



ICAO

International Civil Aviation Organization

Fifth Meeting of the Asia/Pacific Regional Search and Rescue Working Group (AP SARWG/5)

Video Teleconference, 09 – 11 June 2020

Agenda Item 3: Global update

Papers will be confined to discussion on:

- *Global Air Navigation Plan (GANP) GADSS - ADT Implementation and Location of Aircraft in Distress Repository (LADR) elements*

GLOBAL SAR UPDATE

(Presented by the Secretariat)

SUMMARY

This paper presents a summary of the activities undertaken by ICAO at the global level to support the implementation of the Global Aeronautical Distress and Safety System (GADSS), including developments relating to the location of an aircraft in distress repository (LADR).

1. INTRODUCTION

1.1 As was reported during AP SAR/WG/4, WP03, a significant part of the ICAO activities related to SAR has been related to the implementation of the tracking capabilities and procedures underscoring the Global Aeronautical Distress and Safety System. Specifically, this concerned the implementation of the Annex 6 — *Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes* provisions related to location of an aeroplane in distress and aircraft tracking, that became applicable on 10 November 2016 and 8 November 2018, respectively. These provisions are contained in **Appendix A**.

1.2 GADSS provides an effective and globally consistent approach to enhancing the alerting procedures of search and rescue services by addressing a number of key improvement areas.

1.3 In order to achieve these improvements, GADSS contains 3 main elements:

- 1.3.1 Aircraft tracking;
- 1.3.2 Autonomous distress tracking (ADT) of aircraft in flight; and
- 1.3.3 Post-flight localisation and recovery (PFLR)

1.4 Utilising these elements, GADSS maintains an up-to-date record of aircraft progress and, in case of a crash, forced landing or ditching, information on the location of survivors, the aircraft and recoverable flight data.

2. DISCUSSION

2.1 The ICAO Council adopted amendment 40-A to Annex 6 — *Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes* on 2 March 2016, with an applicability date of 10 November 2016. Included in this amendment were provisions (paragraph 6.18) related to location of an aeroplane in distress, requiring specified aeroplanes, as of 1 January 2021, to autonomously transmit information from which a position can be determined, when in distress.

2.2 Following discussions at the 40th Session of the Assembly (A40, 24 September – 4 October 2019), ICAO consulted States and industry to determine their readiness to apply these provisions, in State Letter AN 11/1.1.29 – 19/78. This consultation resulted in the ICAO Council extending the future equipage date in the Standards to 1 January 2023.

2.3 Concurrent with this consultation, ICAO opened a tender process for development and maintenance of the LADR (formerly known as the distress tracking repository (DTR)), a web-based solution to ensure that position information of aircraft in distress can be made available to the appropriate organizations. The tenderer Snowflake Software, based in the United Kingdom, has been selected.

2.4 A screenshot of a prototype LADR developed in Q2 2020, is shown in Figure 1. A workshop was scheduled to be held in July 2020 to review LADR functionality prior to proceeding to the full production model. Consideration, therefore, will be given to the best way to roll out the GADSS concept in preparation for the LADR becoming operational; for example, what further guidance is considered necessary, what system features still require development, what training will be needed?

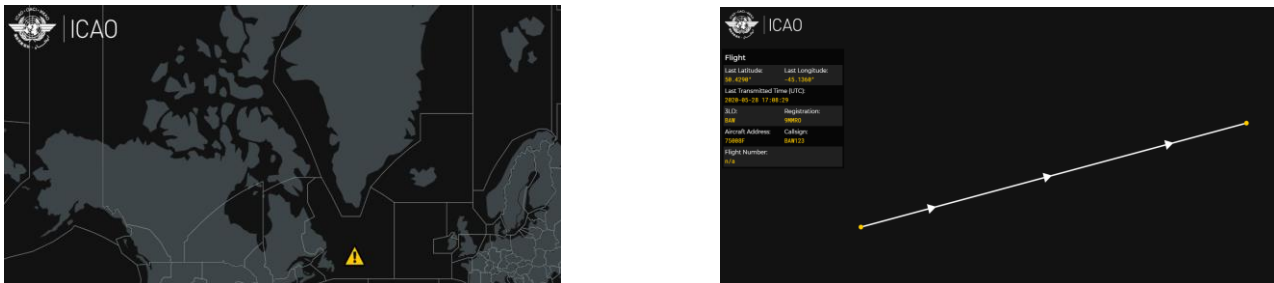


Figure 1. LADR interface, showing an event notification (left) and position and aircraft information from the notified event (right).

2.5 On 24 October 2019, the Air Navigation Commission carried out a preliminary review (AN-WP/9361 and AN-WP/9361.PDP) on proposals to amend Annex 6 — *Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes and Procedures for Air Navigation Services — Aircraft Operations* (PANS-OPS, Doc 8168), Volume III — *Aircraft Operating Procedures*.

2.6 The PANS-OPS Volume III proposals, envisaged for applicability on 4 November 2021, complete air operator provisions supporting the implementation of the GADSS concept by establishing requirements for operators to develop procedures to: a) monitor the aircraft tracking systems in use for their aircraft; b) respond to any information received from such tracking systems in an appropriate manner; and c) require that information received from an autonomous distress tracking system be forwarded to the (LADR). Proposed amendments to Annex 6, Part I are consequential notes that ensure visibility of the operator PANS-OPS requirements.

2.7 The Commission agreed that the proposal be transmitted to States and appropriate international organizations for comment. Accordingly, State letter AN 11/1.1.29-19/79, dated 6 December 2019, was sent with a due date for replies of 6 March 2020. A copy is contained in **Appendix B**. The Commission was tentatively scheduled to carry out a final review of State comments in June 2020; and a further update will be provided to APSAR/WG/6.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) discuss means by which the GADSS concept could be rolled out once the LADR is in place, and the role the APSAR WG could play in this process; and
- c) discuss any relevant matters as appropriate.

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APPENDIX A

ICAO PROVISIONS RELATED TO AIRCRAFT TRACKING (AMENDMENT 39, APPLICABLE 8 NOVEMBER 2018) AND LOCATION OF AN AEROPLANE IN DISTRESS (AMENDMENT 40-A, APPLICABLE 10 NOVEMBER 2016)

Annex 6 — Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes

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3.5 AIRCRAFT TRACKING

3.5.1 The operator shall establish an aircraft tracking capability to track aeroplanes throughout its area of operations.

Note.— Guidance on aircraft tracking capabilities is contained in the Aircraft Tracking Implementation Guidelines (Cir 347).

3.5.2 **Recommendation.**— *The operator should track the position of an aeroplane through automated reporting at least every 15 minutes for the portion(s) of the in-flight operation(s) under the following conditions:*

- a) *the aeroplane has a maximum certificated take-off mass of over 27 000 kg and a seating capacity greater than 19; and*
- b) *where an ATS unit obtains aeroplane position information at greater than 15 minute intervals.*

Note.— See Annex 11, Chapter 2, for coordination between the operator and air traffic services providers regarding position report messages.

3.5.3 The operator shall track the position of an aeroplane through automated reporting at least every 15 minutes for the portion(s) of the in-flight operation(s) that is planned in an oceanic area(s) under the following conditions:

- a) the aeroplane has a maximum certificated take-off mass of over 45 500 kg and a seating capacity greater than 19; and
- b) where an ATS unit obtains aeroplane position information at greater than 15 minute intervals.

Note 1.— *Oceanic area, for the purpose of aircraft tracking, is the airspace which overlies waters outside the territory of a State.*

Note 2.— See Annex 11, Chapter 2, for coordination between the operator and air traffic services providers regarding position report messages.

3.5.4 Notwithstanding the provisions in 3.5.2 and 3.5.3, the State of the Operator may, based on the results of an approved risk assessment process implemented by the operator, allow for variations to automated reporting intervals. The process shall demonstrate how risks to the operation, resulting from such variations, can be managed and shall include at least the following:

- a) capability of the operator's operational control systems and processes, including those for contacting ATS units;
- b) overall capability of the aeroplane and its systems;
- c) available means to determine the position of, and communicate with, the aeroplane;
- d) frequency and duration of gaps in automated reporting;
- e) human factors consequences resulting from changes to flight crew procedures; and
- f) specific mitigation measures and contingency procedures.

Note.— Guidance on development, implementation and approval of the risk assessment process, which allows for variations to the need for automatic reporting and the required interval, including variation examples, is contained in the Aircraft Tracking Implementation Guidelines (Cir 347).

3.5.5 The operator shall establish procedures, approved by the State of the Operator, for the retention of aircraft tracking data to assist SAR in determining the last known position of the aircraft.

Note.— Refer to 4.2.1.3.1 for operator responsibilities when using third parties for the conduct of aircraft tracking under 3.5.

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6.18 LOCATION OF AN AEROPLANE IN DISTRESS

6.18.1 All aeroplanes of a maximum certificated take-off mass of over 27 000 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2021, shall autonomously transmit information from which a position can be determined by the operator at least once every minute, when in distress, in accordance with Appendix 9.

6.18.2 **Recommendation.**— *All aeroplanes of a maximum certificated take-off mass of over 5 700 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2021, should autonomously transmit information from which a position can be determined at least once every minute, when in distress, in accordance with Appendix 9.*

6.18.3 The operator shall make position information of a flight in distress available to the appropriate organizations, as established by the State of the Operator.

Note.— Refer to 4.2.1.3.1 for operator responsibilities when using third parties.

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APPENDIX B
STATE LETTER AN 11/1.1.29-19/79

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International
Civil Aviation
Organization

Organisation
de l'aviation civile
internationale

Organización
de Aviación Civil
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авиации

منظمة الطيران
المدني الدولي

国际民用
航空组织

Tel.: +1 514-954-8219 ext. 6011

Ref.: AN 11/1.1.29-19/79

6 December 2019

Subject: Proposals for the amendment of Annex 6, Part I and PANS-OPS, Volume III related to aircraft tracking

Action required: Comments to reach Montréal by 6 March 2020

Sir/Madam,

1. I have the honour to inform you that the Air Navigation Commission (ANC), at the fourth meeting of its 212th Session held on 24 October 2019, considered a preliminary review of the proposals developed by the Secretariat, assisted by the Global Aeronautical Distress and Safety System Advisory Group (GADSS-AG), and subsequently reviewed by the Flight Operations Panel (FLTOPSP), to amend Annex 6 — *Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes and Procedures for Air Navigation Services — Aircraft Operations* (PANS-OPS, Doc 8168), Volume III — *Aircraft Operating Procedures*. The proposals complete air operator provisions supporting the implementation of the GADSS concept by establishing requirements for operators to develop procedures to: a) monitor the aircraft tracking systems in use for their aircraft; b) respond to any information received from such tracking systems in an appropriate manner; and c) require that information received from an autonomous distress tracking system be forwarded to the location of an aircraft in distress repository (LADR). Amendments to Annex 6, Part I are consequential Notes that refer to the PANS-OPS provisions. The Commission authorized the transmission of these proposals to Contracting States and appropriate international organizations for comments.

2. The background of the aforementioned amendment proposals is contained in Attachment A. The proposals for amendment to Annex 6, Part I and PANS-OPS, Volume III are contained in Appendices B and C, respectively. A rationale box providing more information has been included immediately following each proposal.

3. In examining the proposed amendment, you should not feel obliged to comment on editorial aspects as such matters will be addressed by the ANC during its final review of the draft amendment.

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4. May I request that any comments you wish to make on the amendment proposals be dispatched to reach me not later than 6 March 2020. To facilitate the processing of replies with substantive comments, I invite you to submit an electronic version in Word format to icaohq@icao.int. The ANC has asked me to specifically indicate that comments received after the due date may not be considered by the Commission and the Council. In this connection, should you anticipate a delay in the receipt of your reply, please let me know in advance of the due date.

5. In addition, the proposed amendments to PANS-OPS, Volume III are envisaged for applicability on 5 November 2020 and the proposed amendment to Annex 6, Part I will be included in an amendment to the Annex at the earliest opportunity.

6. Following discussions at the 40th Session of the Assembly, held in Montréal from 24 September to 4 October 2019, regarding State and industry readiness to implement the provisions of Annex 6, Part I related to the location of an aeroplane in distress, your attention is drawn to a consultation State letter AN 11/1.1.29-19/78, dated 25 November 2019. The outcome of that consultation may lead to a reconsideration of the dates contained in Annex 6, Part I, provisions 6.18.1 and 6.18.2 related to autonomous transmission of position information. In your reply to State letter AN 11/1.1.29-19/78, you are invited to express any concerns you may have regarding your readiness to implement those provisions. Please note that the outcome of the consultation will be taken into consideration by the Air Navigation Commission when making a final recommendation on the applicability date for the amendment proposals in this State letter.

7. The subsequent work of the ANC and the Council would be greatly facilitated by specific statements on the acceptability or otherwise of the proposals.

8. Please note that for the review of your comments by the ANC and the Council, replies are normally classified as “agreement with or without comments”, “disagreement with or without comments” or “no indication of position”. If in your reply the expressions “no objections” or “no comments” are used, they will be taken to mean “agreement without comment” and “no indication of position”, respectively. In order to facilitate proper classification of your response, a form has been included in Attachment D, which may be completed and returned together with your comments, if any, on the proposals in Appendices B and C.

Accept, Sir/Madam, the assurances of my highest consideration.

Fang Liu
Secretary General

Enclosures:

- A — Background information
- B — Proposed consequential amendment to Annex 6, Part I
- C — Proposed amendment to PANS-OPS, Volume III
- D — Response form

ATTACHMENT A to State letter AN 11/1.1.29-19/79**BACKGROUND INFORMATION**

1. The proposed amendments to Annex 6 — *Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes* and *Procedures for Air Navigation Services — Aircraft Operations* (PANS-OPS, Doc 8168), Volume III — *Aircraft Operating Procedures* were developed by the Secretariat, assisted by the Global Aeronautical Distress and Safety System Advisory Group (GADSS-AG), and were subsequently reviewed by the Flight Operations Panel (FLTOSP). The proposals complete operator-related provisions supporting the implementation of the GADSS concept by establishing requirements for operators to develop procedures to: a) monitor the aircraft tracking systems in use for their aircraft; b) respond to any information received from such tracking systems in an appropriate manner; and c) require that information received from an autonomous distress tracking system be automatically forwarded to the location of an aircraft in distress repository (LADR).

Aircraft Tracking

2. Initial Proposal 1 in Attachment B outlines the requirements for operators related to the implementation of aircraft tracking, which became applicable on 8 November 2018 as part of Amendment 39 to Annex 6, Part I. The provisions proposed are intended to ensure that the aircraft tracking Standards will result in the timely determination, by an operator, of a potential problem with their aircraft, resulting in contact being established between operator and air navigation services provider (ANSP) without delay. They also update the standardized aircraft missed position report message template which is intended to be used for communication between operators and ANSPs. This template was originally published in Circular 347 — *Aircraft Tracking Implementation Guidelines* and has been improved based on user feedback.

Location of an aircraft in distress

3. Initial Proposal 2 introduces requirements for operators to support the implementation of the location of an aircraft in distress provisions which have a future equipage requirement of 1 January 2021 as part of Amendment 40-A to Annex 6, Part I. In line with the provisions for aircraft tracking presented in Initial Proposal 1, these establish a requirement for the operator to ensure that information from an autonomous distress tracking system be automatically submitted to the LADR and respond to the activation of an onboard autonomous distress tracking (ADT) system as deemed appropriate. They also require operators to establish training and procedures for use by all relevant staff and specifically require operators to instruct flight crew on the ADT manual activation functionality and develop a policy for its use.

4. Initial Proposal 2 also addresses the information sharing and processes for the notification of a distress condition described in the GADSS concept of operations. Given that the provisions for the location of an aircraft in distress are performance-based, operators may choose from a variety of ADT solutions. While this works well for air operators, it poses a challenge for the search and rescue (SAR) community because the information is required in a timely manner to find survivors. Identifying the site where that information is located from different operators can be time consuming.

5. The LADR will standardize the manner in which the location information of an aircraft in a distress condition is made available to all appropriate organizations (e.g. air traffic service units, rescue coordination centres, others as determined by the State of the Operator). It will serve as the means for these organizations to have access to this information without putting additional burden on the operator, while

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allowing them to meet the requirements in Annex 6, Part I to make the information available. Operators will ensure the data is uploaded by using an ADT system that has an established connection to the LADR, and can additionally opt to receive notifications from the LADR when position data from their aircraft is submitted, should additional confirmation of the data being uploaded to the repository be required. Furthermore, it will provide States the flexibility to make the information available to other organizations, over time, as deemed appropriate. Organizations that participate in the LADR may choose (i.e. opt-in) to receive a notification when information is submitted to the LADR, based on their profile and jurisdiction.

6. The concept for a central repository was validated by two workshops held at ICAO during 2019, and the detailed functional specification of the LADR is available on the ICAO global flight tracking pages (www.icao.int/safety/globaltracking). The LADR will serve as a single point of access for the position information of an aircraft in distress, which was reaffirmed as a requirement by Search and Rescue (SAR) representatives participating at the workshops and at other ICAO discussions. It is expected that multiple compliant systems will be developed to meet the location of an aircraft in distress Provisions, however a single central source for all position data will be needed to meet the expectations of the SAR community. The LADR is intended to meet this requirement.

7. The development of the LADR is currently the subject of a tender process by ICAO and a prototype is expected to be delivered in Q2 of 2020 with final delivery by the end of that year.

ATTACHMENT B to State letter AN 11/1.1.29-19/79

PROPOSED CONSEQUENTIAL AMENDMENT TO ANNEX 6, PART I

RELATED TO AIRCRAFT TRACKING AND THE LOCATION OF AN AIRCRAFT IN DISTRESS

NOTES ON THE PRESENTATION OF THE AMENDMENT

The text of the amendment is arranged to show deleted text with a line through it and new text highlighted with grey shading, as shown below:

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New text to be inserted is highlighted with grey shading.

new text to be inserted

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new text to replace existing text

TEXT OF PROPOSED AMENDMENT TO THE

**INTERNATIONAL STANDARDS
AND RECOMMENDED PRACTICES**

OPERATION OF AIRCRAFT

ANNEX 6

TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION

PART I

INTERNATIONAL COMMERCIAL AIR TRANSPORT — AEROPLANES

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CHAPTER 3. GENERAL

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3.5 AIRCRAFT TRACKING

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3.5.3 The operator shall track the position of an aeroplane through automated reporting at least every 15 minutes for the portion(s) of the in-flight operation(s) that is planned in an oceanic area(s) under the following conditions:

- a) the aeroplane has a maximum certificated take-off mass of over 45 500 kg and a seating capacity greater than 19; and
- b) where an ATS unit obtains aeroplane position information at greater than 15 minute intervals.

Note 1.— Oceanic area, for the purpose of aircraft tracking, is the airspace which overlies waters outside the territory of a State.

Note 2.— See Annex 11, Chapter 2, for coordination between the operator and air traffic services providers regarding position report messages.

Note 3.— Requirements for operators to establish procedures for monitoring the aircraft tracking information are contained in PANS-OPS, Volume III, Section 10.

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**CHAPTER 6. AEROPLANE INSTRUMENTS, EQUIPMENT
AND FLIGHT DOCUMENTS**

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6.18 LOCATION OF AN AEROPLANE IN DISTRESS

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6.18.3 The operator shall make position information of a flight in distress available to the appropriate organizations, as established by the State of the Operator.

Note 1.— Refer to 4.2.1.3.1 for operator responsibilities when using third parties.

Note 2.— Requirements for operators to establish procedures for monitoring and making position information of a flight in distress available to the appropriate organizations in a timely manner are contained in PANS-OPS, Volume III, Section 10.

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| <i>Origin:</i> Secretariat assisted by the Global Aeronautical Distress and Safety System Advisory Group (GADSS-AG) | <i>Rationale:</i> Attention is drawn from the Standards in Annex 6, Part I to the provisions proposed for PANS-OPS, Volume III to ensure sufficient visibility of the operator requirements. |
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ATTACHMENT C to State letter AN 11/1.1.29-19/79

PROPOSED AMENDMENT TO PANS-OPS, VOLUME III

RELATED TO AIRCRAFT TRACKING AND THE LOCATION OF AN AIRCRAFT IN DISTRESS

NOTES ON THE PRESENTATION OF THE AMENDMENT

The text of the amendment is arranged to show deleted text with a line through it and new text highlighted with grey shading, as shown below:

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text to be deleted

New text to be inserted is highlighted with grey shading.

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~~Text to be deleted is shown with a line through it~~ followed by the replacement text which is highlighted with grey shading.

new text to replace existing text

INITIAL PROPOSAL 1 – AIRCRAFT TRACKING

**TEXT OF THE PROPOSED AMENDMENT TO
PROCEDURES FOR AIR NAVIGATION SERVICES
AIRCRAFT OPERATIONS**

**VOLUME III
AIRCRAFT OPERATING PROCEDURES**

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Editorial Note.— Insert new Section 10, Chapters 1 and 2 and amend the Table of Contents accordingly.

Section 10

FLIGHT TRACKING

Chapter 1

AIRCRAFT TRACKING

1.1 GENERAL

The following provisions are applicable to operators required to track their aircraft in accordance with Annex 6, Part I, 3.5 – *Aircraft tracking*.

1.2 OPERATOR RESPONSIBILITIES

1.2.1 Operators shall ensure that they have established and documented:

- a) a training programme for relevant personnel on the policies and procedures for aircraft tracking; and
- b) procedures for the monitoring of automated aircraft position reports, including actions to take in the event of a missed position report.

1.2.2 When information regarding a missed position report is required to be transmitted to an ATSU, the aircraft tracking missed position report message template in the Appendix to this chapter should be used.

Note.— Further information on operator processes for aircraft tracking can be found in the Aircraft Tracking Implementation Guidelines (Circular 347).

1.2.3 Operators should provide and maintain up-to-date their operational contact details in the ICAO OPS Control Directory (OPS CTRL) to facilitate contact between operators and ATSUs when responding to a tracking related event.

Note.— The OPS CTRL can be accessed at: www.icao.int/safety/globaltracking.

Appendix to Chapter 1

Aircraft tracking missed position report message template

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| Aircraft tracking missed position report message | |
| From: | |
| To: | |
| <p>This message provides information regarding potential uncertainty as to the safety of an aircraft. This is a request for action to resolve this uncertainty.</p> <p>Please contact _____ at _____ with details of action taken.</p> | |
| Required information | |
| 1. | Initial or subsequent notification indication |
| 2. | Aircraft identification in Field 7 of filed flight plan |
| 3. | Aircraft type |
| 4. | Last known position (Time, Latitude and Longitude or bearing and range) |
| 5. | Time of last communication |
| 6. | Last known flight level or altitude |
| 7. | Next expected position (if known), and estimate |
| 8. | Name of air traffic service unit notified |
| 9. | Name of operator |
| 10. | Contact details of operator primary point of contact for this event |
| Supplementary information, if available | |
| 11. | Contact actions attempted, including frequency channels and SATCOM numbers |
| 12. | Aircraft registration (if different from aircraft identification in 2 above) |
| 13. | Information contained in Item 19 of the filed flight plan |
| 14. | If not included in 13 above, fuel endurance or fuel endurance remaining at last known position |
| 15. | Total persons on board |
| 16. | Alternate or possible alternates |
| 17. | Any other relevant information (e.g. dangerous goods on board, etc.) |

Note.— Contact details for ANSPs and operators can be obtained from the OPS CTRL directory, accessed at www.icao.int/safety/globaltracking.

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| <p><i>Origin:</i></p> <p>Secretariat, assisted by the Global Aeronautical Distress and Safety System Advisory Group (GADSS- AG)</p> | <p><i>Rationale:</i></p> <p>Guidance describing the implementation of aircraft tracking is already available; however, no requirements are in place to ensure an operator establishes a monitoring process for the position reports received. Follow-up action in the event of a missed report is also vital for reducing the time between a potential situation being identified and it being either resolved or ATSU being notified. To facilitate contact between ATSUs and operators, a central contact database had been established. States were advised of this in State letter AN 11/1.1.29 –18/89, dated 31 August 2018, and requested to ask operators to register and provide their operational contact details. A recommendation to complete these details is included in PANS-OPS, Volume III to ensure sufficient visibility for operators.</p> <p>Operators and air navigation service providers (ANSPs) have indicated that the standard missed aircraft tracking position report message has been helpful. The proposal to move this form from guidance to provisions is to ensure that all such communications from an operator to an ATSU are consistent, providing a more efficient means to clearly pass on the relevant information.</p> |
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INITIAL PROPOSAL 2 – DISTRESS TRACKING

Chapter 2

LOCATION OF AN AIRCRAFT IN DISTRESS

2.1 GENERAL

The following provisions are applicable to operators required to make position information of an aircraft in distress available, in accordance with Annex 6, Part I, 6.18 – *Location of an aeroplane in distress*.

2.2 OPERATOR RESPONSIBILITIES

2.2.1 The operator shall ensure that the location of an aircraft in distress repository (LADR) is automatically updated with autonomous distress tracking (ADT) data from an aircraft in a distress condition.

Note 1.— Guidance on the format and means to update the information in the LADR is contained in the Location of an Aircraft in Distress Repository Functional Specification (Doc XXXX).

Note 2.— An aircraft is considered to be in a distress condition when it is in a state that, if the aircraft behaviour event is left uncorrected, can result in an accident.

2.2.2 The operator shall ensure that they have established and documented:

- a) a training programme for relevant personnel on the use of the autonomous distress tracking (ADT) devices function;

- b) procedures for the monitoring of information received from the ADT device, including actions to be taken in the event of an ADT activation; and
- c) policy and procedures for the flight crew manual activation function.

Note.— Further information for autonomous distress tracking can be found in the Manual on Location of Aircraft in Distress and Flight Recorder Data Recovery (Doc 10054).

| <i>Origin:</i> | <i>Rationale:</i> |
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| <p>Secretariat assisted by the Global Aeronautical Distress and Safety System Advisory Group (GADSS-AG)</p> | <p>Any time an ADT is activated, the data needs to be automatically sent to the LADR. The ADT activation, however, does not necessarily alert an ATSU or RCCs to a distress event. To avoid false alerts, the alerting comes from the operator via the ATSU unit, as described in the GADSS concept of operations. For this to function correctly, the operator needs to implement a monitoring process such that an activated ADT will be detected and follow-up actions will be completed. Only after verification will the operator notify the ATSU, and the ATSU will determine the appropriate alert phase based on the existing requirements of Annex 11 — <i>Air Traffic Services</i>.</p> <p>The operator is also responsible for making the aircraft position information available. The original concept for the GADSS implementation was that this would be accomplished by the use of a central position repository which would be accessible by the appropriate organizations, as established by the State of the Operator. For this concept to work successfully, there must be a requirement to include data from the ADT directly into the repository such that it will always be available when needed. It is important to note that the operators ADT monitoring process has no bearing on the delivery of the information to the LADR.</p> <p>The need to consider manual activation of the ADT comes from the inclusion of this functionality in Annex 6, Part I and the understanding that the situation requiring its use is unlike the existing ELT. An ELT is designed to activate on crash whereas the ADT is intended to operate while the aircraft is flying. The operator should therefore provide guidance to crews on the circumstances in which an ADT should be manually activated. These may include when a distress situation has developed, or when the crew feels such a situation is imminent.</p> <p>The proposed provisions were reviewed by the FLTOPSP at their 6th Working Group Meeting (Berlin, May 2019) and subsequently modified in response to comments received.</p> |

ATTACHMENT D to State letter AN
11/1.1.29-19/79

**RESPONSE FORM TO BE COMPLETED AND RETURNED TO ICAO
TOGETHER WITH ANY COMMENTS YOU MAY HAVE ON THE
PROPOSED AMENDMENTS**

To: The Secretary General
International Civil Aviation Organization
999 Robert-Bourassa Boulevard
Montréal, Québec
Canada, H3C 5H7

(State) _____

Please make a checkmark (✓) against one option for each amendment. If you choose options “agreement with comments” or “disagreement with comments”, **please provide your comments on separate sheets.**

| | <i>Agreement without comments</i> | <i>Agreement with comments*</i> | <i>Disagreement without comments</i> | <i>Disagreement with comments</i> | <i>No position</i> |
|--|---|---|--|---|--------------------|
| Amendment to Annex 6, Part I related to aircraft tracking (Attachment B refers) | | | | | |
| Amendment to PANS-OPS, Volume III related to aircraft tracking (Attachment C refers) | | | | | |

*“Agreement with comments” indicates that your State or organization agrees with the intent and overall thrust of the amendment proposal; the comments themselves may include, as necessary, your reservations concerning certain parts of the proposal and/or offer an alternative proposal in this regard.

Signature: _____ Date:

— END —