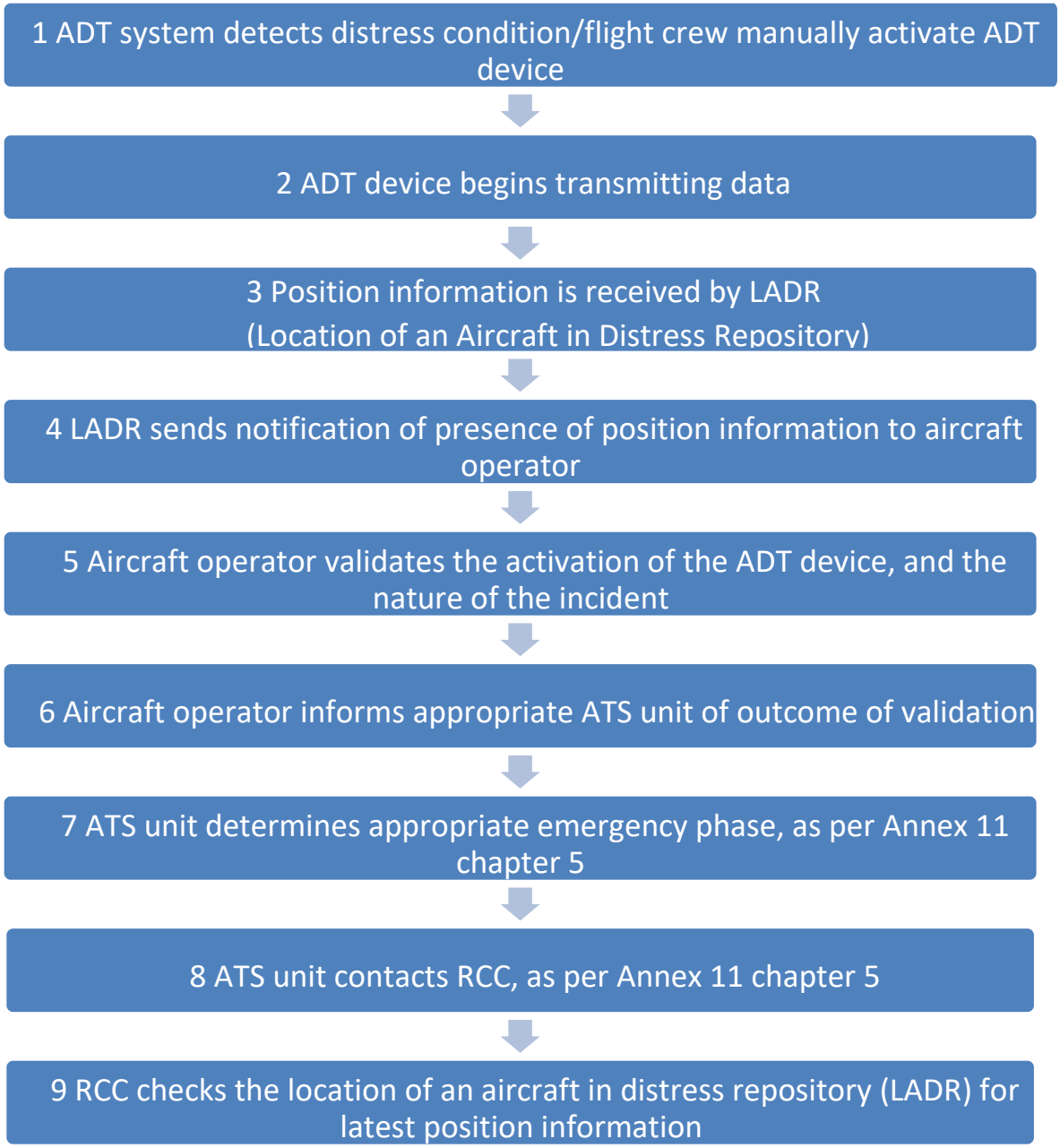
IAMSAR Manual, Volume II, Appendix V Figure 1 annotated



Annotated version of IAMSAR Manual Volume II, Appendix V, Figure 1

Notes on the nine steps in Figure 1:

1. ADT system detects distress condition.
    a. The ADT system activates under certain conditions when the aircraft is in flight, there is no requirement to operate after an accident.
    b. Activated automatically or manually by flight crew. De-activated by the same means it was activated.

2. ADT device begins transmitting data
    a. Aircraft operator (airline) required to obtain information from which a position can be determined at least once every minute, and make the position information available to the appropriate ATS unit and RCC.

3. Position information received by the LADR
    a. All ADT devices send ADT information to the LADR.
    b. The ELT(DT) also sends a Cospas-Sarsat formatted message to the relevant RCC.
    c. The mandatory ADT information to be sent to the LADR is:
        i. Last known position (latitude/longitude, altitude, time stamp, flight track (past position reports)
        ii. Date and time of transmission
        iii. Aircraft operator identifier (3-Letter Designator (3LD)
        iv. Nationality mark and Aircraft registration mark (i.e., tail number)
        v. Contributor, data source (e.g., Cospas-Sarsat).
    d. Optional information may also be in the LADR.

4. LADR sends notifications to subscribers
    a. Subscribers (RCCs, ATS units, aircraft operator)
    b. Subscribers are notified that ADT information is available to view or download
    c. Notification sent from LADR for the first received position and normally not sent for each position report.
    d. New LADR notification sent when an aircraft is distress transits from one FIR to a second (and any subsequent) FIR.
    e. Notification from LADR sent by email, SMS, or ATS message over AFTN/AMHS
    f. ELT(DT) data also automatically sent to relevant RCC in a Cospas-Sarsat SIT 185 message.
    g. Cospas-Sarsat MCC will automatically send all ADT information to the LADR but will not send all ELT(DT) messages to the RCC because of the large number of transmissions.

5. Aircraft operator validates/attempts to validate
    a. Aircraft operator has various methods to validate if its aircraft is in distress or not.
    b. Aircraft operator needs to be aware that the relevant ATS unit and associated RCC have likely been notified.
    c. ADT concept envisioned the current alerting process as per Annex 11 chapter 5 would not change.

6. Aircraft operator informs appropriate ATS unit

a. Aircraft operator needs to be aware that the relevant ATS unit and associated RCC have likely been notified.
b. Aircraft operator, ATS unit and RCC need common ADT procedures, nationally and regionally, for efficient handling of information received from the ADT system.

7. ATS unit determines emergency phase
    a. As per Annex 11 chapter 5.
    b. ATS unit, RCC and aircraft operator need common ADT procedures, nationally and regionally, for efficient handling of information received from the ADT system.

8. ATS unit contacts RCC
    a. As per Annex 11 chapter 5.
    b. ATS unit, RCC and aircraft operator need common ADT procedures, nationally and regionally, for efficient handling of information received from the ADT system.

9. RCC checks the LADR
    a. In addition to the initial notification other information may be available.
    b. If aircraft is equipped with an ELT(DT), the RCC will also receive an ELT(DT) message from the Cospas-Sarsat system.
    c. RCC, ATS unit and aircraft operator need common ADT procedures, nationally and regionally, for efficient handling of information received from the ADT system.