

Regulations for Aircraft Flight Safety-related Events

Promulgated on February 25, 2002

Amendment of Article 1 promulgated on December 15, 2005

Amendment of Article 1,2,3,5,6,7,8,9,10,11 promulgated on July 25, 2008

Amendment of Article 3,5,6 promulgated on February 25, 2010

Amendment Appendix 2 and 3 of Article 3 promulgated on November 25, 2015

Amendment Appendix 2 of Article 3 promulgated on February 25, 2020

Article 1

This regulation is based on the Civil Aviation Act 41-2.

Article 2

An aircraft flight safety-related event per this regulation is defined as an aircraft accident, aircraft serious incident, and ground safety event when aircraft is not intended for flight.

Article 3

The aircraft owner or operator shall comply with the Regulations for Aircraft Flight Safety-related Events for any flight safety event which requires the compulsory reporting of (Appendix 1). The owner or operator shall also submit to the CAA the flight safety event initial report of (Appendix 2) within 24 hours. The Flight Safety Management Information System (FSMIS) report for the safety event shall be submitted to CAA within 72 hours.

The aircraft owner or operator shall submit to CAA, the maintenance difficulty FSMIS report within 72 hours, if the event is related to Appendix 3.

If any delay, turn-back, or flight cancellation is due to reasons of paragraph 1, the aircraft owner or operator shall complete the civil aircraft flight report (Appendix 4) and shall submit this report to the airport operator, who shall relay this to the CAA at once.

Article 4

CAA shall organize an emergency response group to coordinate the related issues while receiving the aircraft accident report or by CAA description.

Article 5

The person in charge of the on-site rescue mission of an aircraft accident, serious incident or other aircraft flight safety event, shall be appointed by:

- 1) The airport operator, the director of airports or his/her representative for events on the airport.
- 2) By local authorities or his/her representative for areas outside the airport, i.e. city or county.
- 3) Director of Harbors or his/her representative for events inside a harbor, i.e. commercial, fishing, military, or industry only.
- 4) The Commander of the Coast Guard Unit within the Ocean Territory of the event

The fire station, medical support, military, police, gas, electricity, telecommunication units shall support the rescue mission per the request of the commander.

Article 6

The airport operator shall initiate the rescue mission upon notification of an aircraft accident, serious incident and provide other emergency support inside the airport or on the vicinity of the airport. They shall abide by the command of the person in charge of the on-site rescue mission for an aircraft accident outside the airport boundaries.

Article 7

The aircraft owner or operator shall submit to the passenger list and medical status list to the person in charge of the on-site rescue mission.

Article 8

The person in charge of the on-site rescue mission shall coordinate with the related military and police units to set up procedures for patrol and control of traffic, personnel, property, vehicle and machinery which have emergency rescue access to the restricted area.

Article 9

The CAA shall include the following items in the investigation report for an aircraft accident, serious incident or other flight safety events:

- 1) History of event
- 2) Aircraft information, including FDR/CVR records
- 3) Crew and related airmen information, including medical history and training records
- 4) Personnel fatality/injury list, aircraft and other damage information
- 5) Weather information
- 6) Aids to navigation
- 7) Air Traffic Control (ATC) and ground-air communication information
- 8) Airport facility
- 9) Fire fighting and rescue procedures
- 10) Others, including the management systems of the company

Based on the investigation reports of the flight safety-related event, the CAA shall provide statistic analysis for the purpose of flight safety enhancement.

Article 10

When necessary the CAA shall coordinate with the aircraft owner or operator to

temporarily suspend the mission dispatch of the related personnel under the circumstances of the following:

- 1) The necessity of investigation
- 2) Stabilizing the minds of the related personnel
- 3) Additional training to reinforce competency of personnel

The aircraft owner or operator shall report to the CAA if the factors above are no longer a concern and has released the related personnel back to normal duty.

Article 11

An aircraft owner or operator, civil air transport enterprise, general aviation operator, air freight forwarder, airport ground handling service, catering service, air cargo entrepot, airfield, repair station or a civil aviation training institution shall establish a reporting system for the employees to comply with the events of this regulation.

Article 12

This regulation shall become effective on the date of promulgation.

Appendix 1 (Compulsory Report)

I. Operation of Aircraft.

A. The Control of Aircraft

1. A system failure which results in an aborted takeoff, in-flight engine shutdown or a diversion, requiring a return to the originating airport not weather related.
2. Any flight crew which completes a checklist, whether it be an emergency or abnormal event such as; an aircraft exceeds any speed limitations, all fire/smoke related to the engine, APU, wheel well(s), cabin/cargo hold, or complete failure of the autopilot system.
3. Hard landing - damage is suspected after inspection.
4. An unintentional landing i.e. contact with ground, including displaced threshold, clearway, etc.
5. Running off the end of the runway, or side of the runway during landing.
6. Landing or takeoff not on or at the assigned runway/airport.
7. Warning or abnormal performance of flight controls.
8. For helicopter; any loss of stabilator control or system failure.
9. Fuel quantity is below minimum safe reserve.
10. A fuel imbalance which results in abnormal control input.
11. A TCAS (RA) alert which requires control input to avoid conflict.
12. Declaring an emergency "MAYDAY-MAYDAY", "PAN-PAN".
13. Malfunction of any emergency systems or equipment during training, maintenance or test.

B. Crew Incapacitation

1. Within the cockpit, any crew member which is incapacitated.
2. Within the cabin, any crew member which is incapacitated and results in the inability to perform normal duties.

C. Injuries

Anyone who sustains injuries from the aircraft or its related equipment

D. Other Flight Safety Events

1. Lighting strikes or hail which results in direct damage to the aircraft or malfunction of aircraft systems.
2. Wake turbulence which results in major control difficulties of the aircraft.
3. Bird strike which results in damage of the aircraft.
4. Turbulence which results in injuries to the crew, occupants, or damage to the aircraft revealed after an inspection.

II. Compulsory reports for malfunctions or defects of aircraft products including equipment and parts:

A. Aircraft Hull

1. The damage or defective structure element which cause harm/injury to the occupants or crew and/or affects the normal operation of the aircraft.
2. Any part of the structure element that becomes dislodged in flight.

B. Aircraft Systems

1. Any type of hydraulic fluid, fuel, or oil leak which causes a fire, corrosion which causes structural or system equipment damage, or injury/harm to the occupants or crew.
2. A warning which is related to asymmetric control surfaces such as slats, flaps or spoilers.

C. Power Plant (Engine, Propeller or APU)

1. During flight the engine(s) sustains severe damage, flame out or shut down.
2. Power, thrust, RPM is uncontrollable or exceeds limits.
3. FOD or IOD resulting in the damage of the engine and requires a replacement.
4. Engine fires or over temperatures which results in the replacement of the engine.
5. Thrust-reversing system is inadvertently activated during flight.
6. Engine-mount structure failure.
7. Essential engine parts are dislodged.
8. Engine shutdown is unable to be accomplished via normal procedures.
9. A system malfunction which results in an excessive imbalance in thrust
10. Propellers blades are unable to control for the flight condition such as; unable to feather or unable to maintain a certain pitch angle.
11. Unable to control the propellers causing excessive torque limit, speed fluctuation

III. Ground Handling/Serviceing:

- A. Incorrect fuel quantity resulting in an obvious imbalance, exceeding structural limits, aircraft performance or operating limitation.
- B. Addition of contaminated/incorrect grade of fuel or other stipulated liquids such as; oxygen or drinking water.
- C. Any spillage of fuel during refueling/ transferring.

- D. Damage to the aircraft which requires a repair due to ground handling mishaps or system failure.
- E. Accidental deployment of emergency slides.
- F. Surface moving aircraft collides with another aircraft, vehicles, or other ground objects.
- G. Moving aircraft inadvertently taxis off the pavement.
- H. Aircraft wake which causes damage to other aircraft, ground equipment or injury to personnel.
- I. Occupants/Luggage/Cargo
 - 1. Occupants/luggage/cargo not loaded, secured or handled according to the load procedures which have a significant influence to the weight & balance of the aircraft.
 - 2. Cargo pallets or containers which become improperly secured in flight and cause damage to the aircraft.
 - 3. Severe damage or contamination to the structure element or equipment as a direct result from luggage or cargo.

Appendix2

航空器飛航安全相關事件初報表
OCCURRENCE NOTIFICATION FORM

通報對象 Unit to be notified	民用航空局 Civil Aeronautics Administration		國家運輸安全調查委員會 Taiwan Transportation Safety Board			
通報電話 Phone No.	(02)2349-6067 (上班時間) (02)2349-6300(非上班時間)		0800 - 004 - 066 0935 - 628 - 217			
傳真號碼 FAX No.	(02)2349-6400 (上班時間) (02)2349-6286 (非上班時間) e-mail : caafsd@mail.caa.gov.tw		(02) 8912-7397 e-mail : go_team-air@ttsb.gov.tw			
航空公司 Operator			機型 Aircraft Model			
班次號碼 Flight No.			註冊號碼 Registration No.			
起飛地點 Departure Point			起飛時間 Departure Time			
目的地 Destination			實際降落機場 Actual Landing Point			
事件發生日期 Date of Occurrence	年 Year	月 Month	日 Day			
事件發生時間 Time of Occurrence	上午 / 下午 AM / PM	時 Hour	分 Minute			
事件發生地點 Location of Occurrence						
事件簡述：(如本欄不敷使用，請另用紙張填寫附上) Summary of Occurrence						
通報人 Notified by		通報單位 Unit		聯絡電話 Phone No.		
以下請勿填寫 For official use only						
登記人 Duty Officer		通報登記 時間 Notification recorded at	月 Month	日 Day	時 Hour	分 Minute

Appendix 3 (SDR)

I. Air Conditioning System

- A. Cabin pressure control system failure
- B. In flight occurrence of accumulated/spreading smoke, fumes (steam) and toxic or hazardous gas in the cabin or cockpit.

II. Autopilot

Autopilot complete failure or unknown ElectroMagnetic Interference (EMI).

III. Communication

Communication system complete failure or unknown ElectroMagnetic Interference (EMI).

IV. Electrical System

- A. Any electrical distribution system failure
- B. One or more power supply system failure
- C. Emergency power supply system failure

V. Fire Warning System

- A. Fire warning or smoke detection/protection system failure, and being unable to indicate warning.
- B. No warning indication, upon occurrence of fire or fumes
- C. In flight occurrence of a fire and related warning, including false alarm
- D. In flight occurrence of a fire in the area without fire warning sensor system

VI. Flight Control

Asymmetric warning indication of flight control surface, such as slats, flaps or spoilers

VII. Fuel System

- A. Fuel quantity indication system failure, and unable to indicate fuel correct quantity
- B. Fuel supply system failure, affecting distribution
- C. Fuel jettison system failure/malfunction, resulting in a concern of significant spillage or fire and containment of equipment or failure of fuel dump

VIII. Hydraulic system

Any one of the hydraulic system failure

IX. Anti-icing system

Failure of anti-icing system resulting in irregular icing and affecting flight control

X. Landing gear

- A. Brake fire

- B. Significant loss of brake effect during ground movement
- C. Asymmetric application of brake effect, causing difficulty maintaining straight line taxi
- D. Emergency release system failure, including test or tire burst
- E. Wheel hatch door, gear retraction/extension abnormal operation during flight

XI. Navigation System

- A. Entire or multiple failure of navigation system or unknown ElectroMagnetic Interference (EMI).
- B. Entire or multiple failure of air data equipment
- C. In flight failure to meet RNP and RVSM operation standards

XII. Oxygen

- A. Cockpit oxygen system failure
- B. Cabin oxygen system failure, resulting in the inadequate supply of required quantity

XIII. Bleed air system

- A. System failure
- B. Leakage resulting in damage on engine structure, equipment and assembly

XIV. Aircraft structure damage or worsening such as; structure fraction, cracks, corrosion, delaminating or disbanding) resulting in the following:

- A. The damage of main structure and the worsening effect has exceeded the tolerance limit prescribed in SRM, and resulting in repair or replacement of partial or all the components.
- B. The damage of the sub-structure is induced or possibly jeopardizes the safe operation of the aircraft.

XV. Propeller

- A. Reverser system or speed governor system failure in flight
- B. Occurrence of unexpected feathering in flight

XVI. Engine

- A. During flight the engine(s) sustains severe damage, flame out or shut down.
- B. Power, thrust, RPM is uncontrollable or exceeds limits.
- C. FOD or IOD resulting in the damage of the engine and requires a replacement.
- D. Engine fires or over temperatures which results a replacement of the engine.
- E. Thrust-reversing system is inadvertently activated during flight.
- F. Engine-mount structure failure.
- G. Essential engine parts are dislodged.
- H. Engine shutdown is unable to be accomplished via normal procedures

- I. A system malfunction which results in an excessive imbalance in thrust
 - J. Propellers blades are unable to be controlled for the flight condition such as; unable to feather or unable to maintain a certain pitch angle.
 - K. Unable to control the propellers causing excessive torque limit, speed fluctuation
- XVII. Others
- A. In-flight action taken in response to aircraft component failure
 - B. Wiring cable fusion
 - C. Failure of escape slide deployment, including test
 - D. In the performance of maintenance according to CAA published AD/SB, or other mandated instruction, locate a system or equipment failure, malfunction or degrading under the following situations:
 - 1. Operator or repair station finds this in the initial inspection in accordance with the requirement described above.
 - 2. Out of limit or lack of existing repair procedures while performing follow-up maintenance or repair in accordance with the requirement described above.

Appendix4 民用航空器飛航報告表(CIVIL AIRCRAFT FLIGHT REPORT)

延 誤	回 航	取 消
DELAY	ABORT	CANCEL

日 期

DATE _____

航空公司 OPERATOR			飛 航 班 次 FLIGHT NO.						
機 型 機 號 ACFT TYPE & NO.			機 長 姓 名 CAPTAIN						
原 因 REASON OF	1. 天候因素 WEATHER	2. 機件故障 MECHANICAL TROUBLE	3. 航管因素 ATC	4. 來機晚到 ACFT LATE	5. 班機調度 ACFT SCHEDULE		6. 其他因素 OTHERS		
歸 責 對 象 (請 勾 選)	A	A	A	A	B	A	B	A	B
說 明 DESCRIPTION									
處 置 措 施 ACTION TAKEN									
填 報 人 REPORT BY			職 稱 TITLE			所 屬 單 位 UNIT			
處 理 情 形 ACTION	(以下由航空站經營人填寫)								
主 管			值 班 人 員						
<p>附註：</p> <ol style="list-style-type: none"> 1. 不同班次不同原因各填乙張表，除非相同航線且相同原因始可共填乙張。 2. 「天候因素」、「機件故障」、「航管因素」、「來機晚到」、「班機調度」及「其他因素」等六項請在「說明」欄內詳述原因。其中「來機晚到」、「班機調度」及「其他因素」三項應再細分為「不可歸責航空公司」及「可歸責航空公司」兩項，由航空站經營人負責查證認定其延誤、回航、取消原因。 3. 「其他因素」暫細分為：1. 原廠臨時來臺檢修。2. 演習。3. 安全檢查。4. 等候旅客。5. 電腦當機。6. 組員用餐。7. 地勤作業(含加油、接駁及供餐)。8. 場站設施(含空橋調度及F.O.D.)。 4. 歸責對象中“A”為不可歸責航空公司，“B”為可歸責航空公司，由航空站經營人判定。 									