

2018 Delegates Conference 521 Division IX SDR Reporting





Objectives of the SDR Program

- Collect, record and analyze in-service defects
- Identify potential or existing safety hazards and investigate accordingly
- Implement corrective action through the assistance with the pertinent Stakeholders; Operator/Owner, DAH, AMO and/or the Civil Aviation Authority
- Improve the level of flight safety and/or restore the aeronautical product to an airworthy condition
- To encourage participation and declaration of all aeronautical in-service safety related incidences



The origins of the SDR Regulation

- ICAO Annex 8, part 2, chapter 4.2.
 - Sets the standard & recommended practices
- Canadian Aeronautics Act A-2, 4.9
 - Sets the power of authority to practice the standard (law)
- CAR part 5, subpart 21, Division IX
 - Defines the regulation to submit and the format
- FAR 21.3 & EASA 21A.3



Part V – Airworthiness Canadian Aviation Regulations ***Subpart 21 — Division IX — Service Difficulty Reporting*** **-Form and Submission**

521.401 (1) A person who is required to report a service difficulty **shall submit to the Minister**, for each reportable service difficulty, a separate service difficulty report that contains the information specified in the form published by the Minister entitled *Service Difficulty Report*.

(2) A service difficulty report shall be submitted

(a) by electronic means, such as the Transport Canada web service difficulty reporting system; or

(b) by mail or courier.



Part V – Airworthiness Canadian Aviation Regulations ***Subpart 21 — Division IX — Service Difficulty Reporting*** **-Time Limits**

521.402: a person who is required to report a service difficulty shall submit a service difficulty report to the Minister within **three working days after the day on which the reportable service difficulty is discovered**.

If all of the information required is not available within the period specified, **an interim service difficulty report containing the following elements** may be submitted to the Minister within three working days after the day on which the reportable service difficulty is discovered:

- (a) the aircraft registration, if applicable;
- (b) the date of the occurrence of the reportable service difficulty;
- (c) a description of the reportable service difficulty; and
- (d) the name, mailing address, and telephone and fax numbers of the person submitting the report.

The person submitting the **interim service difficulty report** shall submit a complete service difficulty report that complies with the requirements set out in subsection 521.401(1) **within 14 days** after the day on which the reportable service difficulty is discovered



Part V – Airworthiness Canadian Aviation Regulations Subpart 21 — Division IX — Service Difficulty Reporting - Service Difficulty Report not Required

521.403 A service difficulty report is not required for a reportable service difficulty that has been reported by another person or organization.

To better define this statement and to prevent confusion the following example is provided;

If an aircraft operator (AOC) issues an SDR for an event which included engineering/technical support from the Design Approval Holder (DAH), the DAH does not need to submit an SDR knowing that the AOC reported the event and;

Only one SDR is required per event but if this same event were to occur on the same aircraft on the next or subsequent flight, another SDR is required to be submitted.

Advisory Circular AC521-009 provides further clarification

What is a Service Difficulty?

A “**service difficulty**”; “means a failure or malfunction of, or defect in, an aeronautical product



CAR 101.01 interpretation and further defined in AC 521-009 and SDR Logic Chart TP 14134 help define this difference

What is a Reportable Service Difficulty?

“means a **service difficulty** that affects or that, if not corrected, is likely to affect the safety of an aircraft, its occupants or any other person.”



Division VIII of Subpart 21 of Part V — Responsibilities of a Design Approval Document Holder

Service Difficulty Report

- **521.353** The holder of a design approval document in respect of an aeronautical product **shall report to the Minister, in accordance with Division IX**, any reportable service difficulty related to the aeronautical product.

Establishing a Service Difficulty Reporting System

- **521.354** The holder of a design approval document in respect of an aeronautical product **shall establish and maintain a service difficulty reporting system** for the purpose of receiving, recording, analyzing and investigating reports and information concerning a reportable service difficulty related to the aeronautical product.



Division VIII of Subpart 21 of Part V — Service Responsibilities of a Design Approval Document Holder

Investigation of Service Difficulty Reports

- **521.355** (1) When the holder of a design approval document in respect of an aeronautical product **receives notice that a service difficulty report has been submitted** to the Transport Canada web service difficulty reporting system in relation to the aeronautical product, the holder shall:
 - (a) investigate the service difficulty and, **if it results from a deficiency** in the aeronautical product, develop a corrective action to rectify the deficiency; and
 - (b) report to the Minister the **progress of the investigation** and any proposed corrective action.



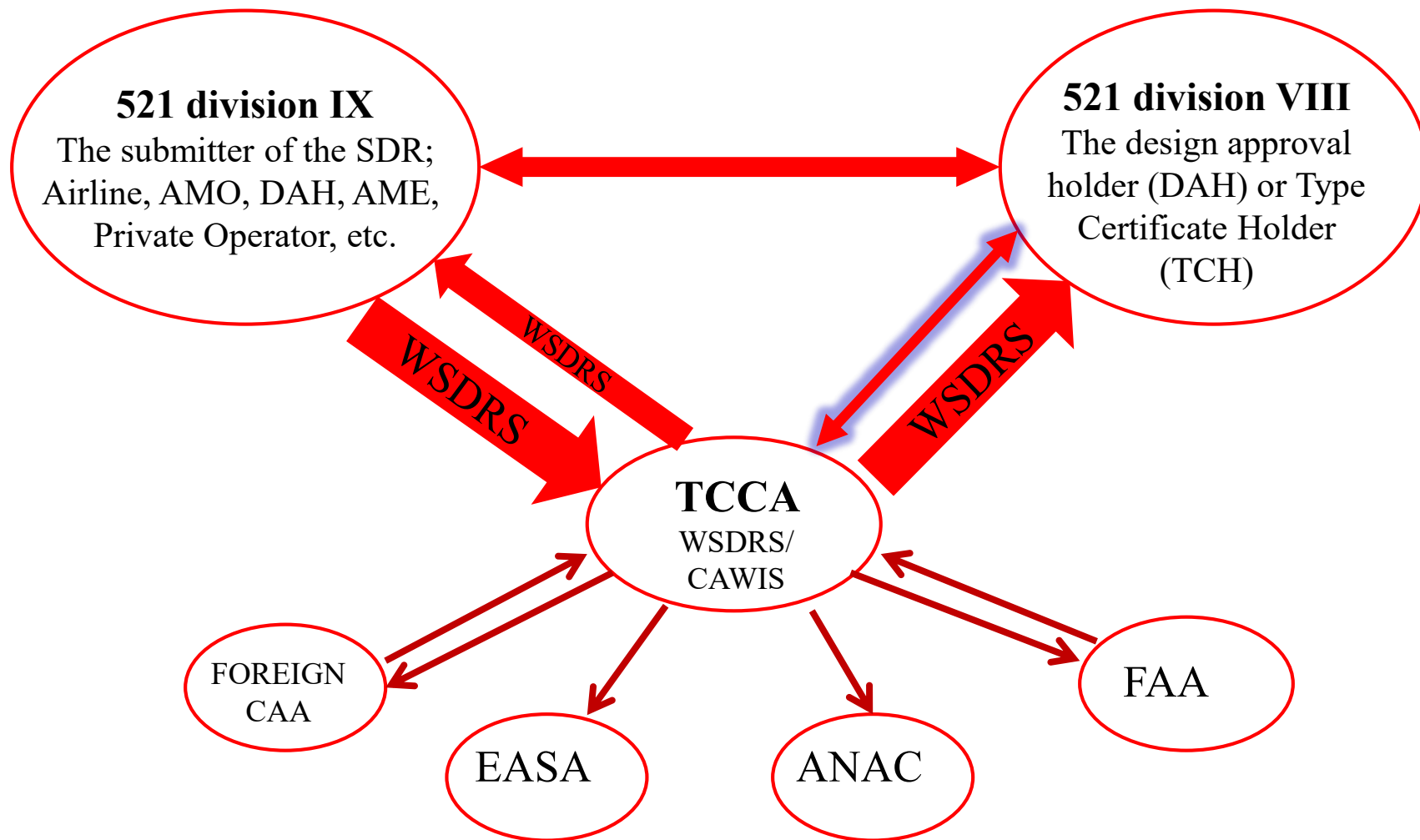
Division VIII of Subpart 21 of Part V — Service Responsibilities of a Design Approval Document Holder

Investigation of Service Difficulty Reports

- **521.355** (cont.) (2) Subject to section 521.356, if the Minister determines that a **corrective action is required** to rectify the deficiency, the holder of the design approval document in respect of the aeronautical product shall:
 - (a) submit the technical data in support of the **proposed corrective action** to the Minister; and
 - (b) undertake any corrective action that the Minister determines is necessary to **rectify the deficiency**.



The SDR flow chart with a Canadian domestic design approval holder





Examples of an SDR

- Any failure of the aircraft primary structure, being corrosion, crack or breakage that is not normally covered in the manufacturer's repair manual...
- Any loss, restriction or interference of movement or controllability of an aircraft and its systems...
- A significant loss of aircraft fuel or a loss of an aircraft component during ground and/or air operations...
- Any form of fire, smoke, toxic/noxious fumes within or on an aircraft...
- An occurrence that required the flight crew to apply an abnormal or emergency procedure to address an aircraft technical fault...
- Loss of control for an engine including its functions and ability for containment...

“...that affects safety.”

Refer to AC521-009 for more details

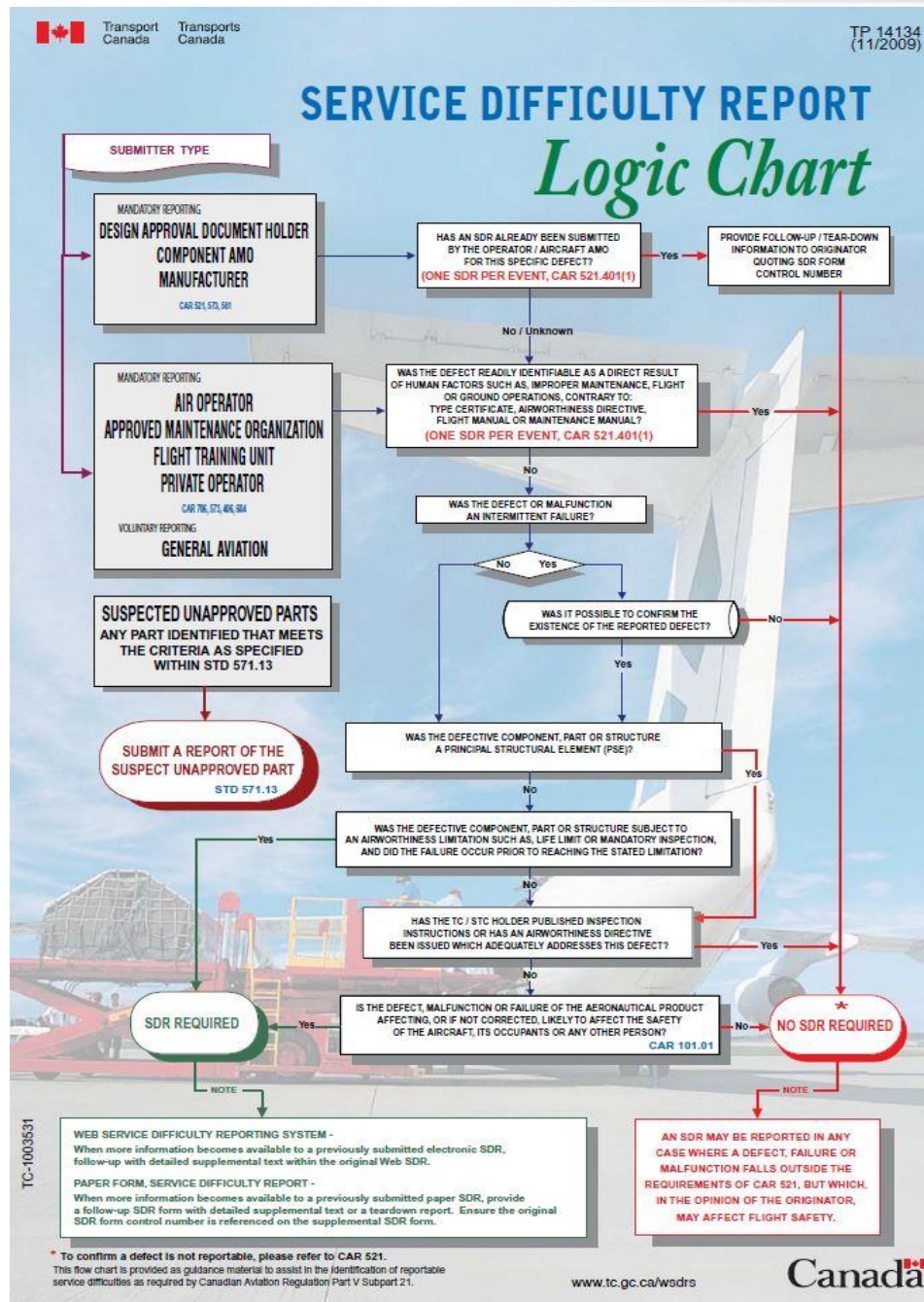
SDR Logic Chart

The SDR Logic Chart, was located on the WSDRS menu page. Many changes to the TC website and CAWIS now have it located at the following link:

<http://www.tc.gc.ca/publications/en/tp14134/pdf/hr/tp14134e.pdf>

If you are not sure if an SDR is required please submit anyway.

Note:
Beware if using Google search for TP14134 because a number of outdated versions can be found





Questions...