

Issued as part of the process of public consultation by the CAA

# **NOTICE OF PROPOSED AMENDMENT**

**(NPA 01/21)**

## **AMENDMENT OF**

## **AIR NAVIGATION TECHNICAL**

## **REGULATIONS**

### ***ANTR PART IV***

### ***(OPERATIONAL REGULATIONS)***

### ***Aeroplanes (ANTR-OPS 1)***

**Who this NPA applies to:**

It is anticipated that this proposal will affect the following groups in the aviation industry:  
Operators of Bahraini registered aircraft, aircraft engineering facilities and CAA staff

**AERONAUTICAL LICENSING DIRECTORATE**

**NOTICE OF PROPOSED AMENDMENT**  
*(NPA 01/21)*

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# AERONAUTICAL LICENSING DIRECTORATE

## 1. INTRODUCTION

1.1 The Kingdom of Bahrain's aviation safety requirements are currently contained in the Civil Aviation Law and Air Navigation Technical Regulations. It has become CAA policy that the Air Navigation Technical Regulations will be gradually amended to reflect ICAO Annex SARPs and industry best practice (EASA). This NPA applies to Air Navigation Technical Regulations ANTR Part IV (OPS 1).

1.2 The purpose of this Notice of Proposed Rule Making (NPA) is to:

- (a) Continue the process of formal public consultation on proposed amendments of the Air Navigation Technical Regulations; and
- (b) Ensure the adequacy of regulations governing operations of CAA registered in accordance with ICAO SARPS and international best regulatory practices; and
- (c) Determine the effect on the aircraft operator of the proposed regulations.

1.3 The CAA now seeks comments on this proposal from the aviation industry and the concerned parties before proceeding further.

1.4 Abbreviations

NPA Notice of Proposed Amendment

SARPS ICAO Standards and Recommended Practices

CAA Civil Aviation Affairs of the Kingdom of Bahrain

## 2. OBJECTIVE

2.1 The objective of this NPA is to amend ANTR Part IV (OPS 1) to the existing regulations for compliance with ICAO Annex 6 Part I, 11<sup>th</sup> Edition.

2.2 A number of regulatory criteria have been identified to guide the development of the Air Navigation Technical Regulations. The criteria require that the new regulation should:

- (a) be clear, concise and unambiguous;
- (b) be consistent with the Kingdom of Bahrain's international obligations;
- (c) be harmonized with ICAO SARPS and European standards, unless unique CAA circumstances require otherwise;
- (d) be outcome-based, to the greatest extent practicable;
- (e) be cost effective or cost neutral; and
- (f) be enforceable.

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### 3. REGULATORY PROPOSAL

- 3.1 The CAA considers that revision and modification of existing regulations along the lines of ICAO (SARPs) and industry best practice (EASA), is appropriate and consistent with CAA future objectives and regional harmonization.
- 3.2 The CAA considers that revision and modification of existing regulation along the lines of the European model is appropriate and consistent with future objectives and regional harmonization.
- 3.3 Amendment action is planned for *28 February 2021*.

### 4 AFFECT OF CHANGES

- 4.1 The persons affected by this NPA are:
- 4.1.1 Operators of the Bahraini registered aircraft;
  - 4.1.2 Engineering facilities; and
  - 4.1.3 CAA staff.
- 4.2 Effect on Existing Regulation. This NPA contains all of the necessary amendments for compliance with amended ANTR Part IV (OPS 1) to the existing regulations for compliance with ICAO Annex 6 Part I, 11<sup>th</sup> Edition.
- 4.3 The effect of the proposed new regulations is considered to be generally cost neutral, with greater operational flexibility and guidance.
- 4.4 There would be no additional change in CAA inspections and compliance with the proposed regulations will be monitored and enforced through normal CAA surveillance activity.

### 5 PRESENTATION

The complete proposed amendment to the ANTRs is issued to Bahrain operators and published on CAA Q-Pulse System.

### 6 HOW TO SUBMIT COMMENTS ON THIS NPA

The Notice of Proposed Amendment process is the CAA's method of notifying and seeking comment from industry and the public with respect to proposed changes to rules. All submissions are evaluated and assessed with a view to incorporating any necessary changes to the draft regulations prior to their formal promulgation as law. In order to simplify collation and summarizing of comments, it is requested that responses be made on the NPA Response Sheet provided (Refer page 6) or a copy of the sheet, with additional comments attached as necessary. Responses can be individual or from industry working groups. Written comments quoting NPA 01/21 should be forwarded by *28 February 2021* to the CAA by post to P. O. Box 586, Kingdom of Bahrain or e-mail to [Aerolicensing@mtt.gov.bh](mailto:Aerolicensing@mtt.gov.bh).

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### **7 SUMMARY OF RESPONSES**

Subsequent to the closing date for comments, a Summary of Responses will be made publicly available in conjunction with the issue of the Final Rules for each Part. The CAA may contact persons in respect to submissions in order to clarify issues but is not obliged to individually acknowledge or respond to comments or submissions.

**AERONAUTICAL LICENSING DIRECTORATE**

**NPA 01/21 RESPONSE SHEET**  
**(ANTR Part IV – OPS 1)**

Please return this response sheet by **28 February 2021** by post to P. O. Box 586, Kingdom of Bahrain, or e-mail to [Aerolicensing@mtt.gov.bh](mailto:Aerolicensing@mtt.gov.bh). Please indicate your acceptance or otherwise of the proposal by ticking [✓] the appropriate box below. Any additional constructive comments, suggested amendments or alternative action will be welcome and may be provided on this response sheet or by separate correspondence.

- The proposals are ***acceptable without change***.
- The proposals are ***acceptable but would be improved if the following changes were made:*** (Please provide explanatory comment).

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- The proposals are ***not acceptable but would be acceptable if the following changes were made:*** (Please provide explanatory comment).

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- The proposals are ***not acceptable under any circumstances.*** (Please provide explanatory Comment).

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- Any other comments.

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Name.....Organization:.....

Address/Contact No:.....

Signed:.....Date:.....

Aviation Safety Rules & Regulations

# ANTR OPS I

In compliance with ICAO Annex 6 Part I, 11th Edition

Amendment to ANTR OPS 1.822 and its Appendix

## Bahrain CAA Publication Revisions Highlight Sheet

ANTR: ANTR OPS 1       CAP: \_\_\_\_\_       TPM: \_\_\_\_\_

The following pages of ANTR Part IV OPS 1 have been revised to ICAO Annex 6 Part I, 11<sup>th</sup> Edition.

Item	Paragraph number	Page	Reason
1	Foreword, Contents (general) and Contents (details)	i-xxviii	Foreword reflects current revision and date.
<b>Section 1</b> <b>ICAO Annex 6 Part I, 11<sup>th</sup> Edition (Chapter 6.18 &amp; Appendix 9)</b>			
1	ANTR OPS 1.822	1-K-29	Paragraphs (a) and (b) amended as per above ICAO Annex.  Note 2 has been added to add reference to ICAO Doc 10054.
2	Appendix to ANTR OPS 1.822	1-K-68 to 1-K-69	Paragraph (a) amended.  Note added to refer to ICAO Doc 10054 Manual on Location of Aircraft in Distress and Flight Recorder Recovery.



**TEXT OF PROPOSED AMENDMENT TO THE**  
**AIR NAVIGATION TECHNICAL REGULATIONS (ANTR)**  
**VOLUME 1 – FLIGHT SAFETY**  
**ANTR PART IV – OPS 1**  
**COMMERCIAL & PRIVATE AIR TRANSPORTATION (AEROPLANES)**  
**CONTENTS**

**SUBPART K – INSTRUMENTS AND EQUIPMENT**

**ANTR OPS 1.822 Location of an Aeroplane in Distress**

(See Appendix 1 ANTR OPS 1.822)

(See IEM OPS 1.822)

- (a) 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 202~~1~~<sup>3</sup>, 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 1 to ANTR OPS 1.822.
- (b) 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 202~~1~~<sup>3</sup>, shall autonomously transmit information from which a position can be determined at least once every minute, when in distress, in accordance with Appendix 1 to ANTR OPS 1.822.
- (c) The operator shall make position information of a flight in distress available to the appropriate organisations, as established by the BCAA.

*Note 1: Refer to ANTR OPS 1.175(p) for operator responsibilities when using third parties.*

*Note.2: Refer to ICAO Annex 6, Part-I, Appendix 9, Attachment K & DOC 10054 “Manual on Location of Aircraft in Distress and Flight Recorder Data Recovery” for detailed guidelines.*

**Appendix 1 to ANTR OPS 1.822 Location of an Aeroplane in Distress**

(See ANTR OPS 1.822)

- (a) Purpose and Scope

Location of an aeroplane in distress aims at establishing, to a reasonable extent, the location of an accident site within a 6 NM radius. The aircraft shall have installed with equipment & systems to enable Autonomous Distress Tracking (ADT) system to identify the location of aircraft in distress with the aim of establishing to a reasonable extent the location of an accident site within a 6 NM radius.

- (b) Operation

- (1) An aeroplane in distress shall automatically activate the transmission of information from which its position can be determined by the operator and the position information shall contain a time stamp. It shall also be possible for this transmission to be activated manually. The system used for the autonomous transmission of position information shall be capable of transmitting that information in the event of aircraft electrical power loss, at least for the expected duration of the entire flight.

*Note: Guidance on the location of an aeroplane in distress is provided in IEM OPS 1.822.*

- (2) An aircraft is in a distress condition when it is in a state that, if the aircraft behaviour event is left uncorrected, can result in an accident. Autonomous transmission of position information shall be active when an aircraft is in a distress condition. This will provide a high probability of locating an accident site to within a 6 NM radius. The operator shall be alerted when an aircraft is in a distress condition with an acceptable low rate of false alerts. In case of a triggered transmission system, initial transmission of position information shall commence immediately or no later than five seconds after the detection of the activation event.

*Note1: Aircraft behaviour events can include, but are not limited to, unusual attitudes, unusual speed conditions, collision with terrain and total loss of thrust/propulsion on all engines and ground proximity warnings.*

*Note 2: A distress alert can be triggered using criteria that may vary as a result of aircraft position and phase of flight. Further guidance regarding in-flight event detection and triggering criteria may be found in the EUROCAE ED-237, Minimum Aviation System Performance Specification (MASPS) for Criteria to Detect In-Flight Aircraft Distress Events to Trigger Transmission of Flight Information.*

- (3) When an aircraft operator or an air traffic service unit (ATSU) has reason to believe that an aircraft is in distress, coordination shall be established between the ATSU and the aircraft operator.
- (4) The State of the Operator shall identify the organizations that will require the position information of an aircraft in an emergency phase. These shall include, as a minimum:
  - (i) air traffic service unit(s) (ATSU); and
  - (ii) SAR rescue coordination centre(s) (RCC) and sub-centres.
- (5) When autonomous transmission of position information has been activated, it shall only be able to be deactivated using the same mechanism that activated it.
- (6) The accuracy of position information shall, as a minimum, meet the position accuracy requirements established for ELTs.

*Note: The ICAO DOC 10054 - Manual on Location of Aircraft in Distress and Flight Recorder Data Recovery provides guidance on Standards and Recommended Practices (SARPs) contained in Annex 6 - Operation of Aircraft, Part I - International Commercial Air Transport - Aeroplanes, relating to the location of an aircraft in distress and flight recorder data recovery.*