failed, if any, and continues questioning in that direction irrespective of what was previously prepared on the Surveillance Worksheet and scope.
- Collects or records results of sampling, including what was sampled and how many, on the Surveillance Worksheet Form 1308, or relevant Surveillance Report Form 1301. Any collected records must be stored on RMS.
- 8. Records significant points about any interviews and conversations with authorisation holder personnel (Surveillance Event Record of Conversation Form 1289 and results of any verification carried out during the Operational Check.
- 9. Meets at periodic intervals to compare notes to analyse the results of the Operational Check prior to leaving the premises (This will be at the discretion of the surveillance team.).
- 10. Conducts an exit meeting, if appropriate, in accordance with the Exit Meeting Agenda Form 1295.
- **Note:** The instructions on the appropriate engagement of the authorisation holder during the conduct of a surveillance event detailed in Section 2.5.4 Authorisation holder engagement must be applied throughout the surveillance event.

## 4.5.14.2 Process Details – Conduct Level 2 surveillance event

## Entry meeting

While Level 2 events do not require a formal entry meeting or completion of the entry meeting agenda, where appropriate to the particular surveillance event, e.g. on-site surveillance events, an entry meeting may be conducted. Whether an entry meeting is held or not, a surveillance team member must present their CASA ID as required under Item 1 of the Entry Meeting Agenda (Form 1293), along with other procedures in the agenda followed as appropriate.

## **Recording note /minutes**

All matters of significance discussed during a Level 2 event must be recorded and saved in RMS.

## **On-site familiarisation**

A formal on-site familiarisation may not be necessary during a Level 2 event; however, Inspectors should consider hazards, e.g. airside operations. All health and safety matters need to be addressed at this time, including identifying the location of emergency exits and assembly areas etc.

## **Process Verification**

The surveillance team must record significant points about any interviews and conversations with authorisation holder personnel and results of any verification carried out (Surveillance Event Record of Conversation (Form 1289). However, when Level 2 events are used as the verification tool in support of larger surveillance events, it will be necessary to follow the Process Verification methods as for a systems audit (see Section on – Level 1 Surveillance Event – Process Verification Procedure).

## Sampling results of a process

Confirm and adjust the level of sampling required to verify the process being surveilled. Collect or record results of sampling, including what was sampled and the number of samples. For remote surveillance events contact the AH to gather additional documents if required.

## **Periodic meetings**

The surveillance team may be required to meet at periodic intervals to compare notes. However, due to the short time periods of a Level 2 event, authorisation holder periodic meetings may not be required.

## Pre-exit team meeting

The purpose of this meeting is for the surveillance lead and the surveillance team members to analyse the results of the Level 2 event prior to leaving the premises. This will be at the discretion of the surveillance team. The team should discuss any immediate safety concerns to be raised with the authorisation holder, such as Safety Alerts. In the first instance, areas of immediate safety concern need to be discussed with the Surveillance Manager

## Exit meeting

While a Level 2 event does not require a formal exit meeting and completion of the exit meeting agenda, where appropriate to the particular surveillance event type, e.g. on-site surveillance events, an exit meeting may be conducted. Inspectors must follow the procedures in the agenda as appropriate.

## **Disclosure at event conclusion**

Whether an exit meeting is conducted or not for the Level 2 event, when consulting with and providing feedback to the authorisation holder at the conclusion of the surveillance event, the surveillance team must provide full disclosure while being open and transparent when discussing any observed deficiencies or breaches. If there are breaches, it should be explained that written Findings will not be provided at the exit meeting, and discussion should focus on explaining the procedural fairness and peer-review processes that will be applied. It is, however, appropriate to advise the authorisation holders on a provisional basis, of any potential surveillance related Findings, including Safety Alerts, Safety Findings or Safety Observations, that have been identified and may be issued. Also, it must be made clear that

these provisional Findings are subject to written confirmation and may change following the analysis of Evidence collected and the peer-review process.

The reasons for this approach should be explained in the following terms:

- allows time to review Evidence collected to confirm whether any breaches have occurred
- allows for time to consider the most appropriate action to take once the surveillance data has been assessed
- ensures the correct type of Finding is used in relation to any breaches or deficiencies
- allows the opportunity for peer review of surveillance Findings prior to release, ensuring standardisation of surveillance Findings
- ensures deficiencies are properly consolidated into appropriate Findings.

It must be explained that the authorisation holder will be given the opportunity to consider and potentially object to any Findings. It should also be made clear that no additional deficiencies or breaches will be reported on unless prior advice is given.

**Note:** Any breach that has not been explicitly discussed with the authorisation holder during the conduct of the surveillance event, but which is subsequently identified post-surveillance as part of the assessment of Evidence or peer-review process, must be communicated to the authorisation holder prior to the issue of the Surveillance Report.

Also advise that typically, a Surveillance Report will only be sent to the authorisation holder for a Level 2 event if a Finding is to be issued. In addition, advise that the report will be sent within a maximum of twenty (20) Business Days from the date of the exit meeting and, if there are any delays expected, they will be notified before this time.

## **Recording notes/minutes**

The surveillance team must record and save into RMS all matters of significance discussed during an exit meeting, when required to be conducted. Where matters of significance are identified, they must be recorded in the exit meeting minutes.

Matters of significance may include:

- problems encountered during the Level 2 event
- significant views expressed by the authorisation holder regarding the Level 2 event
- intended changes or improvement actions as a result of the event.
- **Note:** While the responsibility for conducting Root Cause analysis on any Findings rests with the authorisation holder, the Issuing Inspector should conduct a basic or rudimentary Root Cause analysis on any possible Findings for themselves, so they are better able to discuss their areas of safety concern at the event conclusion. This basic analysis will also assist the Inspector to assess the authorisation holder's response to ensure the response focuses on the true cause of the identified deficiency.

## 4.5.15 Level 2 - Operational Check - AOC Desktop Subsequent Issue (AOCD) - Conduct

## 4.5.15.1 Process - Conduct Level 2 Surveillance Event - AOC Subsequent Issue

## Surveillance Lead

- 1. Conduct review of documentation in the RMS event folder and any other information deemed pertinent.
- 2. Commence Form 2173 and save to RMS.

## 4.5.15.2 Process Details - Conduct Level 2 - Operational Check - AOC Subsequent Issue - Desktop Review

To inform the decision-making process surrounding the renewal of certain AOCs, the surveillance lead must conduct a desktop review to provide a recommendation to the oversighting Surveillance Manager regarding the renewal. The Surveillance Manager can either conduct the review themselves or allocate it to an Inspector within their team. Regardless, the Surveillance Manager must review the results of the assessment in preparation for the Special Purpose Lane (SPL) process that is conducted by the Regulatory Services Assessment Group.

The assigned surveillance lead will compile relevant comments and responses into Form 2173 during the review/upon completion of the review. The completed form will then be filed in the RMS sub-file for the event and can be reviewed by the AOC renewal decision-maker.

Note: In respect to how the recommendation is made to PI, nothing has changed from the previous SPL process. The regulatory service Inspector/manager will then compile the information contained in the AOC subsequent Issue Assessment Sheet (Form 1535). The assessment sheet should be compiled in a way to provide a snap-shot of the AOC holder to enable the CASA delegate to make an informed decision on the renewal or non-renewal of the AOC, based on the recommendation of the Reg Service Manager.

The conduct of the desktop review is not designed to require the recommending officer be fully satisfied regarding the matters within section 28(1) of the Act, but instead, is designed to enable them to identify if any matters now exist which may give rise to CASA having the reasonable view that they no longer satisfy those matters.

## 4.5.16 Level 2 - Operational Check - COVID-19 - Conduct

## 4.5.16.1 Process - Conduct Level 2 - Operational Check - COVID-19

## Surveillance Lead and Surveillance Team:

- Conducts the entry meeting, if appropriate, in accordance with the Entry Meeting Agenda Form 1293, which may be over the phone or via videoconferencing. If a response to the worksheet questions has not been received, the authorisation holder can complete the form at the entry meeting or within a time frame agreed at the meeting.
- 2. Presents CASA identification to the authorisation holder prior to commencing the Level 2 event.

- 3. Explains CASA's approach to authorisation holder engagement during the conduct of a surveillance event (as detailed in Section 2.5.4 Authorisation holder engagement), as well as any other procedural matters that may arise during the surveillance event as appropriate.
- 4. Confirms and adjusts the level of sampling required to verify the process being surveilled. Surveillance Team may have already requested additional documents prior to event.
- 5. Carries out sampling to verify the effectiveness of a process.
- 6. Determines what systems and/or processes have failed, if any, and continues questioning in that direction irrespective of what was previously prepared on the Surveillance Worksheet and scope.
- Collects or records results of sampling, including what was sampled and how many, on the Surveillance Worksheet Form 1308, or relevant Surveillance Report Form 1301. Any collected records must be stored on RMS.
- 8. Records significant points about any interviews and conversations with authorisation holder personnel (Surveillance Event Record of Conversation Form 1289 and results of any verification carried out during the Operational Check.
- 9. Meets at periodic intervals to compare notes to analyse the results of the Operational Check.
- 10. Ensure additional questions are asked to address known areas of concern and/or to address concerns identified during the initial response received from the worksheet.
- 11. Conducts an exit meeting, if appropriate, in accordance with the Exit Meeting Agenda Form 1295.
- 12. Complete the COVID-19 Risk Assessment Guide and score. The Risk score and the surveillance team's recommendation should be included as a Sky Sentinel comment. The outcome should be discussed with the Surveillance Manager.
- 13. File all documentation into the RMS event file.
  - **Note:** The instructions on the appropriate engagement of the authorisation holder during the conduct of a surveillance event detailed in Section 2.5.4 Authorisation holder engagement must be applied throughout the surveillance event.
    - a. Surveillance COVID19 CASR Part 145 Worksheet
    - b. Surveillance COVID19 CASR Part 42 Worksheet
    - c. Surveillance COVID19 CAR 30 Worksheet
    - d. Surveillance COVID19 Air Operators Certificate Part 141/142 Worksheet
    - e. Surveillance COVID19 CASR Part 147 Worksheet
    - f. <u>Surveillance COVID19 Safety Management System/Change Management</u> <u>Worksheet</u>.

## 4.5.17 Discontinuing a surveillance event

## 4.5.17.1 Process – Discontinue surveillance event

## **Surveillance Manager**

1. Decides whether a surveillance event must be ceased or suspended in consultation with the surveillance team and advise the National Manager Surveillance of the action.

#### Surveillance Team Member

1. May discontinue a surveillance event in a threatening situation. Informs the surveillance lead, and Surveillance Manager of this action at the earliest opportunity.

## 4.5.17.2 Process Details - Discontinue surveillance event

The decision to discontinue any surveillance event must be made by the relevant Surveillance Manager after consulting with the surveillance team. However, in threatening situations, an individual Inspector may cease or suspend a surveillance event at any time. In such an event, the surveillance lead, Surveillance Manager and National Manager Surveillance must be informed at the earliest opportunity.

Events that may prevent a surveillance continuing include:

- the safety of the surveillance team is at Risk
- the objective of the surveillance becomes unattainable due to access limitations, hindrance, harassment or aggressive behaviour by the authorisation holder
- non-availability of the authorisation holder key staff, or in the event Enforcement action is assessed as being more appropriate.

On return to the office the surveillance lead together with the surveillance team complete <u>Form 3836</u> - Aviation Event brief, to be forwarded to the Surveillance Manager and National Manager.

## 4.5.18 Accountabilities - Conduct surveillance event

#### Table 6: Position and accountabilities

Position	Accountabilities
Surveillance Manager	<ul> <li>decide whether a surveillance event must be discontinued (in consultation with the surveillance team)</li> <li>provide assistance and advice to the surveillance lead and surveillance team members</li> <li>escalate issues, where required, to the National Manager Surveillance</li> </ul>
Surveillance lead	<ul> <li>lead and assist the surveillance team</li> <li>chair relevant briefings and meetings, while ensuring minutes are captured</li> <li>escalate issues to the appropriate Surveillance Manager, if necessary</li> <li>keep appropriate stakeholders progressively informed</li> <li>ensure a start date is entered on Sky Sentinel once the event has commenced</li> <li>manage the Acquittal of all Findings</li> </ul>
Surveillance team member	<ul> <li>gather objective Evidence to support surveillance Findings</li> <li>keep the surveillance lead and team informed</li> </ul>
All	<ul> <li>ensure all correspondence and documentation is saved into RMS</li> </ul>

## 4.6 Surveillance Event Reporting

## 4.6.1 Purpose

This section outlines the format of a standardised official record of an authorisation holder's surveillance. The report details the outcomes of the surveillance event and agreed actions to manage identified deficiencies (if any) and associated safety Risks. Following the conduct of a surveillance event and review of Evidence obtained on the assessed system Elements, a copy of the Surveillance Report is provided to the authorisation holder to inform them of their current level of Compliance and any identified Findings. The section also outlines the process for the management of the report and any resultant identified actions.

## 4.6.2 References

The following materials are applicable to the Surveillance Event Reporting:

## Reports

- Systems & Elements (refer to relevant technical annex)
- Forms (Available on the CASA Document Catalogue)
  - Form 996 Aircraft Survey Report (Note)
  - <u>Form 1288</u> Surveillance Technical Discipline Summary Form Not mandatory
  - <u>Form 1292</u> Surveillance Report Covering Letter Form
  - Form 1298 Safety Observation Form\*
  - Form 1299 Safety Finding Form\*
  - Form 1300 Safety Alert Form\*
  - Form 1301 Surveillance Report Form (applies to Level 1 and Level 2 surveillance events)\* (See relevant technical annex)
  - <u>Form 1304</u> Surveillance Notification Letter Form\* (Optional for Level 2)
  - Form 1308 Surveillance Worksheet Form\*
  - Surveillance Report Summary Work Instruction Standard Wording
  - Operational Check resources, e.g. approved worksheets.

\*Generated in Sky Sentinel

**Note:** Form 996 is a paper based quadruplicate form. When these forms are used the paper form number is entered onto Sky Sentinel as the relating reference and a copy of the paper form is saved into RMS on the surveillance event and the aircraft registration file.



Figure 12: Developing a Level 1 Surveillance Report



Figure 13: Developing a Level 2 Surveillance Report

## 4.6.3 Reporting

The Surveillance Report provides an official record of the surveillance event, as well as information for CASA's own ongoing analysis and Risk management. The role of the report is to give CASA enough information to be satisfied that an authorisation holder can either continue to operate in a safe and effective manner or is not operating safely and appropriate action should be taken. The report also provides context to the authorisation holder about any Findings.

The report should provide the reader with details on the dates and locations of when and where the surveillance event occurred, the reference documents used and viewed and the key people that were met with. This information is then held within Sky Sentinel and can provide

CASA Management with the relevant authorisation holder information. The <u>Surveillance</u> <u>Report and Findings Work Instructions - Standard Wording</u> should be used when creating the report and any Findings.

## 4.6.4 Surveillance Findings

A surveillance Finding is used to highlight actual and/or potential breaches and may be issued as:

- Safety Alerts
- Safety Findings
- Safety Observations
- Aircraft Survey Reports (ASRs Code A, B or C).

The surveillance lead, or surveillance team member, who issues the Finding, and who is subsequently responsible for managing that Finding, is known as the Issuing Inspector.

In line with procedural fairness principles, an authorisation holder retains the right to object to a Finding by submitting supporting Evidence for their objection. Once the objection has been considered by CASA, the objection is either upheld and the Finding withdrawn, or the Finding Management Process proceeds as normal. Safety Finding Evidence must be saved to RMS referencing the Safety Finding number.

**Note:** When conducting the post-surveillance review and analysis, if the surveillance team identifies repeated breaches of a similar nature from the review of previous surveillance events and the surveillance team is no longer satisfied that the authorisation holder is willing or able take remedial and corrective actions to address the breaches, the surveillance team, in conjunction with the Surveillance Manager must consider initiating the Coordinated Enforcement Process (CEP) in accordance with section of the Enforcement Manual. Writing Compliance Findings (Level 1 and 2 surveillance types).

Findings must not be issued to the authorisation holder at the exit meeting. Findings must be included in and form part of the Surveillance Report associated with the event.

All Findings must be peer reviewed by either an independent Inspector with the relevant experience, or another surveillance team member when available with relevant experience to identify any potential systemic issues and ensure the requirements for the allocated Finding are met, for example:

- Is the Finding at the appropriate level, i.e. Safety Observation, Safety Finding, ASR or Safety Alert?
- Has the use of discretion and procedural fairness been applied in the decisionmaking process?
- Is the Finding formulated against the correct Regulatory Head of Power for breach?
- Has the regulatory reference been entered in the correct way refer <u>CSM Annex 1</u>,
- Does the Finding clearly explain the deficiency identified?
- Is there objective evidence recorded in RMS?
- Record the peer-review in the comments of the Safety Finding/s.

This peer-review process in no way questions the expertise of the Inspector in identifying and issuing the Finding, but rather constitutes a quality check to assure standardisation and consistency in the issuing of Findings.

**Note:** Any Finding can be deleted in Sky Sentinel, ensuring it is not displayed in the Surveillance Report. Typically, a Finding would be deleted if it had been created in error, or if an incorrect Finding type had been created. The Issuing Inspector must send a request via email detailing the reason for deletion to <u>surveillance@casa.gov.au</u> and the surveillance team will facilitate the deletion of the Finding.

## 4.6.5 Safety Findings

## 4.6.5.1 Process - Writing safety Findings

## **Issuing Inspector**

- Determines the type of Finding based on the nature of the issue, e.g. a Safety Finding should be raised for a breach of any civil aviation legislation however section 1.1.1 key considerations for regulatory decision making should be taken into consideration in the decision making process
- 2. Formulates Findings using the Safety Finding Form 1299 in Sky Sentinel, providing sufficient detail to support any possible subsequent Enforcement action.
- 3. Documents the legislative provision that has been breached (excluding the Penalty Units, strict liability reference or the breach of conditions).
  - **Note:** If the breach relates to a Civil Aviation Order (CAO) or a Manual of Standards (MOS), the Safety Finding must reference the CAO or MOS, as well as the overarching legislation to which the CAO or MOS is linked. The CAO or MOS reference must be cited for the purpose of clarification, and the relevant section of the Act or regulation must be cited as Evidence of the actual breach. If uncertain about the appropriate head of power, the Inspector should contact LIRA branch.

**Surveillance Team member or** an independent Inspector with the relevant experience: Peer reviews all Findings to ensure they meet the Safety Finding requirements prior to issue.

- **Note:** Any proposed amendment to a Safety Finding requires notification to, and agreement by, the Issuing Inspector.
- **Note:** If it is determined a Safety Alert is necessary, follow procedures as detailed in Section 4.6.6 Safety Alerts.

**Surveillance Manager**: Takes appropriate action to ensure that standardisation and consistency is maintained for quality and correctness exercising the discretion allowed as part of the regulatory decision-making considerations set down in this manual (see Section 2.5.1–Key considerations for regulatory decision making).

## Surveillance Lead or Surveillance Team Member

- 1. Ensures all documentation is appropriately filed in RMS.
- 2. Ensures the Controlling Office conducts data entry.
- **Note:** To delete a Safety Finding prior to the report approval email <u>surveillance@casa.gov.au</u> providing justification for deletion.

## 4.6.5.2 Process Details - Writing safety Findings

A Safety Finding is issued to an authorisation holder to give written notice of a breach and must be responded to by the authorisation holder within twenty-one (21) calendar days (see Section 4.7.6 – Assessment of response).

Safety Findings are issued where, as a result of surveillance, a Non-Compliance has been detected. A Safety Finding must be peer reviewed prior to issue in order to ensure it meets the requirements for a Safety Finding.

Where an immediate safety concern is raised, a Safety Finding is issued in conjunction with a Safety Alert and/or an ASR. Safety Findings must be associated with a surveillance event when recorded in Sky Sentinel and are issued to the authorisation holder with the relevant Surveillance Report.

While a Safety Finding is provided primarily as a notification of a breach, it will generally be issued in circumstances where CASA is satisfied that the authorisation holder has the willingness and the ability to take remedial and Corrective Action to address the breach. Where CASA is no longer satisfied that the authorisation holder is willing or able to do so (for example, as shown by repeated breaches of the same type, or where additional or new information indicates further safety issues), a Safety Finding will still be issued, and the matter must also be referred, for coordinated Enforcement in accordance with section 6.

If a Safety Finding is issued to an authorisation holder, the Safety Finding must be raised against the legal entity holding the authorisation.

All breaches must be supported by Evidence with adequate detail of the process or system deficiencies, or their inappropriate use, and which resulted in the Safety Finding. This Evidence must be saved into RMS and titled accordingly. Refer, Surveillance - <u>RMS Titling</u> <u>Conventions document in Horace</u>.

All Safety Findings must document the legislative provision that has been breached (head of power). Safety Findings must not be issued against advisory material, which includes, but is not limited to:

- Civil Aviation Advisory Publications (CAAP)
- Advisory Circulars (AC)
- Guidance Material (GM)
- policy documents and manuals
- Acceptable Means of Compliance (AMC).

While Inspectors should make every effort to consolidate Safety Findings as appropriate, grouping breaches within the one Safety Finding where possible, the detail captured in the Detail of Deficiency must be sufficiently granular to capture all aspects of the breach.

**Note:** If a breach relates to a Civil Aviation Order (CAO) or a Manual of Standards (MOS), the Safety Finding must reference the CAO or MOS, as well as the overarching legislation to which the CAO or MOS is linked. The CAO or MOS reference must be cited for the purpose of clarification, and the relevant section of the Act or regulation must be cited as Evidence of the actual breach. If uncertain about the appropriate head of power, the Inspector should contact LIRA branch.

The aim of issuing a Safety Finding is to highlight process or system deficiencies, not to provide consultancy nor tell the authorisation holder what to do. It is the authorisation holder's responsibility to investigate and identify the Root Cause, then take Corrective Action to address the Root Cause(s). While the responsibility for conducting Root Cause analysis on documented Findings rests with the authorisation holder, the Issuing Inspector should form a view regarding the Root Cause so that, when assessing the response from the authorisation holder, the Inspector can ensure the authorisation holder has focused on the most appropriate area to rectify the true cause of the Non-Compliance.

The response to a Safety Finding can either take the form of an objection to the Safety Finding with supporting Evidence, or the provision of details of remedial, Root Cause and Corrective Action taken in returning to a compliant state. If the objection is accepted by CASA, the Safety Finding is withdrawn. If an objection is accepted by CASA and requires a change to the original regulatory reference that was placed against the Safety Finding, the Safety Finding is withdrawn from the original surveillance event and a new Level 2 Desktop Review event must be created with the addition of the new Safety Finding and reference.

If an authorisation holder has not objected to the Safety Finding, or if the objection has not been accepted, they are required to provide a response to CASA regarding the remedial and corrective actions taken for each Safety Finding. Those that fail to provide such a response should be considered for referral for Coordinated Enforcement. Consequently, it is important to write a Safety Finding with sufficient detail to support Enforcement action.

The Information Capture Protocols for Findings section in CSM - Annex 1, describes the requirements for recording a Safety Finding.

## Self-reported deficiencies

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At any time throughout the course of the surveillance cycle, a deficiency may come to CASA's attention as result of the authorisation holder's self-auditing or continuous improvement processes. The process for dealing with self-reported deficiencies is detailed in Section 4.7.15 – Self-reported deficiencies.

**Note:** Under normal circumstances, the surveillance team member who initially identified the breach is the author of the Safety Finding (Issuing Inspector) and is also responsible for the Acquittal process. If the Surveillance Manager issues the Safety Finding, appropriate action needs to be taken to ensure standardisation and consistency is maintained through peer review.

## 4.6.6 Safety Alerts

## 4.6.6.1 Process - Issuance and Acquittal of Safety Alerts

## **Issuing Inspector**

- 1. Consults with the Surveillance Manager and the National Manager Surveillance on whether a Safety Alert should be issued.
- 2. Considers whether an Aircraft Survey Report (ASR) should be issued with the Safety Alert, i.e. a defect to an aircraft is found.

## Issuing Inspector, surveillance lead, surveillance manager and National Manager Surveillance

1. Discuss and categorise safety concerns and decide whether a Safety Alert should be issued with the **National Manager Surveillance**, particularly taking into account

the discretionary scope allowed in the regulatory decision-making considerations set down in this manual (see Section 2.5.1 – Key considerations for regulatory decision making).

## National Manager Surveillance

1. Advises LIRA manager that a Safety Alert is to be issued and associated details.

## **Issuing Inspector**

- 1. Creates a Sky Sentinel Event
- 2. Compiles the Safety Alert using Sky Sentinel outputs. The Safety Alert Form 1300 is available as a backup)
- 3. Before issue of Safety Alert ensures all Evidence is saved on RMS
- 4. Issues the Safety Alert advising the authorisation holder to respond within five (5) calendar days detailing the Remedial Action taken.
  - **Note:** The Safety Alert notification includes advice that the alert takes immediate effect. However, in line with procedural fairness principles, CASA will consider any representation that the recipient makes as to whether the alert has been correctly issued. If it is subsequently decided the alert has not been correctly issued, CASA will withdraw the Safety Alert. During the time any representation is being considered, restrictions on the operation of any aircraft involved or activity carried out that is subject to the breach, must stand.
- 5. Notifies the surveillance manager and the **National Manager Surveillance** when the Safety Alert is issued.
  - **Note:** If the Issuing Inspector is not able to establish communication to discuss the issuance of the Safety Alert with the **National Manager Surveillance** or the Surveillance Manager, and a serious safety concern continues to exist, the Issuing Inspector must issue the Safety Alert and make the appropriate notifications as soon as they are able.

## National Manager Surveillance

- 1. Notifies the relevant branch manager when the Safety Alert is issued.
- 2. Initiates the CEP as set out in Chapter 3 of the Enforcement Manual via EICMS.
- 3. Notifies the Manager, Litigation, Investigations and Enforcement (for their information).

## Surveillance Lead

1. Provides support to the Issuing Inspector as required throughout the issuing process.

## **Branch Manager**

1. Notifies the relevant Executive Manager as necessary, when the Safety Alert is issued.

## Surveillance Technical Officer

1. Monitors 5-day response timeframe and ensures the Safety Alert is entered on EAP as a file note.

## **Authorisation Holder**

1. Responds to the Safety Alert, detailing all actions taken.

#### **Issuing Inspector**

- 1. Assesses the authorisation holder's response and, when satisfied, acquits the Safety Alert.
- 2. Notifies the Surveillance Manager and National Manager Surveillance that the Safety Alert has been acquitted.
- 3. Notifies the authorisation holder that the Safety Alert has been acquitted.
- **Note:** If no response is received, refer immediately to the **National Manager Surveillance** to inform the Coordinated Enforcement Process.

#### National Manager Surveillance

1. Notifies the relevant branch manager and the Manager, Litigation, Investigations and Enforcement that the Safety Alert has been acquitted.

#### **Branch Manager**

- 1. Notifies the relevant Executive Manager that the Safety Alert has been acquitted if it is considered appropriate and necessary.
  - **Note:** A separate Safety Finding must also be issued with the Surveillance Report if a Safety Alert has been issued (as outlined in the section below). The process for dealing with the authorisation holder's response, assessment and Acquittal of a Safety Alert, including the capture of all details in Sky Sentinel and on the relevant file (in RMS), is the same as that for a Safety Finding, see Section 4.7.4 Findings management.

## 4.6.6.2 Process Details - Issuance and Acquittal of Safety Alerts

Safety Alerts are issued as a result of surveillance in circumstances where it is assessed that the interests of safety will be best served by an immediate safety intervention with prompt rectification by the authorisation holder.

A Safety Alert must be issued as soon as possible to the person who is accountable for the authorisation holder and must be associated with a surveillance event when recorded in Sky Sentinel.

When a surveillance lead or Inspector is considering issuing a Safety Alert, they must consult with the Surveillance Manager and **National Manager Surveillance** to assist in maintaining consistency in CASA's use of Safety Alerts and ensure all appropriate processes are followed. When the Safety Alert has been issued, the Issuing Inspector or surveillance lead must notify the surveillance manager and **National Manager Surveillance** of the action. The **National Manager Surveillance** advises the relevant branch manager, initiates the CEP via EICMS, and notifies the Manager, Litigation, Investigations and Enforcement. This process is set out in the Enforcement Manual - Chapter 3. The CEP provides a forum for better informed decision-making and for discussing alternative options.

**Note:** The positive safety-related benefits of a Safety Alert should be emphasised to the authorisation holder. It should be explained that a Safety Alert is a positive example of CASA working collaboratively to address an identified safety concern. When consulting with the authorisation holder on the matter, this safety intervention should be presented within a constructive context highlighting the comparative benefits of issuing a Safety Alert, rather than the alternative of

taking 'Serious and Imminent Risk', or other Enforcement action. It should also be stressed that a Safety Alert is used when CASA is satisfied that the authorisation holder has shown a willingness to participate in the rectification of the safety concern.

For any queries in relation to this process, contact the Manager, Litigation, Investigations and Enforcement.

The relevant branch manager must refer the information on the Safety Alert to the relevant Executive Manager.

Authorisation holders must respond with Remedial Action to rectify the safety concern before continuing any activity. Any authorisation holder who refuses to provide a response must be considered for Enforcement action.

Safety Alerts must be supported by specific Evidence to substantiate any future actions that may be required where an authorisation holder fails to respond or is unable to respond immediately to all concerns generated in a Safety Alert. A Safety Alert must also provide sufficient details for the authorisation holder to take appropriate Remedial Actions. The surveillance lead must make it clear to the recipient of the Safety Alert that immediate action to rectify the deficiency must be taken before continuing any activity carried out under the authorisation that is the subject of the deficiency.

The following is a non-exhaustive list of examples where a Safety Alert can be issued:

- runway surface contaminated, rendering it unsafe for any operations
- operating aircraft in contravention of an applicable Airworthiness Directive or approved system of maintenance, including scheduled maintenance not carried out by a due date, or failure to replace time-expired aircraft components
- fire station operating with insufficient supervising officers to safely maintain the level of service
- maintenance certified by persons without appropriate licences or certificates of approval
- repeated Non-Compliance with authorised design data for production of aircraft and/or aeronautical products
- use of unapproved parts

- flight crew operating without holding valid licences or appropriate type endorsements or ratings
- falsification of aircraft time-in-service records, or flight crew records
- carriage of "Cargo Aircraft Only" dangerous goods on a passenger aircraft.

Once the Issuing Inspector is satisfied that the authorisation holder has undertaken the required immediate Remedial Action to rectify the identified safety concern, the Safety Alert can be acquitted, and notification made to the relevant CASA personnel advising that this has occurred.

Under normal circumstances, the surveillance team member who initially identified the breach is the author of the Safety Alert (Issuing Inspector) and is also responsible for the Acquittal process.

**Note:** A separate Safety Finding is also issued in relation to the breach and is issued with the Surveillance Report. While a Safety Alert is issued to raise immediate safety concerns, a separate Safety Finding is used so that the authorisation holder can respond to the Root Cause analysis and attend to necessary corrective action. The process to be followed in issuing and

managing the subsequent Safety Finding is the same as that for managing all Findings. Refer to CSM Section 4.7.4 – Findings management.

## 4.6.7 Aircraft Survey Report

## 4.6.7.1 Process - Issuance and Acquittal of Code 'A' ASR's

#### **Issuing Inspector**

- 1. Identifies what is believed to be a serious safety-of-flight defect in an aircraft, and the Issuing Inspector can verify the aircraft's airworthiness status is such that rectification must be carried out prior to further flight
- 2. Immediately contacts the surveillance lead and Surveillance Manager who then contacts the National Manager Surveillance to alert them of the potential identification of a Code 'A' ASR.

## Issuing Inspector, surveillance lead, Surveillance Manager and National Manager Surveillance

 Discuss and categorise safety concerns and decide whether a Code 'A' ASR should be issued with the Surveillance Manager and National Manager Surveillance particularly taking into account the discretionary scope allowed in the regulatory decision-making considerations set down in this manual (see Section 2.5.1 – Key considerations for regulatory decision making).

#### **Issuing Inspector**

1. Drafts the Code 'A' ASR using the Sky Sentinel ASR <u>Form 996</u>. Output on the event. Or utilises the quadruplicate paper form.

#### Notes:

Code 'A' ASRs must be recorded individually on separate forms to Code 'B' and/or Code 'C' ASR items.

If the ASR is recorded on-site using a hardcopy, the ASR must then be recorded in Sky Sentinel using the same ASR number as printed on the hardcopy form.

- 2. Issues the Code 'A' ASR to the registered operator and AOC holder if applicable and the person who has control of aircraft at the time of issue.
- **Notes:** Code 'A' ASRs are legal directions and can only be issued by CASA officers holding the appropriate delegated authority under CASR 11.245.

When issuing the Code 'A' ASR, the Issuing Inspector must ensure the registered operator clearly understands and acknowledges the details and implications of a Code 'A' ASR direction.

- 3. Notifies the Surveillance Manager and surveillance lead when the Code 'A' ASR is issued.
- 4. Determines whether the authorisation holder (AOC holder / AMO) has contributed to the Non-Compliance and, if so, raises a Safety Finding against the authorisation holder.
  - **Note:** In the unlikely event that the Issuing Inspector is not able to establish communication to discuss the issuance of the Code 'A' ASR with the National Manager Surveillance or

the Surveillance Manager, and a serious safety concern continues to exist, the Issuing Inspector must issue the Code 'A' ASR and make the appropriate notifications as soon as possible.

## **Registered Operator**

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- 1. Receives the Code 'A' ASR.
- 2. Immediately ceases operation of the aircraft, if directed.
- 3. Considers available options and either:
  - a. Accepts the finding OR
  - b. Objects with supporting evidence. See process below.

#### Notification for information only

#### National Manager Surveillance

- 1. Notifies the Manager, Litigation, Investigations and Enforcement and the Executive Manager Regulatory Services and Surveillance of the action being taken. Also notifies the Executive Manager if the directive relates to a Class A aircraft.
- **Note:** The Executive Manager should use their discretion as to whether the matter warrants escalation to the CEO / DAS and advises accordingly.
- 2. Notifies surveillance@casa.gov.au so an alert can be added to the VH on EAP referencing the ASR. The ASR should also be attached "alternatively within" to both the RMS Aircraft file and the Registered Owners file.

#### If Code 'A' ASR is accepted by registered operator

#### **Registered Operator**

- 1. Completes rectification of the defect within a self-determined timeframe that is achievable and suitable.
- 2. Responds to the Code 'A' ASR within twenty-one (21) calendar days by advising details of the rectification work undertaken, or by providing an Action Plan to address the defect.

#### **Issuing Inspector**

- 1. If the Issuing Inspector is unsure or a problematic response is received, a peer review of the response should be sought in liaison with the Surveillance Manager.
- 2. If necessary, continues to liaise with the registered operator until satisfied.
- **Note:** If the registered operator is repeatedly unable or unwilling to provide an adequate response, or they are not willing to address the defect, the CEP must be initiated with the **National Manager Surveillance** approval via EICMS.
- 3. Acquits the Code 'A' ASR by recording the Acquittal date and noting associated Evidence in Sky Sentinel.
- 4. Notifies the Surveillance Manager and National Manager Surveillance that the Code 'A' ASR has been acquitted.
- 5. Formally advises the registered operator that the Code 'A' ASR has been acquitted.

## If Code 'A' ASR is objected to by registered operator

## **Issuing Inspector**

- 1. Receives registered operator's objection with supporting Evidence.
- 2. Refers objection and supporting Evidence to Surveillance Manager with any pertinent background information.

#### Surveillance Manager

- 1. Considers the objection and supporting Evidence put forward and either:
  - a. Upholds the objection with the Code 'A' ASR withdrawn by CASA, OR
  - b. The Code 'A' ASR proceeds.
- 2. Notifies Issuing Inspector of decision.

## If objection to Code 'A' ASR is accepted

## **Issuing Inspector**

- 1. Notifies the registered operator of acceptance of objection.
- 2. Note withdrawal of Code 'A' ASR in Sky Sentinel accordingly (see Section on Managing objections to Findings).
- 3. Formally advises the registered operator that the Code 'A' ASR has been withdrawn.
- 4. Considers, if necessary, the issue of a Code 'B' or Code 'C' ASR

**Note:** The Inspector should consider the effect on any associated Safety Findings.

## If objection to Code 'A' ASR is NOT accepted,

## **Issuing Inspector**

1. Notifies the registered operator of non-acceptance of objection and confirms the need for immediate cessation of operation of the aircraft - if directed, and obligation to provide recipient's response within 21 calendar days from the date of issue.

## **Registered Operator**

- 1. Completes rectification of the defect within the newly specified timeframe (up to twenty-one (21) calendar days).
- 2. Responds to the Code 'A' ASR advising of rectification work that has been undertaken, or by providing an Action Plan to address the defect.

## **Issuing Inspector**

- 1. Assesses the registered operator's response.
- 2. If necessary, continues to liaise with the registered operator until satisfied.
  - **Note**: If the registered operator is repeatedly unable or unwilling to provide an adequate response, or they are not willing to address the defect, the CEP must be initiated with the **National Manager Surveillance** approval via EICMS.
  - **Note**: Notifies surveillance@casa.gov.au so a file note can be added to the VH on EAP referencing the ASR. The ASR must also be attached "alternatively within" to both the RMS Aircraft file and the Registered Owners file.

- 3. When satisfied acquits the Code 'A' ASR by recording Acquittal and noting Evidence in Sky Sentinel by using the Edit function against the ASR in Sky Sentinel.
- 4. Formally advises the registered operator that the Code 'A' ASR has been acquitted.

## After Acquittal of Code 'A' ASR

#### Surveillance Manager

- 1. In consultation with the National Manager Surveillance, decides whether the Executive Manager ROD Regulatory Service should be advised of Acquittal and actions accordingly.
- 2. Takes appropriate action to ensure that standardisation and consistency is maintained in what the ASR has been created for.

#### Surveillance Lead or Surveillance Team Member

- 1. Ensures all documentation is appropriately filed in RMS.
- 2. Ensures the data entry is conducted in Sky Sentinel and EAP in consultation with the surveillance technical officer.
  - **Note:** A separate Safety Finding must also be issued with the Surveillance Report if a Code 'A' ASR has been issued for a deficiency related to a potential systemic failure, and where there is a benefit to aviation safety through the identification of the Root Cause of the deficiency (as outlined in the section below).

For ASRs raised by an Inspector from an office other than the oversighting controlling office, reviewers/approvers from the oversighting Controlling Office can access all relevant surveillance documents in Sky Sentinel.

While the Issuing Inspector is responsible for acquitting the ASR, the oversighting Controlling Office is responsible for the approval and management of the ASR.

## 4.6.7.2 Process - Issuance and Acquittal of Code B or Code C ASR's

#### **Issuing Inspector**

- 1. Identifies an aircraft defect.
- 2. Determines the level of Finding based on the deficiencies identified following the survey of an aircraft and/or its associated records.
- 3. Drafts the Code 'B' or Code 'C' ASR using ASR Form (Form 996) in Sky Sentinel or, if issued on site, using a hardcopy form.
- 4. Issues the Code 'B' or Code 'C' ASR to the registered operator, AOC holder and/or person in control of aircraft.
  - **Note:** Code 'B' ASRs is legal directions and can only be issued by CASA officers holding the appropriate delegated authority.
  - **Note:** ASRs issued on site (on quadruplicate paper forms) must still be recorded in Sky Sentinel on return to the office referencing the paper form prepopulated number.
  - **Note:** Advise Surveillance Technical Officer of ASR issue and they will place a file note against the VH on EAP. The ASR must also be attached "alternatively within" to both the RMS Aircraft file and the Registered Owners file.

5. Determines whether the authorisation holder (AOC holder / AMO) has contributed to the Non-Compliance and, if so, raises a Safety Finding against the authorisation holder in addition to the ASR issued to the registered operator.

## **Registered operator**

- 1. Receives Code 'B' or Code 'C' ASR and acknowledges receipt of the direction
  - **Note:** If neither Code 'B' nor Code 'C' ASR are issued on-site as a hard copy, this acknowledgement should be made by return e-mail.
- 2. Considers available options and either:
  - a. Accepts the Finding, OR
  - b. Objects to the Code 'B' or Code 'C' ASR with supporting Evidence.

## If Code 'B' or Code 'C' ASR accepted by registered operator

## **Registered Operator**

- 1. Completes rectification of the defect or outstanding regulatory requirement, depending on the circumstances within a self-determined timeframe that is achievable and suitable.
- 2. Responds to the Code 'B' or Code 'C' ASR within twenty-one (21) days by advising of rectification work that has been undertaken, or by providing an Action Plan to address the defect.

## **Issuing Inspector**

- 1. Assesses the registered operator's response.
- 2. If necessary, continues to liaise with the registered operator until satisfied.
  - **Note:** If the registered operator is repeatedly unable or unwilling to provide an adequate response, or they are not willing to address the defect, the CEP must be initiated with the **National Manager Surveillance** approval in accordance with section 6.
- 3. Acquits the Code 'B' or Code 'C' ASR by recording Acquittal and noting Evidence in Sky Sentinel.
- 4. Formally advises the registered operator that the Code 'B' or Code 'C' ASR has been acquitted.

## If Code 'B' or Code 'C' ASR objected to by registered operator

#### **Issuing Inspector**

- 1. Receives registered operator's objection with supporting Evidence.
- 2. Refers objection and supporting Evidence to surveillance manager with any pertinent background information.

## Surveillance Manager

- 1. Considers the objection and supporting Evidence put forward and either:
  - a. Upholds the objection with the Code 'B' or Code 'C' ASR withdrawn by CASA OR
  - b. The Code 'B' or Code 'C' ASR proceeds
- 2. Notifies Issuing Inspector of decision.

## If objection to Code 'B' or Code 'C' ASR is accepted

## **Issuing Inspector**

- 1. Notifies the registered operator of acceptance of objection.
- 2. Note the withdrawal of Code 'B' or Code 'C' ASR in Sky Sentinel accordingly (see Section 4.7.4.1 Managing objections to Findings).
- 3. Formally advises the registered operator that the Code 'B' or Code 'C' ASR has been withdrawn.

**Note:** The Inspector should consider the effect on any associated Safety Findings.

## If objection to Code 'B' or Code 'C' ASR is NOT accepted

#### **Issuing Inspector**

1. Notifies the registered operator of non-acceptance of objection and reaffirms requirements associated with the initial issue of the ASR, and obligation to provide recipient's response within twenty-one (21) calendar days from the date of issue.

## **Registered Operator**

- 1. Completes rectification of the defect within the newly specified timeframe (up to twenty-one (21) calendar days).
- 2. Responds to the Code 'B' or Code 'C' ASR advising of rectification work that has been undertaken, or by providing an Action Plan to address the defect.

#### **Issuing Inspector**

- 1. Assesses the registered operator's response.
- 2. If necessary, continues to liaise with the registered operator until satisfied.
- **Note:** If the registered operator is repeatedly unable or unwilling to provide an adequate response, or they are not willing to address the defect, the CEP must be initiated with the **National Manager Surveillance** approval in accordance with section 6.
- 3. When satisfied, acquits the Code 'B' or Code 'C' ASR by recording Acquittal and noting Evidence in Sky Sentinel.
- 4. Formally advises the registered operator that the Code 'B' or Code 'C' ASR has been acquitted.

## After Acquittal of Code 'B' or Code 'C' ASR

#### Surveillance Manager

1. Takes appropriate action to ensure that standardisation and consistency is maintained.

#### Surveillance lead or surveillance team member

- 1. Ensures all documentation is appropriately filed in RMS.
- 2. Ensures the data entry is conducted in Sky Sentinel and EAP in consultation with the surveillance technical officer.

## IMPORTANT

Code 'B' ASRs are issued for identified defects or damage that may affect the airworthiness of the aircraft with the potential requirement for an endorsement in the Maintenance Release

under CAR 50. While a Code 'B' ASR does not explicitly require rectification prior to further flight, the aircraft could effectively be grounded until the defect is assessed. In such circumstances, the internal notification instructions required for a Code 'A' ASR (under heading 'Notification for information only') must be applied.

**Note:** Where possible, the inclusion of photographs to support the observed defect should form part of the ASR direction. Note that Sky Sentinel does not have the capability to capture and store photos accordingly, all relevant photographs are required to be appropriately titled and stored within RMS.

A separate Safety Finding may also be issued with the Surveillance Report if a Code 'B' or Code 'C' ASR has been issued for a deficiency related to a potential systemic failure, and where there is a benefit to aviation safety through the identification of the Root Cause of the deficiency.

For ASRs raised by an Inspector from an office other than the oversighting controlling office, reviewers/approvers from the oversighting Controlling Office can access all relevant surveillance documents in Sky Sentinel.

While the Issuing Inspector is responsible for acquitting the ASR, the oversighting Controlling Office is responsible for the management of the ASR.

## 4.6.7.3 Process Detail - Issuance and Acquittal of ASR's

ASRs are generally issued to registered operators (see CASR 47.100) who may or may not be the authorisation holder. The ASR notifies the registered operator of any airworthiness deficiencies identified following the survey of an aircraft and/or its associated records.

Typically, an ASR is issued to the registered operator with an associated Surveillance Report if the ASR is raised as part of a scheduled surveillance event. However, if the ASR is issued on-site as part of an unscheduled event, e.g. Ramp Check, the Surveillance Report does not need to be forwarded to the registered operator unless it is considered necessary.

- **Note:** While a Surveillance Report may not be forwarded to the registered operator, a surveillance event must still be created, and a Surveillance Report generated in Sky Sentinel with the summary details recorded in the Executive Summary section of the report.
- **Note**: The ASR (Form 996) can be downloaded from CASA's intranet or generated from Sky Sentinel. If the ASR is recorded in a hardcopy format the ASR must still be entered into Sky Sentinel.

ASRs are used to give a direction to a person to do something, pursuant to CASR 11.245 (Code 'A' and Code 'B'), or a formal notification relating to a Non-Compliance of an aircraft or its maintenance documentation. Copies of ASRs are kept in the aircraft RMS file in each relevant Controlling Office and in the relevant authorisation holder's RMS file.

Careful consideration must be given to the code applied. Detailed descriptions of ASR codes are provided in Annex 1 (see Section 9.1 – ASR Codes).

ASRs may be accompanied by a Safety Finding where there is a particular breach. If the authorisation holder (AOC holder / AMO) can be identified as contributing to the Non-Compliance, a Safety Finding must also be raised on that authorisation holder to ensure appropriate remedial and Corrective Action is taken. The issue of an ASR does not affect CASA's prerogative to take, at any time, such regulatory or other legal action as may be appropriate in the circumstances.

All ASRs must be recorded in Sky Sentinel and must be associated with a surveillance event.

If a hardcopy ASR is issued on site and the hardcopy form has a number annotated in the top right-hand corner, this number must be entered into Sky Sentinel as the reference of the ASR issued on-site and must be the same as the ASR number recorded in Sky Sentinel. If the issued hardcopy form does not show an annotated number, Sky Sentinel will automatically generate a discrete number when it is entered in the system.

On return to the CASA office the surveillance technical officer is advised of the issuance of an ASR and the details and will add a file note to EAP against the VH mark. A scanned copy of the issued ASR will also be alternatively within both the RMS aircraft file and the Registered Owners file.

## Acquittal of ASRs

All ASRs with the exception of Code 'C' must be responded to by the registered operator with the response recorded in the comments field against the relevant ASR in Sky Sentinel. If a problematic response is received or there doubt as to the response, a peer review of the response should be sought in liaison with the Surveillance Manager. All ASRs must be acquitted with appropriate Evidence recorded in Sky Sentinel.

Acquittal of all ASRs requires a registered operator to advise CASA within twenty-one (21) calendar days of the action taken or being taken to address the identified defect(s).

Under normal circumstances, the Issuing Inspector who initially identified the breach is the author of the ASR (Issuing Inspector) and also responsible for the Acquittal process.

Physical verification of ASRs prior to Acquittal is not generally required unless the Issuing Inspector has reason to believe verification is necessary.

Under normal circumstances, the Inspector who initially issued the ASR (Issuing Inspector) is responsible for the Acquittal process. The Surveillance Manager must select an alternative inspector who will take responsibility for verifying action taken and the Acquittal process if the Issuing Inspector is unavailable.

Use the Edit function on the ASR in Sky Sentinel to Acquit.

## Timeframes

**Code 'A' ASRs:** Requires 'Prior to further flight' action to be taken, effectively grounding the aircraft until the defect or damage is rectified and the registered operator has notified the Issuing Inspector. No specific timeframe is set by CASA for completion of the defect rectification. The timeframe is self-determined by the registered operator and is dependent on what is achievable and suitable on a case-by-case basis. However, the registered operator must respond within twenty-one (21) calendar days, advising details of the rectification work undertaken or by providing an Action Plan to address the defect.

**Code 'B' and Code 'C' ASRs:** The registered operator should respond within twenty-one (21) calendar days, indicating the rectification action undertaken. Once the response is received and the inspector is satisfied the required action has been completed, the Issuing Inspector can acquit the ASR in Sky Sentinel and notify the registered operator.

The ASR is then acquitted in Sky Sentinel using the edit function on the ASR itself.

**ASR** example defects

## CODE 'A'

- engine not making take-off power as specified in data, i.e. Flight Manual/maintenance manual
- structural component has a visible crack, such as propeller, lift strut, undercarriage leg
- damage sustained that may affect the structural integrity of the aircraft
- required equipment specified in CASR 91.095 or the flight manual is damaged or missing, e.g. airspeed indicator damaged or missing.

## CODE 'B'

- fuel leak is identified; however, further investigation may determine the fuel leak is within allowable limits
- aircraft returned to service as an IFR aircraft, but equipment later found to be unserviceable. In this circumstance, the Inspector recognises the aircraft could continue to be operated VFR with the equipment defective; however, with rectification, it could return to IFR operation.

## CODE 'C'

Code 'C' items may include any equipment referred to in:

- the CARs
- the CAOs
- a company maintenance requirement
- the type certification documents
- the applicable maintenance requirements.
- a direction issued pursuant to CAR 38(1) i.e. airworthiness directives (ADs) or a previous ASR.

**Note:** For further information on ASRs refer to the Annex 1 to the CASA Surveillance Manual.

## Reissue of an ASR after 365 Days pursuant to 11.250 of the CASR 1998

Code 'A' and Code 'B' ASRs are directions issued by CASA under reg. 11.245 of CASR 1998. Relevantly, reg. 11.250 specifies the following period of effect of any direction issued under reg. 11.245.

## 11.250 Period of effect of direction

A direction under regulation 11.245 ceases to be in force:

- if it specifies a day on which it ceases to be in force on the specified day; or
- if it does not specify a day for that purpose 1 year after the day it commences.

Although in most instances' satisfactory Acquittal of Code A and Code B ASRs would have taken place within a 1-year period from date of issue, circumstances may dictate otherwise - such as long-term maintenance of the aircraft, or storage associated with inactivity. In those instances' consideration as to the need to either reissue a new ASR for a further period of time, or for other action to take place that may be deemed necessary, such as suspension or cancellation of the aircraft certificate of airworthiness. The Surveillance Manager of the oversighting office of the aircraft shall be responsible for making such determination in
consultation with the **National Manager Surveillance**. This may also involve input from the Inspector who issued the ASR, if considered necessary. If the requirement is to issue another ASR, the process at 4.6.7 should be repeated.

# 4.6.8 Safety Observations

# 4.6.8.1 Process - Safety Observations

#### **Issuing Inspector**

- 1. Determines the type of Finding based on the nature of the issue, e.g. a Safety Observation is used when there is a potential breach caused by the deficiency.
  - **Note:** A Safety Observation is also used to highlight system deficiencies and poor operational safety Risk control by the authorisation holder.
- 2. Formulates the Finding using the Safety Observation Form 1298 in Sky Sentinel

#### Surveillance Team member, relevant experienced Inspector

- 1. Peer reviews the Safety Observation prior to issue to ensure it meets the requirements for a Safety Observation.
  - **Note:** Any proposed amendment to a Safety Observation requires notification to, and agreement by, the Issuing Inspector.

#### Surveillance Manager

1. Takes appropriate action to ensure that standardisation and consistency is maintained.

#### Surveillance Lead or Surveillance Team Member:

- 1. Where the office issuing the Finding is not the responsible controlling office, ensures the responsible Controlling Office can access all documentation via Sky Sentinel for review by the controlling office, Surveillance Manager.
- 2. Ensure all documentation is appropriately filed in RMS.
- 3. Ensure the Controlling Office conducts data entry.

# 4.6.8.2 Process Details - Safety Observations

A Safety Observation is used to provide an authorisation holder with written notice of the following:

• identified latent conditions resulting in system deficiencies that, while not constituting a breach, have the potential to result in a breach if not addressed.

The Safety Observation must indicate the identified latent conditions that the Issuing Inspector believes has resulted in a system deficiency.

A Safety Observation must be peer reviewed by a member of the surveillance team, a relevantly experienced Inspector or the surveillance team, prior to issue to ensure it meets the requirements for a Safety Observation.

The aim of issuing a Safety Observation is not to provide consultancy or tell the authorisation holder what to do. It is always the authorisation holder's responsibility to investigate and identify the appropriate means to address potential improvements to safety performance. In

identifying any opportunity for improving safety performance, the Issuing Inspector must do so without providing a specific solution.

While an authorisation holder is not obligated to respond formally to a Safety Observation, the way in which an authorisation holder manages Safety Observations provides an indication of the level of maturity of their management system.

All Safety Observations must be associated with a surveillance event and recorded in Sky Sentinel. Safety Observations are issued to the authorisation holder with the relevant Surveillance Report.

Under normal circumstances, the surveillance team member who initially made the observation is the author of the Safety Observation (Issuing Inspector) and also responsible for recording any associated responses, or any other relevant interactions with the authorisation holder.

# 4.6.9 Surveillance report

The same Surveillance Report template is applied in developing reports for Level 1 and Level 2 surveillance events with any Finding forming part of the Surveillance Report. A Surveillance Report Executive Summary template and associated guidance is available for specific surveillance event types. These templates are located within the <u>Surveillance Report and Findings Work Instruction – Standard Wording</u>.

The maximum twenty (20) business-day timeframe to produce and issue the report from the date of the exit meeting, as set out in the Surveillance Notification Letter Form 1304, should only be extended in exceptional circumstances with the authorisation holder advised accordingly. The surveillance technical officer will monitor Sky Sentinel and remind the surveillance lead to ensure the report is issued within twenty (20) Business Days. Sky Sentinel does not have the functionality to be aware of public holidays or specific state holidays. Teams should ensure they take these into account. A request from the Team Leader to <u>surveillance@casa.gov.au</u> for an extension to cover the additional days can be enacted should the team believe, they will not meet the deadline.

If a surveillance lead requires an extension to this timeframe, they must seek approval from the Surveillance Manager who may approve an extension up to a total of thirty (30) Business Days. The timeframe can only be extended beyond thirty (30) Business Days if approved by the National Manager Surveillance, with the authorisation holder kept informed accordingly and the extend selection undertaken against the report on Sky Sentinel with the new extension date.

If any extension to the timeframe is approved by the Surveillance Manager or National Manager Surveillance/Branch Manager, it must be recorded in the comments section of the relevant Surveillance Report page in Sky Sentinel, or the approval email saved in RMS.

This reporting period also allows the surveillance team time to review overall surveillance event outcomes and decide whether to continue with the collaborative corrective action. Alternatively, if greater concern exists, e.g. repeated Findings over previous surveillance events or significant breach(s), the Surveillance Manager must initiated the Coordinated Enforcement Process (CEP) in accordance with section 6. Enforcement.

**Note:** When preparing a Surveillance Report, it should be kept in mind that the report is a formal record of the authorisation holder's Compliance. This record may be viewed not only by the

authorisation holder and CASA, but also in courts and tribunals.

- **Note:** Construct the Surveillance Report from the bottom up to ensure all Findings are reflected in the Executive Summary. A Technical Summary should not be completed. Use Form 1288.
- **Note:** All applicable fields should be completed within Sky Sentinel. This includes Dates and Locations of the surveillance event. For Desktop events a location of "Remote" is suitable and will assist in future reporting requirements. Key People this should be all Key People spoken to in the surveillance not only Key Personnel. Reference documents that were used and viewed during the event (excluding CASA internal forms).

#### 4.6.9.1 Process - Develop and approve Level 1 Surveillance Report

#### Surveillance Technical Officer

1. Monitors Sky Sentinel and reminds the surveillance lead to ensure reports are issued within twenty (20) Business Days, allowing review time by the Surveillance Manager.

#### Surveillance Lead

 Discusses the overall performance of the surveillance with the surveillance team and obtains agreement from surveillance team members on the content of the Surveillance Report

#### Surveillance Team Member

- Compiles surveillance data for their specific discipline area, including the completed Surveillance Worksheet Form (Form 1308), Findings and supporting Evidence (Safety Findings, Safety Alerts, ASRs or Safety Observations must be included in the report via Sky Sentinel).
- 2. Drafts the Surveillance Technical Discipline Summary (Form 1288), if applicable, comparing the current results with those from the previous surveillance to help identify system deficiencies for inclusion in the Surveillance Report.

#### Surveillance Lead

- 1. Ensures all surveillance documentation is consolidated and, along with the Surveillance Report, information is entered into Sky Sentinel.
- 2. Ensures items not scoped are removed from Sky Sentinel by display of a double asterisk.
- 3. If required, ensure Surveillance Report is peer reviewed amongst the surveillance team.
- 4. Enters all Surveillance Report content directly into Sky Sentinel utilising a word version as a draft where necessary.
- Ensures all tables are completed:(Key People interviewed, Dates and Locations ("Remote" if Desktop, Documents used as standards and references (both authorisation holder documents with version and CASA references, excluding forms used in the surveillance event process).
- 6. Submits report for review and approval.
  - **Note:** Where available for the particular authorisation type, the <u>Surveillance Report Summary</u> <u>– Work Instruction – Standard Wording</u> is to be used to assist in drafting the surveillance report.

**Note:** Where the surveillance team that produced the Surveillance Report is not from the oversighting controlling office, the reviewing and approving managers from the relevant oversighting Controlling Office are responsible for approving the report.

#### Surveillance Manager

- 1. Reviews the Surveillance Report, and any associated Findings for quality and correctness to ensure it meets all requirements as outlined in this procedure.
- 2. Ensures Safety Findings have objective Evidence correctly titled in RMS as per Surveillance - RMS Titling Conventions.
- 3. When satisfied, marks the Surveillance Report as reviewed in Sky Sentinel, which then generates a notification to the Surveillance Manager that the report is available for approval.

#### Surveillance Technical Officer

 Ensures standards and policy are followed throughout the report, the style guide including grammar checks is followed and regulatory references are cross checked. Any proposed changes to Findings are provided to Issuing Inspector, prior to amending the report.

#### Surveillance Manager

- 1. Reviews the Surveillance Report, and any associated Findings for clarity and conformity with CASA policies and procedures.
- 2. When satisfied, selects "Approved" against the Surveillance Report as approved in Sky Sentinel, which generates a notification email to the surveillance lead and the surveillance technical officers that the report has been approved.

#### Surveillance Technical Officer

- 1. "Issues" the Surveillance Report generated from Sky Sentinel.
- 2. Formats the Surveillance Report.
- 3. Ensure all information, including the report and surveillance Findings, are filed appropriately and entered into Sky Sentinel.
- 4. From the centralised surveillance mailbox, distributes the Surveillance Report (PDF copy) to the authorisation holder with a covering e-mail using the Surveillance Report Covering Letter Form (Form 1292) as a template, if required, with all Findings that have been raised as part of the surveillance event. A copy of the Findings response template is also to be provided to the authorisation holder. The surveillance lead will be included in the email to the authorisation holder (by CC). For Airservices events Current contact name and RegulatoryEngagement@AirservicesAustralia.com CC to regulatoryenhancement@casa.gov.au, cns.atm@casa.gov.au, Lead and TL and for Airworthiness & Engineering Branch CC to airworthiness@casa.gov.au in order to update job tracking and BCC in Manager.
- 5. Saves the report electronically to the RMS.
- **Note:** The report may be e-mailed to the authorisation holder, handed personally to the authorisation holder's accountable manager, or posted to the authorisation holder directly.

#### Surveillance Lead

- 1. Conducts an AHPI assessment and the SharePoint AHPI (For AOC or AMO), drawing on any new information and knowledge about the authorisation holder which was gained throughout the conduct and reporting phase.
- **Note:** Any proposed amendment to a Finding requires notification to, and agreement by, the Issuing Inspector.

# 4.6.9.2 **Process Details - Develop and approve Level 1 Surveillance Report**

A Surveillance Report is used to succinctly capture information obtained during the surveillance and its analysis, which supports CASA's actions and future surveillance of an authorisation holder.

Inspectors must record Findings made during the surveillance, evaluate the Findings, and develop the report. This should include analysis of the authorisation holder's performance against legislation, and a review of control effectiveness during the surveillance event.

The purpose of CASA's Surveillance Report is not only to document the surveillance information in a logical manner, supported by facts, but also to enable decision-makers (i.e. the authorisation holder and CASA) to understand the deficiencies identified, besides allowing the authorisation holder to formulate appropriate action.

The Surveillance Report has a three-fold function:

- to direct the authorisation holder to address deficiencies and achieve legislative Compliance
- to inform the authorisation holder of elevated safety Risks and encourage the authorisation holder to act on the Findings
- provide updated information to inform future assessments by the surveillance team. This includes:
  - focusing future surveillance
  - Enforcement strategies to secure Compliance
  - highlighting areas to target surveillance and/or education.
- **Note:** For instructions on completing a Surveillance Report, see Annex 1 Surveillance Standards and Protocols and the <u>Surveillance Report Summary Work Instruction Standard Wording</u>.
- **Note:** As it is likely a significant amount of knowledge and information about the authorisation holder would have been gained throughout the surveillance conduct phase, and while drafting the surveillance report and any associated Findings, completing an AHPI assessment and for AOC or AMO the completion of the SharePoint set of questions for an AOC or AMO must occur.

# 4.6.10 Level 2 Surveillance Report (Including COVID-19 but excluding AOCD)

# 4.6.10.1 Process - Develop and approve Level 2 Surveillance Report

# Surveillance Technical Officer

1. Monitors Sky Sentinel and reminds the surveillance lead to ensure reports are issued within twenty (20) Business Days allowing review time by the Surveillance Manager.

#### Surveillance Team member or Surveillance Lead

- Compiles surveillance data for specific discipline areas (if more than one discipline), including the completed Surveillance Worksheet Form (Form 1308), Findings and supporting Evidence (Safety Findings, Safety Alerts, ASRs and Safety Observations must be included in the report via Sky Sentinel).
- 2. Compare the results with those from the previous surveillance to help identify system deficiencies for inclusion in the Surveillance Report and save this into RMS.

#### Surveillance Lead

- 1. Ensures all surveillance documentation is consolidated and, along with the Surveillance Report, information is entered into Sky Sentinel.
- 2. Ensures items not scoped are notated as such on Sky Sentinel by display of a double asterisk.
- 3. Enters all Surveillance Report content directly into Sky Sentinel
- 4. Ensure Surveillance Report is peer reviewed amongst the surveillance team.
- 5. Ensures all tables are completed (Key personnel interviewed, Dates and Locations (using "Remote" if desktop), Documents used as standards and references (both authorisation holder documents and CASA references but excluding CASA forms).
- 6. COVID-19 Events Review the COVID-19 Risk Assessment Guide as completed during the event for recommendations on the next activity, a future on-site Level 1 event within the financial year or closer on-going management and prioritisation of on-site activity as soon as practical.

#### **Surveillance Technical Officer**

1. Ensures standards and policy are followed throughout the report, the Style Guide, including a grammar check is followed and regulatory references are cross checked. Any suggested proposed changes to Findings are provided to Issuing Inspector.

Surveillance Lead: Submits report for review and approval.

- **Note:** Where available for the particular authorisation type, the <u>Surveillance Report Summary</u> <u>– Work Instruction – Standard Wording</u> is to be used to assist in drafting the surveillance report.
- **Note:** Where the surveillance team that produced the Surveillance Report is not from the oversighting controlling office, the approving officer from the relevant oversighting Controlling Office is responsible for approving the report.

#### **Surveillance Manager**

- 1. Reviews not only the Surveillance Report, but also any associated Findings for quality and correctness to ensure it meets all requirements as outlined in this procedure.
- 2. When satisfied, marks the Surveillance Report as approved in Sky Sentinel, which generates a notification to the surveillance lead and the surveillance technical officers that the report has been approved.

#### Surveillance Technical Officer

1. Issues the Surveillance Report generated from Sky Sentinel.

- 2. Formats the Surveillance Report if it is to be sent to the authorisation holder. Level 2 Surveillance Events with no Findings are often not sent to authorisation holder, confirm with Surveillance Lead.
- 3. From the centralised surveillance mailbox, distributes the Surveillance Report (PDF copy) to the authorisation holder with a covering e-mail using the Surveillance Report Covering Letter Form (Form 1292) as a template, if required, with all Findings that have been raised as part of the surveillance event. On the email: "Response(s) should be emailed with the Safety Finding/s number in the Subject line to surveillance@casa.gov.au to attempt to close the loop on the SF Acquittal process. A copy of the Findings response template in Word is also to be provided to the authorisation holder. The Surveillance Manager and surveillance lead will be included in the email to the authorisation holder (by CC). For Airservices events CC to regulatoryenhancement@casa.gov.au in order to update job tracking.
- 4. Saves the report electronically to CASAs RMS.
  - **Note:** The report is usually e-mailed to the authorisation holder, but on request can be handed personally to the authorisation holder's accountable manager or posted to the authorisation holder.

#### Surveillance Lead

- 1. Conducts an AHPI assessment and for AOC or AMO authorisation holder also undertakes the SharePoint set of AHPI questions, drawing on any new information and knowledge about the authorisation holder which was gained throughout the conduct and reporting phase.
  - **Note**: Any proposed amendment to a Finding requires notification to, and agreement by, the Issuing Inspector.

# 4.6.10.2 Process Detail - Develop and approve Level 2 Surveillance Report

The Level 2 Surveillance Report is a reduced content version of a Level 1 Surveillance Report. It should include analysis of the authorisation holder's performance against legislation.

The Surveillance Report includes a summary and where, applicable, discipline summaries and a reference to Findings. The report should be objective, clear and concise.

- **Note:** For instructions on completing a Surveillance Report, see Annex 1 Surveillance Standards and Protocols.
- **Note:** As it is likely a substantial amount of knowledge and information about the authorisation holder would have been gained throughout the surveillance conduct phase, and while drafting the surveillance report and any associated Findings, completing an AHPI assessment and for AOC or AMO the completion of the SharePoint set of questions for an AOC or AMO must occur.

# 4.6.11 Level 2 Surveillance Report AOC Desktop Subsequent Issue (AOCD)

# 4.6.11.1 Process - Develop and Approve Level 2 - Operational Check - AOC Subsequent Issue - Desktop Review Surveillance Report

## Surveillance Technical Officer

1. Monitors Sky Sentinel and reminds the surveillance lead to ensure reports are issued within twenty (20) Business Days allowing review time by the Surveillance Manager.

#### Surveillance Lead

- 1. Compiles any supplementary information used during the desktop assessment into the RMS file (including Authorisation Holder Profile report, transition, Compliance forms or tasks).
- 2. Ensure Sky Sentinel is updated with appropriate dates and comments.
- 3. Ensure Sky Sentinel is updated with the Referenced Authorisation Holder documents (Operations Manual, training and checking manual, dangerous goods manual).
- 4. Drafts the executive summary with the standard wording (see section below).
- 5. Should the AOCD review result in possible Findings to be issued with the authorisation holder a separate surveillance event must be raised.
  - **Note:** Findings of any type are not to be raised against an AOCD event. If significant Compliance issues are identified as a result of the analysis, action should be taken in consultation with the Surveillance Manager outside of this surveillance event to rectify the deficiencies as per the CSM Enforcement.

#### **Surveillance Technical Officer**

Ensures standards and policy are followed throughout the report.

# Surveillance Lead

- 1. Submits report for review and approval.
- 2. Utilises the AOC AHPI SharePoint set of questions drawing on any new information and knowledge about the authorisation holder which was gained throughout the conduct and reporting phase.
- 3. Should the recommendation be to "not recommend' the AOC renewal Form 3836 must be completed and forwarded to the NM prior to the Surveillance event being completed.
- 4. Conducts an AHPI on Sky Sentinel.

#### Surveillance Manager

- 1. Review the Surveillance Report.
- 2. Review form 2173.
- 3. Reviews and forwards to the NM Form 3836 should the Not recommended status be decided.
- 4. Approves the report in Sky Sentinel, which generates a notification to the surveillance lead and the surveillance technical officers that the report has been approved.

5. Recommends further action if the form 2173 was not approved, including advice to Permission Issue.

#### Surveillance Manager / National Manager

1. Forwards endorsed Form 3836 to surveillance@casa.gov.au

#### Surveillance Technical Officer

- 1. Issues the Surveillance Report in Sky Sentinel.
- 2. Saves the report to RMS.
- 3. Adds an alert on the ARN in EAP referencing the endorsed RMS Form 3836
- 4. Adds a comment in the Status field on the EAP AOC Certificate "AOC Not recommended for renewal".

**Note:** The surveillance report will not be issued to the authorisation holder, it is only filed in the RMS folder.

# 4.6.11.2 Process Detail - Develop and Approve Level 2 - Operational Check -AOC Subsequent Issue - Desktop Review Surveillance Report

Once the relevant information has been captured on the AOC Desktop Review Assessment (Form 2173), the surveillance event can be finalised. The surveillance report is to be completed with the following information:

- Technical Summary Leave blank.
- Referenced Documents Detail the latest approved revisions of the follow documents required by section 27AB of the CAA:
- operations manual
- training and checking manual (if applicable) and
- dangerous goods manual (if applicable).
- Executive Summary Use the following wording as a template for completion, tailoring to the specific operator details:

This surveillance report captures the details of a Level 2 Surveillance Event (SE) – AOC Subsequent Issue of the Air Operators Certificate, XXXX Pty Ltd. The SE was conducted to determine if the AOC could be subsequently issued via the Special Purpose Lane.

The results of the SE have been captured on the Surveillance AOC Desktop Review Assessment Form 2173 (ref: D2xx/xxxx).

The assessment recommends/not recommends renewal. Form 3836 contains information regarding the recommendation not to renew (ref DXX/xxxx). (Delete as appropriate).

Note: AOC Renewal period is recommended for xxx months / not recommended.

#### Surveillance Manager

Once completed, the surveillance report is submitted to the Surveillance Manager for approval.

Once the Surveillance Report has been submitted to the Surveillance Manager within Sky Sentinel, it is the Surveillance Managers responsibility to review for quality and correctness and to ensure that Form 2173 and the surveillance report meets all requirements as outlined

in this procedure. If the report and form are deemed satisfactory select the approved button in Sky Sentinel.

#### Surveillance Technical Officer

- 1. File the report in RMS. Report is not issued to the authorisation holder.
- **Note 1:** The event is to be Closed/completed regardless of whether the AOC subsequent issue is to be processed by the SPL process, or whether the job is to be allocated to the Regulatory Service Team for a full assessment.
- **Note 2**: If the AOC holder is seeking subsequent issue of the AOC with changes, those changes will be assessed in accordance with the requirements of the AOCH. Form 1535 will be used by the Regulatory Service Team.

If (Form 2173) has not been approved, the surveillance report for the AOC subsequent issue does not change from the template. If significant Compliance issues are identified as a result of the analysis, action should be taken in consultation with the Surveillance Manager and the National Manager Surveillance outside of this surveillance event to rectify the deficiencies as per the existing CSM and Enforcement processes.

Form 3836 is completed when the decision is not to renew. The issuing Inspector/SM completes the form and sends to the NM Surveillance. Once approved return to the Issuing Inspector/SM and advise Surveillance Services so that an alert can be placed on the AOC in EAP. The AOC renewal EAP CASE job will be created by Permissions Issue (PI) 90 days prior to the AOC expiry date.

# 4.6.12 Accountabilities - Surveillance Event Reporting

#### Table 7: Position and accountabilities

Position	Accountabilities
National Manager Surveillance	<ul> <li>Notify the relevant Executive Manager of any Safety Alerts and subsequent Acquittal</li> <li>Discuss and categorise safety concerns relating to an authorisation holder to decide whether a Safety Alert or Code 'A' ASRs should be issued exercising the discretion allowed as part of the regulatory decision-making considerations set down in this manual</li> <li>Notify the branch manager and the manager, Litigation, Investigations and Enforcement of any Safety Alerts and subsequent Acquittal</li> <li>Approve matters for referral to Coordinated Enforcement as necessary within the requirements of this manual</li> <li>Approve extensions to the timeframe for providing the Surveillance Report beyond thirty (30) Business Days</li> </ul>
Surveillance Manager	<ul> <li>Approve Level 2 – Surveillance Reports and associated Findings</li> <li>Ensure Surveillance Reports are issued within the required twenty (20) Business Days within the requirements of this manual</li> </ul>

Position	Accountabilities
	<ul> <li>Refer matters to the National Manager for Coordinated Enforcement as necessary within the requirements of this manual</li> <li>Ensure standardisation and consistency of Surveillance Reports and Findings for quality and correctness while meeting all procedural requirements, exercising the discretion allowed as part of the regulatory decision-making considerations set down in this manual</li> <li>Discuss and categorise safety concerns to decide whether Safety Alerts or Code 'A' ASRs should be issued, exercising the discretion allowed as part of the regulatory decision- making considerations set down in this manual</li> <li>Approve extensions to the timeframe for providing the Surveillance Report beyond twenty (20) Business Days up to thirty (30) Business Days</li> <li>Consider whether an AHPI assessment should be conducted</li> </ul>
Surveillance Lead	<ul> <li>Consolidate surveillance information</li> <li>Review Findings, or ensure such reviews are completed to ensure Findings meet requirements for quality and consistency prior to issue</li> <li>Ensure production of the Surveillance Report and associated Findings is to standards and in line with instructions in this manual</li> <li>Distribute the Surveillance Report to the authorisation holder within the stipulated twenty (20) Business Day timeframe</li> <li>Discuss and categorise safety concerns to decide whether Safety Alerts or Code 'A' ASRs should be issued</li> <li>Provide support to Issuing Inspector as required throughout the Findings issuing process</li> <li>Ensure all relevant documentation is appropriately filed in RMS.</li> <li>Ensure AHPIs are conducted</li> <li>Manage Acquittal of Findings</li> </ul>
Issuing Inspector	<ul> <li>Consult with Surveillance Manager on whether Safety Alerts should be issued</li> <li>Raise Findings (Safety Alerts, Safety Findings, ASRs and Safety Observations)</li> <li>Issue the Safety Alert advising the authorisation holder to respond within five (5) calendar days, detailing the immediate Remedial Action to be taken</li> <li>Notify the Surveillance Manager of Safety Alert issue and subsequent Acquittal</li> <li>Ensure all relevant documentation is appropriately filed in CASA RMS.</li> </ul>
Surveillance Team Member	<ul> <li>Collate and pass all relevant surveillance information to the surveillance lead</li> <li>Peer-review Findings to ensure they meet requirements prior to issue</li> <li>Assist in compiling and reviewing the Surveillance Report, including Discipline Summaries if relevant</li> </ul>

Position	Accountabilities
	<ul> <li>Enter report data into Sky Sentinel</li> <li>Ensure all relevant documentation is appropriately filed in the RMS. If relevant, as a team, analyse all surveillance event Evidence, review control effectiveness for assessed systems Risks, and input effectiveness scores into the Mitigated Risk Calculator tool in Sky Sentinel</li> </ul>
Surveillance Technical Officer	<ul> <li>Monitors Sky Sentinel and reminds the surveillance lead to ensure reports are issued within twenty (20) Business Days.</li> <li>Formats the Surveillance Report</li> <li>Distributes the Surveillance Report, using the centralised surveillance mailbox, to the authorisation holder with a covering e-mail</li> <li>Ensure all relevant documentation is appropriately filed in CASA RMS.</li> </ul>

# 4.7 Update system information

# 4.7.1 Purpose

/

This section has two areas – information retrieval and finalisation. As discussed in Section 3.2 – Surveillance Phases, the Update System Information section is the point at which the process loops back in its continuum. This section provides direction on collecting relevant information based on its importance, relevance, completeness, quality and verifiability, and the finalisation phase where the surveillance event is completed in a timely and effective manner, including the management of surveillance Findings.

# 4.7.2 References

The following materials are applicable to the Update System Information - Finalisation phase

- Reports
  - Systems & Elements (refer to relevant technical annex)

# • Forms (Available on the CASA Document Catalogue)

- Form 1291 Further Evidence Requested Letter\*
- Form 1302 Safety Finding Overdue Letter\*
- Form 1303 Safety Finding Acquittal Letter\*
- Form 1455 Safety Finding Extension Acceptance Letter\*
- Form 1456 Safety Finding Extension Rejection Letter.
- Form 1543 Safety Finding Response to Objection Letter

\*Generated in Sky Sentinel

# 4.7.3 Process



Figure 14: Manage Safety Findings (SFs)

# 4.7.4 Findings management

**Note:** Finding types other than Safety Findings: The processes described in this section typically refer to the management of Safety Findings. However, actions required to specifically manage other Finding types, e.g. Safety Alerts, ASRs or Safety Observations, are highlighted as notes indicating the specific action required for a particular Finding type.

It is the responsibility of surveillance services to process any responses to Safety Findings and other Findings when a response is received to update Sky Sentinel and then provide to the Issuing Inspector and to ensure adequate records are maintained. However, other offices acting on behalf of a surveillance team may issue Findings. It is the role of the Issuing Inspector, who initially identified the breach during the surveillance event, to issue the Finding and then continue to manage the Finding to its finalisation. This should be done in conjunction with the surveillance technical officer and is overseen by the surveillance lead

The Surveillance Manager and the surveillance technical officer can provide more information on open Findings, as required, to the SPM on Safety Findings and ASRs, which are accessible through Power BI. Information can also be viewed at any time from Sky Sentinel to determine overdue Safety Findings and ASRs. Overdue Safety Findings are managed and followed up by the Controlling Office through Sky Sentinel. Safety Observations can also be viewed through Sky Sentinel.

In the ongoing management of Findings Surveillance Managers should at all times exercise discretion on how to apply the regulatory decision-making considerations set down in this manual (see Section 2.5.1 – Key considerations for regulatory decision making), e.g. how any follow-up action should be applied.

Throughout the Finding's Management Process for Safety Findings, the relevant status must be set manually in Sky Sentinel, with the user prompted to provide the necessary associated details. Details of available Finding status options in Sky Sentinel are described as follows:

• **Response Received** – the option selected when authorisation holder has specifically responded to the relevant Finding.

**Note:** This status is entered by the surveillance technical **issuing** Inspector.

- No Response Received a No Response Received letter is sent to the AH after the twenty-one (21) day response period has passed with no response from the authorisation holder. The Status remains at Issued and the Safety Finding Due Date amended but remains overdue. A comment must be made in the SF comments to reflect a No response received letter has been sent to the AH.
- Action Plan selected when the authorisation holder response is in the form of an Action Plan which sets out multiple milestone dates for completion of any Remedial Action, Root Cause analysis or Corrective Action working towards Acquittal.
- **Extension of Time** the option selected when an authorisation holder's request for additional time to address outstanding Remedial Action, Root Cause Analysis or Corrective Action is approved in line with the requirements set down in Section 4.7.11 Request for extension. To be approved by the Surveillance Manager.
- **Further Evidence Requested** the status selected when the Issuing Inspector is not satisfied with any aspect of the Acquittal Evidence provided by the authorisation holder, and further Evidence is sought.

- Verification Required by CASA selected when the authorisation holder's response has adequately addressed all response Elements with no additional Evidence required; however, the Evidence provided has not yet been verified by CASA with the Finding remaining as Outstanding.
- **Objection** this status option must be selected when the authorisation holder submits an objection to the Finding with supporting Evidence (see Section 4.7.4.1 Managing objections to Findings). Objections should be peer reviewed using Form CASA-04-5630.
- **Enforcement Action** the option selected when the relevant Finding is the subject of current Enforcement action, including coordinated Enforcement.
- **Withdrawn** selected when an objection is lodged and accepted, and the subject Finding is withdrawn by CASA.
- **Downgrade** to Observation this status is selected when an objection to a Safety Finding has been objected and the decision has been made by the Surveillance Manager to downgrade it to a Safety Observation.
- **Acquitted** the option selected for when all Finding response Elements are accepted by the Issuing Inspector after supporting Evidence is received and verified.

# Safety Finding management

The following diagram shows the standard scenarios that are likely to arise in managing a Safety Finding after it is issued. Throughout the following sections, the detail of this diagram will expand to show details of the key process steps and specific requirements for each scenario.



Figure 155: Possible responses to Safety Finding

# 4.7.4.1 Process - Managing Objections to Findings

#### **Objection peer review process**

#### Surveillance Technical Officer:

1. Enters email into Sky Sentinel as an objection - Excluding the decision field - with the details from the authorisation holder. Assign to Surveillance Manager.

#### Surveillance Manager

1. On receipt of the automatic notification of an objection in Sky Sentinel then reviews the objection to ensure there is supporting Evidence from the authorisation holder.

#### **Issuing Inspector**

- 1. On receipt of the objection notification regarding a Safety Finding.
- 2. If the objection has not been captured in Sky Sentinel notify the STO of the objection.
- 3. To ensure the objection is reviewed independently within CASA, the Issuing Inspector cannot review the objection

#### Surveillance Manager

1. Assigns an independent office to review the Objection, Safety Finding and Evidence from the event.

#### Assigned Surveillance Manager and reviewing Inspector

- 1. Peer review by using form <u>CASA-04-5630</u>. Considers the objection and supporting Evidence put forward and recommends to either:
  - a. Withdraw Finding objection upheld, and the Safety Finding withdrawn.
  - Downgrade Finding Safety Finding downgraded to a Safety Observation with the Safety Finding withdrawn, and new Safety Observation created approved and issued.
  - c. Reject objection the Safety Finding proceeds with the SM rejecting the objection and then the Issuing Inspector setting a new due date in Sky Sentinel for the response, selecting an appropriate date for response that must not be more than fourteen (14) calendar days from the date of the Further Evidence Requested notification. This changes the status to Further Evidence requested.
  - d. Amend Finding the Safety Finding is to be amended and then re-issued, with the amendment completed by the Issuing Inspector, once approved to do so, by the Surveillance Manager. An additional twenty-one (21) calendar days is allowed for a response to the re-issued Safety Finding.
- 2. Send completed peer review to the Surveillance Manager, original Surveillance Manager and Issuing Inspector.
- 3. Capture any action taken in RMS and Sky Sentinel by selecting the applicable Decision status.

#### Surveillance Manager and Issuing Inspector

1. Completed peer review form returned for discussion on the outcome.

2. Notify the STO of the outcome and issue the outcome letter to the authorisation holder.

#### Surveillance Technical Officer

- 1. Notifies the authorisation holder of the outcome using Form 1543. Capture all documents in RMS and Sky Sentinel.
- **Note:** Clear and open communication with the authorisation holder must continue throughout the assessment process.

# 4.7.4.2 Process Details - Managing Objections to Findings

Objections are considered and approved by the Surveillance Manager. The objection period (twenty-one (21) calendar days) is the same as the standard Finding response period. Objection responses are sent from the STO to the Issuing Inspector and Surveillance Manager. An objection must go through a peer review process.

Under procedural fairness principles, an authorisation holder has the right to object to a Safety Finding. It is expected that the authorisation holder will receive the Safety Finding and will consider the details of the deficiency identified as a breach. It they do not agree with the deficiency details as presented; they have the opportunity to submit an objection within the twenty-one (21) calendar-day response period. The supporting Evidence must specifically address and/or challenge the deficiency detailed in the Safety Finding, providing enough Evidence for the independent Surveillance Manager to consider and make a decision on the objection. The decision must be completed via the Peer Review Process. The decision on the objection must be made by the Surveillance Manager, not the Issuing Inspector, to ensure the procedural fairness principles and process transparency is maintained. The Issuing Inspector can provide specific background information, if not already in the system.

In considering the objection, the Surveillance Manager must exercise discretion in line with the regulatory decision-making considerations set down in this manual (see Section 2.5.1 – Key considerations for regulatory decision making). The Surveillance Manager may find it necessary to contact the authorisation holder on any aspect of the objection and, if considered necessary or appropriate, the authorisation holder may be invited to clarify any matter to assist the decision-making process.

Once a decision is made, the Issuing Inspector is advised, and the authorisation holder is informed. (See objection options detailed in Section 4.7.4.1 – Managing objections to Findings).

**Safety Finding Objections** – In some circumstances, the authorisation holder may disagree with the identified deficiency, or the potential area for improvement in safety performance detailed in the Safety Observation. In this case, the authorisation holder may elect to submit an objection. Such an objection must be treated the same as a Safety Finding and, if it is upheld, the Safety Observation must be withdrawn and duly noted in Sky Sentinel. Form 1543 - Response to Objection Letter should be used to advise the authorisation holder.

#### **Objection outcome – withdraw Finding**

If an objection is upheld and the Surveillance Manager approves the withdrawal of the Finding, the Finding is withdrawn by selecting the Withdraw Finding status option in Sky Sentinel. The reason the objection is accepted must be captured in Sky Sentinel against the

Finding being withdrawn. This should include details of the supporting Evidence provided by the authorisation holder, or the reference from the RMS where the Evidence is saved.

A withdrawn Finding can still be accessed in Sky Sentinel.

If an objection is upheld and the Surveillance Manager approves the withdrawal of the Finding but the Finding is required to be re-issued a new Safety Finding created using the "Incorrect Regulation" Objection category and 'Amend Finding' status. Form 1543 - Response to Objection Letter should be used to advise the authorisation holder.

#### **Objection – downgrade Safety Finding to a Safety Observation**

An outcome of an objection could be the downgrading of a Safety Finding to a Safety Observation. This would apply in circumstances where the Surveillance Manager, after assessing the objection Evidence, decides that, while no actual breach has occurred, a system deficiency still existed, or there is potential for an improvement in safety performance. Once the downgrade Finding option is selected in Sky Sentinel, the Safety Finding is withdrawn, and a new Safety Observation is created for completion, approval and issue. Form 1543 - Response to Objection Letter should be used to advise the authorisation holder.

#### **Objection – rejected**

Where an objection is rejected by the Surveillance Manager after assessment of supporting Evidence, the authorisation holder is notified accordingly. The Finding status will remain as 'Issued' with a response status of 'Objection' and the reason being Reject Objection and the due date will remain unchanged.

When using the Further Evidence selection of the Safety Finding a revised response due date can be set Issuing Inspector, to a maximum of fourteen (14) calendar days from the date of the Further Evidence Requested notification. The appropriate sections of Sky Sentinel will need to be updated by the Surveillance Manager. This changes the status to Further Evidence requested.

#### **Objection – amended Finding**

An objection may also result in the Finding being amended and then re-issued. Amendments to the Finding are completed by the Issuing Inspector, once approved to do so, by the Surveillance Manager. The STO are notified to re-issue that Finding and Amend Finding letter to the authorisation holder.

An additional twenty-one (21) calendar days from the date of notification is allowed for a response to the re-issued Finding. Form 1543 - Response to Objection letter should be used to advise the authorisation holder.

# 4.7.5 Response/Objection received



Figure 16: Handling Safety Finding (SF) Responses/Objections process

Civil Aviation Safety Authority CASA-03-0041

# **Process - Response to Safety Finding**

#### Authorisation Holder

Within the specified twenty-one (21) calendar-day timeframe, considers available options and either:

- accepts the Safety Finding by responding with details of all actions taken to return to a compliant state, Root Cause analysis and corrective actions taken OR
- objects to the Safety Finding with supporting Evidence.

#### Issuing Inspector/ Surveillance Technical Officer

On receipt of a response or objection from the authorisation holder regarding a Safety Finding:

- 1. If the authorisation holder accepts the Safety Finding, select 'Response Received' status in Sky Sentinel with appropriate date and notes:
  - a. Finding Advise the Issuing Inspector by email with the response received OR
  - b. If the authorisation holder Objects to the Safety Finding, select "Objection" status in Sky Sentinel with appropriate date and notes excluding the decision field
- 2. If the authorisation holder Objects to the Safety Finding, select "Objection" status in Sky Sentinel with appropriate date and notes Excluding the decision field:
  - a. Advise the Issuing Inspector and Surveillance Manager of the objection
  - b. Surveillance Manager to follow the "Managing objections to Findings" section.
  - a. Capture receipt of the response/objection and any administrative action taken in the RMS and Sky Sentinel.
- 3. Monitors open Safety Findings in Sky Sentinel to ensure response or objection is received within twenty-one (21) calendar days:
  - a. Notify the Surveillance Manager if Safety Findings are overdue.
- 4. Ensures all authorisation holder responses received in the <u>centralised</u> surveillance mailbox are registered in RMS.

# 4.7.5.1 Process Details - Response to Safety Finding

While it is a requirement that a formal response or objection to a Safety Finding be received from the authorisation holder within twenty-one (21) calendar days (see Section 4.6.5.2 – Process Details – Writing Safety Findings), it is not uncommon in the ongoing management of a Safety Finding that, after receipt of the initial response, verification and Acquittal will involve multiple interactions with the authorisation holder. This is particularly relevant in cases involving requests for extension supported by acceptable documented Action Plans that include timeframes and milestones.

**IMPORTANT:** To be read in conjunction with Section 4.7.11 – Request for extension, particularly noting when Action Plans must be referred to the CEP.

Any subsequent responses/notifications of a substantial nature, particularly if required to satisfy Action Plan milestones, must be managed by selecting the appropriate status in Sky Sentinel (see 4.7.4 Findings Management) and setting due dates. When an Action Plan is submitted, the Action Plan status option is selected in Sky Sentinel and saved which then

allows for multiple milestone dates to be added. All milestone dates and response-received dates set in Sky Sentinel must be accompanied by the justification and details of the response.

- **Note: Safety Observation** While there is no obligation to respond to Safety Observations, CASA considers that providing a meaningful response to a Safety Observation is indicative of an enhanced level of organisational maturity.
- **Note: SAFETY ALERT** While the process for received responses detailed above generally applies to all Finding types, a response to a Safety Alert must include proof of Remedial Action being taken to rectify the safety concerns before continuing any related activity. An authorisation holder who fails to respond to a Safety Alert within five (5) calendar days must be considered for Enforcement action (For more information, see Section 4.6.6.2 Process Details Issuance and Acquittal of Safety Alerts).

# 4.7.6 Assessment of response

# 4.7.6.1 Process - Assess response

#### Surveillance Manager

1. Decides who is responsible for assessing a Safety Finding in circumstances where the Issuing Inspector is unavailable. The Issuing Inspector cannot be changed on Sky Sentinel.

# If Safety Finding accepted authorisation holder

#### Surveillance Technical Officer

1. Receives authorisation holder response of acceptance of Safety Finding and enters this as a 'Response received' in Sky Sentinel and forward email to Issuing Inspector.

# **Issuing Inspector**

- 1. Receives email from STO re authorisation holder response of acceptance of Safety Finding.
- 2. Assesses the response by reviewing against the criteria.
- 3. Adds appropriate comments in the comments section within the relevant Safety Finding page in Sky Sentinel.
- 4. Selects the acquitted status in Sky Sentinel.
- 5. Forward email advice to STO who will forward the authorisation holder Acquittal letter and ensure the status is set to acquitted.

# If Safety Finding objected to by authorisation holder

- 1. Issuing Inspector and Surveillance Manager receives via surveillance@casa.gov.au the authorisation holder's objection with supporting Evidence.
- 2. Refers the objection and supporting Evidence to the Surveillance Manager with any pertinent background information.

# 4.7.6.2 Finding Process Details - Assess response

Under normal circumstances, the surveillance team member who initially identified the breach is the author of the Safety Finding (Issuing Inspector) and responsible for assessing the response. The Surveillance Manager must decide who is responsible for assessing a Safety Finding if the Issuing Inspector is unavailable. The Issuing Inspector cannot be changed on Sky Sentinel.

Any Safety Finding must be responded to by the authorisation holder within twenty-one (21) calendar days. No change in the original due date can be granted for any reason as it is critically important that the authorisation holder returns to a compliant state as soon as possible.

The response to a Safety Finding must take the form of either an initial response indicating acceptance of the Safety Finding (response to Remedial Action / Root Cause Analysis / corrective action), or an objection to the Safety Finding including supporting Evidence. If it is an Objection, see section Managing Objection to Findings process.

The initial response to a Safety Finding from the authorisation holder must include advice covering the following requirements:

- the Remedial Action that has been taken to return to a compliant state
- the Root Cause analysis that has been completed
- the Corrective Action that has been completed.
- **Note:** If the Remedial and/or Corrective Action has not yet been taken at the time of the initial response, the required course of action is for the authorisation holder to submit a request for extension of time to undertake and/or implement any necessary outstanding remedial and/or corrective action.

**IMPORTANT:** To be read in conjunction with Section 4.7.11 – Request for extension.

The response must provide Evidence to satisfy the Issuing Inspector that the authorisation holder:

• has returned to a compliant state

• is actively working towards implementing the Corrective Action to mitigate potential recurrence of the identified deficiency.

While it is understood that completion of the required Corrective Action may not be achievable within the twenty-one (21) calendar day timeframe for large organisations, or where the Corrective Action is complex, the expectation is that the authorisation holder will (within the above-mentioned timeframe) request an extension to undertake and/or implement all necessary action. For complex matters, it is likely that such a request will take the form of an Action Plan detailing all significant milestone dates, with actions to be taken against such dates.

(IMPORTANT: To be read in conjunction with Section 4.7.11 – Request for extension)

Status options in Sky Sentinel available to the Issuing Inspector when assessing a response include:

• Response Received

**Note:** May be entered by the surveillance technical officer in the absence of the Issuing Inspector.

- No Response Received
- Action Plan
- Extension of Time

- **Note:** Only to be selected when request for extension is submitted by authorisation holder (see Section 4.7.11 Request for extension). Surveillance Manager approval email saved to RMS. OR when a Reject Objection is selected, then an extension of time is provided to the authorisation holder.
  - Further Evidence Requested
  - Verification Required by CASA
  - Objection

- Enforcement Action
- Acquitted.

Assessment of Remedial Action is reviewed against the following criteria:

- Did the authorisation holder state the Remedial Action taken to remedy the identified breach?
- Did the Remedial Action adequately provide a short-term treatment for the identified deficiency?
- Has sufficient and conclusive Evidence been provided to satisfy the Inspector that all requirements have been met and the authorisation holder has returned to a compliant state?

Assess the adequacy of the Corrective Action taken by considering:

- Have the Root Causes been identified?
- Are the corrective actions necessary to address the breach and, if so, was it performed?
- When will the Corrective Action be completed?
- Is there sufficient validation of the response to acquit the Safety Finding?
- Is there any flow-on effect that could impact on other processes? If so, has this impact been considered?
- Has the Corrective Action been implemented in all relevant areas of the authorisation holder's organisation?
- What monitoring system has been implemented to track the effectiveness of the corrective action?
- If there is uncertainty, the CEP must be considered in accordance with section 6 Enforcement Verification required by CASA.

'Verification required by CASA' means the authorisation holder's response has adequately addressed each of the response Elements, namely Remedial Action, Root Cause and corrective action, but this has not yet been verified. Verification in this context means Evidence providing a high degree of assurance that the intended outcomes were accomplished, and verification has been scheduled for follow-up by CASA. Such Findings are recorded in Sky Sentinel as having a status of 'Verification Required by CASA'.

However, consideration should be given to acquitting the Safety Finding and adding a comment to authorisation holders file in Sky Sentinel that verification is to be carried out at the next surveillance event.

**Note:** This status is not appropriate if any additional Evidence is required from the authorisation holder.

The response must answer the principal questions and/or detail the following required actions:

- **Remedial Action** Immediate action taken by an authorisation holder in response to a Finding to address the deficiency which caused the breach and return to a compliant state
- Safety outcome An immediate, short-term treatment was put in place ensuring the operation was brought within safe parameters by eliminating the safety concern. If no Remedial Actions were applied, the deficiency may have become, or continue to be, an unsafe operation or act (i.e. error or violation)
- **Root Cause** the fundamental breakdown or failure of a process or system, which, when resolved, prevents a recurrence of the deficiency
- Safety outcome Evidence supporting the conclusion of the causal factor(s) contributing to the deficiency's Root Cause. Singularly, this does not assure continued effectiveness of a corrective action
- **Corrective Action** Action required by an authorisation holder in response to a breach that reduces the potential for recurrence. The action must address the Root Cause of the deficiency that caused the breach while indicating how the effectiveness of the action will be tracked.
- Safety outcome A prevention strategy (what, how, where and by whom) of the corrective measures to be applied to the Root Cause to eliminate a repeat recurrence and initiate continuous improvement. The variables allowing an authorisation holder to monitor the effectiveness of their corrective action, and to assure continued safety and Compliance, must also be included.
- **Note:** There will be situations were establishing the Root Cause may only require a fairly simple analysis by the authorisation holder, and the Corrective Action needed is minor. The reason CASA includes Root Cause analysis and Corrective Action in the expected response to Safety Findings is that they provide further assurance to CASA, from a safety perspective, that the authorisation holder not only understands why the breach occurred, but also acted to reduce the chance of reoccurrence.
- **Note:** Consider conducting an AHPI assessment based on information received.

# 4.7.7 Acquittal Process

**Note:** SAFETY ALERTS AND ASRs - The process for Acquittal of a Safety Alert is detailed in Section 4.6.6.1– Process – Issuance and Acquittal of Safety Alerts.

The process for Acquittal of ASRs is detailed in Section 4.6.7.1 – Process – Issuance and Acquittal of Code 'A' ASRs, and Section 4.6.7.3 – Process details – ASRs.

# 4.7.7.1 Process - Acquittal process

#### Surveillance Manager

1. Decides who should be responsible for verifying and acquitting a Safety Finding when the Issuing Inspector is unavailable.

**Issuing Inspector** (or other Inspector) or surveillance technical officer: Following assessment and acceptance of the Safety Findings response.

- 1. Within Sky Sentinel select on the Safety Finding page select "Add Response Information". Do not select the previously entered Response received. From the Finding Response pop up enter the details and select Status Field of: Acquitted.
- Records the verification Evidence and action taken in the relevant comments box in Sky Sentinel. (MSM Attribute. Remedial Action, Root Cause Analysis and Corrective Action.
- **Note:** The surveillance technical officer must seek email confirmation from the issuing/nominated Inspector prior to acquitting Safety Findings in Sky Sentinel.
- **Note:** If appropriate, the RMS file reference, where details of the verified Evidence details are recorded, should be noted in Sky Sentinel in both the 'RM8 Reference' box. The RMS reference should be the document that contains the information regarding the specific Safety Finding response. Alternatively, details of the relevant response can be entered directly into Sky Sentinel and supported by an RMS reference.
- 3. Selects the appropriate MSM Component in Sky Sentinel, for data capture and reporting purposes, based on the Root Cause analysis provided by the authorisation holder (Safety Findings and Safety Alerts only).
- 4. Records the Acquittal of the Safety Finding in Sky Sentinel by noting the Acquittal date with supporting comments. Advises STO of Acquittal.

#### Surveillance technical officer

- In consultation with the Issuing Inspector, notifies the authorisation holder in writing of the Acquittal of the Safety Finding (Safety Finding Acquittal Letter - Form 1303) (optional).
- 2. Ensures the acquitted Safety Finding, with supporting finalisation documentation, is saved to the appropriate RMS file.

# Issuing Inspector (or other inspector)

- 1. Creates a proposed surveillance request in Sky Sentinel for follow-up surveillance if deemed necessary.
- **Note:** Safety Alert A Safety Alert can be acquitted once the Issuing Inspector is satisfied the authorisation holder has undertaken the required immediate Remedial Action to rectify the identified safety concern (For more information, see Section 4.6.6.2 Process Details Issuance and Acquittal of Safety Alerts).

# 4.7.7.2 Process Details - Acquittal process

Under normal circumstances, the surveillance team member who initially identified the breach is the author of the Safety Finding (Issuing Inspector) and also responsible for the Acquittal process. The Surveillance Manager must select an alternative inspector who will take responsibility for verifying action taken and the Acquittal process if the Issuing Inspector is unavailable. The Issuing Inspector cannot be changed on Sky Sentinel.

# Management of Safety Finding – Acquittal

Once a response has been accepted (see Section 4.7.6.2 – Process Details – Assess response: 'Verification Required by CASA' and Acquittal), it may be considered for Acquittal.

On occasions, a Safety Finding response may require the surveillance team to monitor the Corrective Action over time. This is particularly the case in circumstances involving larger organisations, changes in complex systems, the development of supporting procedures and documentation, or when training large numbers of personnel. This must be assessed on a case-by-case basis.

In managing the Acquittal process, the Issuing Inspector must not acquit the Safety Finding unless they have verified Evidence that the Remedial Action, Root Cause analysis and Corrective Action has been satisfied. In doing so, the following principles must be considered:

- the response provides satisfactory explanation and physical Evidence that the Remedial Action taken removes all immediate threats to safe operations, while providing adequate and effective compliant short-term treatment
- the response is supported by Evidence of not only a credible investigation by the authorisation holder, but also a Root Cause analysis process, resulting in Findings that clearly and unambiguously identify the causal factor(s) that contributed to the deficiency
- the response provides satisfactory explanation and physical Evidence that the corrective action, already taken, will effectively eliminate or minimise any repeat of the deficiencies that led to the breach.

# See failure to verify below.

**Satisfactory Evidence** – Safety Finding verification, based purely on a proposed plan of corrective action, is not adequate for Acquittal. Evidence must be direct and specific, rather than circumstantial. Unequivocal proof must be secured by way of material Evidence, such as:

- documentation, e.g. manual amendments
- acquisition of hardware or software
- acquisition of plant or material
- addition of qualified staff
- observed behavioural changes, changes of procedures
- observed rectification of material damage or deficiencies.

**Failure to verify** – If the Issuing Inspector becomes aware an authorisation holder is unable to provide satisfactory Evidence, or if Corrective Action cannot be verified, then the procedures for "unsatisfactory response" must be followed.

If the Issuing Inspector deems it necessary to follow up the verification at a future date before acquitting, this must be entered as a Formal Comment in Sky Sentinel.

A Safety Finding must only be acquitted when the Controlling Office is satisfied that the authorisation holder has addressed the remedial and corrective actions (see Section 4.7.6 – Assessment of response), with all rectification action carried out within the agreed timeframe.

Verification Evidence and a record of all actions taken must be recorded in the comments box for the relevant Safety Finding in Sky Sentinel. The recorded verification Evidence must reflect the complexity of the rectification activities undertaken by the authorisation holder. The appropriate MSM Component must also be selected at this time in Sky Sentinel for data capture and reporting purposes. The component selected must be based on the Root Cause analysis information provided by the authorisation holder. Noting the effective Acquittal date in Sky Sentinel formally records the Safety Finding as acquitted.

**Note**: In line with the Regulatory Philosophy principles, a Surveillance Manager may apply discretion in accepting Root Cause analysis and Corrective Action provided in response to a Safety Finding where it is considered that there is no identifiable safety benefit to be realised by pursuing additional information. Remedial Actions must still be of a satisfactory standard, ensuring a return to a compliant state.

If an authorisation holder is subject to current Enforcement action, any Safety Finding relating to the activity that is the subject of that Enforcement action must not be acquitted unless LIRA Division has been advised prior to the Acquittal. Any such matters should be discussed with the Manager Litigation, Investigations and Enforcement.

By the time Enforcement action is commenced, the authorisation holder will, most likely, be outside the time specified by CASA for response to the Safety Finding.

However, in most cases, it is anticipated that an authorisation holder will continue to address the subject of the outstanding Safety Finding during the Enforcement process as a measure of its willingness and ability to do so. Nevertheless, where administrative action in the form of a Show Cause Notice has commenced, the timeframe for response to the matters raised in the notice (including outstanding Safety Findings) will be dictated by the timeframe set out in the Show Cause Notice for a response.

# 4.7.8 Follow-up control effectiveness review

# 4.7.8.1 Process – Follow-up control effectiveness review

#### Surveillance Team Members

- 1. Consider all post-surveillance data received, including any information, Root Cause analysis, reports and plans submitted by the authorisation holder, as part of the Acquittal process.
- 2. If a control effectiveness review was conducted after returning from the surveillance event, due to newly received post-surveillance data, including any responses to Safety Observations received, decide whether there is any likelihood of change in the level of control effectiveness for those systems Risks that had been assessed.
- 3. If it is decided there is sufficient Evidence that a follow-up review would result in a change in the level of the mitigated systems Risk, as a team, consider completing a follow-up control effectiveness review by comparing the original Evidence with the newly available Evidence, and entering the revised effectiveness score for the relevant system Risk into the Risk Mitigation Calculator page in Sky Sentinel.

# 4.7.8.2 Process Detail - Follow up control effective review

Once most of the information is received from the authorisation holder as part of the Safety Finding Management Process, particularly in verifying and the Acquittal process, a decision is made whether sufficient Evidence exists to undertake a follow-up review of a particular system Risk.

Possible post-surveillance information or Evidence could include the following:

• Safety Finding Acquittal details:

- How effectively has the operator reviewed the Root Cause?
- How completely has the operator endeavoured to address both remedial and corrective actions to achieve long-term Compliance and safety performance?
- Has the authorisation holder addressed more than just Compliance?
- Has the authorisation holder addressed the deeper safety questions?
- Have they initiated response to these issues in a timely manner, or did they need reminding?
- If the authorisation holder utilises an SMS, did the operator include any, or all, of the appropriate issues from the surveillance into their SMS?
- responses to Safety Observations

- responses to comments in the Surveillance Report
- any other information (e-mails, letters or phone calls) that has a bearing on how the operator is addressing the issues raised in relation to a particular system Risk.

If a control effectiveness review was conducted after returning from the surveillance event, it would have been based on Evidence gathered during the event. Surveillance team members who initially conducted the Risk analysis may consider completing a follow-up control effectiveness review by comparing new Evidence with the original Evidence and documenting any changes to justify a follow-up review.

The timeframe for this review would normally be done after the Safety Findings have been acquitted and/or responded to. In circumstances where extensions are granted to authorisation holders to respond, any necessary follow-up review may be deferred until the end of this period.

# 4.7.9 Unsatisfactory response

# 4.7.9.1 Process - Unsatisfactory response

#### **Surveillance Technical Officer**

 Following consultation with the issuing/nominated Inspector, advises the authorisation holder in writing (Further Evidence Requested Letter - Form 1291) setting a revised due date (a maximum of fourteen (14) calendar days from the date of the letter) in which to satisfy remedial, Root Cause analysis and Corrective Action requirements.

#### Surveillance Manager

- 1. Determines the appropriate option, e.g.:
  - b. Contact the authorisation holder's representative to determine a way of resolution
  - c. Schedule an additional surveillance event to verify the current situation.
  - **Note:** This option may depend on when the next surveillance is scheduled, the availability of resources, and may generate further Safety Findings.
- 2. Select Further Evidence Requested as the new status in Sky Sentinel and enter the new Due Date.
- 3. Documents all communication and actions/inactions in sufficient detail in Sky Sentinel and/or RMS to support any possible Enforcement action.

- 4. Ensures all actions taken are entered appropriately as a comment in the relevant Sky Sentinel Safety Finding page.
- 5. Reviews the progress and considers available options regularly and, if the issue persists:
  - a. Contacts the authorisation holder to determine a resolution, or
  - b. Proposes a new surveillance event request through Sky Sentinel.
- 6. If the authorisation holder is repeatedly unable or unwilling to provide an adequate response, or it is clear they are not frankly and openly addressing the deficiencies raised, alerts the National Manager Surveillance.
- 7. **National Manager Surveillance**: Initiates action to refer the Safety Finding to the CEP in accordance with section 6.

# 4.7.9.2 Process Detail - Unsatisfactory response

An unsatisfactory response means that some or all elements of the response failed to satisfy the Issuing Inspector that the Safety Finding had been appropriately addressed. The authorisation holder must be advised in writing (Further Evidence Requested Letter - Form 1291), including the reasons the response was rejected and setting a revised due date (a maximum of fourteen (14) calendar days from the date of the letter) to respond with satisfactory remedial, Root Cause analysis and corrective action.

Until satisfactory remedial and corrective actions have been provided and verified, the Safety Finding must not be acquitted.

The response to a Safety Finding may be unsatisfactory if:

- remedial and corrective actions have not addressed the Root Cause of the deficiency
- documented Evidence is not sufficient
- the response is not understood.

At all stages, the level and/or adequacy of the response must be documented in Sky Sentinel, i.e. the status of the Acquittal process as the authorisation holder may not have responded in full.

Note: Safety Alert - In circumstances where a Safety Finding is associated with a Safety Alert and the authorisation holder has failed to adequately respond, the National Manager Surveillance must be alerted, and the CEP considered in accordance with section 6.Enforcement ASR – If the registered operator fails to adequately respond to a Code 'A' or Code 'B' ASR, the National Manager Surveillance must be alerted, and the CEP initiated, following the processes as detailed above for Safety Alerts.

If the authorisation holder does not provide an adequate response, contact the authorisation holder's representative who is accountable to determine a way of resolution. Document all communication and retain in the appropriate RMS file, scheduling an additional surveillance event to verify the current situation may be required.

**Note:** This option may depend on when the next surveillance is scheduled, the availability of resources and may generate further Safety Findings.

Subsequently, the National Manager Surveillance must be alerted, and the CEP initiated in accordance with section 6. Findings, documentation of decisions and escalation of unsatisfactory responses must be recorded in Sky Sentinel.



Figure 17: No Response to issued Safety Findings (SF) process

# 4.7.10.1 Process - No response received

#### Surveillance technical officer

- Following consultation with the issuing/nominated Inspector, issues a Safety Finding reminder letter (Safety Finding Overdue letter - <u>Form 1302</u>), allowing a maximum of fourteen (14) calendar days from the date of the letter in which to respond. This revised due date is entered in the New Due Date with the Safety Finding remaining as Issued.
- 2. Add a comment in Sky Sentinel "Overdue letter sent".

#### **Controlling office**

- 1. Determines the appropriate option, e.g.:
  - a. Contact the authorisation holder's representative to determine a way of resolution
  - b. Schedule an additional surveillance event to verify the current situation.
  - **Note:** This option may depend on when the next surveillance is scheduled, the availability of resources, and may generate further Safety Findings.
- 2. Documents all communication and actions/inactions in sufficient detail in Sky Sentinel and/or RMS to support any possible Enforcement action.
- 3. Ensures all actions taken are entered appropriately as a comment in the relevant Sky Sentinel Safety Finding page. The Status remains at Issued but will revert to overdue once new date is arrived at.
- 4. Reviews progress and options regularly and, if the issue persists, discuss options with the Surveillance Manager.
- 5. Option: to provide an Extension of Time to the authorisation holder to respond.
- 6. If authorisation holder fails to respond after being reminded of their responsibilities, alerts the National Manager Surveillance.
- 7. National Manager Surveillance: Initiates action to refer the Safety Finding to the CEP in accordance with section 6.

# 4.7.10.2 Process Details - No response received

A response must be received within the specified timeframes. If no response is received, a Safety Finding reminder letter (Safety Finding Overdue letter - Form 1302) must be issued allowing a maximum of fourteen (14) calendar days in which to respond.

Note: Safety Alert - In circumstances where a Safety Finding is associated with a Safety Alert and the authorisation holder has failed to respond, the National Manager Surveillance must be alerted, and the CEP initiated in accordance with section 6 Enforcement
 ASR - If the registered operator fails to respond to either a Code 'A' or Code 'B' ASR, the National Manager Surveillance must be alerted, and the CEP initiated following the process as detailed above for Safety Alerts. If no due date was provided on the ASR it is in force 365 days after the direction was issued (CASR 11.245).

If the authorisation holder fails to respond, the following options must be considered. One or several options can be considered and/or actioned:

- contact the authorisation holder's representative who is accountable to determine a way of resolution. Document all communication and retain on the appropriate RMS file
- escalate to the Surveillance Manager review.
- **Note:** This option may depend on when the next surveillance is scheduled, the availability of resources and may generate further Safety Findings.

If the authorisation holder fails to respond after being reminded of their responsibilities, the National Manager Surveillance must be alerted, and the CEP initiated in accordance with section 6. (Proceed as per above note).

**Note**: Any request for an extension of time received during the fourteen (14) calendar day response period, and made subsequent to a reminder letter, must be dealt with by the Surveillance Manager on a case-by-case basis as per the processes set out in Section 4.7.11 – Request for extension.





Figure 18: Requested Extension Period

# 4.7.11.1 Process - Request for extension

#### **Receipt and evaluation of requests**

#### Surveillance Technical Officer

- 1. Received the authorisation holder's request for extension.
- 2. Enters a response received into Sky Sentinel and forwards email to Issuing Inspector.

#### **Issuing Inspector**

- 1. Receives the authorisation holder's request for extension to complete any outstanding remedial, Root Cause analysis or corrective actions.
- **Note:** A request for extension can occur at any stage in the Finding's Management Process. This process applies when the authorisation holder submits a request for any additional time required to address outstanding Remedial Action, Corrective Action or Root Cause analysis.
- 2. Notifies the Surveillance Manager of the request and any other supporting documentation, e.g. Action Plan, submitted by the authorisation holder.
- 3. Evaluates the request, considering the following:
  - c. Whether the extension being sought is for a period greater than three months (if so, the matter requires referral to the CEP with National Manager Surveillance approval)
  - d. Whether the authorisation holder has shown a capacity and willingness to satisfactorily complete the actions within the specified timeframe.

#### Requests for extension less than three months

Refers the request to the Surveillance Manager for approval or otherwise.

#### Surveillance Manager

- 1. After considering the matter, approves or rejects the extension request for periods less than three (3) months, or decides on whether the request should be referred to the CEP for any reason.
- 2. Records the decision of acceptance or non-acceptance in the comments field for the relevant Safety Finding in Sky Sentinel.
- 3. Informs the STO of outcome who will use Form 1455 Safety Finding Extension Acceptance with the date agreed entered as the new due date.

#### Requests for extension greater than three months

Refers extension request to the National Manager Surveillance for submission to the CEP as required.

#### **Enforcement Controlling Office**

**Note:** Specific reasons for rejection, from the National Manager Surveillance, must be provided for inclusion in the response to the authorisation holder and recorded in Sky Sentinel.

#### Response to authorisation holder and follow-up action

#### Surveillance Technical Officer

/

- 1. Depending on whether the National Manager Surveillance, decides to accept or reject the request, in consultation with the Surveillance Manager issues one of the following letters:
  - a. Safety Finding Extension Acceptance letter (Form 1455) notifying the authorisation holder of the acceptance of the request for extension, including details of revised due dates. Use the Add Response Information selection to change the status of the Safety Finding to "Extension of Time" and enter the new Due Date and then enters details of the justification for the extension in Sky Sentinel
  - b. Save email to authorisation holder into RMS
  - c. Safety Finding Extension Rejection letter (<u>Form 1456</u>) notifying the authorisation holder of the non-acceptance of the request, the reason why the request was rejected, and the requirement to either meet the original timeframe, or setting a revised due date. Save into RMS.
  - **Note:** The authorisation holder must be advised of the rejection in writing (Form 1456 above). A maximum of fourteen (14) calendar days from the date of the rejection of extension request letter can be granted to enable the authorisation holder to respond with details of satisfactory remedial, Root Cause analysis and Corrective Action taken to meet the requirements of the Safety Finding.

#### **Issuing Inspector**

1. Finding Monitors and follows up on agreed milestones, records in Sky Sentinel all significant responses received, and regularly reports to the surveillance lead on the progress.

#### Surveillance Manager

- 1. Manages the monitoring and reporting process.
- **Note:** If any deviations from an accepted Action Plan occur, including any variation from specified timeframes or milestones and unsatisfactory progress etc., the CEP must be considered in accordance with section 6, Enforcement.

# 4.7.11.2 Process Details - Request of extension

#### **Receipt and evaluation of requests**

An authorisation holder is required to address the Remedial Action, Root Cause and corrective actions to satisfy the requirements of a Safety Finding. An authorisation holder may request an extension of time beyond the specified timeframe (twenty-one (21) calendar days) to address any outstanding remedial, Root Cause analysis or corrective action. A request for an extension can occur at any stage in the Findings Management Process, with the process detailed above applied to any extension.

The request must provide justification for the extension, including the following Elements:

 details of what has already been done (up to the point of requesting the extension) to rectify the breach

- the reason further time is required to complete the actions
- an Action Plan that will satisfy the requirements of the Safety Finding that must include:
  - clearly identified actions to be taken
  - timeframes/milestones for each action or implementation phase
- an explanation of how safety Risks will be addressed in the interim period of the extension.

The process for considering and approving an extension depends on the extent and nature of the request. No set timeframes are established for the length of time an extension can be granted, with each request considered on a case-by-case basis. However, before granting an extension, CASA needs to be satisfied, based on the information provided by the authorisation holder, that it is reasonable to expect that the action to be taken cannot be completed within the twenty-one (21) calendar-day period, but will be completed within the agreed timeframe.

#### **Requests for extension less than three months**

Requests for extension for periods less than three (3) months are evaluated by the Controlling Office in consultation with the Issuing Inspector.

Evaluation of the extension request must consider the following:

- the complexity of the request and whether it should be recommended for referral to the CEP to ensure safety will not be compromised by the delay in the authorisation holder's response
- whether the authorisation holder has shown a capacity and willingness to satisfactorily complete the actions within the specified timeframe.

The request is then referred to the Surveillance Manager who considers the request, and then either approves or rejects the request.

While the extension request may be for a period less than three (3) months, the Surveillance Manager may still refer the request to the National Manager Surveillance for referral to the CEP at any stage. This would be particularly relevant if the request is of a complex nature, or if there are any safety concerns that may result from a delay in the authorisation holder's response.

In assessing the complexity of the request and whether it should be referred to the CEP, the Surveillance Manager should exercise their discretion in deciding whether a matter is referred or not. In cases of a more complex nature, except where a decision on the facts is made not to refer the matter, the reasons for that decision must be recorded in Sky Sentinel, including confirmation that safety will not be compromised by the delay in the authorisation holder's response. Those reasons will need to address:

- whether the proposed action covers all the issues
- whether the milestones (where there are a number of actions proposed) are realistic and have sufficient detail to be assessable
- whether a person could be exposed to a serious safety Risk while the issues are being addressed.
### Requests for extension greater than three months

If the extension being sought is for a period greater than three (3) months, the request must be referred to the National Manager Surveillance

All requests for extension referred to the National Manager Surveillance must be supported by an Action Plan including details of action(s) to be taken with detailed milestones etc. (as set out above as justification for the extension

In the ongoing management of extensions, particularly for those that extend over a lengthy period and involve an Action Plan, it is important to ensure the plan directly addresses the breaches identified in the Safety Finding and will, when implemented, fully satisfy the specific requirements for all associated Safety Findings. The plan's milestones must also specifically align with the relevant Safety Finding and be recorded as such in the relevant Safety Finding page in Sky Sentinel. Even in situations where Administrative Action, voluntary conditions or an Enforceable Voluntary Undertaking (EVU) are in place, specific breaches identified in Safety Findings must still be managed individually. The voluntary conditions, EVU or Show Cause Notice requirements should specifically address the issues raised in the Safety Findings and any milestones set in managing the Safety Findings through to Acquittal.

### Response to authorisation holder and follow-up action

Depending on the decision, one of the following letters is issued to the authorisation holder:

- Safety Finding Extension Acceptance letter (Form 1455) notifying the authorisation holder of the acceptance of the request for extension, including details of the revised due date
- Safety Finding Extension Rejection letter (<u>Form 1456</u>) notifying the authorisation holder of the non-acceptance of the request for extension, including the reason the request was rejected, as well as any requirement to either meet the original timeframe or setting a revised due date.

If the extension request is rejected the authorisation holder must be advised in writing (Form 1456). A maximum of fourteen (14) calendar days from the date of the rejection letter (in addition to the original twenty-one (21) day response deadline), can be granted to enable the authorisation holder to respond with details of remedial, Root Cause analysis and Corrective Action taken to satisfy the requirements of the Safety Finding.

Should the request for an extension be accepted (to ensure the authorisation holder satisfies any outstanding remedial, Root Cause analysis or corrective actions within an appropriate timeframe), the start date for the Safety Finding approved extension will commence at the end of the twenty-one (21) calendar day period (from the original due date of the Finding).

That said, each request for an extension is analysed on a case-by-case basis. In situations where involvement with Coordinated Enforcement or other parties exceeds the twenty-one (21) calendar day period, then it is at the discretion of the National Manager Surveillance to set the commencement date for the extension. This is to be documented in Sky Sentinel and the authorisation holder's RMS file.

If the approved extension results in a new due date, the date must be recorded in Sky Sentinel. If multiple milestones are established, as each milestone is successfully completed, the next milestone date is entered. All new due dates entered into Sky Sentinel must include supporting details. Response date(s) must also be recorded in Sky Sentinel with appropriate details.

If an extension is approved, it must be made clear to the authorisation holder that the granting of an extension and/or the acceptance of an Action Plan, whether referred to the CEP or not, does not preclude CASA from taking Enforcement action, in the interest of aviation safety, if it is considered necessary, or if there is any deviation from an agreed Action Plan.

Any request for a variation to an accepted Action Plan, including a change to the specified timeframes or milestones that had previously been referred to the CEP, must be considered through the CEP.

**Note**: An authorisation holder may, at any time during the surveillance process, submit some form of written proposal, which in this manual is referred to as an Action Plan (but may also be referred to by the authorisation holder by various names, including recovery program, action management plan etc.) to rectify issues that have been discussed generally during the surveillance event, or which they realise, as a result of the conduct of the surveillance event, need to be addressed.

For further information on dealing with such proposals, see the Enforcement Manual – Chapter 3 Section 3.5 – Contraventions Identified during the Surveillance Process, and in Chapter 6 at Section 6.8 – Further Coordinated Enforcement Meeting and Outcomes of Show Cause Conferences.

### 4.7.11.3 Finding Process - Closure of a Safety Finding without Acquittal

### **Surveillance Manager**

- 1. Records closure in Sky Sentinel.
- 2. Completes the reason for the closure (mandatory).

### 4.7.11.4 Process Details - Closure of a Safety Finding without Acquittal

A Safety Finding can only be closed without Acquittal if the authorisation holder is no longer operating, i.e. their authorisation has been surrendered or cancelled.

**Note:** If a Safety Finding is the subject of an objection that is upheld, the Safety Finding will be moved to a withdrawn status in Sky Sentinel rather than closed.

### 4.7.12 Information retrieval

Updating system information is a continuous process. The information retrieval process remains constantly active and may continue independently of a surveillance event and vice versa. The initiation of the authorisation holder assessment is routinely triggered by an update to system information.

### 4.7.12.1 Process – Retrieve information

### Surveillance Team

- 1. Collects any relevant information to assist effective authorisation holder assessment.
- 2. Considers completing an AHPI assessment drawing on information gathered from standard data warehouse reports and local intelligence if the information gathered is of significance.

### 4.7.12.2 Process Details – Retrieve information

During this phase, information needed by the surveillance team to inform the authorisation holder assessment is collected and entered as a comment in the Authorisation Holder Assessment – Current Results page in Sky Sentinel.

If the information is of a significant nature, consideration should be given to completing an AHPI assessment. All information gathered in this phase from standardised data warehouse reports, or any local intelligence should be recorded appropriately in Sky Sentinel.

## 4.7.13 Self-reported deficiencies (SRD)

### Authorisation holder

1. Reports to CASA a deficiency, as a result of its self-auditing or continuous improvement processes, that would constitute a regulatory breach.

### Surveillance Team / Inspector

- 1. If not already provided, requests the authorisation holder to submit details of Remedial Action and Corrective Action taken, or to be taken, to rectify the breach.
- 2. Evaluates the remedial and Corrective Action taken, or to be taken.
- 3. Captures full details of the self-reported deficiency and action taken in RMS on the Safety Compliance Investigations file and Sky Sentinel.
- 4. Depending on whether the action taken is satisfactory or not, either:
  - a. Notifies the authorisation holder of acceptance, or
  - b. Contacts the authorisation holder and engages with the authorisation holder, as necessary, to achieve the desired Compliance outcome
- 5. Records all discussions and actions as required in RMS, with appropriate notes captured in Sky Sentinel.

If verified by CASA, amend the SRD with a date verified and justification.

6. Notify Surveillance Manager of SRD.

**Note:** No Safety Finding is issued by CASA as a result of a self-reported deficiency.

### 4.7.13.1 Process details - Self-reported deficiencies

At any time during the course of the surveillance cycle, a deficiency or other information may come to CASA's attention as a result of the authorisation holder's self-auditing, or its own continuous improvement processes. Such self-reporting should be encouraged and may be accepted by Inspectors as an indication of a mature or maturing operation. CASA should determine, however, on the merits of an individual case if a self-reported deficiency is accepted in this manner. For example, consideration should extend to the seriousness of the breach, whether it was deliberate or fraudulent, and whether it has been adequately addressed by the authorisation holder.

The details of such self-reporting or information provision must be captured in the RMS on the Safety Compliance – Investigations file and in Sky Sentinel.

If the self-reported deficiency constitutes a regulatory breach, no Safety Finding is issued by CASA; however, the surveillance team must engage with the authorisation holder to achieve a

satisfactory outcome, following the principles set down in Section 2.5.3 – Authorisation Holder engagement.

Where a self-reported deficiency results in the surveillance team determining that the initiation of the Enforcement process warrants consideration, the National Manager Surveillance should be consulted. After consideration of Subpart 13K of CASR 1998 – Aviation Self Reporting Scheme, if the National Manager Surveillance believes that the breach is of such a serious nature the Coordinated Enforcement process must be initiated in accordance with section 6.

Authorisation holders should be urged to continually share any ongoing progress with CASA, with the details captured in the RMS and Sky Sentinel with progress monitored in subsequent surveillance events.

### 4.7.14 Information sources

The following is a non-exhaustive list of information sources that can be accessed to support the assessment of a factor:

- past assessments held in Sky Sentinel
- surveys

- regulatory history Findings (Safety Findings)
- past Surveillance Reports and Findings (Safety Findings and Safety Observations)
- EAP information
- DRS information
- Regulatory Service activity
- information gathered by the authorisation holder
- external information gathered from industry or other government agencies
- Enforcement action
- past accident/incident history
- Action Plans provided by the authorisation holder.

A large portion of this information is available to both the surveillance team and surveillance team via the Data Warehouse using the Business Objects//Power BI application.

**Note:** For advice on where and how to access required information, refer to Chapter 5 – Information Capture and Access.

## 4.7.15 Issue of new authorisation and Post-Authorisation Review (PAR)

### 4.7.15.1 Process - Issue of new authorisation and Post-authorisation Review

### Surveillance Manager or surveillance technical officer:

- 1. Receives notification of the approval of a new authorisation.
- 2. Records the details of the new authorisation in Sky Sentinel.
  - **Note:** If the new authorisation is issued to an authorisation holder that is not already in Sky Sentinel, new authorisation holder details must also be recorded in liaison with the Surveillance Manager.

### National Manager Surveillance

1. Assigns an authorisation holder management team leader and team the responsibility for the ongoing surveillance monitoring of the new authorisation.

#### Surveillance Technical Officer

1. Records details of the responsible surveillance team in Sky Sentinel.

### Surveillance Team

- 1. Conducts a review of the new authorisation, including completing an AHPI assessment.
- 2. Plans a Post-Authorisation Review within a period of six (6) to fifteen (15) months of the issue of a new authorisation to check all entry control requirements are being met.

## 4.7.15.2 Process Details - Issue of new authorisation and Post-authorisation Review

Notification of an authorisation approval triggers the recording of the new authorisation in Sky Sentinel for ongoing surveillance monitoring. A surveillance team must also be assigned and recorded in Sky Sentinel at this time, as well as new authorisation holder details if necessary.

An assessment, including completing an AHPI assessment, must also be conducted on the new authorisation.

A Post-Authorisation Review is conducted to check that all entry control requirements are being met in the form of a Level 1 surveillance event, which may be a Health Check. If a Health Check is conducted, the next Level 1 surveillance event scheduled for the authorisation must be a Level 1 systems audit. Depending on the authorisation type issued, this type of surveillance must be conducted within six (6) to fifteen (15) months following the initial issue. The scope of a Post-Authorisation Review must be based on the authorisation type issued.

### 4.7.16 Voluntary suspension of authorisation

### 4.7.16.1 Process - Voluntary suspension of authorisation

### **Controlling office**

- 1. Receives written request from authorisation holder to suspend authorisation.
- 2. Records the details of the voluntary suspension in Sky Sentinel Formal Comments, including the name of the Inspector that assessed the request. When no date is provided for an end date, a twelve-month interval should be selected so that the authorisation holder can be contacted for an update to their certificate status. A new twelve-monthly interval can then be entered into Sky Sentinel on completion of this contact if required.
  - **Note:** Not all authorisation types may be suspended at the authorisation holder's request; an Inspector must verify that this is permitted by legislation prior to entering details in Sky Sentinel, in consultation with the Surveillance Manager/Manager Surveillance Services.

### Surveillance Team

- 1. Conducts a formal discussion of the authorisation every twelve (12) months while the voluntary suspension is in force, and when the suspension period ends.
- 2. Conducts an AHPI assessment and/or proposes a surveillance event at the end of the suspension period.

### 4.7.16.2 Process Details - Voluntary suspension of authorisation

Legislation allows for holders of some authorisation types to temporarily suspend their authorisation by submitting a request in writing to CASA. Receiving such a request triggers the application of the voluntary suspension flag in Sky Sentinel for that authorisation.

An Inspector must verify that the request is valid prior to it being actioned, in consultation with the Surveillance Manager. Advice should be sought from the Manager Litigation, Investigations and Enforcement in LIRA branch to ensure that such requests for suspension can be assessed to meet the legislative requirements.

Surveillance Teams are not required to conduct AHPI assessments in relation to voluntarily suspended authorisations for the period that the suspension is in force. However, there is still a requirement to contact the authorisation holder and make a record of that contact in Sky Sentinel every twelve (12) months while the suspension is in force, and when the suspension period ends.

Surveillance Teams should consider whether an AHPI assessment and/or a surveillance event should be conducted at the end of the suspension period.

Should an authorisation holder under voluntary suspension wish to return to operations, then the Surveillance Manager together with the National Manager Surveillance should manage any and all related outstanding Safety Findings. The authorisation holder should advise their CASA representative of the date they wish to re-commence operations and consult the process for managing Safety Findings outlined in Section 3.3.4.5 of the CASA Surveillance Manual. An appropriate Corrective Action Plan for any outstanding Safety Findings should be presented. A proposal of a surveillance event should also be considered.

This approach aims to guarantee that authorisation holders ceasing voluntary suspension are in a state of Compliance when operations re-commence. At any stage, advice may be sought from the LIRA branch to ensure that legislative requirements are met.

## 4.7.17 Accountabilities - Update System Information

Fable 8:	Position	and	accountabilities
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Position	Accountabilities			
National Manager	<ul> <li>Notify the Manager Litigation, Investigations and Enforcement about a Safety Alert when no response has been received within the specified timeframe</li> <li>Refer matters for Coordinated Enforcement as necessary within the requirements of the manual</li> </ul>			
Surveillance Manager	<ul> <li>Ensure Surveillance Reports are actioned when received through Sky Sentinel</li> <li>Ensure approved processes are in place to follow-up and acquit Findings</li> <li>Exercise discretion on how to apply the regulatory decision-making considerations set down in this manual (see Section 2.5.1 – Key considerations for regulatory decision making)</li> <li>Enforcement Assign responsibility for peer review for objections to SF</li> <li>Assign responsibility for a new authorisation holder to a Surveillance Manager and team</li> <li>Participate in collaborative decision-making process for more complex requests for extensions for Safety Findings</li> <li>Assist Issuing Inspector in finalisation of a surveillance event to follow-up and acquit Findings.</li> </ul>			
Issuing Inspector	<ul> <li>Ensure Surveillance Reports are actioned within appropriate timeframes.</li> <li>Follow up and acquit Safety Findings, Safety Alerts and ASRs</li> <li>Notify the Surveillance Manager if no response is received in the case of a Safety Alert</li> <li>Ensure that the Safety Finding follow-up data is provided to the relevant action officer and is entered into Sky Sentinel</li> <li>Accept requests for an extension for Safety Findings and notify Surveillance Manager and controlling office</li> <li>Notify authorisation holder as to whether requests for extension are accepted or not accepted for Safety Findings</li> <li>Monitor milestones on Safety Finding extensions and report to surveillance team</li> </ul>			
Surveillance Team Members	<ul> <li>Consider conducting a follow-up control effectiveness review of any systems Risks that may have changed sufficiently to constitute a change in the mitigated systems Risk rating</li> <li>Assist Issuing Inspector in finalisation of a surveillance event to follow-up and acquit Findings</li> <li>Exercise discretion on how to apply the regulatory decision-making considerations set down in this manual (see Section 2.5.1 – Key considerations for regulatory decision making)</li> <li>Issuing Inspector Finding</li> </ul>			

Position	Accountabilities
Surveillance Team	<ul> <li>Collect relevant information to assist in assessment and record in Sky Sentinel</li> <li>Conduct a review of the new authorisation holder, including completing an AHPI assessment</li> </ul>
Surveillance Technical Officer	<ul> <li>Provide education to Surveillance teams on RMS, Power BI, Sky Sentinel</li> <li>Action auto-generated emails from Sky Sentinel in a timely manner</li> <li>Issue Surveillance Reports in a timely manner with proofing and editing completed.</li> <li>Add response correspondence to Sky Sentinel when received</li> <li>Assist with S32 requests</li> <li>Ensure Job Aids and Forms are up to date</li> <li>Monitor Sky Sentinel for Surveillance Reports/Events timing</li> <li>Monitor Sky Sentinel and issue applicable letters for SF</li> <li>Ensure status is correct on Safety Findings</li> <li>Provide Power BI on request</li> <li>Action requests that come through the surveillance mailbox</li> <li>Provide relevant forms and documentation on Events files</li> <li>Update EAP for ASR Alert (commence and Acquittal dates)</li> </ul>
Controlling office	<ul> <li>Record details of the new authorisation holder and responsible surveillance team in Sky Sentinel</li> <li>Evaluate and approve requests for extension for Safety Findings of a straightforward nature in consultation with the Issuing Inspector</li> <li>Refer requests for extension for Safety Findings to Manager, Litigation, Investigations and Enforcement for more complex requests, and participate in collaborative decision-making process</li> </ul>

## 5 Monitoring and Response Surveillance (MRS)

## 5.1.1 Intelligence Data Management (IDM)

Intelligence Data Management (IDM) refers to how CASA manages intelligence it becomes aware of. This intelligence is managed by the MRS team in accordance with this section.

## 5.1.2 Intelligence Data Sources

Intelligence Data is received by CASA via multiple sources. These sources include, but are not limited to:

- Authorisation holder assessments (including AHPIs)
- ATSB/CIRRIS Reports
- Authorisation Holder Safety Reports
- Internal CASA correspondence
- Investigation Reports (ATSB/NTSB/AAIB etc)
- Non-Significant changes
- Reliability Reports
- REPCONS
- Self-reported deficiencies
- Defect Reports processed through the CASA Defect Reporting System
- Unsafe Behaviour & Low Flying Aircraft Reports.

Due to the variations in data sources, all the intelligence is entered into a centrally managed spreadsheet, accessible by all Surveillance Managers, to ensure consistency in the management of reports and for the analysis of safety trends.

It is important that all intelligence received by CASA is reviewed by the MRS team to assess any impact on the current Scheduled Surveillance and Reg Services tasks or the operations of another division of CASA. Where it is determined the intelligence may impact another division the MRS team will email the relevant manager to ensure they are aware of the intelligence and any potential impact.

Once the intelligence is received the MRS team will determine if follow up action by the MRS team is required.

Deciding if a follow-up event is required is determined taking into account the following factors:

- AHPI assessment history
- any additional surveillance intelligence about the authorisation holder and their operation
- date of the last AHPI assessment
- enforcement history
- number of 'don't know' responses recorded in the previous AHPI
- outstanding Safety Findings and Findings history
- the severity of the occurrence being reported
- time since the last Level 1 or Level 2 surveillance event, particularly when compared to the recommended frequency specified in the NSSP manual.



Figure 19: Intelligence process

## 5.1.3 Process Intelligence Received

- 1. Intelligence reviewed by team.
- 2. Decide, no further action or follow-up.
- 3. No further action:
  - a. Up-date spreadsheet, check intelligence is in RMS if required.

Note: ATSB/CIRRIS data automatically populates AH Power BI report.

- 4. Follow-up:
  - a. Allocate lead
  - b. Review surveillance history
  - c. Review current Reg Services tasks
  - d. Make initial contact by phone call or sending a form 994 or 995 to the individual or organisation involved
  - e. Ensure a record of conversation (Form 1289) is completed at the conclusion of the phone call
  - f. Advise Reg Services if intelligence impacts current tasks
  - g. Advise Surveillance Office Manager if intelligence impacts current or upcoming surveillance event.
- 5. Review information received by phone call or form returned:
  - a. Decide no further action (NFA) or Level 2.
- 6. If no further action:
  - a. File record of conversation Form 1289 or forms 994 or 995 in RMS
  - b. Place comment for AH in formal comments section of Sky Sentinel stating NFA and include RMS file location for form or record of conversation.
- 7. If Level 2 recommended: Note if Level 2 is raised for ATSB report ALO needs to be notified:
  - a. Review surveillance history
  - b. Review Reg Services history including current tasks
  - c. Advise Reg Services if proposed action affects current tasks
  - d. Raise Level 2 for Authorisation Holder, only use below for MRS events:
    - ii. Level 2 Unscheduled Occurrence Desktop
    - iii. Level 2 Unscheduled Occurrence Site.
  - e. Scope event using form 1189
  - f. Consult with Surveillance Office Manager for resources and timing of event
  - g. Scheduled Surveillance conduct event
- 8. Review result of Level 2:
  - a. Decide no further action, another event, or Co-ordinated Enforcement.
- 9. In consultation with Surveillance Office Manager:
  - a. Propose another event
  - b. Recommend Co-ordinated Enforcement.

10. If Co-ordinated Enforcement recommended:

- a. Advise National Manager of recommendation
- b. Initiate Co-ordinated Enforcement
- c. Take other action as recommended.

## 6 Enforcement in Surveillance

## 6.1 Overview

### 6.1.1 Purpose

The purpose of this chapter is to describe CASA's approach and procedures to Enforcement procedures of aviation authorisation holders throughout Australia's aviation industry.

In accordance with the Regulatory Philosophy, CASA will not utilise its discretionary powers to vary or suspend a civil aviation authorisation for punitive or disciplinary purposes, but only for purposes reasonably calculated to achieve specified safety-related objectives, including the protection of persons and property pending the satisfactory demonstration by the person whose privileges have been, or are to be, varied or suspended, that the shortcomings or deficiencies giving rise to CASA's action have been effectively addressed.

Before enforcement is recommended, factors to be considered in section 3.7 of the Enforcement Manual must be considered.

## 6.2 Process

The diagram below provides a high-level view of the surveillance Enforcement process.



Figure 20: Surveillance Enforcement Process

## 6.2.1 Process - Entry into Enforcement

### Surveillance Manager

- 1. Review outcome of the event taking into consideration the CASA Regulatory Philosophy.
- 2. LIRA assistance required Surveillance Manager completes appropriate forms

- 3. Coordinated Enforcement Referral Non RPAS | V 1.1 | CASA-04-5575 | 08/2021, or
- 4. Coordinated Enforcement Referral RPAS | V 1.1 | CASA-04-5577 | 08/2021.
- 5. Email form to LIRA investigations@casa.gov.au and Monitoring and Response Surveillance Mailbox response.surveillance@casa.gov.au.
- 6. No assistance required.

- 7. No further action required close event, or
- 8. Further action required.
- 9. Further action required
- 10. Create brief using form 3836.
- 11. Email form to response.surveillance@casa.gov.au.

### Manager Monitoring and Response Surveillance

- 1. Triage intelligence.
- 2. Further LIRA assistance required email LIRA with updated form, or No further assistance required.
- 3. No further assistance required.
- 4. Conduct weekly meetings with National Surveillance Manager.

### National Surveillance Manager

- 1. Recommends further surveillance.
- 2. Recommends coordinated Enforcement.

### Manager Monitoring and Response Surveillance

- 1. Enforcement recommended.
- 2. Create brief for EM ROD.
- 3. Create summary for LIRA/Surveillance Managers.
- 4. Contact <u>Surveillance@casa.gov.au</u> with notification of decision.
- 5. Recommend further surveillance.
- 6. Contact local office/branch with decision for further surveillance.
- 7. Contact Surveillance with notification of decision.

### **Surveillance Technical Officers**

- 1. When Enforcement recommended.
- 2. Activate Enforcement flag in EAP and Sky Sentinel.
- 3. Create Coordinated Enforcement form and send to investigations@casa.gov.au.
- 4. Record information in RMS.

## 6.2.2 **Process Detail - Entry into Enforcement**

Entry into Enforcement is required where any of the following situations occur:

- the authorisation holder's response to the Safety Finding is unsatisfactory in circumstances where:
  - the authorisation holder is repeatedly unable or unwilling to provide an adequate response, despite reminders of their responsibilities, or
  - it is clear the authorisation holder is not frankly and openly addressing the deficiencies raised.

- there has been no response from the authorisation holder following the issue of a Safety Finding (see 4.7.10 No response received)
- the period of a request for extension is for a period greater than three (3) months and an Action Plan has been proposed by the authorisation holder (see 4.7.11 -- Request for extension).

The requirements of an agreed Action Plan have not been met:

- A class A ASR has been issued
- A Safety Alert has been issued
- A Safety Alert has not been responded to.

If an authorisation holder is subject to current Enforcement action, any Safety Finding relating to the activity that is the subject of that Enforcement action must not be acquitted unless LIRA branch has been advised prior to the Acquittal. Any such matters should be discussed with the National Manager Surveillance and Manager Litigation, Investigations and Enforcement.

In circumstances where a Safety Finding is associated with a Safety Alert and the authorisation holder has failed to respond, the National Manager Surveillance must be alerted, and entry into Enforcement initiated.

The Surveillance Manager of all authorisation holders oversighted by the Regulatory Oversight Division (ROD) will provide a brief to the Manager Monitoring and Response Surveillance (MRS) using Form 3836 in support of the Enforcement action. The MRS will initiate action to refer the matter to the CEP once clearance has been received to do so by the National Manager Surveillance.

The CEM provides a forum for better decision-making and for discussing alternative options for dealing with the issue (For any queries in relation to this process, contact the Manager, Litigation, Investigations and Enforcement).

### **Enforcement flag**

It is important that all CASA staff members involved in surveillance activities are aware of any current Enforcement action, and so the Enforcement flag must be activated when an authorisation holder is referred to the CEP. Knowledge of the current Enforcement status is important throughout all surveillance phases; however, it is particularly important when assessing a Safety Finding for Acquittal. The Enforcement flag is removed if the referral does not progress, following advice from LIRA Division, or if the Action Plan is accepted by the CEM and the request for extension is approved.

**Note**: If an authorisation holder is subject to current Enforcement action, any Safety Finding relating to the activity that is the subject of that Enforcement action must not be acquitted unless the matter has been discussed with LIRA prior to it being acquitted. Any such cases should be discussed with the Manager Litigation, Investigations and Enforcement. By the time that Enforcement action is commenced, the authorisation holder will most likely be outside the time provided by CASA for response to the Safety Finding.

In most cases, it is anticipated that an authorisation holder will continue to address the subject of the outstanding Safety Finding during the Enforcement process, as a measure of its willingness and ability to do so. However, where administrative action in the form of a Show Cause Notice has commenced, the timeframe for response to the matters raised in that notice (including outstanding Safety Findings) will be dictated by the timeframe set out in the Show Cause Notice for a response.

## 7 Information Capture and Access

## 7.1 Overview

### 7.1.1 Purpose

This chapter defines the management of information in relation to the capture and assessment of surveillance information. It also outlines the purpose of the information captured, request of analysis of information, and the release of information and associated protocols.

### 7.1.2 References

- Manuals/policies
  - Safety Information Gateway Quick Reference Guide
  - Information Security Manual
  - Information Management Procedures Manual
  - Protective Security Manual.

## 7.2 Safety analysis information support

The SSB supports all relevant divisions by providing safety analysis information to enhance decision-making through the identification of existing and emerging Risks.

SSB works within the Safety Analysis Framework to:

- assist in deciding what additional facts are needed
- ascertain factors underlying safety deficiencies
- assist in reaching valid conclusions.

## 7.2.1 Safety information

CASA's SAP Business Objects system (BO) and Power Business Intelligence (BI) enables access to important safety data, allowing centralised access to corporate information stored within the system.

BO provides EAP certificate information at the individual operator level with information for most authorisation holders.

Guidance material on accessing and using BO is available on CASA's Intranet at: <u>http://horace/our-systems/Pages/sap.aspx.</u>

Access to specific reports through BO can be gained by selecting a service portal request under SAP BO.

Power BI reports are available for Sky Sentinel data.

There are a number of options available for most reports both in SAP BO and Power BI, including the ability to download previously prepared reports, or customise search fields to access more specific information.

## 7.2.2 Ongoing information capture and sharing

Throughout all phases of the surveillance process and on an ongoing basis, Inspectors and staff should be mindful of the importance of capturing and recording full details of all interactions with authorisation holders, as well as providing the reasoning behind all decisions and assessments made during the process. All such recorded information must be Evidence based, factual and justifiable within the scope of an individual's responsibilities and logged as a General Comment in Sky Sentinel. Capturing and recording this information is important when reviewing previous events, or if the matter is referred to CEP.

Any information collected regarding aviation activities should be made available to the Surveillance Manager. The nature of the information will determine the method by which it is communicated (orally, e-mail etc.).

The Surveillance Manager will consider the following when determining what to do with that information:

- effect on aviation safety
- effect on the existing safety Risks associated with the authorisation holder
- relevant and applicable legal requirements
- who needs to be aware of the information?
- the most effective way of communicating the information.

## 7.2.3 Information quality control

Surveillance Managers must periodically review their information quality to ensure surveillance information is complete, consistent, valid, and correct/accurate. This includes the ongoing review of Safety Findings, systems Risk results and Surveillance Reports.

Surveillance Managers must ensure all information relevant to their assigned authorisation holders is entered into Sky Sentinel, including performing periodic reviews of work being undertaken by teams to ensure the highest information quality possible. The information contained in Sky Sentinel must not be altered to change or manipulate the surveillance work programs for the controlling offices. Any identified errors with data stored must be rectified by the information asset delegate. Contact Group Transformation Team for details of information delegates and custodians. Information in the surveillance tool is used extensively for Safety Performance Analysis and national surveillance prioritisation.

## 7.2.4 Information Elements

Each information Element can be checked using some or all of the following measures:

- **Completeness** all applicable fields contain the correct information. At this point, no assessment is made regarding the content of the field, only that the information has been entered
- **Consistency** records are checked for consistency with other information guidance, i.e. correct values are used for word pictures and in a consistent manner between Inspectoral team members
- **Validity** during information entry, appropriate and relevant peer-review processes have occurred ensuring consistency and standardisation

- **Correctness/Accuracy** Sky Sentinel fields may contain information that meets completeness, consistency and validity criteria, but can still be incorrect. Regular review of surveillance information by Surveillance Managers and team members is a key step in correcting obvious typing errors, as well as identifying missing or incorrect information.
- Answering the following questions may be helpful in ascertaining information quality:
  - Are the surveillance team members using the surveillance tool?
  - Are timely entries being made?

- Is the surveillance information complete, consistent, valid and accurate?
- Are all surveillance records current for new authorisation holders?
- Are all comments entered in a way that makes the intent readable, meaningful, useful, and understandable?

**Raytheon** Aircraft Company



## BEECHCRAFT SUPER KING AIR B200 & B200C

## Models B200 & B200C

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BB-1439, BB-1444 thru BB-1842, Except BB-1463 and BB-1834; BL-139 thru BL-147; BW-1 thru BW-29

P/N 101-590010-309F

Revision 3—October 2006

# **PILOT CHECKLIST**

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All airspeeds quoted in this section are indicated airspeeds (IAS) and assume zero instrument error.

Closed [BRACKETS] in this section denote annunciator(s).

Expanded procedures are noted by reference to a page number after the command.

## AIRSPEEDS FOR SAFE OPERATION (12,500 LBS)

Maximum Demonstrated Crosswind Component25	Knots
Takeoff (Flaps Up)	
Rotation95	Knots
50-ft Speed121	Knots
Takeoff (Flaps Approach)	
Rotation94	Knots
50-ft Speed106	Knots
Two-Engine Best Angle-of-Climb (V <sub>X</sub> )100	Knots
Two-Engine Best Rate-of-Climb (V <sub>Y</sub> )125	Knots
Cruise Climb:	
Sea Level to 10,000 feet160	Knots
10,000 to 20,000 feet140	Knots
20,000 to 25,000 feet130	Knots
25,000 to 35,000 feet120	Knots
Maximum Airspeed for Effective Windshield Anti-Icing226	Knots
Maneuvering Speed (V <sub>A</sub> )181	Knots
Turbulent Air Penetration170	Knots
Landing Approach:	
Flaps Down103	Knots
Balked Landing Climb100	Knots
Intentional One-Engine-Inoperative Speed (V <sub>SSE</sub> )104	Knots
Air Minimum Control Speed (V <sub>MCA</sub> )86	Knots

## **PROCEDURES BY FLIGHT PHASE**

## PREFLIGHT INSPECTION

### NOTE

After the first flight of each day, the Preflight Inspection may be omitted except for items marked with a "+". (Fuel tank Caps and Engine Oil Quantity/Filler Cap need not be checked unless system(s) were serviced.) External inspections with flaps down may be conducted at intervals deemed appropriate by the pilot.

### Cabin/Cockpit

	1.	Monogram Electric Toilet (if installed)KNIFE VALVE OPEN
+	2.	BaggageSECURE
	3.	Emergency ExitSECURE AND UNLOCKED
	4.	Control LocksREMOVE AND STOWED
	5.	Trim TabsSET TO "0" UNITS
	6.	Condition LeversFUEL CUTOFF
	7.	Landing Gear ControlDN
	8.	Parking BrakeSET
	9.	Ignition and Engine StartENSURE OFF
	10.	BatteryON, CHECK 23 VOLTS MINIMUM
	11.	Fuel Quantity (main and auxiliary)CHECK
	12.	ELT (cockpit installations)ARM [XMT] — EXTINGUISHED
	13.	Gear Down AnnunciatorsILLUMINATED
	14.	Flap Control (if desired)APPROACH, THEN DOWN (check indicator)
	15.	Airstair Door (B200) Circuitry (N-19)CHECK
	16.	Airstair Door (B200C) Circuitry (N-19)CHECK
	17.	Oxygen System Preflight Inspection (N-20)COMPLETE
+ ′	18.	BatteryOFF

#### Left Wing and Nacelle

	1.	Cabin Door Seal, Step Extension Cable, Light Wire, Damper, and Handrails	CHECK
	2.	Cabin Windows	CHECK
ł	3.	Auxiliary Fuel Tank Cap	.SECURE
	4.	Flaps (condition, asymmetry protection, and flap tracks)	CHECK
	5.	Oil Breather Vent	CLEAR
⊦	6.	Brake Lines, Brake Wear, Brake Deice Lines (if installed)	CHECK

Continued On Next Page.

7. Fire Extinguisher (if installed) .....CHECK PRESSURE

### FIRE EXTINGUISHER PRESSURE VS. TEMPERATURE

°F	-40	-20	0	20	40	60	80	100	120
°C	-40	-29	-18	-7	4	16	27	38	49
PSI	190	220	250	290	340	390	455	525	605
Range	to								
	240	275	315	365	420	480	550	635	730

8.	Inverter Cooling Louver	CLEAR
9.	Aileron and Tab	CHECK
10.	Flush Outboard Wing Fuel Tank Sump	DRAIN
11.	Static Wicks (4)	CHECK
12.	Navigation, Recognition, & Strobe Lights	CHECK
+13.	Main Fuel Tank Cap	SECURE
14.	Stall Warning Vane	CHECK
+15.	Tiedown	REMOVED
16.	Outboard Deice Boot and Stall Strip	CHECKED
17.	Ice Light	CHECK
18.	Heated Fuel Vent	CLEAR
19.	Ram Scoop Fuel Vent	CLEAR
20.	Gravity Line Drain	DRAIN
21.	Inverter Cooling Louvers	CLEAR
22.	Wing Leading Edge Tank Sump	DRAIN
+23.	Landing Gear (doors, wheel well, strut, tires)	CHECK
+24.	Chock	REMOVE
25.	Fuel Filter and Fuel Strainer Drains	DRAIN
+26.	Engine OilCHECK QUANTITY, CAI	P SECURE
27.		
	Engine Compartment Door (outbd)SECURE, BLE	ED VALVE ST CLEAR
28.	Exhaust Stack (outbd)CHECK FOR	ED VALVE ST CLEAR R CRACKS
28. 29.	Engine Compartment Door (outbd)SECURE, BLE EXHAU Exhaust Stack (outbd)CHECK FOF Top Cowling Locks (outbd)	ED VALVE ST CLEAR R CRACKS SECURE
28. 29. 30.	Engine Compartment Door (outbo)SECURE, BLE EXHAU Exhaust Stack (outbd)CHECK FOF Top Cowling Locks (outbd) Nacelle Cooling Ram Air Inlets	ED VALVE ST CLEAR R CRACKS SECURE CLEAR
28. 29. 30. +31.	Engine Compartment Door (outbd)SECURE, BLE EXHAU Exhaust Stack (outbd)CHECK FOF Top Cowling Locks (outbd) Nacelle Cooling Ram Air Inlets PropCHECK FOR NICKS, DEICE BOO	ED VALVE ST CLEAR R CRACKS SECURE CLEAR T SECURE
28. 29. 30. +31. 32.	Engine Compartment Door (outbo)SECURE, BLE EXHAU Exhaust Stack (outbd)CHECK FOR Top Cowling Locks (outbd) Nacelle Cooling Ram Air Inlets PropCHECK FOR NICKS, DEICE BOOT Engine Intake	ED VALVE ST CLEAR R CRACKS SECURE CLEAR T SECURE CLEAR
28. 29. 30. +31. 32. 33.	Engine Compartment Door (outbo)SECURE, BLE EXHAU Exhaust Stack (outbd)CHECK FOF Top Cowling Locks (outbd) Nacelle Cooling Ram Air Inlets PropCHECK FOR NICKS, DEICE BOO Engine Intake Top Cowling Locks (inbd)	ED VALVE ST CLEAR R CRACKS SECURE CLEAR T SECURE CLEAR CLEAR
28. 29. 30. +31. 32. 33. 34.	Engine Compartment Door (outbo)SECURE, BLE EXHAU Exhaust Stack (outbd)CHECK FOR Top Cowling Locks (outbd) Nacelle Cooling Ram Air Inlets PropCHECK FOR NICKS, DEICE BOO Engine Intake Top Cowling Locks (inbd)CHECK FOR Exhaust Stack (inbd)CHECK FOR	ED VALVE ST CLEAR R CRACKS SECURE T SECURE CLEAR SECURE R CRACKS
28. 29. 30. +31. 32. 33. 34. 35.	Engine Compartment Door (outbo)SECURE, BLE EXHAU Exhaust Stack (outbd)CHECK FOR Top Cowling Locks (outbd) Nacelle Cooling Ram Air Inlets PropCHECK FOR NICKS, DEICE BOO Engine Intake Top Cowling Locks (inbd) Exhaust Stack (inbd)CHECK FOR Generator Cooling Inlet	ED VALVE ST CLEAR CRACKS SECURE CLEAR CLEAR SECURE R CRACKS CLEAR
28. 29. 30. +31. 32. 33. 34. 35. 36.	Engine Compartment Door (outbo)SECURE, BLE EXHAU Exhaust Stack (outbd)CHECK FOR Top Cowling Locks (outbd) Nacelle Cooling Ram Air Inlets PropCHECK FOR NICKS, DEICE BOO Engine Intake Top Cowling Locks (inbd) Exhaust Stack (inbd)CHECK FOR Generator Cooling Inlet Engine Compartment Door (inbd)SECURE, BLE EXHAU	ED VALVE ST CLEAR R CRACKS SECURE T SECURE CLEAR SECURE R CRACKS CLEAR ED VALVE ST CLEAR

Continued On Next Page.

38.	Hydraulic Landing Gear Service Door	SECURE
39.	Inboard Deice Boot	CHECK
40.	Heat Exchanger Outlet	CLEAR
41.	Hydraulic Landing Gear Vent Lines	CLEAR
42.	Auxiliary Fuel Tank Sump	DRAIN
43.	Lower Antennas and Beacon	CHECK
Nose	•	
1.	OAT Probe/Relief Tube Vent	CHECK
2.	Brake Reservoir Vent	CLEAR
3.	Left Avionics Access Panel	SECURE
4.	Air Conditioning Condenser Exhaust Duct	CLEAR
5.	Windshield and Wipers	CHECK
6.	Radome	CHECK
7.	Pitot Masts	CLEAR
8.	Landing and Taxi Lights	CHECK
+ 9.	Nose Gear (shimmy damper, stop block, torque knee, strut, tire)	CHECK
+10.	Chocks	REMOVE
11.	Nose Gear Doors and Wheel Well	CHECK
12.	Air Conditioner Condenser Intake Duct	CLEAR
13.	Right Avionics Access Panel	SECURE
Right	t Wing and Nacelle	
1.	Ejector Exhaust	CLEAR
2.	Auxiliary Fuel Tank Sump	DRAIN
3.	Battery Drain	CLEAR
4.	Battery Air Inlet (Airplanes Prior to BB-1632, BL-141, and BW-30)CLEAR.	VALVE FREE
5.	Heat Exchanger Outlet	CLEAR
6.	Inboard Deice Boot	CHECK
7.	Battery Exhaust (Airplanes Prior to BB-1632, BL-141, and BW-30)	CLEAR
8.	Heat Exchanger Inlet	CLEAR
+ 9.	Engine OilCHECK QUANTITY. (	CAP SECURE
10.	Engine Compartment Door (inbd)	SECURE.
	BLEED VALVE EXH	AUST CLEAR
11.	Exhaust Stack (inbd)CHECK F	OR CRACKS
12.	Top Cowling Locks (inbd)	SECURE
13.	Nacelle Cooling Ram Air Inlets	CLEAR
+14.	PropCHECK FOR NICKS, DEICE BO	DOT SECURE
15.	Engine Intake	CLEAR
	Continued On Next Page.	

	16.	Top Cowling Locks (outbd)	SECURE
	17.	Exhaust Stack (outbd)CHECK F	OR CRACKS
	18.	Generator Cooling Inlet	CLEAR
	19.	Engine Compartment Door (outbd) BLEED VALVE EXH	SECURE, AUST CLEAR
2	20.	Fuel Filter and Fuel Strainer Drains	DRAIN
+2	21.	Landing Gear (doors, strut, tires, wheel well)	CHECK
2	22.	Fire Extinguisher (if installed)CHECH	<pre>&lt; PRESSURE</pre>
+2	23.	Chock	REMOVE
2	24.	Heated Fuel Vent	CLEAR
2	25.	Ram Scoop Fuel Vent	CLEAR
2	26.	Gravity Line Drain	DRAIN
2	27.	Inverter Cooling Louvers	CLEAR
2	28.	Wing Leading Edge Tank Sump	DRAIN
+2	29.	External Power Door	CLOSED
;	30.	Ice Light	CHECK
;	31.	Outboard Deice Boot and Stall Strip	CHECK
+;	32.	Tiedown	REMOVE
;	33.	Flush Outboard Wing Fuel Tank Sump	DRAIN
+:	34.	Main Fuel Tank Cap	SECURE
;	35.	Navigation, Recognition, and Strobe Lights	CHECK
;	36.	Static Wicks (4)	CHECK
;	37.	Aileron and Bendable Tab	CHECK
	38.	Flaps (condition, asymmetry protection, flap tracks, limit switches, and position transmitter)	CHECK
;	39.	Inverter Cooling Louver	CLEAR
+4	40.	Brake Lines, Brake Wear, Brake Deice Lines (if installe	ed)CHECK
4	41.	Oil Breather Vent	CLEAR
+4	42.	Auxiliary Fuel Tank Cap	SECURE
4	43.	Cabin Windows	CHECK
Ri	ight	t Aft Fuselage	
	1.	Lower Antennas	CHECK
	2.	Ventral Fin Drain Holes	CLEAR
	3.	Lower Aft Cabin Access Door	SECURE
+	4.	Tiedown	REMOVED
	5.	Oxygen Service Access Door	SECURE
	6.	Static Ports	CLEAR
	7.	ELT (aft fuselage installations)	ARMED
	8.	Cabin Air Exhaust	CLEAR
	9.	Access Panel	SECURE

Continued On Next Page.

### Tail

1.	Ventral Fin and Static Wick (1)	CHECK
2.	VOR Antennas (right and left)	CHECK
3.	Rudder, Rudder Tab, Stinger and Static Wicks (4)	CHECK
4.	Horizontal Stabilizer, Boots and Static Wicks (right and left)	CHECK
5.	Elevator, Tab, and Static Wicks (3 each side)	CHECK
6.	Position Light, Tail Floodlights (if installed) (left and right)	CHECK
Left /	Aft Fuselage	
1.	Access Panel	SECURE
2.	Static Ports	CLEAR
3.	Oxygen Overpressure Discharge and Aft Compartment Drain Tubes	CLEAR
4.	Relief Tube	CLEAR

## **BEFORE ENGINE STARTING**

### NOTE

Items marked with an "\*" may be omitted at pilot's discretion after the first flight of each day.

### WARNING

Only a crew member or properly trained ground personnel should close and lock the airstair door and cargo door (if installed).

1	. Airstair Door (B200) (N-22)LOCKED
2	. Cargo Door (B200C) (N-22)LOCKED
3	. Airstair Door (B200C) (N-22)LOCKED
4	. Monogram Electric Toilet (if installed)KNIFE VALVE CONFIRM OPEN
5	. Load and BaggageCONFIRM SECURE
6	. Weight and C.GCHECKED
7	. Seats and TablesPOSITIONED
	a. All Seats - Seatbacks Upright; Headrests fully extended
	b. Lateral-tracking Seats - Outboard position
	c. Tables - Stowed
8	. Emergency ExitCONFIRM SECURE AND UNLOCKED
9	. Passenger BriefingCOMPLETE
	Continued On Next Page.

\*

## **BEFORE ENGINE STARTING (Cont)**

10.	Со	ntrol Locks	CONFIRM REMOVED
11.	Se	ats and Rudder Pedals	ADJUSTED
12.	Se	atbelts and Shoulder Harness	sesFASTENED
* 13.	Ox	ygen System Preflight Inspect	tion (N-20)CONFIRM COMPLETE
14.	Fu	el Panel Circuit Breakers	IN
15.	Pil	ot's Instrument Panel	CHECK
	a.	Compass Control	SLAVED (Mode Switch Out)
	b.	EFIS Aux Power	CHECK
		1) Test Switch	HOLD TO TEST FOR A MAXIMUM. OF 5 SECONDS
		2) Test Switch	RELEASE TO OFF
	c.	Prop Sync Switch	ON
* 16.	Pil	ot's Clock (control wheel)	CHECK AND SET
17.	Pil	ot's Subpanel	CHECK
	a.	Mic Selector Switch	NORMAL
	b.	Parking Brake	CONFIRM SET
	c.	Engine Anti-Ice Switches	ON
	d.	Pilot Air Control	AS REQUIRED
	e.	Defrost Air Control	AS REQUIRED
	f.	Landing Gear Control	DN
	g.	Landing Gear Relay Circuit	BreakerIN
	h.	All Other Switches	OFF
18.	Av	ionics Panel Switches	AS REQUIRED
	•	Radar	OFF OR STANDBY
19.	Po	wer Console	CHECK
	a.	Power Levers	IDLE, FRICTION SET
	b.	Prop Levers	FULL FORWARD, FRICTION SET
	c.	Condition Levers	FUEL CUTOFF, FRICTION SET
	d.	Elevator, Aileron, and Rudde	er Trim ControlsSET
	e.	Oxygen System Ready	CONFIRM ON
	* f.	Flashlight	CHECK
	g.	Landing Gear Alternate Exte	ension HandleSTOWED
20.	Pe	destal	CHECK
	a.	EFIS Power Switches	OFF
	b.	EFIS Reversionary Switches	sNORMAL
	C.	Cabin Pressure Switch	PRESS
	d.	Rudder Boost Switch	ON
	e.	Elevator Trim Switch	ON
	f.	Pressurization Controller	SET

Continued On Next Page.

## BEFORE ENGINE STARTING (Cont)

21.	Copilot's Instrument Panel	CHECK
	Compass Control	SLAVED (Mode Switch Out)
* 22.	Copilot's Clock (control wheel)	CHECK AND SET
23.	Copilot's Subpanel	CHECK
	a. Cabin Sign	NO SMOKE & FSB
	b. Vent Blower Switch	AUTO
	c. Bleed Air Valve Switches	ENVIR OFF
	d. Cabin Temp Mode Control	OFF
	e. Cabin/Cockpit Air Control	AS REQUIRED
	f. Copilot Air Control	AS REQUIRED
	g. Mic Selector Switch	NORMAL
	h. Oxygen Pressure	CONFIRM
	i. All Other Switches	OFF
24.	Copilot's Circuit Breaker Panel	CHECK
* 25.	Pilot's Static Air Source	NORMAL
* 26.	Fire Extinguisher (under copilot's o	chair)CHECK
27.	Battery	ON OFF for FUEL SYSTEM CHECK)
* 28	Fuel System (N-23)	CHECK
29	Fuel Quantity (main and auxiliary)	CHECK
* 30	Landing Gear Handle Lights	PRESS TO TEST
* 31	Hydraulic Eluid Sensor	TEST
01.	[H	IYD FLUID LOW] - ILLUMINATED
32.	Beacon	ON
33.	DC Volt/Loadmeters	PRESS TO CHECK VOLTAGE (23 volts minimum)
* 34.	Annunciators	TEST
* 35.	Stall Warning	TEST
* 36.	Fire Detectors and Fire Extinguish	ers (if installed)TEST

## ENGINE STARTING (BATTERY)

1.	Right Ignition and Engine StartON
	[R IGNITION ON] - ILLUMINATED
	[R FUEL PRESS] - EXTINGUISHED
2.	Right Condition Lever (12% $N_1$ or above)LOW IDLE
3.	Right ITT and $N_1$ MONITOR (1000°C maximum)
4.	Right Oil PressureCHECK
5.	Right Ignition and Engine Start (50% $N_1 \mbox{ or above})$ OFF
6.	Right Condition LeverHIGH IDLE
	Continued On Next Page.

## ENGINE STARTING (BATTERY) (Cont)

7.	Right GeneratorRESET, THEN ON
8.	BatteryCHARGE (until loadmeter reads approximately 50% or less.)
9.	Left Ignition and Engine StartON [L IGNITION ON] - ILLUMINATED [L FUEL PRESS] - EXTINGUISHED
10.	Left Condition Lever (12% N1 or above)LOW IDLE
11.	Left ITT and N <sub>1</sub> MONITOR (1000°C maximum)
12.	Left Oil PressureCHECK
13.	Left Ignition and Engine Start (50% N1 or above)OFF
14.	D.C. Volt/LoadmetersPRESS TO CHECK VOLTAGE (27.5-29.0 volts)
15.	Left GeneratorRESET, THEN ON
16.	Right Condition LeverREDUCE TO LOW IDLE

## ENGINE STARTING (EXTERNAL POWER)

Expanded Procedure on Page N-23.

## HOT START OR HUNG START

If rate of ITT increase predicts an over-temperature occurrence, or if  $N_1$  ceases to accelerate in a normal manner:

- 1. Condition Lever.....FUEL CUTOFF
- 2. Ignition and Engine Start......STARTER ONLY (for remainder of starter time limit)
- 3. Ignition and Engine Start .....OFF
- 4. Do not attempt another start until the cause of the hot start or hung start has been corrected.

## NO LIGHT START

If no ITT rise is observed within 10 seconds after moving the Condition Lever to LOW IDLE:

- 1. Condition Lever.....FUEL CUTOFF
- 2. Ignition and Engine Start .....OFF
- 3. Follow ENGINE CLEARING procedure.

## ENGINE CLEARING

Use the following procedure to remove internally trapped fuel and vapor, or if there is evidence of a fire within the engine.

1.	Condition Lever	CONFIRM FUEL CUTOFF
2.	Starter	COOL FOR 1 MINUTE AFTER PREVIOUS START ATTEMPT
3.	Ignition and Engine Start	STARTER ONLY (for a maximum of 40 seconds)
4.	Ignition and Engine Start	OFF
5.	Starter	COOL FOR 1 MINUTE BEFORE ATTEMPTING ANOTHER START

## **BEFORE TAXI**

### NOTE

Items marked with an "\*" may be omitted at pilot's discretion after the first flight of the day.

1.	Inverters
	(VOIIS/FIEq = 105-120  V/360-420  Hz)
	a. Either InverterSELECT Check Volts, Freq, [INVERTER] - EXTINGUISHED
	b. Other InverterSELECT Check Volts, Freq, [INVERTER] - EXTINGUISHED
2.	InverterSELECT NO.1 OR NO. 2
3.	LoadmetersPARALLEL WITHIN 10%
4.	Avionics MasterON
5.	EFIS PowerON
6.	EFIS Aux PowerON
7.	External LightsAS REQUIRED
8.	Cabin LightsAS REQUIRED
9.	FurnishingsAS REQUIRED
10.	Cabin SignNO SMK & FSB
11.	Environmental System Controls (N-24)SET
12.	InstrumentsCHECK
13.	Brake Deice (if installed) (N-25)CHECK
14.	FlapsCHECK AND SET
15.	Flight ControlsCHECK FOR FULL FREEDOM OF MOVEMENT AND PROPER DIRECTION OF TRAVEL
16.	BrakesRELEASE & CHECK

\*

## **BEFORE TAKEOFF (RUNUP)**

### NOTE

Items marked with an "\*" may be omitted at pilot's discretion after the first flight of the day.

1.	Avionics and Radar	CHECK
2.	EFIS	TEST
3.	Pressurization (N-25)	CHECK AND SET
4.	Flight Director (if installed) (N-26)	CHECK
5.	Autopilot (if installed) (N-26)	CHECK
6.	Yaw Damp (N-27)	CHECK
7.	Electric Elevator Trim (N-27)	CHECK
8.	Trim Tabs	CONFIRM SET
* 9.	Primary Governors, Overspeed Governors and Rudder Boost (N-28)	CHECK
* 10.	Autofeather (if installed) (N-28)	CHECK
11.	Autofeather (if installed)	ARM
12.	Manual Prop Feathering	CHECK
* 13.	Vacuum and Pneumatic Pressure (N-28)	CHECK
* 14.	Engine Anti-Ice (N-29)	CHECK
15.	Ice Protection Equipment (if required) (N-29)	CHECK
16.	Fuel Quantity, Flight and Engine Instruments	CHECK
17.	V <sub>R</sub> , V <sub>2</sub> , and Minimum Take-off Power	CONFIRM

### **TAKE-OFF SPEEDS (KIAS)**

FLAPS →	UP		APPROACH	
WEIGHT (LBS)	V <sub>1</sub> /V <sub>R</sub>	V <sub>2</sub> /V <sub>50</sub>	V <sub>1</sub> /V <sub>R</sub>	V <sub>2</sub> /V <sub>50</sub>
12,500	95	121	94	106
12,000	95	119	94	105
11,000	95	115	94	103
10,000	95	111	94	101
9,000	95	108	94	99

## **BEFORE TAKEOFF (FINAL ITEMS)**

- 1. Auto Ignition (if required) .....ARM [LIGNITION ON] ILLUMINATED, if ARMED
- Engine Anti-Ice.....AS REQUIRED [L ENG ANTI-ICE] & [R ENG ANTI-ICE] - ILLUMINATED if ON
   Autofoothor (if installed)
- 3. Autofeather (if installed) .....CONFIRM ARMED

Continued On Next Page.

## **BEFORE TAKEOFF (FINAL ITEMS) (Cont)**

4.	Exterior LightsAS REQUIRED
5.	Ice ProtectionAS REQUIRED
	a. Windshield Anti-Ice (if required)NORMAL/HI
	b. Prop Deice (if required)AUTO
	c. Left and Right Fuel Vent HeatON
	d. Brake Deice (if installed)OFF
	e. Stall Warning HeatON
	f. Left and Right Pitot HeatON
6.	TransponderALT
7.	Prop LeversCONFIRM FULL FORWARD
8.	TrimCONFIRM SET
9.	FlapsCONFIRM SET
10.	Interior LightsAS REQUIRED
11.	Bleed Air ValvesOPEN
12.	Electric Heat (if installed)OFF [ELEC HEAT ON] - EXTINGUISHED
13.	Aft Blower (if installed)AS REQUIRED
14.	Generator LoadCHECK
15.	Battery Ammeter (Airplanes BB-1632 thru BB-1842, except BB-1834, BL-141 thru BL-147CHECK (Charge current 10 amps or less if required)
16.	AnnunciatorsEXTINGUISHED OR CONSIDERED

## TAKEOFF

### WARNING

Do not cycle boots during takeoff.

1.	BrakesHOLD
2.	PowerSET (Ensure minimum take-off power is available)
3.	[L AUTOFEATHER] & [R AUTOFEATHER] (if installed)ILLUMINATED
4.	BrakesRELEASED
5.	Landing Gear (when positive climb established)UP
6.	Flaps (at 121 knots minimum)UP

### CLIMB

1.	Yaw Damp	ON
2.	Climb Power	SET
3.	Props	1900 RPM
4.	Windshield Anti-Ice	NORMAL
5.	Engine Instruments	MONITOR
6	Cabin Sign	AS REQUIRED
7.	Pressurization	CHECK
	<ul> <li>Set cruise altitude + 1000 feet</li> </ul>	
8.	Aft Blower (if installed)	AS REQUIRED
9.	Lights	AS REQUIRED

## CRUISE

### WARNING

Do not lift power levers in flight.

1.	Cruise PowerSET per CRUISE POWER TABLES or GRAPHS	
2.	Autofeather (if installed)OFF	
3.	Engine InstrumentsMONITOR	
4.	Auxiliary Fuel GagesMONITOR (Ensure fuel is being transferred from the auxiliary tanks.)	
5.	Pressurization	

#### **Icing Conditions**

### WARNING

Due to distortion of the wing airfoil, ice accumulation on the leading edges can cause a significant loss in rate of climb and in speed performance, as well as increases in stall speed. Even after cycling deicing boots, the ice accumulation remaining on the boots and unprotected areas of the airplane can cause large performance losses. For the same reason, the aural stall warning system may not be accurate and should not be relied upon. Maintain a comfortable margin of airspeed above the normal stall airspeed. In order to minimize ice accumulation on unprotected surfaces of the wing, maintain a minimum of 140 knots during operations in sustained icing conditions. In the event of windshield icing, reduce airspeed to 226 knots or below. Prior to a landing approach, cycle the deicing boots to shed any accumulated ice.

Continued On Next Page.

## CRUISE (Cont)

#### 1. Engine Ice Protection

When visible moisture is encountered at +5°C and below, or;

At night when freedom from visible moisture is not assured at +5°C and below (Operation of strobe lights will sometimes show ice crystals not normally visible).

- a. Engine Anti-Ice.....ON [L ENG ANTI-ICE] & [R ENG ANTI-ICE] - ILLUMINATED
- b. Check for proper operation by noting a drop in torque.



If in doubt, actuate the Engine Anti-Ice System. Engine icing can occur even though no surface icing is present. If freedom from visible moisture can not be assured, engine ice protection should be activated. Visible moisture is moisture of any form; clouds, ice crystals, snow, rain, sleet, hail or any combination of these. Operation of strobe lights will sometimes show ice crystals not normally visible.

- 2. Auto Ignition ......ARM
- 3. Prop Deice ......AUTO
  - a. The system may be operated continuously in flight, and will function automatically until the switch is turned off.
  - b. Relieve propeller imbalance due to ice by increasing rpm briefly and returning to the desired setting. Repeat as necessary.
- 4. Surface Deice



All components of the surface deice system must be monitored during icing flight to ensure the system is functioning normally. These components include:

Pneumatic Pressure Gage. The gage should indicate 12.0 – 20.0 psi before boots are activated. The pressure will momentarily decrease when the boots are activated.

Gyro Suction Gage. The gage should indicate in the area of the green arc corresponding to the airplane altitude. The vacuum will momentarily decrease when the boots are activated.

Pneumatic Boots. Visually monitor the boots, where possible, to ensure ice is being removed.

When Ice Accumulates 1/2 to 1 inch:

- a. Surface Deice Switch .....SINGLE AND RELEASE
- b. Repeat as required.

If Single Position of the Surface Deice Switch Fails:

- c. Surface Deice Switch ......MANUAL AND HOLD FOR A MINIMUM OF 6 SECONDS, THEN RELEASE
- d. Repeat as required.

Continued On Next Page.

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## **CRUISE (Cont)**

5.	Windshield Anti-Ice	NORMAL/HIGH
6.	Left and Right Fuel Vent Heat	CONFIRM ON
7.	Left and Right Pitot Heat	CONFIRM ON
8.	Stall Warning Heat	CONFIRM ON
9.	Ice Lights	AS REQUIRED
10.	Alternate Static Air Source (if required)	SEE ABNORMAL PROCEDURES

## DESCENT

1.	. Pressurization		SET	
	a.	Cabin Altitude	.SET	PER TABLE

b. Rate Control.....AS DESIRED

#### CABIN ALTITUDE SETTING FOR LANDING Closest Add to Airport Closest Add to Airport Altimeter Elevation Altimeter Elevation Setting (Cont) (Cont) Setting 28.00 +2400 29.50 +900 28.10 +2300 29.60 +800 28.20 29.70 +2200 +700 28.30 +2100 29.80 +600 28.40 +2000 29.90 +500+1900 +400 30.00 28.50 28.60 +1800 30.10 +300 30.20 28.70 +1700 +200 28.80 +1600 30.30 +100 28.90 +1500 30.40 0 -100 29.00 +1400 30.50 29.10 +1300 30.60 -200 29.20 +1200 30.70 -300 29.30 +1100 -400 30.80 29.40 +1000 30.90 -500

2.	Altimeter	SET
3.	Cabin Sign	AS REQUIRED
4.	Windshield Anti-Ice	AS REQUIRED
5.	Windshield Defrost	AS REQUIRED
6.	Fuel Balance	CHECK
7.	Power	AS REQUIRED
8.	Seats and Tables	POSITIONED
	a. All Seats - Seatbacks Upright; Headrests fu	ully extended

b. Lateral-tracking Seats - Outboard position

c. Tables - Stowed
### BEFORE LANDING

1. Approach Speed .....CONFIRM

### NORMAL LANDING APPROACH SPEED

LANDING WEIGHT LBS	KNOTS
12,500	103
12,000	102
11,000	99
10,000	96
9,000	93
2. Autofeather (if installed)	ARM

3.	Pressurization	CHECK
4.	Cabin Sign	NO SMOKE & FSB
5.	Flaps	APPROACH
6.	Landing Gear	DN
7.	Lights	AS REQUIRED
8.	Radar	AS REQUIRED
9.	Surface Deice	.CYCLE AS REQUIRED
If res	idual ice remains on wing boots:	
10.	Approach Speed and Landing Distance	INCREASE

### NORMAL LANDING

1.	Flaps	DOWN
2.	AirspeedNORM	IAL LANDING APPROACH SPEED (increase with residual ice)
3.	Yaw Damp	OFF
4.	Power Levers	IDLE
5.	Prop Levers	FULL FORWARD
After	Touchdown:	
6.	Power Levers	LIFT AND SELECT GROUND FINE
7.	Brakes	AS REQUIRED

### MAXIMUM REVERSE THRUST LANDING

1.	Flaps	DOWN
2.	AirspeedNORMAL LAI	NDING APPROACH SPEED (increase with residual ice)
3.	Yaw Damp	OFF
4.	Power Levers	IDLE
5.	Prop Levers	FULL FORWARD
After	Touchdown:	
6.	Power LeversLIFT	THROUGH GROUND FINE AND LIFT TO REVERSE
7.	Brakes	AS REQUIRED
8.	Condition Levers	LOW IDLE

### BALKED LANDING

1.	Power	MAXIMUM ALLOWABLE
2.	Airspeed	
3.	Flaps (when clear of obstacles)	UP
4.	Landing Gear (with a positive rate-of-	climb)UP
5.	Airspeed	ESTABLISH NORMAL CLIMB

### AFTER LANDING

1.	Auto Ignition	OFF
2.	Engine Anti-Ice	ON
3.	Lights	AS REQUIRED
4.	Ice Protection	OFF
5.	Transponder	STANDBY
6.	Radar	STANDBY or OFF
7.	Trim Tabs	SET
8.	Flaps	UP
9.	Pressurization Differential	VERIFY 0
10.	Bleed Air Valves	ENVIR OFF

### SHUTDOWN AND SECURING

1.	Parking Brake	SET
2.	Electric Heat (if installed)	OFF
3.	Standby Boost Pumps and Crossfeed	OFF
4.	EFIS Power	OFF
5.	EFIS Aux Power	OFF
6.	Avionics Master	OFF
7.	Inverter	OFF
8.	Autofeather (if installed)	OFF
9.	Lights	OFF
10.	Oxygen System Ready	PUSH OFF
11.	Vent Blower	AUTO
12.	Cabin Temp Mode	OFF
13.	Aft Blower (if installed)	OFF
14.	Battery	CHARGED
15.	ITTSTABILIZED AT MINIMU TEMPERATURE FO	JM OBTAINABLE DR ONE MINUTE
16.	Condition Levers	FUEL CUTOFF
17.	Prop Levers	FEATHER
18.	DC Volt/LoadmetersC	HECK VOLTAGE
	(No voltage indicates curi	rent limiter is out.)
19.	Overhead Panel Switches	OFF
20.	Battery and Generator Switches (below 15% $N_{1})$	OFF
21.	Control Locks	INSTALL
22.	Emergency Exit	LOCKED
23.	Monogram Electric Toilet (if installed)SERVIC	E AS REQUIRED
24.	Tiedowns and Chocks	AS REQUIRED
25.	External Covers	AS REQUIRED
26.	Prop Locks	AS REQUIRED
27.	Oil QuantityCHEC	CK IF REQUIRED
28.	Parking Brake	OFF
29.	Baggage Compartment Light	OFF

# **EXPANDED PROCEDURES**

### NOTE

Items marked with an "\*" may be omitted at pilot's discretion after the first flight of the day.

### \*AIRSTAIR DOOR CIRCUITRY CHECK (B200)

Perform Annunciator Circuitry Check With Battery ON:

- 1. Airstair Door Closed and Locked. [DOOR UNLOCKED].....EXTINGUISHED
- 2. Airstair Door Closed and Latched, but Not Locked. [DOOR UNLOCKED] ......ILLUMINATED
- 3. Airstair Door Open and Mechanism in Locked Position. [DOOR UNLOCKED] .....ILLUMINATED

### **RETURN TO PAGE N-2, STEP 16**

### \*AIRSTAIR DOOR CIRCUITRY CHECK (B200C)

Perform Annunciator Circuitry Check With Battery Initially ON:

1.	Cargo Door	CONFIRM CLOSED AND LOCKED
2.	Airstair Door Open. [DOOR UNLOCKED]	ILLUMINATED
3.	Airstair Door Closed and Locke [DOOR UNLOCKED]	d. EXTINGUISHED
4.	Battery	OFF
5.	Airstair Door Closed, but Not Lo [DOOR UNLOCKED]	ocked. ILLUMINATED
6.	Airstair Door Open. [DOOR UNLOCKED]	EXTINGUISHED
7.	Battery	ON

**RETURN TO PAGE N-2, STEP 17** 

### **\*OXYGEN SYSTEM PREFLIGHT INSPECTION**

- 1. Passenger Manual Drop-Out.....PUSH OFF
- 2. System Ready .....PULL ON
- 3. Oxygen Masks (Pilot & Copilot) .....CHECK
  - a. Select EMER Position .....CHECK CONTINUOUS FLOW
    - b. Set 100%



Beards and mustaches should be carefully trimmed so that they will not interfere with the proper sealing of an oxygen mask. The fit of the oxygen mask around the beard or mustache should be checked on the ground for proper sealing. Studies conducted by the military and the FAA conclude that oxygen masks do not seal over beards and mustaches. Hats and "earmuff" type headsets must be removed prior to donning crew oxygen masks. Headsets and eyeglasses worn by crew members may interfere with quick-donning capabilities.

4. Oxygen Duration .....DETERMINE (SEE NEXT PROCEDURE)

### **\*OXYGEN DURATION**

### NOTE

A bottle of 1850 psig at 15°C is fully charged (100% capacity). Read duration directly from the table.

- 1. Read the oxygen pressure from the gage.
- 2. Read the IOAT (with battery ON). (Assume IOAT to be equal to BOTTLE TEMPERATURE.)
- Determine the percent of usable capacity from the following graph (e.g., 1100 psi at 0°C = 57%).
- 4. Compute the oxygen duration in minutes from the following table by multiplying the full bottle duration by the percent of usable capacity, e.g.:
  - a. Pilot and copilot with masks set at 100% plus 6 passengers = 10 people using oxygen.

### NOTE

- Pilot and copilot are each counted as 2 people with oxygen masks set at the 100% or EMERG mode.
- b. Cylinder volume = 115 cubic feet.
- c. Duration with full bottle = 73 minutes
- d. Duration with 57% capacity =  $.57 \times 73 = 41$  minutes.



#### OXYGEN DURATION WITH FULL BOTTLE (100% CAPACITY)

0711 0.211 2						- (			
STATED			**NUN	IBER (	OF PEC	DPLE L	JSING		
CYLINDER	1	2	3	4	5	6	7	8	9
SIZE (CU FT)		DURATION IN MINUTES							
22	144	72	48	36	28	24	20	18	16
50	317	158	105	79	63	52	45	39	35
77	488	244	162	122	97	81	69	61	54
115	732	366	244	183	146	122	104	91	81
STATED	**NUMBER OF PEOPLE USING								
CYLINDER	10	11	12	13	14	15	**16	**	17
SIZE (CU FT)			DL	JRATIC	on in M	NINUT	ES		
22	14 13 12 11 10 * * *		ł						
50	31	28	26	24	22	21	19	1	8
77	48	44	40	37	34	32	30	2	8
115	73	66	61	56	52	48	45	4	3
* Will not meet oxygen requirements.									
** -									

\*\* For oxygen duration computations, count each diluter-demand crew mask in use as 2 (e.g. with 4 passengers and a crew of 2, enter the table at 8 people using).

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### RETURN TO PAGE N-2, STEP 18 OR PAGE N-7, STEP 14

### LOCKING THE AIRSTAIR DOOR (B200)

- 1. Close and lock the door.
- 2. Ensure that the door handle will not move out of the locked position without depressing the release button.
- 3. Lift the top door step and ensure that the red safety arm is around the plunger.
- 4. Ensure that the green index mark on each of the 4 locking bolts aligns with the black pointer in the observation port.

RETURN TO PAGE N-6, BEFORE ENGINE STARTING, STEP 2

### LOCKING THE CARGO DOOR (B200C)

- Check Upper Handle Position .....CLOSED AND LOCKED (Open access panel on upper left side of door and attempt to open cargo door latches without releasing safety lock.)
- 2. Ensure that the orange index mark on each of the four rotary cam locks aligns with the notch in the plate on the door frame.
- Check Lower Pin Lock Handle Position......CLOSED AND LOCKED (Open access panel on lower forward area of door and attempt to rotate the handle without lifting the orange lock hook.)
- 4. Ensure that the orange stripe on the latch pin linkage is aligned with the orange pointer. (Observe through window at lower aft corner.)

RETURN TO PAGE N-6, BEFORE ENGINE STARTING, STEP 3

### LOCKING THE AIRSTAIR DOOR (B200C)

- 1. Close and lock the door.
- 2. Ensure that the door handle will not move out of the locked position without depressing the release button.
- 3. Lift the door step and ensure that the red safety arm is around the plunger.
- 4. Ensure that the orange index mark on each of the six rotary cam locks aligns with the notch in the plate on the door frame.

**RETURN TO PAGE N-6, BEFORE ENGINE STARTING, STEP 4** 

### FUEL SYSTEM

Conduct the following checks with Battery initially OFF:

1.	Firewall Shutoff ValvesCLOSE
2.	BatteryON
3.	Standby PumpsON Listen For Operation, [L FUEL PRESS] & [R FUEL PRESS]- ILLUMINATED
4.	Firewall Shutoff ValvesOPEN   [L FUEL PRESS] & [R FUEL PRESS] - EXTINGUISHED
5.	Standby PumpsOFF [L FUEL PRESS] & [R FUEL PRESS] - ILLUMINATED
6.	CrossfeedALTERNATELY LEFT AND RIGHT [FUEL CROSSFEED] - ILLUMINATED, [L FUEL PRESS] & [R FUEL PRESS] - EXTINGUISHED
7.	CrossfeedOFF
8.	Auxiliary Tank TransferAUTO
9.	No Transfer Light (if extinguished)PRESS TO TEST
	<b>RETURN TO PAGE N-8, STEP 29</b>

### ENGINE STARTING (EXTERNAL POWER)

### CAUTION

NEVER CONNECT AN EXTERNAL POWER SOURCE TO THE AIRPLANE UNLESS A BATTERY INDICATING A CHARGE OF AT LEAST 20 VOLTS IS IN THE AIRPLANE. If the battery voltage is less than 20 volts, the battery must be recharged, or replaced with a battery indicating at least 20 volts, before connecting external power.

1.	Avionics Master Switch	CONFIRM OFF
2.	Left and Right Generator Switc	hesCONFIRM OFF
3.	Battery	ON
4.	External Power Source	TURN OFF, THEN CONNECT TO AIRPLANE
5.	External Power Source	TURN ON
6.	Voltmeter	
7.	Prop Levers	FEATHER
8.	Right Ignition and Engine Start.	ON [R IGNITION ON] - ILLUMINATED [R FUEL PRESS] - EXTINGUISHED
9.	Right Condition Lever (12% $N_1$	or above)LOW IDLE

### **ENGINE STARTING (EXTERNAL POWER) (Cont)**

10.	Right ITT and $N_1$ MONITOR (1000°C maximum)
11.	Right Oil PressureCHECK
12.	Right Ignition and Engine Start (50% $N_1 \mbox{ or above})$ OFF
13.	Left Ignition and Engine StartON [L IGNITION ON] - ILLUMINATED [L FUEL PRESS] - EXTINGUISHED)
14.	Left Condition Lever (12% $N_1 \mbox{ or above})LOW IDLE$
15.	Left ITT and $N_1 \ldots \ldots MONITOR$ (1000°C maximum)
16.	Left Oil PressureCHECK
17.	Left Ignition and Engine Start (50% $\ensuremath{N}_1$ or above)OFF
18.	External Power SourceTURN OFF, DISCONNECT, SECURE DOOR
19.	Left and Right GeneratorsRESET, THEN ON
20.	Prop LeversFULL FORWARD

**RETURN TO PAGE N-10, BEFORE TAXI, STEP 1** 

### **ENVIRONMENTAL SYSTEM CONTROLS**

Observe  $N_1$ , ITT, and generator limits if air conditioning or electric heat is used.

Vent Blower Mode	Cabin Temp Mode Selection	Vent Blower Speed
Auto	Off	Off
Auto	Auto, Man Heat, Man Cool	Low
Lo	Any	Low
High	Any	High

1. Vent Blower.....AS REQUIRED

- 2. Cabin Temp Control.....AS REQUIRED
- 3. Cabin Temp Mode .....AUTO
- 4. Bleed Air Valves.....OPEN OR ENVIR OFF
  - a. Use OPEN for more efficient heating on the ground.
  - b. Use ENVIR OFF for more efficient cooling on the ground.
- 5. Aft Blower (if installed) .....AS REQUIRED
  - a. For maximum cooling, the vent blower should be selected to HIGH, and the aft blower should be selected on.
  - b. For maximum heating without electric heat, the vent blower should be selected to HIGH and the aft blower should be selected off.

### ENVIRONMENTAL SYSTEM CONTROLS (Cont)

6.	Ele	ectric Heat (if installed) (ground operations only)AS REQUIRED
	a.	Cabin Temp ModeAUTO OR MAN HEAT
	b.	Vent BlowerHIGH
	C.	Aft BlowerON
	d.	Electric HeatON
		[ELEC HEAT ON] - ILLUMINATED
7.	Са	bin/Cockpit AirAS REQUIRED
	a.	Pull to increase airflow to the cockpit.
	b.	Push to increase airflow to the cabin.
8.	Со	pilot AirAS REQUIRED
9.	Pil	ot AirAS REQUIRED
10.	Wi	ndshield DefrostAS REQUIRED
	a.	Pull to increase; push to decrease.
	b.	Push the pilot and copilot air controls fully in and pull the Cabin/Cockpit Air Control fully out if increased windshield defrost airflow is required.

### **RETURN TO PAGE N-10, BEFORE TAXI, STEP 12**

### **\*BRAKE DEICE**

1. Bleed Air Valves	OPEN
2. Brake Deice	ON [BRAKE DEICE ON] - ILLUMINATED
3. Brake Deice (if not required).	OFF [BRAKE DEICE ON] - EXTINGUISHED
If Brake Deice is Required:	
4. Condition Levers	HIGH IDLE

RETURN TO PAGE N-10, BEFORE TAXI, STEP 14

### PRESSURIZATION

### NOTE

Items marked with an "\*" may be omitted at pilot's discretion after the first flight of the day.

1. Bleed Air Valves .....OPEN

- 2. Pressurization Controller .....SET
  - a. Adjust cabin altitude knob to indicate 1,000 feet below field pressure altitude.
  - b. Set rate knob to 12-o'clock position.

### **PRESSURIZATION (Cont)**

- \* 3. Cabin Pressure Switch ......HOLD IN TEST POSITION
- \* 4. Cabin Altimeter and VSI ......CHECK FOR DESCENT INDICATION
- \* 5. Cabin Pressure Switch ......RELEASE TO PRESS POSITION
  - 6. Pressurization Controller .....SET FOR HIGHEST CABIN ALTITUDE
    - a. ACFT ALT = Cruise Altitude + 1000 feet (OR)
    - b. CABIN ALT = Field Pressure Altitude + 500 feet

**RETURN TO PAGE N-11, BEFORE TAKEOFF (RUNUP), STEP 4** 

### FLIGHT DIRECTOR

1.	Flię	ght Control Panel (FCP) Test Button PRESS AND RELEASE
	a.	FCP Mode AnnunciatorsILLUMINATED BRIEFLY THEN EXTINGUISHED EXCEPT FOR GA
	b.	EADIAMBER TEST MESSAGE AND V-BAR DISPLAYED
2.	FC	P Test ButtonPRESS AND RELEASE
	a.	GA Mode AnnunciatorEXTINGUISHED
	b.	EADITEST MESSAGE AND V-BAR EXTINGUISHED

**RETURN TO PAGE N-11, BEFORE TAKEOFF (RUNUP), STEP 5** 

### AUTOPILOT

1.	Elevator TrimTAKEOFF POSITION
2.	Electric Elevator TrimON
3.	ElevatorFORWARD POSITION
4.	AutopilotENGAGE [YAW] & [AP] - ILLUMINATED
5.	Electric Elevator TrimOPERATE IN BOTH DIRECTIONS (AP disengages with each operation and the YD remains engaged)
6.	ElevatorCENTERED
7.	AutopilotENGAGE
	a. Apply rearward pressure on the elevator - Pitch trim travels nose-down.
	b. Apply forward pressure on the elevator - Pitch trim travels nose-up.
8.	AP/Trim DisconnectDEPRESS TO FIRST LEVEL [YAW DIS] & [AP DIS] - ILLUMINATED, FLASHING AND THEN EXTINGUISHED
9.	Repeat steps 1 through 8 for copilot's side.

**RETURN TO PAGE N-11, BEFORE TAKEOFF (RUNUP), STEP 6** 

### YAW DAMP

- 1. Yaw Damp.....ON [YAW] - ILLUMINATED
- 2. Rudder Pedals ......CHECK FOR ADDED RESISTANCE
- 3. AP/Trim Disconnect ......DEPRESS TO FIRST LEVEL [YAW DIS] - ILLUMINATED, FLASHING THEN EXTINGUISHED
- 4. Repeat steps 1 through 3 for copilot's side.

RETURN TO PAGE N-11, BEFORE TAKEOFF (RUNUP), STEP 7

### ELECTRIC ELEVATOR TRIM

- 1. Electric Elevator Trim .....ON
- 2. Pilot's and Copilot's Trim Switches .....CHECK OPERATION
  - a. Move each dual-element switch fore and aft verify trim is inop.
  - b. Move both dual-element switches fore and aft verify trim operates nose down and nose up.
  - c. Ensure pilot's trim switch overrides copilot's trim switch
- 3. A/P Trim Disconnect ......PRESS TO 2ND LEVEL [ELEC TRIM OFF] - ILLUMINATED
- 4. Electric Elevator Trim ......OFF, THEN ON [ELEC TRIM OFF] - EXTINGUISHED

### WARNING

Operation of the electric elevator trim system should occur only when both elements of the dual-element switch are activated. Any movement of the elevator trim wheel while activating only one element denotes a system malfunction. The electric elevator trim must then be turned off and the flight conducted only by manual operation of the elevator trim control.

### **RETURN TO PAGE N-11, BEFORE TAKEOFF (RUNUP), STEP 8**

### \*PRIMARY GOVERNORS, OVERSPEED GOVERNORS AND RUDDER BOOST

1.	Rudder BoostON
2.	Prop Governor Test SwitchHOLD TO TEST
3.	Power Levers (individually)INCREASE UNTIL PROP IS STABILIZED AT 1800 TO 1910 RPM
4.	Prop LeverRETARD TO DETENT, THEN FULL FORWARD (to check primary governor)
5.	Power LeverCONTINUE TO INCREASE UNTIL RUDDER MOVEMENT IS NOTED (Observe ITT and Torque Limits)
6.	Power LeverIDLE
7.	Repeat Steps 3 thru 6 on opposite engine.
8.	Prop Governor Test SwitchRELEASE

RETURN TO PAGE N-11, BEFORE TAKEOFF (RUNUP), STEP 10

### \*AUTOFEATHER

1.	Power LeversAPPROXIMATELY 500 FT-LBS TORQUE		
2.	Autofeather SwitchHOLD TO TEST [L AUTOFEATHER] & [R AUTOFEATHER] - ILLUMINATED		
3.	Power LeversRETARD INDIVIDUALLY THEN ADVANCE BACK TO 500 FT-LB		
	a. At Approximately 410 ft-lbsOPPOSITE ANNUNCIATOR EXTINGUISHED		
	b. At Approximately 260 ft-lbsBOTH ANNUNCIATORS EXTINGUISHED (Prop Starts to Feather)		
4.	Power LeversIDLE		
	[L AUTOFEATHER] & [R AUTOFEATHER] - EXTINGUISHED, (Neither Prop Feathers)		
5.	Autofeather SwitchRELEASE		
RE	RETURN TO PAGE N-11, BEFORE TAKEOFF (RUNUP), STEP 11		

### **\*VACUUM AND PNEUMATIC PRESSURE**

1.	Le	eft Bleed Air ValveINSTR & EN	VIR OFF
	a.	[L BL AIR OFF]ILLUM	INATED
	b.	Gyro Suction Gage and Pneumatic Pressure Gage in Gre	en Arc.
2.	Rig	ght Bleed Air Valve INSTR & EN	VIR OFF
	a.	[R BL AIR OFF], [L BL AIR FAIL] & [R BL AIR FAIL]ILLUM	IINATED
	b.	Gyro Suction Gage and Pneumatic Pressure Gage	ZERO

### \*VACUUM AND PNEUMATIC PRESSURE (Cont)

- 3. Left Bleed Air Valve .....OPEN
  - a. [L BL AIR OFF], [L BL AIR FAIL] & [R BL AIR FAIL]......EXTINGUISHED
  - b. Gyro Suction Gage and Pneumatic Pressure Gage in Green Arc.
- 4. Right Bleed Air Valve.....OPEN

[R BL AIR OFF] - EXTINGUISHED

RETURN TO PAGE N-11, BEFORE TAKEOFF (RUNUP), STEP 14

### **\*ENGINE ANTI-ICE**

### WARNING

Either the main or standby actuator must be operational on each engine before takeoff.

### With system initially ON:

1.	Engine Anti-Ice ActuatorsSTANDBY
2.	Engine Anti-IceOFF [L ENGINE ANTI-ICE] & [R ENGINE ANTI-ICE] - EXTINGUISHED
3.	Engine Anti-Ice ActuatorsMAIN
4.	Engine Anti-IceON [L ENGINE ANTI-ICE] & [R ENGINE ANTI-ICE] - ILLUMINATED

**RETURN TO PAGE N-11, BEFORE TAKEOFF (RUNUP), STEP 15** 

### ICE PROTECTION EQUIPMENT (IF REQUIRED)

### **Auto Ignition**

1.	Power LeversIDLE
2.	Auto IgnitionARM [L IGNITION ON] & [R IGNITION ON] - ILLUMINATED
3.	Power LeversAPPROXIMATELY 500 FT-LBS TORQUE [L IGNITION ON] & [R IGNITION ON] - EXTINGUISHED
4.	Power Levers
5.	Auto IgnitionOFF [L IGNITION ON] & [R IGNITION ON] - EXTINGUISHED

### Windshield Anti-Ice (check pilot's & copilot's one at a time)

### ICE PROTECTION EQUIPMENT (IF REQUIRED) (Cont)

2.	Windshield Anti-Ice OFF, THEN NORMAL (observe increase on left & right loadmeters)
3.	Windshield Anti-Ice OFF
Elect	rothermal Prop Deice
1.	Automatic Prop DeiceAUTO
2.	Deice Ammeter
	Monitor for a fluctuation every 90 seconds.
3.	Manual Prop DeiceHOLD IN MANUAL POSITION
	a. Small increase on both loadmeters indicates the manual system is operating.
	b. Deice Ammeter0 AMPS
4.	Manual Prop DeiceRELEASE
5.	Deice Ammeter
6.	Automatic Prop DeiceOFF
Surfa	ace Deice System
1.	Condition LeversHIGH IDLE
2.	Pneumatic PressureCHECK
3.	Surface Deice SwitchSINGLE AND RELEASE
	a. Pneumatic Pressure - Will decrease momentarily.
	b. Check boots visually, where possible, for inflation and hold down.
	c. Inflation time is 6 seconds for wings, followed by 4 seconds for horizontal stabilizer.
4.	Surface Deice SwitchMANUAL AND HOLD
	a. Pneumatic Pressure - Will Decrease Momentarily.
	b. Check boots visually, where possible, for inflation.
5.	Surface Deice SwitchRELEASE
	Check boots visually, where possible, for hold down.
6.	Condition LeversLOW IDLE
Stall	Warning HeatCHECK
Pitot	HeatCHECK
RI	ETURN TO PAGE N-11, BEFORE TAKEOFF (RUNUP), STEP 16

# OTHER PROCEDURES

### SIMULATING ONE-ENGINE-INOPERATIVE (ZERO THRUST)

When establishing zero thrust operation, use the power setting listed below. By using this power setting to establish zero thrust, one avoids the inherent delays of restarting a shut down engine and preserves almost instant power to counter any attendant hazard.

### WARNING

IN-FLIGHT ENGINE CUTS BELOW  $\mathsf{V}_{\mathsf{SSE}}$  SPEED OF 104 KNOTS ARE PROHIBITED.

- 2. Power Lever.....SET 120 FT-LBS TORQUE

### NOTE

This setting will approximate Zero Thrust at low altitudes using recommended One-Engine-Inoperative Climb speed. The propeller autofeather system is disabled with a retarded power lever.

### PRACTICE DEMONSTRATION OF V<sub>MCA</sub>

### WARNING

IN-FLIGHT ENGINE CUTS BELOW  $\mathsf{V}_\mathsf{SSE}$  SPEED OF 104 KNOTS ARE PROHIBITED.

1.	Landing GearUP
2.	FlapsUP
3.	AirspeedABOVE 104 KNOTS (V <sub>SSE</sub> )
4.	Prop LeversHIGH RPM
5.	Power Lever (simulated inoperative engine)IDLE
6.	Power Lever (other engine)MAXIMUM ALLOWABLE
7.	Airspeed - Reduce approximately 1 knot per second until either V <sub>MCA</sub> or stall warning is obtained.

### PRACTICE LANDING GEAR MANUAL EXTENSION

- 1. Airspeed .....BELOW 181 KNOTS
- 2. Landing Gear Relay Circuit Breaker (pilot's subpanel)......PULL
- Landing Gear Control ......DN
  Alternate Extension Handle ......PUMP UP AND DOWN
- (until the [L], [R], & [NOSE] illuminate and further resistance is felt) 5. Alternate Extension Handle.....STOW IN CLIP

### LANDING GEAR RETRACTION AFTER PRACTICE MANUAL EXTENSION

After a practice manual extension of the landing gear, the gear may be retracted as follows:

- 1. Alternate Extension Handle.....CONFIRM STOWED
- 2. Landing Gear Relay Circuit Breaker (pilot's subpanel) ......PUSH IN
- 3. Landing Gear .....UP

### PILOT NOTES



DECEMBER 2004

# **EMERGENCY PROCEDURES**

EMERGENCY AIRSPEEDS	
ENGINE FAILURE	
EMERGENCY ENGINE SHUTDOWN	1
ENGINE FIRE ON GROUND	
EMERGENCY ENGINE SHUTDOWN ON THE GROUND	
ENGINE FAILURE DURING TAKEOFF (AT OR BELOW $V_1$ )-TAKEOFF ABORTED	
ENGINE FAILURE DURING TAKEOFF (AT OR ABOVE V1)– TAKEOFF CONTINUED	
ENGINE FAILURE IN FLIGHT BELOW AIR MINIMUM CONTROL SPEED ( $V_{MCA}$ )	2
ENGINE FLAMEOUT (2ND ENGINE)	
OIL PRESSURE LOW	
FUEL SYSTEM	
FUEL PRESSURE LOW	
SMOKE AND FUME ELIMINATION	
WINDSHIELD ELECTRICAL FAULT	
ELECTRICAL SMOKE OR FIRE	3
ENVIRONMENTAL SYSTEM SMOKE OR FUMES	
AIRSTAIR DOOR/CARGO DOOR UNLOCKED	
EMERGENCY DESCENT	
GLIDE	1
ELECTRICAL	4
INVERTER FAILURE	
DUAL GENERATOR FAILURE	5
FLIGHT CONTROLS	
UNSCHEDULED ELECTRIC ELEVATOR TRIM	6
UNSCHEDULED RUDDER BOOST ACTIVATION	
ENVIRONMENTAL SYSTEMS	
USE OF OXYGEN	1
PRESSURIZATION LOSS	
HIGH DIFFERENTIAL PRESSURE	
AUTO-DEPLOYMENT OXYGEN SYSTEM FAILURE	-
BLEED AIR FAIL	8
EMERGENCY EXIT	
SPINS	

L

1

All airspeeds quoted in this section are Indicated Airspeeds (IAS) and assume zero instrument error.

Closed [BRACKETS] in this section denote annunciator(s)

# EMERGENCY AIRSPEEDS (12,500 LBS)

One-Engine-Inoperative Best Angle-of-Climb (V <sub>XSE</sub> )	115	Knots
One-Engine-Inoperative Best Rate-of-Climb (V <sub>YSE</sub> )	121	Knots
One-Engine-Inoperative Enroute Climb	21	Knots
Air Minimum Control Speeds (V <sub>MCA</sub> )	.86	Knots
Emergency Descent	81	Knots
Maximum Range Glide	135	Knots

1

## **ENGINE FAILURE**

### EMERGENCY ENGINE SHUTDOWN

UNSCHEDULED ENGINE TORQUE INCREASE IN FLIGHT (Not Responsive to Power Lever Movement)

ENGINE FIRE IN FLIGHT

LENG FIRE OR RENG FIRE

**ENGINE FAILURE IN FLIGHT** 

### Affected Engine:

1.	Condition Lever	FUEL CUTOFF
2.	Prop Lever	FEATHER
3.	Firewall Shutoff Valve	CLOSE
4.	Fire Extinguisher (if installed) (if fire warning persists)	ACTUATE
5.	Generator	OFF
6.	Auto Ignition	OFF
7.	Autofeather (if installed)	OFF
8.	Brake Deice (if installed)	OFF
9.	Electrical Load	MONITOR

### ENGINE FIRE ON GROUND

### Affected Engine:

1.	Condition Lever	FUEL CUTOFF
2.	Firewall Shutoff Valve	CLOSE
3.	Ignition and Engine Start	STARTER ONLY
If Fire	Warning Persists:	
4.	Fire Extinguisher (if installed)	ACTUATE

### EMERGENCY ENGINE SHUTDOWN ON THE GROUND

1.	Condition Levers	FUEL CUTOFF
2.	Prop Levers	FEATHER
3.	Firewall Shutoff Valves	CLOSE
4.	Master Switch (gang bar)	OFF

**R ENG FIRE** 

OR

L ENG FIRE

# ENGINE FAILURE DURING TAKEOFF (AT OR BELOW $V_1$ ) - TAKEOFF ABORTED

- 1. Power Levers ......GROUND FINE
- 2. Brakes......AS REQUIRED TO ACHIEVE STOPPING DISTANCE
- 3. Operative Engine ......MAXIMUM REVERSE

### WARNING

Extreme care must be exercised when using single engine reversing on surfaces with reduced traction.

# ENGINE FAILURE DURING TAKEOFF (AT OR ABOVE $V_1$ ) - TAKEOFF CONTINUED

1.	Ро	werMAX	IMUM ALLOWABLE
2.	Aiı	rspeedMAINTAIN (take	-off speed or above)
3.	La	nding Gear	UP
4.	Pro	op Lever (inoperative engine) (or verify prop FEATHERED if auto	FEATHER ofeather is installed)
5.	Aiı	rspeed (after obstacle clearance altitude	is reached)V <sub>YSE</sub>
6.	Fla	aps	UP
7.	Cle	ean-up inoperative engine:	
	a.	Condition Lever	FUEL CUTOFF
	b.	Prop Lever	FEATHER
	c.	Firewall Shutoff Valve	CLOSE
	d.	Generator	OFF
	e.	Auto Ignition	OFF
	f.	Autofeather (if installed)	OFF
8.	Ele	ectrical Load	MONITOR

# ENGINE FAILURE IN FLIGHT BELOW AIR MINIMUM CONTROL SPEED ( $V_{MCA}$ )

- 1. Power ......REDUCE AS REQUIRED TO MAINTAIN CONTROL
- 2. Nose .....LOWER TO ACCELERATE ABOVE  $V_{\mbox{\scriptsize MCA}}$
- 3. Power.....AS REQUIRED
- 4. Failed Engine.....SECURE

(see Emergency Engine Shutdown)

### **ENGINE FLAMEOUT (2ND ENGINE)**

- 1. Power Lever ......IDLE
- 2. Prop Lever ......DO NOT FEATHER
- 3. Condition Lever ......FUEL CUTOFF
- 4. Conduct Air Start Procedure in ABNORMAL PROCEDURES.

### OIL PRESSURE LOW OR INDICATION BELOW 60 PSI

L OIL PRESS	OR	R OIL PRESS
(If Installed)		

1. Oil Pressure ......CONFIRM BELOW 60 PSI

### If confirmed:

2. Engine.....SECURE (See EMERGENCY ENGINE SHUTDOWN; Tab 1, page E-3)

### Or:

3. Land at nearest suitable airport using the minimum power required to sustain flight.

### FUEL SYSTEM

### FUEL PRESSURE LOW

L FUEL PRESS

OR **R FUEL PRESS** 

- Standby Pump (failed side) .....ON
  [FUEL PRESS] .....EXTINGUISHED
- 3. Oil Temperature and Pressure Gages (failed side) .......MONITOR

## SMOKE AND FUME ELIMINATION

### WINDSHIELD ELECTRICAL FAULT

1. WSHLD ANTI-ICE Switches .....OFF

If Smoke and/or Fire Does Not Cease:

2. Conduct ELECTRICAL SMOKE OR FIRE procedure.

### If Smoke and/or Fire Ceases:

3

3. Continue flight with Windshield Anti-Ice OFF if possible.

### If Windshield Anti-Ice is Required:

4. If the source of the smell, smoke, or fire can be isolated to the pilot's or copilot's windshield, the opposite windshield (without the overheat condition) may be operated in the NORMAL or HI windshield heat mode.

### **ELECTRICAL SMOKE OR FIRE**

1.	Oxygen Mask(s)	DON
2.	Mask Selector Switch(es)	EMERG POSITION
3.	Headset(s)	DON, OR AUDIO SPEAKER(S) – ON
4.	Mic Switch(es)	OXYGEN MASK
5.	Cabin Temp Mode	OFF
6.	Vent Blower	AUTO
7.	Aft Blower (if installed)	OFF
8.	Avionics Master	OFF
9.	Nonessential Electrical Equip	mentOFF
	0	

If Fire or Smoke Ceases:

- 10. Individually restore avionics and equipment previously turned off.
- 11. Isolate defective equipment.

### WARNING

Dissipation of smoke is not sufficient evidence that a fire has been extinguished. If it cannot be visually confirmed that no fire exists, land at the nearest suitable airport.

If Smoke Persists Or If Extinguishing Of Fire Is Not Confirmed:

12.	Cabin Pressure	DUMP
13.	Storm Window (if required)	OPEN
14.	Land	NEAREST SUITABLE AIRPORT

### ENVIRONMENTAL SYSTEM SMOKE OR FUMES

1.	Oxygen Mask(s)DON
2.	Mask Selector SwitchEMERG POSITION
3.	Headset(s)DON, OR AUDIO SPEAKER(S) – ON
4.	Mic Switch(es)OXYGEN MASK
5.	Cabin Temp ModeOFF
6.	Vent BlowerHIGH
7.	Left Bleed Air ValveENVIR OFF
lf Sm	oke Decreases:
8.	Continue operation with left bleed air off.
lf Sm	oke Does Not Decrease:
9.	Left Bleed Air ValveOPEN
10.	Right Bleed Air ValveENVIR OFF
lf Sm	oke Decreases:
11.	Continue operation with right bleed air off.
lf Sm	oke Persists:
12.	Bleed Air ValvesENVIR OFF
13.	Cabin PressurizationDUMP
14.	Storm Window (if required)OPEN
15.	LandNEAREST SUITABLE AIRPORT

### AIRSTAIR DOOR/CARGO DOOR UNLOCKED

DOOR UNLOCKED

### WARNING

Do not attempt to check the security of the airstair door or cargo door in flight. Remain as far from the door as possible with seatbelts securely fastened.

# *If The* [DOOR UNLOCKED] *Illuminates, Or If An Unlatched Airstair Door/Cargo Door Is Suspected:*

 All Occupants ......SEATED WITH SEAT BELTS SECURELY FASTENED
 Cabin Sign ......NO SMOKE AND FSB
 Cabin Differential Pressure.....REDUCE TO LOWEST VALUE PRACTICAL (zero preferred) a. Descend and/or b. Select higher cabin altitude setting.
 Oxygen......AS REQUIRED
 Land ......NEAREST SUITABLE AIRPORT 3

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### **EMERGENCY DESCENT**

1.	Power Levers	IDLE
2.	Prop Levers	FULL FORWARD
3.	Flaps (200 knots maximum)	APPROACH
4.	Landing Gear (181 knots maximum)	DN
5.	Airspeed	181 KNOTS MAXIMUM

### GLIDE

- 1. Landing Gear .....UP
- 2. Flaps.....UP



Determine that procedures for restarting first and second failed engines are ineffective before feathering second engine propeller.

3.	Propellers	FEATHERED
4.	Airspeed	
5.	Glide Ratio	2.0 nautical miles for each 1000 feet of altitude. Decrease by 0.2 nautical miles for each 10 knots of headwind

4

# ELECTRICAL

### INVERTER FAILURE

### INVERTER

1.	Other Inverter	SELECT
2.	Frequency/Voltage	CHECK
	, , ,	(f = 380–480, Volts = 105–120)

### DUAL GENEATOR FAILURE

L DC GEN

AND

### WARNING

The following procedure is intended to provide 30 minutes of battery life for a typical airplane. This battery life is based on specific assumptions which may not occur in every instance such as the generator loads at the time of failure, battery condition, the time required to load shed non-essential equipment, and the electrical equipment installed on the airplane.

### 1. Generators .....RESET, THEN ON

### If Either Generator Will Reset:

- 2. Operating Generator Loadmeter .....DO NOT EXCEED 100% (88% above 31,000 feet)
- 3. Inoperative Generator.....OFF

### If Neither Generator Will Reset:

4. Generators.....OFF

### 5. Maintain airplane control using the following instruments:

- a. Pilot's and Copilot's Airspeed
- b. Copilot's Attitude Indicator
- c. Copilot's Altimeter
- d. Copilot's EHSI/HSI or Standby Compass
- 6. Non-essential Equipment:

### WARNING

The following step will cause the pilot's attitude indicator and the autopilot to become inoperative.

a.	InverterOFF
b.	Auto-IgnitionOFF
C.	Engine Anti-IceLEAVE IN EXISTING POSITION
d.	Traffic Advisory System (if installed)OFF
e.	All Exterior LightsOFF
	Beacon on when required
f.	All Ice Protection Except L Pitot HeatOFF
	Surface DeiceACTIVATE WHEN REQUIRED
g.	Landing Gear Relay CBPULL (to prevent inadvertent gear extension)
h.	Comm 1OFF
i.	NAV 1OFF

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	j.	Transponder	SELECT NO. 2
	k.	Radar	OFF
	I.	ADF	OFF
	m.	Cabin Furnishings, Lights, No Smoke/FSB	OFF
	n.	Vent Blower	AUTO
	0.	Right Bleed Air Valve	ENVIR OFF
	p.	Aft Blower (if installed)	OFF
	q.	Cabin Temp Mode Control	OFF
	r.	EFIS Power	OFF
	s.	FMS (if installed)	OFF
	t.	Electric Trim	OFF
	u.	Overhead Flood Lights (if required)	ON
	v.	Instrument Indirect Lights	OFF
	w.	Master Panel Lights	OFF
	х.	Left and Right Fuel Control Heat CB's (right pan	el)PULL
	y.	Avionics No. 1 Circuit Breaker (right panel)	PULL
	z.	EFIS Aux Battery CB (right panel)	PULL
7.	Vei equ	rify that only the following equipment is on and all uipment not mentioned above is off.	other optional
	a.	Battery	
	b.	Avionics Master	
	c.	L Pitot Heat (if required)	
	d.	Comm 2 and NAV 2	
	e.	Flood Lights (if required)	
8.	Bat	ttery Ammeter (if installed)	MONITOR 8 amps or less)

9. Avoid icing conditons, if possible.

- 10. Land ......NEAREST SUITABLE AIRPORT
- 11. Flaps.....DO NOT LOWER
- 12. Landing Gear .....EXTEND MANUALLY
- 13. Restrict use of Landing/Taxi Lights to one light for 5 minutes or less.

### If An ILS Approach Is Required:

14. Obtain Radar Vectors to final, tune NAV 2, and monitor the copilot's HSI.

### WARNING

The following step may cause the airplane battery to be depleted in less than 30 minutes.

### If Navigation Using VOR Equipment Is Required:

15. Select either inverter ON, tune NAV 2, and monitor the copilot's HSI.

5

# **FLIGHT CONTROLS**

### UNSCHEDULED ELECTRIC ELEVATOR TRIM

- 1. Airplane Attitude......MAINTAIN USING ELEVATOR CONTROL
- 2. AP/Trim Disconnect Switch ......DEPRESS FULLY [ELEC TRIM OFF] - ILLUMINATED
- 3. Manually retrim airplane.
- 4. Elevator Trim .....OFF

### UNSCHEDULED RUDDER BOOST ACTIVATION

Rudder boost operation without a large variation of power between the engines indicates a failure of the system.

- Directional Control ......MAINTAIN USING RUDDER PEDALS
  Rudder Boost.....OFF
- If Condition Persists:
- 6

DECEMBER 2004

### **PILOT NOTES**

# **ENVIRONMENTAL SYSTEMS**

### **USE OF OXYGEN**

### WARNING

Beards and mustaches should be carefully trimmed so that they will not interfere with the proper sealing of an oxygen mask. The fit of the oxygen mask around the beard or mustache should be checked on the ground for proper sealing. Studies conducted by the military and the FAA conclude that oxygen masks do not seal over beards and mustaches. Hats and "ear-muff" type headsets must be removed prior to donning crew oxygen masks. Headsets and eyeglasses worn by crew members may interfere with quick-donning capabilities.

### WARNING

The following table sets forth the average time of useful consciousness (TUC) (time from onset of hypoxia until loss of effective performance) at various altitudes. Rapid decompressions can reduce these times to 1/3 - 1/2 of their original value.

CABIN PRESSURE ALTITUDE	TUC	
35,000 Feet	1/2–1 Minute	
30,000 Feet	1–2 Minutes	
25,000 Feet	3–5 Minutes	
22,000 Feet	5–10 Minutes	
12-18,000 Feet	30 Minutes or more	

### Crew

7

- 1. Oxygen Mask(s) .....DON
- 2. Headset(s).....DON, OR AUDIO SPEAKER(S) ON
- 3. Mic Switch(es).....OXYGEN MASK
- 4. Oxygen Duration ......CONFIRM (refer to Oxygen Duration in Normal Procedures)

To Discontinue Use:

- 5. Oxygen Mask(s) .....RETURN TO OVERHEAD CONTAINER
- 6. Mic Switch(es) .....NORMAL

### USE OF OXYGEN (Cont)

### Passengers

### WARNING

Adequate oxygen pressure is not provided to the passengers for sustained flight at cabin altitudes above 34,000 feet. The highest recommended cabin altitude for sustained flight is 25,000 feet.

1.	Passenger Manual Drop-OutPULL C [PASS OXY ON] - ILLUMINATE	)N ED
2.	Lanyard Pin For Each Mask UsedPULL OL	JT
3.	MaskDC	)N
4.	Oxygen DurationCONFIR (refer to Oxygen Duration in Normal Procedure	:M es)
To Discontinue Use:		
5.	Passenger Manual Drop-OutPUSH OF	F
6.	Lanyard PinINSEF	۲۲

### **First Aid Oxygen**

1.	Oxygen Compartment	PULL COVER TO OPEN
2.	ON/OFF Valve	ON
3.	Mask	DON
To Di	scontinue Use:	

# ON/OFF Valve.....OFF Mask.....OFF Compartment Cover ....CLOSE

L

### PRESSURIZATION LOSS

### ALT WARN

- 1. Oxygen Mask(s) .....DON
- Headset(s).....DON, OR AUDIO SPEAKER(S) ON 2.
- 3. Mic Switch(es).....OXYGEN MASK
- 4. Passenger Manual Drop-Out.....PULL ON [PASS OXY ON] - ILLUMINATED
- 5. Descend.....AS REQUIRED
- Passengers.....PULL LANYARD PIN, DON MASK 6.

### WARNING

Adequate oxygen pressure is not provided to the passengers for sustained flight at cabin altitudes above 34,000 feet. The highest recommended cabin altitude for sustained flight is 25,000 feet.

- 7. Range ......DETERMINE FOR FINAL CRUISE ALTITUDE
- 8. Oxygen Duration ......CONFIRM (refer to Oxygen Duration in Normal Procedures)

### HIGH DIFFERENTIAL PRESSURE

### If Cabin Differential Pressure Exceeds 6.6 psi:

- Bleed Air Valves .....ENVIR OFF 1. Oxygen (crew and passengers).....AS REQUIRED 2.
- 3. Descend.....AS REQUIRED

### AUTO-DEPLOYMENT OXYGEN SYSTEM FAILURE

ALT WARN

8

– ILLUMINATED &

PASS OXY ON - EXTINGUISHED

- 1. Passenger Manual Drop-Out.....PULL ON
- First Aid Mask (if required).....DEPLOY MANUALLY 2.

To Isolate Oxygen Supply To The Crew And First Aid Mask:

- OXYGEN CONTROL Circuit Breaker ......PULL
- 4. Passenger Manual Drop-Out.....PUSH OFF

Raytheon Aircraft Company		Fligh	international
BLEED AIR FAIL	L BL AIR FAIL	OR	R BL AIR FAIL
Illumination of an annunciator in flight inc bleed air line aft of the engine firewall.	licates a poss	sible ru	upture of a
1. Bleed Air Valve (affected engine). [L BL AIR OFF] or [F	R BL AIR OFF	ST & E   - Illl	<b>NVIR OFF</b> JMINATED

2. Engine Instruments......MONITOR

# EMERGENCY EXIT

Escape Hatch Handle.....PULL

# SPINS

Intentional spins are prohibited. If an unintentional spin is encountered, perform the following procedure IMMEDIATELY—THE LONGER THE DELAY, THE MORE DIFFICULT RECOVERY WILL BECOME. Steps 1 through 3 should be done AGGRESSIVELY and SIMULTANEOUSLY. The full forward position of the control column may be reduced slightly, if required, to prevent the airplane from exceeding a 90° nose down (inverted) attitude.

- 1. Control Column......FULL FORWARD, AILERONS NEUTRAL
- 2. Full Rudder ..... OPPOSITE THE DIRECTION OF SPIN
- 3. Power Levers .....IDLE
- 4 Rudder .....NEUTRALIZE WHEN ROTATION STOPS
- 5. Execute a smooth pullout.

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### **PILOT NOTES**

	N	TRANSFER	AUXILIARY FUEL TRANSFER FAILURE	*Optional Equipment	R DC GEN	R CHIP DETECT	R ENG ICE FAIL	*R AUTOFEATHER	R ENG ANTI-ICE	R IGNITION ON	*Optional Equipment
R ENG FIRE	R FUEL PRESS	*R OIL PRESS			1				*ELEC HEAT ON	R BL AIR OFF	
ALT WARN		*R GEN OVHT	R BL AIR FAIL	ANEL	<b>RVS NOT READY</b>	<b>BUCT OVERTEMP</b>	EXT PWR	AIR CND N <sub>1</sub> LOW	PASS OXY ON	FUEL CROSSFEED	ANNUNCIATOR PANEL
DOOR UNLOCKED		*A/P TRIM FAIL	*A/P FAIL	WARNING ANNUNCIATOR I	4YD FLUID LOW		<b>A</b> BATTERY CHG	*ELEC TRIM OFF	LDG/ТАХІ ШСНТ		CAUTION-ADVISORY
INVERTER		*L GEN OVHT	L BL AIR FAIL		Ţ				*BRAKE DEICE ON	L BL AIR OFF	
L ENG FIRE	L FUEL PRESS	*L OIL PRESS			4 L DC GEN	3 I CHIP DETECT	6 LENG ICE FAIL	*L AUTOFEATHER	L ENG ANTI-ICE	<b>LIGNITION ON</b>	

WARNING/CAUTION/ADVISORY ANNUNCIATORS

## **ABNORMAL PROCEDURES**

AIR START	
STARTER ASSIST	1
NO STARTER ASSIST	
LANDING FLAPS UP LANDING ONE-ENGINE-INOPERATIVE APPROACH AND LANDING ONE-ENGINE-INOPERATIVE GO-AROUND	2
ENGINE OIL SYSTEM LOW OIL PRESSURE INDICATION (60–99 PSI; YELLOW ARC) HIGH OIL PRESSURE INDICATION (ABOVE 135 PSI BUT NOT EXCEEDING 200 PSI) CHIP DETECT FUEL SYSTEM CROSSFEED (ONE-ENGINE-INOPERATIVE OPERATION) AUXILIARY FUEL TRANSFER FAILURE (NO TRANSFER LIGHT)	3
ELECTRICAL SYSTEM SINGLE GENERATOR FAILURE BATTERY CHARGE RATE (AIRPLANES PRIOR TO BB-1632, BL-141, AND BW-30) EXCESSIVE LOADMETER INDICATION (OVER 100%) CIRCUIT BREAKER TRIPPED BUS FEEDER CIRCUIT BREAKERS TRIPPED (FUEL PANEL BUS FEEDERS AND RIGHT CIRCUIT BREAKER PANEL BUS FEEDERS)	4
AVIONICS MASTER POWER SWITCH FAILURE LANDING GEAR SYSTEM HYDRAULIC FLUID LOW LANDING GEAR MANUAL EXTENSION	5
ENVIRONMENTAL SYSTEMS DUCT OVERTEMPERATURE ICE PROTECTION SYSTEMS ELECTROTHERMAL PROPELLER DEICE (AUTO SYSTEM) ELECTROTHERMAL PROPELLER DEICE (MANUAL SYSTEM) ENGINE ANTI-ICE FAILURE	6
STATIC AIR SYSTEM PILOT'S ALTERNATE STATIC AIR SOURCE CRACKED OR SHATTERED WINDSHIELD CRACK IN ANY SIDE WINDOW (COCKPIT OR CABIN)	7
SEVERE ICING CONDITIONS (REQUIRED BY FAA AD 96-09-13)	8

All airspeeds quoted in this section are Indicated Airspeeds (IAS) and assume zero instrument error.

Closed [BRACKETS] in this section denote annunciator(s)

## **AIR START**

### STARTER ASSIST



For EFIS equipped airplanes not equipped with an EFIS aux power supply: Airstarts may momentarily cause the loss of the attitude display and lead to premature system failures. IF FLIGHT CONDITIONS DO NOT PERMIT THE TEMPORARY LOSS OF ATTI-TUDE REFERENCE, CONDUCT AIR START USING THE NO STARTER ASSIST PROCEDURES.

1.	Cabin Temp Mode	OFF
2.	Vent Blower	AUTO
3.	Bleed Air Valve (inoperative engine	e)ENVIR OFF
4.	Aft Blower (if installed)	OFF
5.	Furnishings	OFF
6.	Radar	STANDBY or OFF
7	Windshield Heat	OFF
8.	EFIS Power (if installed, & if EFIS aux power is not installed)	OFF IF CONDITIONS PERMIT
9.	Power Lever	IDLE
10	Prop Lever (inoperative engine)	LOW RPM
11.	Condition Lever	FUEL CUTOFF
12.	Firewall Shutoff Valve	OPEN
13.	Generator (inoperative engine)	OFF
14.	Ignition and Engine Start	
15.	Condition Lever (10% N1 or Above	)LOW IDLE
16.	ITT and $N_1$	MONITOR (1000°C maximum)
17.	Ignition and Engine Start (N <sub>1</sub> above	e 50%)OFF
18.	Prop Lever	AS REQUIRED
19.	Power Lever	AS REQUIRED
20.	Generator	RESET, THEN ON
21.	EFIS Power (if installed)	ON
22.	Auto Ignition	ARM
23.	Bleed Air Valve	OPEN
24.	Cabin Temp Mode	AUTO
25.	Aft Blower (if installed)	AS REQUIRED
26.	Radar	AS REQUIRED
27.	Windshield Heat	AS REQUIRED

### NO STARTER ASSIST (WINDMILLING ENGINE AND PROPELLER)

1.	Power Lever	IDLE
2.	Prop LeverFULL FOI	RWARD, CONFIRM 2000 RPM
3.	Condition Lever	FUEL CUTOFF
4.	Engine Anti-Ice (inoperative engine)	OFF
5.	Firewall Shutoff Valve	OPEN
6.	Generator (inoperative engine)	OFF
7.	Airspeed	140 KNOTS MINIMUM
8.	Altitude	BELOW 20,000 FEET
9.	Auto-Ignition	ARM. GNITION ON] – ILLUMINATED
10.	Condition Lever (10% N <sub>1</sub> or above).	LOW IDLE
11.	ITT and $N_1$	MONITOR (1000°C maximum)
12.	Power (after ITT has peaked)	AS REQUIRED
13.	Generator	RESET, THEN ON
14.	Prop Sync	ON

## LANDING

## FLAPS UP LANDING

1. Approach Speed .....CONFIRM

	LANDING APPROACH SPEED - FLAPS UP			
	LANDING WT	KNOTS		
	12,500	132		
	12,000	130		
	11,000	126		
	10,000	122		
	9,000	117		
2.	Autofeather (if installed)	ARM		
3.	Pressurization	CHECK		
4.	Cabin Sign	NO SMOKE & FSB		
5.	Flaps	UP		
6.	Landing Gear	DN		
7.	LightsAS REQUIRED			
8.	RadarAS REQUIRED			
9.	Surface DeiceCYCLE AS REQUIRED			
If Res	sidual Ice Remains On Wing E	Boots:		
10.	Approach Speed & Landing DistanceINCREASE			
Prior	To Landing:			
11.	Approach AirspeedES	TABLISHED (increase with residual ice)		
12.	Yaw Damp	OFF		
13.	Power Levers			
14.	Prop LeversFULL FORWARD			
After	Touchdown:			
15.	Power Levers	LIFT AND SELECT GROUND FINE OR REVERSE (as required)		
16.	Brakes	AS REQUIRED		

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#### ONE-ENGINE-INOPERATIVE APPROACH AND LANDING

1. Approach Speed .....CONFIRM

NORMAL LANDING APPROACH SPEED			
	LANDING WT	KNOTS	
	12,500	103	
	12,000	102	
	11,000 99		
	10,000	96	
	9,000	93	
2.	Fuel Balance	CHECK	
3.	Pressurization	CHECK	
4.	Cabin Sign	NO SMOKE/FSB	
Wher	When It Is Certain That the Field Can Be Reached:		
5.	Flaps	APPROACH	
6.	Landing GearDN		
7.	Prop Lever	FULL FORWARD	
8.	Airspeed		
9.	Interior and Exterior Lights	AS REQUIRED	
10.	Radar	AS REQUIRED	
11.	Surface Deice	CYCLE AS REQUIRED	
If Res	sidual Ice Remains On Wing Boots	S:	
12.	Approach Speed and Landing D	istanceINCREASE	
Wher	h It Is Certain There Is No Possibil	ity Of a Go-Around:	
13.	Flaps	DN	
14.	AirspeedNORMAL LANDING APPROACH SPEED		

15. Perform normal landing.

### **ONE-ENGINE-INOPERATIVE GO-AROUND**

Power ......MAXIMUM ALLOWABLE
Landing Gear .....UP
Flaps .....UP
Airspeed .....UP

## **ENGINE OIL SYSTEM**

### LOW OIL PRESSURE INDICATION (60 - 99 PSI; YELLOW ARC)

For oil pressures below 60 psi, see EMERGENCY PROCEDURES.

- 1. 85 99 PSI at 21,000 Feet and Above ......NO ACTION REQUIRED
- 2. 60 84 PSI at 21,000 Feet and Above, or 60 99 PSI Below 21,000 Feet:
  - a. Do not exceed 1100 ft-lbs or torque.
  - b. Correct fault prior to next flight.

#### HIGH OIL PRESSURE INDICATION (ABOVE 135 PSI BUT NOT EXCEEDING 200 PSI)

Ground Operation, excluding transients during cold ground starts.

• Correct fault prior to flight.

In Flight:

- 1. Continue flight to destination at pilot's discretion.
- 2. Correct fault prior to next flight.

CHIP DETECT

L CHIP DETECT	OR

**R CHIP DETECT** 

- 1. Engine Instruments......MONITOR
- 2. If Abnormal .......SHUT DOWN ENGINE AT PILOT'S DISCRETION

## **FUEL SYSTEM**

#### CROSSFEED (ONE-ENGINE-INOPERATIVE OPERATION)

1.	CrossfeedLEFT OR RIGHT, AS REQUIRED [FUEL CROSSFEED] - ILLUMINATED
2.	Standby PumpsOFF
3.	Auxiliary Tank TransferAUTO
4.	Fuel BalanceMONITOR
lf Fue the R	el is Required from the Inoperative Engine's Auxiliary Fuel Tank and eason for Shutdown was Not an Engine Fire or Fuel Leak:
5.	Firewall Shutoff Valve (inoperative engine)OPEN [FUEL PRESS] - EXTINGUISHED
6.	No Transfer Light (inoperative engine)EXTINGUISHED IN 30 TO 50 SECONDS
To Di	scontinue Crossfeed:

### AUXILIARY FUEL TRANSFER FAILURE (NO TRANSFER LIGHT)

1. Auxiliary	Tank Transfer	OVERRIDE
2. No Trans (If I	sfer Light light not not extinguish, auxiliary fuel may	EXTINGUISHED not be available.)
3. Auxiliary	Fuel Quantity	MONITOR
4. Auxiliary	Tank TransferAUTO (when auxiliary fu	uel tank is empty)

# **ELECTRICAL SYSTEM**

### SINGLE GENERATOR FAILURE LDC GEN OR R DC GEN

- 1. Loadmeter.....VERIFY GENERATOR IS OFF (0% LOAD)
- 2. Generator .....RESET, THEN ON

If Generator Will Not Reset:

- 3. Generator ......OFF
- 4. Loadmeter ......DO NOT EXCEED 100% (88% above 31,000 feet)

#### BATTERY CHARGE RATE (AIRPLANES PRIOR TO BB-1632, BL-141, AND BW-30)

BATTERY CHG

#### Ground Operation:

- Illumination of the [BATTERY CHG] indicates an above-normal charge current.
- The [BATTERY CHG] should extinguish within 5 minutes after a battery start.
- If the [BATTERY CHG] does not extinguish, or it re-illuminates, the battery charge current should be checked every 90 seconds using the procedure below until the [BATTERY CHG] extinguishes.
- No decrease in charging current between checks indicates an unsatisfactory condition. Remove battery and check prior to flight.
- Do not takeoff with the [BATTERY CHG] illuminated unless a decreasing charge current is confirmed.
- 1. Either Generator .....OFF
- 2. Voltmeter.....VERIFY INDICATION OF 28 VOLTS
- 3. Battery.....OFF MOMENTARILY, NOTING DECREASE IN LOADMETER
- 4. Battery .....ON

If Decrease in Loadmeter Exceeds 2.5%:

- 5. Battery .....CONTINUE TO CHARGE, REPEATING STEPS 3 & 4 EVERY 90 SECONDS
- 6. [BATTERY CHG] .....EXTINGUISHED WHEN DECREASE IN LOADMETER IS LESS THAN 2.5%

#### In Flight:

In-Flight illumination of the [BATTERY CHG] indicates a possible battery malfunction.

- 1. Battery .....OFF
- 2. [BATTERY CHG] Extinguished......CONTINUE TO DESTINATION
- 3. [BATTERY CHG] Still Illuminated.....LAND AT NEAREST SUITABLE AIRPORT

### **EXCESSIVE LOADMETER INDICATION (OVER 100%)**

1.	Battery	OFF (monitor loadmeter)
lf Loa	dmeter Still Indicates Above 100%:	
2.	Nonessential Electrical Equipment	OFF
lf Loa	dmeter Indicates 100% or Below:	
3.	Battery	ON

### **CIRCUIT BREAKER TRIPPED**

1.	No	nessential Circuit	DO NOT RESET IN FLIGHT	
2.	Essential Circuit (necessary for continued safe flight):			
	a.	Circuit Breaker (after allowing to a for a minimum of 10 sec)	cool PUSH TO RESET	
	lf C	Circuit Breaker Trips Again:		
	b.	Circuit Breaker	DO NOT RESET	

#### BUS FEEDER CIRCUIT BREAKERS TRIPPED (FUEL PANEL BUS FEEDERS AND RIGHT CIRCUIT BREAKER PANEL BUS FEEDERS)

• A short is indicated. Do not reset in flight.

# AVIONICS MASTER POWER SWITCH FAILURE

If The Avionics Master Pwr Switch Fails To Operate In The On Position:

Avionics Master Circuit Breaker.....PULL

## LANDING GEAR SYSTEM

### HYDRAULIC FLUID LOW

HYD FLUID LOW

If The [HYD FLUID LOW] Illuminates During Flight:

1. Landing Gear ......ATTEMPT TO EXTEND NORMALLY UPON REACHING DESTINATION

If Landing Gear Fails To Extend:

2. Follow LANDING GEAR MANUAL EXTENSION procedures.

### LANDING GEAR MANUAL EXTENSION

If One Or More Of The Landing Gear Fails To Extend After Placing The Landing Gear Control Down, Perform The Following:

- 1. Landing Gear Relay Circuit Breaker (pilot's right subpanel).....PULL
- 2. Landing Gear Control ..... CONFIRM DN
- 3. Alternate Extension Handle .....UNSTOW AND PUMP
  - a. Pump handle up and down until the three green gear-down annunciators are illuminated.
  - b. While pumping, do not lower handle to the level of the securing clip as this will result in loss of pressure.

If All Three Green Gear-Down Annunciators Are Illuminated:

- 4. Alternate Extension Handle .....STOW
- 5. Landing Gear Controls ......DO NOT ACTIVATE
  - a. The Landing Gear Control and the Landing Gear Relay Circuit Breaker MUST NOT BE ACTIVATED.
  - b. The landing gear should be considered UNSAFE until the airplane is on jacks and the system has been cycled and checked.

If One Or More Green Gear-Down Annunciators Do Not Illuminate For Any Reason And A Decision Is Made To Land In This Condition:

- 6. Alternate Extension Handle.....CONTINUE PUMPING
  - a. Continue to pump the handle until maximum resistance is felt.
  - b. When pumping is complete, leave handle at the top of the stroke. DO NOT LOWER AND STOW.

Prior To Landing:

- 7. Alternate Extension Handle.....PUMP AGAIN
  - a. Pump the handle again until maximum resistance is felt.
  - b. When pumping is complete, leave handle at the top of the stroke. DO NOT LOWER AND STOW.

After Landing:

- 8. Alternate Extension Handle.....PUMP AGAIN WHEN CONDITIONS PERMIT
  - a. Pump the handle again, when conditions permit, to maintain hydraulic pressure until the gear can be mechanically secured.
  - b. DO NOT STOW HANDLE.
  - c. DO NOT ACTIVATE THE LANDING GEAR CONTROL OR THE LANDING GEAR RELAY CIRCUIT BREAKER.
  - d. The landing gear should be considered UNLOCKED until the airplane is on jacks and the system has been cycled and checked.

# **ENVIRONMENTAL SYSTEMS**

### DUCT OVERTEMPERATURE

DUCT OVERTEMP

1.	Electric Heat (if installed)	OFF
2.	Vent Blower	HIGH
3.	Cabin/Cockpit AirPUSH TO INC	CREASE AIRFLOW TO CABIN
lf Cor	ndition Persists:	
4.	Cabin Temp Mode	MAN HEAT
5.	Manual Temp	DECR (60 seconds)
lf Cor	ndition Continues To Persist:	
6.	Left Bleed Air Valve	ENVIR OFF
lf The	e [DUCT OVERTEMP] Does Not Extin	guish After 2 Minutes:
7.	Oxygen	AS REQUIRED
8.	Right Bleed Air Valve	ENVIR OFF
9.	Descend	AS REQUIRED

## ICE PROTECTION SYSTEMS

### ELECTROTHERMAL PROPELLER DEICE (AUTO SYSTEM)

#### Abnormal Readings on Deice Ammeter: (Normal Operation: 18 to 24 amps)

- 1. Zero amps:
  - a. Automatic Prop Deice ......CHECK ON
  - b. If OFF, reposition to ON after 30 seconds.
  - c. If ON with zero amps reading, system is inoperative; position the switch to OFF.
  - d. Use Manual Prop Deice system.
- 2. Below 18 amps:
  - a. Continue operation.
  - b. If propeller imbalance occurs, increase RPM briefly to aid in ice removal.
- 3. Over 24 amps:
  - a. If the Auto Prop Deice circuit breaker switch does not trip, continue operation.
  - b. If propeller imbalance occurs, increase RPM briefly to aid in ice removal.
  - c. If the Auto Prop Deice circuit breaker switch trips, use the manual system. Monitor loadmeter for excessive current drain.
  - d. If the Prop Deice Control circuit breaker or the left or right Prop Deice circuit breaker trips, avoid icing conditions.

#### ELECTROTHERMAL PROPELLER DEICE (MANUAL SYSTEM)

- 1. Manual Prop Deice......MANUAL FOR 90 SECONDS
- 2. Loadmeters ......MONITOR FOR SMALL NEEDLE

DEFLECTION (approx. 8%)

OR

L ENG ICE FAIL

3. Repeat as required.

#### ENGINE ANTI-ICE FAILURE

- 1. Engine Anti-ice Actuator.....SELECT OTHER ACTUATOR If [ENG ICE FAIL] Does Not Extinguish:
- 2. Exit icing conditions.
- 3. Assume engine anti-ice is ON for performance calculations.

R ENG ICE FAIL

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# STATIC AIR SYSTEM

## PILOT'S ALTERNATE STATIC AIR SOURCE

Whenever Any Obstruction Exists In The Normal Static Air System, Or When The Alternate Static Air System Is Desired For Use:

- 1. Pilot's Static Air Source (right side panel) .....ALTERNATE
- 2. For Airspeed Calibration and Altimeter Correction, refer to POH/AFM Section 5, PERFORMANCE.

## **CRACKED OR SHATTERED WINDSHIELD**

- 1. Altitude......MAINTAIN 25,000 FT OR LESS, IF POSSIBLE
- 2. Pressurization Controller .....RESET
  - a. Cruise and Descent......MAINTAIN A CABIN DIFFERENTIAL PRESSURE OF 2.0 TO 4.6 PSI

(A cabin differential pressure of 4.6 psi will produce approximately a 10,500-foot cabin altitude at an airplane altitude of 25,000 feet.)

- b. Before Landing......DEPRESSURIZE CABIN PRIOR TO TOUCHDOWN
- 3. Other In-flight Considerations:
  - a. Visibility through a shattered windshield may be sufficiently reduced to dictate flying the airplane from the opposite side of the cockpit.
  - b. Precautions should be taken to prevent particles or flakes of glass from a shattered inner ply of the windshield from interfering with the crew's vision.
  - c. A cracked outer windshield ply may damage operating windshield wipers.
  - d. Windshield heat may be inoperative in the area of the crack(s).
  - e. The structural integrity of the windshield will be maintained.
- 4. Postflight Considerations ......SEE SECTION 2, LIMITATIONS IN POH/AFM

## CRACK IN ANY SIDE WINDOW (COCKPIT OR CABIN)

- 1. Altitude ......DESCEND IF REQUIRED
  - a. Descend to an altitude not requiring oxygen, if possible or
  - b. Descend to at least 25,000 feet if passengers are on board.
- 2. Crew and Passengers ......DON OXYGEN MASKS, IF REQUIRED
- 3. Pressurization Controller.....RESET AS REQUIRED TO DEPRESSURIZE CABIN
- 4. Cabin Pressure Switch......DUMP
- 5. Postflight Considerations .....SEE SECTION 2, LIMITATIONS IN POH/AFM

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## SEVERE ICING CONDITIONS (Required By FAA AD 96-09-13)

THE FOLLOWING WEATHER CONDITIONS MAY BE CONDUCIVE TO SEVERE IN-FLIGHT ICING:

- Visible Rain At Temperatures Below 0 Degrees Celsius Ambient Air Temperature.
- Droplets That Splash or Splatter On Impact At Temperatures Below 0 Degrees Celsius Ambient Air Temperature

#### PROCEDURES FOR EXITING THE SEVERE ICING ENVIRONMENT

These procedures are applicable to all flight phases from takeoff to landing. Monitor the ambient air temperature. While severe icing may form at temperatures as cold as -18 degrees Celsius, increased vigilance is warranted at temperatures around freezing with visible moisture present. If the visual cues specified in the Limitations Section of the POH/AFM for identifying severe icing conditions are observed, accomplish the following:

- Immediately request priority handling from Air Traffic Control to facilitate a route or an altitude change to exit the severe icing conditions in order to avoid extended exposure to flight conditions more severe than those for which the airplane has been certificated.
- 2. Avoid abrupt and excessive maneuvering that may exacerbate control difficulties.
- 3. Do not engage the autopilot.
- 4. If the autopilot is engaged, hold the control wheel firmly and disengage the autopilot.
- 5. If an unusual roll response or uncommanded roll control movement is observed, reduce the angle-of-attack.
- 6. Do not extend flaps when holding in icing conditions. Operation with flaps extended can result in a reduced wing angle-of-attack with the possibility of ice forming on the upper surface further aft on the wing than normal, possibly aft of the protected area.
- 7. If the flaps are extended, do not retract them until the airframe is clear of ice.
- 8. Report these weather conditions to Air Traffic Control.