CAAS
Civil Aviation Authority of Singapore

Advisory Circular

REPORTING OF REPORTABLE SAFETY MATTERS

GENERAL
Advisory Circulars (ACs) are issued by the Director-General of Civil Aviation (DGCA) from time to time to provide practical guidance or certainty in respect of the statutory requirements for aviation safety. ACs contain information about standards, practices and procedures acceptable to CAAS. An AC may be used, in accordance with section 3C of the Air Navigation Act (Cap. 6) (ANA), to demonstrate compliance with a statutory requirement. The revision number of the AC is indicated in parenthesis in the suffix of the AC number.

PURPOSE
This AC provides guidance to demonstrate compliance with, and information related to, the requirements for mandatory reporting of reportable safety matters.

APPLICABILITY
This AC is applicable for the operator operating in accordance with ANR-91, ANR-121, ANR-135, ANR-125 or ANR-137.

RELATED REGULATIONS
This AC relates specifically to Regulation 50 and the Third Schedule of ANR-91.

RELATED ADVISORY CIRCULARS
Nil.

CANCELLATION
This AC supersedes AC AOC-28.

EFFECTIVE DATE
This AC is effective from 1 October 2018.

OTHER REFERENCES
- Singapore Airworthiness Requirements

1 INTRODUCTION

1.1 Pursuant to Section 4O of the Air Navigation Act (as amended 2014) which requires a responsible person to report certain safety matters, Regulation 50 of ANR-91 requires the operator of a Singapore aircraft to make such reports for the safety matters listed in the Third Schedule of ANR-91. The Third Schedule of ANR-91 also sets out the timeline for the report to be made.

Note: The operator is also required to report on the safety matters listed in SAR Chapter 4.9.

1.2 Notwithstanding the reportable safety matters listed, the operator is encouraged to report incidents which he deems would contribute to enhancing the level of aviation safety in Singapore.

1.3 This AC provides further information to some of the reportable safety matters and advises on the reporting process.

Note: "Reportable safety matters" is previously referred to as "mandatory reportable occurrences", and the associated reports were known as "mandatory occurrence reports (MOR)".

2 GUIDANCE ON REPORTABLE SAFETY MATTERS

2.1 The following provides more information to some items listed in paragraph 1(b) of the Third Schedule of ANR-91.

Item (1) Near Collision:
- *Requiring an avoidance manoeuvre to avoid a collision or an unsafe situation or when an avoidance action would have been appropriate;*

Item (2) Incident occurring during a critical phase of flight (such as take-off or landing) that may have high potential of causing an accident
- *including but not limited to undershoots, overruns or running off the side of runways/helipads, incursions, excursions; and*
- *take-offs and landings or attempted take-offs and landings on a closed or engaged runway or helipads*
- *Including incidents occurring on taxiway or unassigned runway or helipads;*

Item (5) Difficulty in controlling aircraft
- *This includes incidents due to system failure, weather phenomena or operations outside the approved flight envelope.*

Item (6) Flight Crew Incapacitation
- *Refers to any reduction in the wellbeing of a pilot to a degree or of a nature that affects the pilot's capacity to maintain vigilant engagement, physically or mentally, in his tasks as a flight crew. Besides "medical" causes, this is to include incapacitation due to "external" factors occurring in a medically fit individual, e.g. hypoxia, smoke inhalation, effects of a laser beam on vision, etc; as well as "flight environment" occurrences, e.g. Spatial Disorientation, loss of Situational Awareness, etc;*

- *Includes Human Factors such as loss of situational awareness or spatial disorientation.*

Item (10) Events requiring the emergency use of oxygen:
- *Does not include the use of oxygen by non-flight crew due to medical conditions;*

Item (12) Declaration of emergency:
- *Refers to declaration of emergency (PAN or MAYDAY) due to low fuel state and system and component malfunctions / failures (exclude declaration of emergency for priority landing due to medical reason);*

  Note: For situations where long holding time might result in low fuel states, operating crew should take the most appropriate course of action without jeopardizing aircraft safety.

Item (16) Dangerous Goods incident
- *Examples include spillage, leakage of dangerous goods and …*

Item (19) Air turn-back:
- *Does not include air turn back due to weather or medical reasons;*

Item (20) Diversion:
- *Do not include diversions due to weather, medical reason and closure of planned airports;*

Item (21) Rejected take-off
- *Includes low speed rejected take-offs;*

Item (22) Significant safety or security related event
- *Examples include a bomb threat, a hijack or similar event, a security breach, a stowaway and severe turbulence*

Item (23) Circumstances requiring a manoeuvre to avoid collision with another aircraft
- *includes activation of Airborne Collision Avoidance System (ACAS) Resolution Advisory (RA):*
- *Does not include Traffic Advisory (TA);*

Item (26) Hard landing:
- *Report within 3 working days if one or all of these conditions are met: (i) Visible signs of damage after inspection (ii) aircraft not released for flight, on airworthiness grounds following maintenance checks and /or (iii) released for flight with conditional maintenance requirements.*
- *As the DFDR download and readout require a longer period to accomplish, the operator should follow up with the provision of the "G" figure to CAAS within 30 working days after the initial notification.*

Item (29) ATC-related events
- *Examples include poor communication, lost communication, and misinterpretation of information or instructions by flight crew*

Item (43) Any other occurrence that endangers or may endanger the operation of an aircraft, or which causes or may cause a danger to persons or property
- *Examples include* Unlawful interference or air rage

3 REPORTING PROCESS

3.1 CAAS(AW)139 is the form to be used when making a formal written notification. It consists of 3 parts: Part 1- Initial Notification, Part 2 - Investigation / Finding, and Part 3 - Verification / Follow Up. **Appendix A** shows a typical flow process for Part 1.

3.2 The written Initial Notification (Part 1) should be filled up for all categories and submitted per the timelines specified in the Third Schedule of ANR-91. It consists of the following:

- Date of Incident (UTC) : dd/mm/yyy
- Time of Incident (UTC) : hh:mm
- Reporting Org
- AOC Reference: ABC xxxx (eg SIA 1234, JSA 001-10, TGW 123-10 etc)
- Pilot Name and Co-pilot Name
- Flight Number
- Last Departure Point
- Planned Destination
- Title of the Occurrence
- Flight Phase
- Aircraft Registration
- Aircraft Model
- State / Area of Occurrence
- Narrative of the occurrence
- Potential Hazard (if any)

3.3 For accident category or serious incident category, the operator should fill the Investigation / Findings (Part 2) and Verification / Follow-Up (Part 3). The completed form should be emailed to the respective Principle Operations Inspector (POI) / Principle Maintenance Inspector (PMI) as an update to the occurrence.
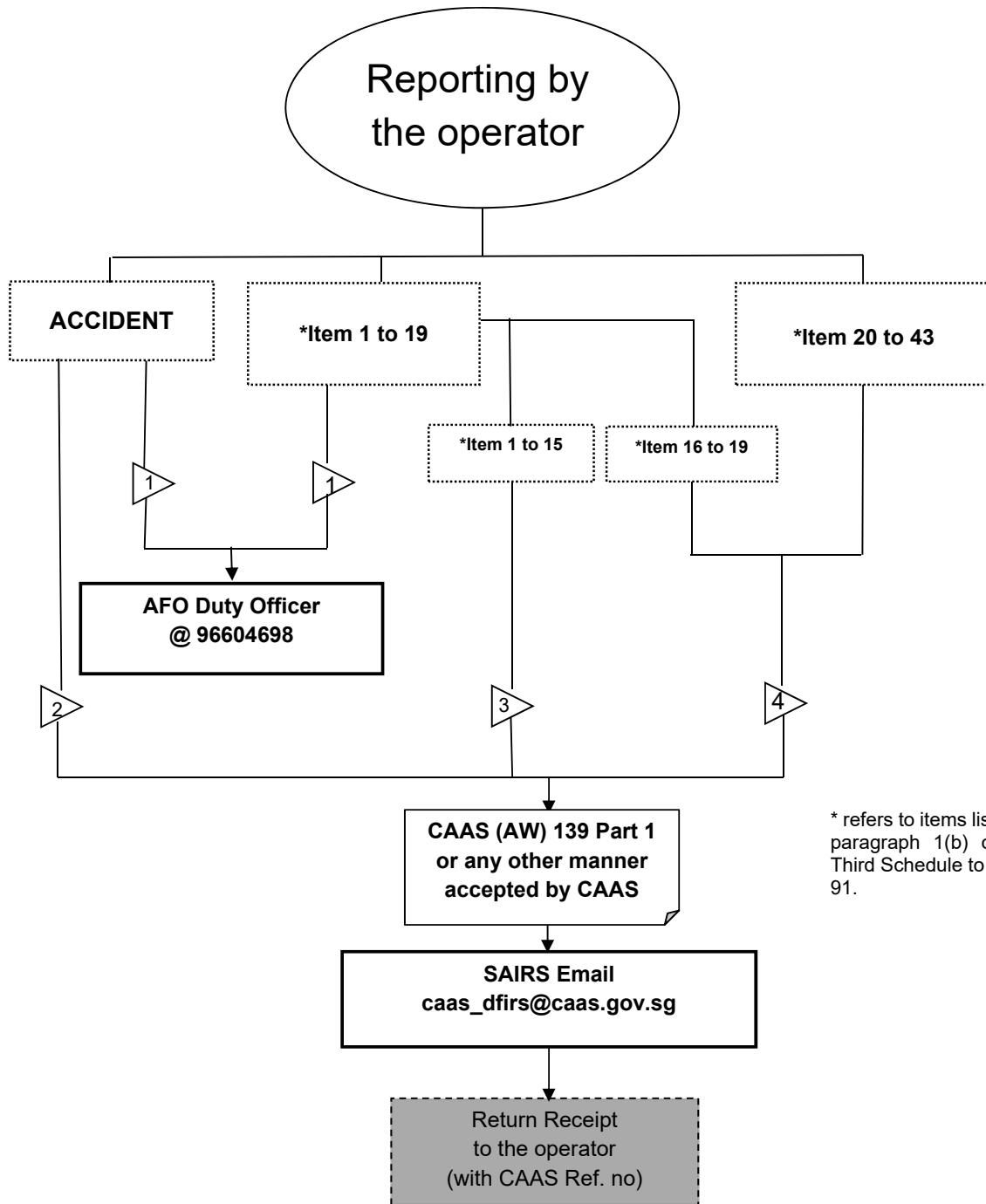
3.4 A copy of the CAAS AW139 (SAIR form) can be requested from the POI / PMI assigned to the operator. In addition, it can also be downloaded from the CAAS website at www.caas.gov.sg. As the form has numerous in-built macros, it is therefore preferred to be zipped, or compressed, before sending it to CAAS.

3.5 The operator or pilot-in-command should provide all available and accurate information in the initial report. However, the operator should not delay the initial notification because of incomplete information. Follow-up reports should be provided as more information becomes available. Prompt advice to CAAS on the results of investigations and the actions taken to control the situation will minimise or may render unnecessary direct CAAS involvement in the investigative activity.

4   SINGAPORE AVIATION ACCIDENT / INCIDENT REPORTING SYSTEM (SAIRS)

4.1   The reports received by CAAS will be uploaded into the SAIRS system used by CAAS to manage reported safety matters. It is based on the ECCAIRS software and the data is in a format aligned with ICAO taxonomy. CAAS makes use of the SAIRS to collate, analyse and monitor the safety trends of the Singapore aviation industry.

Note: the SAIRS is independent from the Confidential Reporting System (SINCAIR) administered by Singapore Transport Safety Investigation Bureau, TSIB.

Reporting by the operator

ACCIDENT

*Item 1 to 19

*Item 20 to 43

*Item 1 to 15

*Item 16 to 19

1

1

AFO Duty Officer @ 96604698

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CAAS (AW) 139 Part 1 or any other manner accepted by CAAS

* refers to items listed in paragraph 1(b) of the Third Schedule to ANR-91.

SAIRS Email caas_dfirs@caas.gov.sg

Return Receipt to the operator (with CAAS Ref. no)

<u>Verbal Notification</u>

1 ▷ Immediate thru most expeditious means (i.e. telephone, sms)

<u>Written Notification</u>

2 ▷ Within 3 hrs from immediate

3 ▷ Within 24 hrs

4 ▷ Next 3 working days