

ENR 1.8 REGIONAL SUPPLEMENTARY PROCEDURES

The supplementary procedures in force are given in their entirety; "differences" are printed in capital letters.

1. Assignment of cruising level to IFR flights within controlled airspace

Unless otherwise specified in 10.5 or authorized by the area Air Traffic Services Units cruising levels to be assigned to IFR flight within controlled airspace will be as given in the table in Appendix 3 to Annex 2.

2. Reporting of position and air-to-ground watch

All aircraft on VFR flights and aircraft on IFR flights outside controlled airspace, must maintain a watch on a radio station furnishing communications for the Bangkok Area Control Centre and file that station information as to their position unless not equipped with suitable two-way radio communications or unless otherwise authorized. The last position reported before passing from Bangkok Flight Information Region to an adjacent Flight Information Region must also be addressed to the Air Traffic Services Unit providing Flight Information Service or Air Traffic Control Service within the Flight Information Region the aircraft is entering.

3. Alerting and search and rescue services

The procedures for "Alerting Service" detailed in the PAN-RAC (Doc 4444/RAC 501) Part VII, paragraph 2 are applicable to:

- a) flights operated more than 100 NM from the shore line; and
- b) all flights with the exception of such local flights as may be exempted by Air Traffic Control.

Note: For the purpose of sub-para v (b), a local flight is a flight wholly conducted in the immediate vicinity of an aerodrome. Provision must be made in the detailed plan for the conduct of search and rescue to provide, to the extent possible, servicing and refuelling facilities to aircraft, vessels, and vehicles made available for search and rescue operations for other States upon request.

4. Flight Information Service

In so far as practicable Air Traffic Services units responsible for the provision of Flight Information Service over water areas must include, at the pilot's request, any available information regarding surface vessels such as radio call signs, positions, true track, speed etc. Responsibility for Flight Information Service passes from Centre to Centre at the time the aircraft crosses the Flight Information Region boundary. When adequate point-to-point communications do not exist with adjacent Flight Information Regions, Flight Information Service will be provided as far as practicable by the Centre to an aircraft leaving Bangkok FIR until reliable communication contact has been established with the Centre whose Flight Information Region it is entering

5. Air Traffic Service coordination

Coordination procedures are in accordance with Regional Supplementary Procedures, supported by detailed local Letters of Agreement.

6. Liaison with operating agencies

All instructions to aircraft from Air Traffic Services units, excluding aerodrome and approach control instructions, are transmitted by a communication network designated by the government. Instructions to aircraft from aerodrome and approach control Air Traffic Services units are routed through a government owned radio network. All area control service information or instructions issued to aircraft are made available to an operator or this designated representative as agreed between the operator and the Air Traffic Services units concerned.

7. Air Traffic Service Messages

Flight plan messages are transmitted to the appropriate Air Traffic Services units and communication stations immediately after the flight plan is filed. The flight plan will be combined with the departure message only if it is reasonably certain that it will reach the addressees in good time, in which case it is transmitted immediately after the departure of the aircraft. For a flight through an intermediate stop the flight plan message originated by the Air Traffic Services unit at the aerodrome of initial departure is considered as a single message, i.e. the number of addressees which may be requested by the operator is limited to two in addition to the one at the aerodrome of aircraft departure and to the one at each aerodrome of intended landing.

When the departure of an aircraft is delayed for more than 10% of the scheduled flight time, but in no case less than 30 minutes after the proposed time of departure contained in the flight plan, ATC will originate a delay message addressed to all recipients of the flight plan message. When a flight plan has been filed through intermediate stop, a departure message will be sent, on the departure of the aircraft from each intermediate stop, to the Air Traffic Services unit of next intended point of landing and to all interested area control or flight information centres. NUMBER OF PERSONS ON BOARD AND FUEL ARE NOT GIVEN IN THE FLIGHT PLAN.

When aeronautical communications are available and when an arrival report is received by an ATC Unit serving the aerodrome of destination, an arrival message will be transmitted to the point of departure. Arrival reports may be filed at points where the absence of communication facilities precludes the transmission of arrival messages. It should be noted, however, that Bangkok ACC does not transmit arrival messages except in accordance with paragraph 10.2 Part 1, Doc 7030 - "Regional Supplementary Procedures".

8. Altimeter setting procedures applicable to Air Traffic Services

Based on current and anticipated atmospheric pressure distribution, Bangkok ACC coordinates where required the lowest flight level to be used.

9. Weather deviation procedures for use in Bangkok FIR

9.1 General

9.1.1 The following procedures are intended to provide guidance in accordance to ICAO Regional Supplementary Procedures (Doc 7030) the pilot's judgment shall ultimately determine the sequence of actions taken and ATC shall render all possible assistance.

9.1.2 If the aircraft is required to deviate from track to avoid weather and prior clearance cannot be obtained, an ATC clearance shall be obtained at the earliest possible time and in the meantime the aircraft shall broadcast its position (including the ATS route designator or the track code, as appropriate) and intentions, on frequency 121.5 MHz at suitable intervals until ATC clearance is received.

9.1.3 The pilots shall advise ATC when weather deviation is no longer required, or when a weather deviation has been completed and the aircraft has returned to the centre line of its cleared route.

9.2 Obtaining priority from ATC when weather deviation is required.

9.2.1 When the pilot initiates communications with ATC, rapid response may be obtained by stating that weather deviation is required to indicate that priority is desired on the frequency and for ATC response.

9.2.2 The pilot also retains the option of initiating the communication using the urgency call PAN-PAN 3 times to alert. All listening parties of a special handling condition which will receive ATC priority for issuance of a clearance or assistance.

9.3 Action to be taken when pilot-controller-communications are established

9.3.1 Pilot identifies the necessity to deviate from track.

9.3.2 Pilot notifies ATC and requests clearance to deviate from track, advising where possible the extent of the deviation expected.

9.3.3 ATC takes one of the following actions:

9.3.3.1 If there is no conflicting traffic in the lateral dimension, ATC issue clearance to deviate from track;

9.3.3.2 If there is conflicting traffic in the lateral dimension, ATC separates aircraft by established vertical separation (2 000 feet above FL 290, 1 000 feet below FL 290) and issues clearance to deviate from track;

9.3.3.3 If there is conflicting traffic in the horizontal dimension and ATC is unable to establish vertical separation, ATC shall:

9.3.3.3.1 Advise the pilot that standard vertical separation cannot be applied;

9.3.3.3.2 Provide essential traffic information for all affected aircraft; and

9.3.3.3.3 If possible, suggest a course of action e.g. ATC may suggest that the pilot climb or descend to a contingency altitude (500 feet above or below that assigned)

Note: suggested phraseology

Standard separation not available deviate at pilot's discretion suggest climb to FL 340 parallel traffic 50 miles north at FL 350 report deviation complete.

9.3.4 Pilot will take the following actions:

9.3.4.1 Comply with ATC clearance issued; or

9.3.4.2 Follow the ATC advisory altitude along with the procedures detailed in paragraph 4; or

9.3.4.3 Execute the procedures detailed in paragraph 4 below. The pilot shall immediately inform ATC of intentions and ATC will issue essential traffic information to all affected aircraft.

9.4 Actions to be taken when pilot-controller communications are not established or revised ATC clearance is not available

9.4.1 If contact cannot be established or revised ATC clearance or advisory is not available and deviation from track is required to avoid weather, the pilot shall take following actions:

9.4.1.1 If possible, deviate away from an organized track or route system;

9.4.1.2 Broadcast aircraft position and intentions on frequency 121.5 MHz at suitable intervals stating: flight identification (operator call sign),

flight level, track code or ATS route designator, and extent of deviation expected;

9.4.1.3 Watch for conflicting traffic both visually and by reference to TCAS (if equipped);

9.4.1.4 Turn on aircraft exterior lights;

9.4.1.5 When the aircraft is approximately 10 NM from track, start a descent to and maintain;

9.4.1.6 If conflicting traffic is identified during the deviation, climb or descend to establish vertical separation from conflicting aircraft;

9.4.1.7 When returning to track, be at assigned flight level or altitude, when the aircraft is within approximately 10 NM of centre line.

9.4.1.8 If contact is not established prior to deviating, continue to attempt to contact ATC to obtain a clearance. If contact is established, continue to keep ATC advised of intentions and obtain essential traffic information.

10. RVSM Procedures

10.1 Airworthiness and Operational Approval and Monitoring

10.1.1 APPROVAL PROCESS.

Operators must obtain airworthiness and operational approval from their States of Registry or States of Operator, as appropriate, to conduct RVSM operations.

Information regarding the process for RVSM approval is contained, for commercial air transport operations, in Notification of The Civil Aviation Authority of Thailand publication, Air Certificate Requirements, Issue 02, Revision 00, dated 30 April 2021.

Additionally, The Monitoring Agency for Asia Region (MAAR) details approval requirements for operators and specifies the RVSM approval flow. This information may be found at <https://www.aerothai.co.th/maar/>

10.1.2 AIRCRAFT MONITORING.

Guidance Material for the Continued Safety Monitoring of the Asia-Pacific RVSM Airspace is published by the Asia and Pacific Office of ICAO. The purpose of this document is to describe safety monitoring activities for RVSM airspace, including the respective roles and responsibilities of States and Regional Monitoring Agencies (RMAs).

With respect to requirements for Thai operators, full details on the monitoring requirements and available monitoring services are available from MAAR at the website listed above.

Operators are required to participate in the RVSM aircraft monitoring program. This is an essential element of the RVSM implementation program in that it confirms that the aircraft altitude-keeping performance standard is being met.

10.1.3 Monitoring accomplished for other regions can be used to fulfill the monitoring requirements for the Asia/Pacific region. There are a number of organizations worldwide who may be able to provide monitoring services in the Asia/Pacific region. Operators should contact MAAR for confirmation that a monitoring contractor is acceptable for the submission of monitoring data.

10.2 Area of Applicability

10.2.1 RVSM shall be applicable in that volume of airspace between FL 290 and FL 410 inclusive in the Bangkok FIR.

10.3 Prior to Departure

10.3.1 An operator shall ensure that, where the flight is intended to operate in Reduced Vertical Separation Minimum (RVSM) airspace, it has the required RVSM approval.

10.3.2 The letter "W" shall be inserted in item 10 (Equipment) of the ICAO standard flight plan to indicate that both the aircraft and operator are RVSM approved.

10.3.3 The aircraft registration shall be inserted in Item 18 of the flight plan.

10.3.4 Operators of formation flights of State aircraft shall not insert the letter W in Item 10 of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned. Operators of formation flights of State aircraft intending to operate within the RVSM airspace specified in 10.2.1 shall include STS/NONRVSM in Item 18 of the ICAO flight plan form.

10.4 In-flight Procedures within RVSM Airspace

10.4.1 Before entering RVSM airspace, the pilot should review the status of required equipment. The following equipment should be operating normally:

- a) two primary altimetry systems. A cross-check between the primary altimeters should be made. A minimum of two will need to agree within $\pm 60\text{m}$ ($\pm 200\text{FT}$). Failure to meet this condition will require that the altimetry system be reported as defective and air traffic control (ATC) notified;
- b) one automatic altitude-keeping device;
- c) one altitude-alerting device; and
- d) one altitude operating transponder

10.4.2 The controller-pilot phraseologies used for in-flight RVSM operations are specified in ICAO PANS-ATM Doc 4444 (Chapter 12), as shown in the following table:

| Message | Phraseology |
|--|---|
| For a controller to ascertain the RVSM approval status of an aircraft | (call sign) CONFIRM RVSM APPROVED |
| For a pilot to report RVSM approval status | AFFIRM RVSM |
| For a pilot to report non-RVSM approval status: i. on the initial call on any frequency within the RVSM airspace (controllers shall provide and readback with this same phrase), and ii. in all requests for flight level changes pertaining to flight levels within the RVSM airspace; and iii. in all read-backs to flight level clearances pertaining to flight levels within the RVSM airspace Additionally, except for State aircraft, pilot shall include this phrase to read back flight level clearances involving the vertical transit through FL 290 or FL 410 | NEGATIVE RVSM |
| For a pilot of a non-RVSM approved State aircraft to report non-RVSM approval status, in response to the phrase (call sign) CONFIRM RVSM APPROVED . | NEGATIVE RVSM STATE AIRCRAFT |
| For a controller to deny of clearance into the RVSM airspace | (call sign) UNABLE CLEARANCE INTO RVSM AIRSPACE, MAINTAIN [or DESCEND TO, or CLIMB TO] FLIGHT LEVEL (number) |
| For a pilot to report when severe turbulence affects the aircraft's capability to maintain the height-keeping requirements for RVSM. | UNABLE RVSM DUE TURBULENCE |
| For a pilot to report that the aircraft's equipment has degraded en-route below that required for flight within the RVSM airspace. (See Appendix A) <i>(This phrase is to be used to convey both the initial indication of the non-MASPS compliance, and henceforth, on initial contact on all frequencies within the lateral limits of the RVSM airspace until such time as the problem ceases to exist, or the aircraft has exited the RVSM airspace.)</i> | UNABLE RVSM DUE EQUIPMENT |
| For a controller to request an aircraft to provide information as soon as RVSM-approved status has been regained or the pilot is ready to resume RVSM operations | REPORT WHEN ABLE TO RESUME RVSM |
| For a controller to request confirmation that an aircraft has regained RVSM-approved status or a pilot is ready to resume RVSM operations | CONFIRM ABLE TO RESUME RVSM |
| For a pilot to report the ability to resume operations within the RVSM airspace after an equipment or weather-related contingency. | READY TO RESUME RVSM |

Example 1:

A non-RVSM approved aircraft, maintaining FL 260, subsequently requests a climb to FL 320.

Pilot: (call sign) REQUEST FL 320, NEGATIVE RVSM

Controller: (call sign) CLIMB TO FL 320

Pilot: (call sign) CLIMB TO FL 320, NEGATIVE RVSM

Example 2:

A non-RVSM approved aircraft, maintaining FL 260, subsequently requests a climb to FL 430.

Pilot: (call sign) REQUEST FL 430, NEGATIVE RVSM

Controller: (call sign) CLIMB TO FL 430

Pilot: (call sign) CLIMB TO FL 430, NEGATIVE RVSM

Example 3:

A non-RVSM approved aircraft, maintaining FL 360, subsequently requests a climb to FL380.

Pilot: (call sign) REQUEST FL 380, NEGATIVE RVSM

Controller: (call sign) CLIMB TO FL 380

Pilot: (call sign) CLIMB TO FL 380, NEGATIVE RVSM

Example 4:

A non-RVSM approved civil aircraft, maintaining FL 280, subsequently requests a climb to FL320.

Pilot: (call sign) REQUEST FL 320, NEGATIVE RVSM

Controller: (call sign) UNABLE CLEARANCE INTO RVSM AIRSPACE, MAINTAIN FL 280

10.4.3 During cleared transition between levels, the aircraft should not overshoot or undershoot the assigned FL by more than 150 FT (45m).

10.4.4 The pilot must notify ATC when the aircraft's equipment has degraded below the requirement in 10.4.1.

- a) When informed by the pilot of an RVSM-approved aircraft operating in RVSM airspace that the aircraft's equipment no longer meets the RVSM requirements, ATC shall consider the aircraft as non-RVSM-approved.
- b) The pilot shall inform ATC, as soon as practicable, of any restoration of the proper functioning of equipment required to meet the RVSM requirements.
- c) The first ACC to become aware of a change in an aircraft's RVSM status shall coordinate with adjacent ACCs, as appropriate.

Scenario 1: All automatic altitude control systems fail (e.g., Automatic Altitude Hold).

| The Pilot should | ATC can be expected to |
|---|--|
| Initially, maintain CFL and evaluate the aircraft's capability to maintain altitude through manual control. | |
| Subsequently, watch for conflicting traffic both visually and by reference to ACAS, if equipped. | |
| If considered necessary, alert nearby aircraft by <ol style="list-style-type: none"> 1. Making maximum use of exterior lights; 2. Broadcasting position, FL, and intentions on 121.5 MHz (as a back-up, the VHF inter-pilot air-to-air frequency, 123.45 MHz, may be used.) | |
| Notify ATC of the failure and intended course of action. Possible courses of action include: | Obtain pilot's intentions, and pass essential traffic information. |
| <ol style="list-style-type: none"> 1. Maintaining the CFL and route, provided that the aircraft can maintain level. 2. Requesting ATC clearance to climb above or descend below RVSM airspace if the aircraft cannot maintain CFL and ATC cannot establish lateral, longitudinal or conventional vertical separation. 3. Executing the contingency manoeuvre shown in 9.4, if ATC clearance cannot be obtained and the aircraft cannot maintain CFL. | <ol style="list-style-type: none"> 1. If the pilot intends to continue in RVSM airspace, assess traffic situation to determine if the aircraft can be accommodated through the provision of lateral, longitudinal, or conventional vertical separation, and if so, apply the appropriate minimum 2. If the pilot requests clearance to exit RVSM airspace, accommodate expeditiously, if possible. 3. If adequate separation cannot be established and it is not possible to comply with the pilot's request for clearance to exit RVSM airspace, advise the pilot of essential traffic information, notify other aircraft in the vicinity and continue to monitor the situation. 4. Notify adjoining ATC facilities/sectors of the situation. |

Scenario 2: Loss of redundancy in primary altimetry systems

| The Pilot should | ATC can be expected to |
|--|---|
| If the remaining altimetry system is functioning normally, couple that system to the automatic altitude control system, notify ATC of the loss of redundancy and maintain vigilance of altitude keeping. | Acknowledge the situation and continue to monitor progress. |

Scenario 3: All primary altimetry systems are considered unreliable or fail

| The Pilot should | ATC can be expected to |
|---|---|
| Maintain CFL by reference to the standby altimeter (if the aircraft is so equipped). | |
| Alert nearby aircraft by 1. Making maximum use of exterior lights; 2. Broadcasting position, FL, and intentions on 121.5 MHz (as a back-up, the VHF inter-pilot air-to-air frequency, 123.45 MHz, may be used.) | |
| Consider declaring an emergency. Notify ATC of the failure and intended course of action. Possible courses of action include: | Obtain pilot's intentions, and pass essential traffic information. |
| <ol style="list-style-type: none"> 1. Maintaining CFL and route, provided that ATC can provide lateral, longitudinal or conventional vertical separation. 2. Requesting ATC clearance to climb above or descend below RVSM airspace if ATC cannot establish adequate separation from other aircraft. 3. Executing the contingency manoeuvre shown in 9.4, if ATC clearance cannot be obtained. | <ol style="list-style-type: none"> 1. If the pilot intends to continue in RVSM airspace, assess traffic situation to determine if the aircraft can be accommodated through the provision of lateral, longitudinal, or conventional vertical separation, and if so, apply the appropriate minimum. 2. If the pilot requests clearance to exit RVSM airspace, accommodate expeditiously, if possible. 3. If adequate separation cannot be established and it is not possible to comply with the pilot's request for clearance to exit RVSM airspace, advise the pilot of essential traffic information, notify other aircraft in the vicinity and continue to monitor the situation. 4. Notify adjoining ATC facilities/sectors of the situation. |

Scenario 4: The primary altimeters diverge by more than 200 FT (60 m)

| The Pilot should |
|---|
| Determine the defective system through the normal airplane integrated comparator warning system or in the absence of such a system, establish trouble-shooting procedures comparing the primary altimeters to the standby altimeter (corrected using the correction card) |
| If the defective system can be determined, couple the functioning altimeter to the altitude keeping device in use. |
| If the defective system cannot be determined, follow the guidance in Scenario 3 for failure or unreliable altimeter indications of all primary altimeters |

10.4.5 When the aircraft encounters severe turbulence:

10.4.5.1 Forecast

- a) When a meteorological forecast is predicting severe turbulence, ATC shall determine whether RVSM should be suspended and, if so, for how long and for which specific flight level(s) and/or area.
- b) In cases where RVSM will be suspended, the ACC suspending RVSM shall coordinate with adjacent ACCs with regard to the flight levels appropriate for the transfer of traffic; unless a contingency flight level allocation scheme has been determined by letter of agreement. The ACC suspending RVSM shall also coordinate applicable sector capabilities with adjacent ACCs as appropriate.

10.4.5.2 Not forecast

- a) When an aircraft operating in RVSM airspace encounters severe turbulence due to weather or wake vortex that the pilot believes will impact the aircraft's capability to maintain its cleared flight level, the pilot shall inform ATC. ATC shall establish either an appropriate horizontal separation or an increased minimum vertical separation.
- b) ATC shall, to the extent possible, accommodate pilot requests for flight level and/or route changes and shall pass on traffic information as required.
- c) ATC shall solicit reports from other aircraft to determine whether RVSM should be suspended entirely or within a specific flight level band and/or area.
- d) ACC suspending RVSM shall coordinate such suspension(s) with, and any required adjustments to, sector capabilities with adjacent ACCs, as appropriate, to ensure an orderly progression to the transfer of traffic.

Scenario 5: Turbulence (greater than moderate), which the pilot believes, will impact the aircraft's capability to maintain flight level.

| The Pilot should | ATC can be expected to |
|--|--|
| Watch for conflicting traffic both visually and by reference to ACAS, if equipped. | |
| If considered necessary, alert nearby aircraft by <ol style="list-style-type: none"> 1. Making maximum use of exterior lights; 2. Broadcasting position, FL, and intentions on 121.5 MHz (as a back-up, the VHF inter-pilot air-to-air frequency, 123.45 MHz, may be used.) | |
| Notify ATC of intended course of action as soon as possible. Possible courses of action include: | |
| <ol style="list-style-type: none"> 1. Maintaining CFL and route, provided that ATC can provide lateral, longitudinal or conventional vertical separation. 2. Requesting flight level change, if necessary. 3. Executing the contingency manoeuvre shown in 9.4, if ATC clearance cannot be obtained and the aircraft cannot maintain CFL. | <ol style="list-style-type: none"> 1. Assess traffic situation to determine if the aircraft can be accommodated through the provision of lateral, longitudinal, or conventional vertical separation, and if so, apply the appropriate minimum. 2. If unable to provide adequate separation, advise the pilot of essential traffic information and request pilot's intentions. 3. Notify other aircraft in the vicinity and continue to monitor the situation. 4. Notify adjoining ATC facilities/sectors of the situation. |

10.5 Procedures for Operation of Non-RVSM Compliant Aircraft in RVSM airspace

10.5.1 RVSM approved aircraft will be given priority for level allocation over non-RVSM approved aircraft.

10.5.2 The vertical separation minimum between non-RVSM compliant aircraft operating in the RVSM stratum and all other aircraft is 2 000 FT.

10.5.3 Non-RVSM compliant aircraft operating in RVSM airspace should use the phraseology contained in ICAO PANS-ATM Doc 4444 (Chapter 12). A pilot of a non-RVSM approved State aircraft to report non-RVSM approval status, in response to the phrase (call sign) CONFIRM RVSM APPROVED, shall respond with "NEGATIVE RVSM, STATE AIRCRAFT."

10.5.4 Non-RVSM compliant aircraft may be cleared to climb to and operate above FL410 or descend to and operate below FL290 provided that they:

- a) Do not climb or descend at less than the normal rate for the aircraft; and
- b) Do not level off at an intermediate level while passing through the RVSM stratum.

10.5.5 Non-RVSM compliant aircraft may not flight plan between FL290 and FL410 inclusive within RVSM airspace, except for the following situations:

- a) The aircraft is being initially delivered to the State of Registry or Operator; or
- b) The aircraft was RVSM approved but has experienced an equipment failure and is being flown to a maintenance facility for repair in order to meet RVSM requirements and/or obtain approval; or
- c) The aircraft is transporting a spare engine mounted under the wing; or
- d) The aircraft is being utilized for mercy or humanitarian purposes; or
- e) State aircraft (those aircraft used in military, custom and police services shall be deemed state aircraft)

Note: The procedures are intended exclusively for the purposes indicated and not as a means to circumvent the normal RVSM approval process.

10.5.6 The assignment of cruising levels to non-RVSM compliant aircraft shall be subjected to an ATC clearance. Aircraft operators shall include the "**STS/ Category of operations (i.e. FERRY/HUMANITARIAN/MILITARY/CUSTOMS/POLICE)/NONRVSM**)" in Field 18 of the ICAO Flight Plan.

10.6 Procedures for Suspension of RVSM

10.6.1 Air traffic services will consider suspending RVSM procedures within affected areas of the Bangkok FIR when there are pilot reports of greater than moderate turbulence. Within areas where RVSM procedures are suspended, the vertical separation minimum between all aircraft will be 2 000 FT.

10.7 Flight Level Allocation Scheme (FLAS) For South China Sea Area

10.7.1 The following flight levels on the routes listed below can be used without pre-departure clearances from the downstream ATS units

(no-PDC levels):

| ATS Route | No-Pre-Departure Coordination (No-PDC) Flight Levels Other levels available with prior approval |
|--------------------------------------|--|
| L880 / L628 (EB) L628 / M633 (WB) | EB – FL330, FL370, FL410 WB – FL280, FL340 |
| N891 | SB – FL330 NB – FL260, FL300, FL380 |
| A1 | EB – FL290, FL330, FL370, FL390, FL410 WB – FL280, FL300, FL340, FL380, FL400 |
| N506 / M768 (EB) M768 / P629 (WB) | EB – FL270, FL330, FL410 WB – FL300, FL380 |
| A202 | EB – FL290, FL330, FL370, FL390, FL410 WB – FL280, FL300, FL340, FL380, FL400 |

11. TRAFFIC INFORMATION BROADCASTS BY AIRCRAFT (TIBA) AND RELATED OPERATING PROCEDURES

11.1 TIBA Procedures

11.1.1 Special procedures have been developed for pilot use in active contingency zones if communications are significantly degraded or unavailable. These TIBA procedures supersede and take the place of lost communication procedures that are outlined in Annex 2 to the Chicago Convention and PANS-ATM (DOC 4444) and will enable traffic information broadcasts by aircraft (TIBA) to be made as well as providing collision hazard information. When aircraft will enter designated airspace in which it is known in advance that normal communication is not available, pilots should maintain a listening watch on the TIBA frequency 10 minutes prior to entering that airspace until leaving the airspace.

11.1.2 For an aircraft taking off from an aerodrome located within the lateral limits of the designated airspace listening watch should start as soon as appropriate after take-off and be maintained until leaving the airspace.

11.2 Times of Broadcast

When a loss of normal communications requires TIBA procedures to be implemented, pilots shall make broadcasts in English on 128.95 MHz as follows:

- a) At the time the loss of normal communications is recognized;
- b) 10 minutes before entering a designated airspace when it is known in advance that normal communications will not be available within that airspace or, for a pilot taking off from an aerodrome located within the lateral limits of the designated airspace, as soon as appropriate after take-off;
- c) 10 minutes prior to crossing a reporting point;
- d) 10 minutes prior to crossing or joining an ATS route;
- e) at 20 minutes intervals between distant reporting points;
- f) 2 to 5 minutes, where possible, before a change in flight level;
- g) at the of a change in flight level; and
- h) at any other time considered necessary by the pilot.

Note: Normal position reporting procedures should be continued at all times, regardless of any action taken to initiate or acknowledge a traffic information broadcast.

11.3 Broadcast Format

TIBA broadcasts should be made using the following phraseology:

- a) For other than those indicating changes in flight level:

ALL STATIONS (call sign) FLIGHT LEVEL (number) [of CLIMBING TO FLIGHT LEVEL (number)] (direction) (ATS route) [or DIRECT FROM (position) TO (position) POSITION] (position) AT (time) ESTIMATING (next reporting point, or the point of crossing or joining a designated ATS route) AT (time) (call sign) FLIGHT LEVEL (number) (direction)

Example: "ALL STATIONS WINDAR 671 FLIGHT LEVEL 380 NORTHWEST BOUND A464 POSITION 80 MILES SOUTH EAST OF KEVOK AT 2358 ESTIMATING KOBAS AT 0020 WINDAR 671 FLIGHT LEVEL 380 NORTHWEST BOUND OUT"

Note: For broadcasts made when the aircraft is not near an ATS significant point, the position should be given as accurately as possible and in any case to the nearest 30 minutes of latitude and longitude.

- b) Before a change in flight level:

ALL STATIONS (call sign) (direction) (ATS route) [or DIRECT FROM (position) TO (position)] LEAVING FLIGHT LEVEL (number) FOR FLIGHT LEVEL (number) AT (position and time)

c) At the time of a change in flight level:

ALL STATIONS (call sign) (direction) (ATS route) [or DIRECT FROM (position) TO (position)] LEAVING FLIGHT LEVEL (number) NOW FOR FLIGHT LEVEL (number) followed by: ALL STATIONS (call sign) MAINTAINING FLIGHT LEVEL (number)

d) When reporting a temporary flight level change to avoid an imminent collision risk:

ALL STATIONS (call sign) LEAVING FLIGHT LEVEL (number) NOW FOR FLIGHT LEVEL (number) followed as soon as practicable by: ALL STATIONS (call sign) RETURNING TO FLIGHT LEVEL (number) NOW

11.4 Acknowledgement of the Broadcasts

TIBA broadcasts should not be acknowledged unless a potential collision risk is perceived.

11.5 Cruising Level Changes

11.5.1 Cruising level changes should not be made within the designated airspace, unless considered necessary by pilots to avoid traffic conflicts, to climb to minimum en-route or safe altitudes, to overcome operational limitations, to avoid adverse weather, or in response to an operational emergency

11.5.2 When cruising level changes are unavoidable, all available aircraft lighting which would improve the visual detection of the aircraft should be displayed while changing levels.

11.6 Collision Avoidance

If, on receipt of a traffic information broadcast from another aircraft, a pilot decides that immediate action is necessary to avoid an imminent collision risk, and this cannot be achieved in accordance with the right-of-way provisions of Annex 2 to the Chicago Convention, the pilot should:

- a) unless an alternative manoeuvre appears more appropriate, immediately descend 150 m (500 ft), or 300 m (1 000 ft) if above FL 290 in an area where a vertical separation minimum of 600 m (2 000 ft) is applied;
- b) display all available aircraft lighting which would improve the visual detection of the aircraft;
- c) as soon as possible, reply to the broadcast advising action being taken;
- d) notify the action taken on the appropriate ATS frequency and
- e) as soon as practicable, resume normal flight level, notifying the action on the appropriate ATS frequency.

11.7 Operation of Transponders

When implementing TIBA procedures, pilots shall operate aircraft transponders on Mode A and C at all time. In the absence of alternative instructions from the appropriate ATS unit, aircraft not assigned a discrete code should squawk code 3300.

11.8 Operation of TCAS

Unless otherwise directed by an appropriate authority, pilots should operate TCAS in TA/RA Mode at maximum range setting during the cruise phase of flight and at a range setting appropriate to the traffic situation when in the departure or terminal phases of flight.

11.9 Special Operations

Specific aircraft may need to be involved in special operations during the period when a FIR is an activated contingency zone. These aircraft may therefore be unable to utilize the contingency route structure for a significant period of their flights, Aircraft that will be classified as special operations are as follows:

- a) Special operations of State aircraft
- b) Aircraft in emergency situations or operating with significant reduction in operating efficiency
- c) Mercy flights and aircraft engaged in search and rescue, medical evacuation, and
- d) coastal surveillance operations.

11.10 Activation and Cancellation of TIBA Procedures

This procedure shall be included in AIP Supplements or NOTAM on TIBA procedures and will be cancelled by NOTAM.

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