ENR 1.6 ATS SURVEILLANCE SERVICES AND PROCEDURES

1 PRIMARY RADAR

1.1 DESCRIPTION OF PRIMARY RADAR SERVICES AND PROCEDURES

1.1.1 Surveillance services will be provided to aircraft operating in controlled airspace subject to surveillance coverage, equipment serviceability and situations that may result in a degradation of ATS provision.

1.1.2 Flight information service may be provided using ATS surveillance to aircraft operating in uncontrolled airspace subject to surveillance and communication coverage, and air traffic conditions. Pilot may request for the following:

a. Information regarding any aircraft observed to be on a conflicting path with the identified aircraft and suggestions or advice regarding avoiding action; and
b. Information on the position of significant weather and, as practicable, advice to the aircraft on how best to circumnavigate any such areas of adverse weather; and
c. Information to assist the aircraft in its navigation.

Aircraft receiving flight information services are not obliged to follow the advice and/or suggestions given by ATC.

1.1.3 Aircraft operating in uncontrolled airspace, intending to enter or cross controlled airspace shall seek ATC clearance to do so. ATC will identify the aircraft and provide ATS surveillance service prior to entering controlled airspace.

1.1.4 The pilot-in-command is responsible for navigation and obstacle clearance when operating on established ATS routes and instrument flight procedures. However, for purpose of ensuring separation and expeditious flow of traffic, ATC may instruct pilots to fly specific headings for an IFR flight to be vectored and/or provide direct routing which takes the aircraft off an ATS route or an instrument flight procedure. Under such circumstance, ATC will issue clearance such that the prescribed obstacle clearance will always exist until the aircraft reaches the point where pilots will resume own navigation.

1.1.5 Position information will be given as follows:

a. A well-known geographical position;
b. Bearing and distance (using points of the compass) from a known position;
c. Magnetic heading (QDM) and distance to the appropriate reporting point or en-route navigational facility;
d. A distance to the runway touchdown point (as “track miles” to run).

1.1.6 Aircraft will be identified by ATC before providing ATS surveillance services using one of the following methods:

a. By a pilot report over a prescribed position displayed on the radar map or plotted on the radar map outlay;
b. By instructing a pilot to carry out turn(s) and ATC observing the executed turn(s);
c. By observing and correlating the radar echo of a departing aircraft to a known airborne time.

1.1.7 It is not possible to specify separation minima between identified aircraft and unknown traffic considered to constitute a hazard due to unpredictable manoeuvres of the latter. However, whenever practicable, the minimum surveillance separation shall be applied.

1.2 SINGAPORE AIR TRAFFIC CONTROL UNITS

1.2.1 Singapore ATC will use the following callsigns when providing ATS surveillance services:

a. Aircraft provided with Area Control Service (ACC)
    i. Singapore Radar;
    ii. Singapore Control.

b. Aircraft provided with Approach Control Service (APP)
    i. Singapore Approach;
    ii. Singapore Arrival;
    iii. Singapore Departure;
    iv. Seletar Approach.

1.3 MILITARY RADAR UNITS AUTHORISED TO PROVIDE RADAR CROSSING SERVICE

1.3.1 The Military Radar Units authorised to provide radar crossings of controlled areas (airways) by military aircraft are:

a. RSAF 201 Squadron (Air Defence Radar Unit-ADRU); and

b. RSAF 203 Squadron (Singapore Air Traffic Control Centre)

1.4 RADAR FAILURE

1.4.1 In the event of radar failure, instructions will be issued by the radar controller to restore standard longitudinal, lateral or vertical separation between those aircraft operating with radar separation. Instructions may also be given to aircraft to communicate on another ATC frequency.

1.5 RADIO FAILURE

1.5.1 In the event of failure of two-way communications while operating on the radar frequency, the pilot shall change to any other alternative ATC frequencies and request instructions.

1.5.2 If able to receive but not transmit, the pilot shall remain on the frequency on which he has been communicating and comply with instructions issued by the radar controller designed to establish that the aircraft is receiving. If this is established, further instructions appropriate to the circumstances will be issued.

1.5.3 If unable to make contact on the alternative frequencies, the pilot shall comply with the standard radio failure procedures as specified below.

1.6 TOTAL RADIO COMMUNICATION FAILURE PROCEDURES

1.6.1 If total radio communication failure occurs in VMC during daylight hours, the pilot shall continue to fly in VMC and land at the most suitable aerodrome. If it occurs in VMC during the hours of darkness (between sunset and sunrise) action shall be taken in accordance with paragraph 1.6.2 below.

1.6.2 If total radio communication failure occurs in IMC, ATC action is based on the assumption that the aircraft will continue to its destination and if unable to land, will proceed to its nominated alternate. Separation standards will be increased and airspace reserved accordingly (see Appendices ‘A’ and ‘B’).

1.6.3 In IMC, or if unable to maintain VFR, the pilot shall either leave or avoid controlled airspace and areas of dense traffic and establish VFR operation or, alternatively, shall:

a. Proceed according to the current flight plan, at the last assigned flight level, to the clearance limit and thereafter at the flight plan level.

b. Arrive at the destination as close as possible to ETA.

c. Commence descent as close as possible to EAT (or ETA if no EAT has been acknowledged).

d. If unable to land within 30 minutes of the time descent should have started (i.e. EAT or ETA if no EAT has been acknowledged), proceed to cross SAMKO Holding Area (SHA) at 4,000ft then via A457 at FL200 if Kuala Lumpur is the nominated alternate or via B470 at FL290 if Soekarno- Hatta is the nominated alternate or otherwise proceed at the planned flight level to other nominated alternate.

Note:

1) Aircraft are to follow the established radio failure procedures as laid down by the respective airports.

2) During this 30 minute period ATC will reserve the airspace at the aircraft’s flight level and below. At the expiry of this period with the concurrence of other users normal operations will resume.

1.6.4 In all cases, the pilot shall contact ATC as soon as possible after landing.

1.7 TOTAL RADIO FAILURE - SPECIAL PROCEDURES - SINGAPORE CHANGI AP - ARRIVALS

1.7.1 In VMC during daylight hours, if total radio communication failure occurs to an aircraft bound for Singapore Changi Airport, the pilot shall maintain VMC to land at the most suitable airfield and report to the appropriate air traffic control unit by the most expeditious means.

1.7.2 For IFR flights to Singapore Changi Airport, aircraft experiencing radio failure shall:

a. Proceed according to the last acknowledged clearance received from Singapore ATC, or
b. If no specific instructions or clearance has been received from Singapore ATC:

i. Maintain the last assigned altitude or flight level and proceed via planned ATS Routes thereafter the appropriate STAR for RWY 02L/02C /02R to SAMKO Holding Area (SHA). If SHA is not part of the STAR, flight shall proceed to SHA after the last waypoint on the STAR.
ii. Commence descent from SHA at or as close as possible to the ETA as indicated on the flight plan.
iii. Carry out the appropriate instrument approach procedure from SHA to land on RWY 02L/02C/02R.

c. If radio failure occurs while flight is on assigned heading from an ATC issued instruction which takes the aircraft off the STAR, the pilot shall rejoin the last assigned STAR by resuming own navigation to the next ensuing waypoint on STAR
d. Identify the runway-in-use in accordance with paragraph 1.8. If unable to effect a landing on:

i. RWY 02L
Carry out missed approach procedure to AKOMA (PU R-356/20DME) (014522N 1035443E). Leave AKOMA at 4,000ft to NYLON Holding Area (NHA) and execute the appropriate instrument procedure from NHA to land on RWY 20R, RWY 20C or RWY 20L, as appropriate.
ii. RWY 02C
Carry out missed approach procedure to NYLON Holding Area (NHA) and execute the appropriate instrument procedure from NHA to land on RWY 20R, RWY 20C or RWY 20L, as appropriate.
iii. RWY 20R
Carry out missed approach procedure to SAMKO Holding Area (SHA) and execute the appropriate instrument procedure from SHA to land on RWY 02L, RWY 02C or RWY 02R, as appropriate.
iv. RWY 20C
Carry out missed approach procedure to EXOMO (VTK R-158/22DME) (010425.49N 1040933.17E). Leave EXOMO at 4,000ft to SAMKO Holding Area (SHA) and execute the appropriate instrument procedure from SHA to land on RWY 02L, RWY 02C or RWY 02R, as appropriate.
v. RWY 02R
Carry out missed approach procedure to HOSBA (VTK R-103/24DME) (011948N 1042418E) Holding Area (HHA). Leave HHA at 7,000ft to NHA via ATS route W401 and VTK DVOR. Execute the appropriate instrument procedure from NHA to land on RWY 20L, RWY 20C or RWY 20R.
vi. RWY 20L
Carry out missed approach procedure to HOSBA (SJ R-079/34DME) (011948N 1042418E) Holding Area (HHA). Leave HHA at 7,000ft to SHA via ATS route G580 and SJ DVOR. Execute the appropriate instrument procedure from SHA to land on RWY 02L, RWY 02C or RWY 02R.

1.8 IDENTIFICATION OF RUNWAY-IN-USE

1.8.1 ATC will switch on the appropriate approach lights and the ILS serving the runway-in-use to assist the pilot in its identification. If the approach lights for the runway-in-use are sighted but the ILS frequency is not received, the pilot shall assume that the ILS is inoperative and shall proceed to land on the runway on which the approach lights have been sighted.

1.8.2 If unable to land within 30 minutes of EAT or ETA, if no EAT has been received and acknowledged, proceed in accordance with paragraph 1.6.3 (d) above.

1.9 TOTAL RADIO FAILURE - SPECIAL PROCEDURES - SINGAPORE CHANGI AP - DEPARTURES

1.9.1 When an aircraft which has been cleared by ATC to an intermediate level experiences total radio communication failure immediately after departure from Singapore Changi Airport and it is deemed unsafe for it to continue to its destination, the pilot will adhere to the procedures below.

1.9.2 When radio communication failure occurs immediately after the aircraft has departed on RWY 02L/02C/02R, the pilot shall proceed according to the following procedures:

a. Proceed straight ahead to NYLON Holding Area (NHA) climbing to the last assigned altitude. At NHA, climb/descend to maintain 7,000ft;
b. Hold at NHA for 4 minutes and leave NHA on track 203°. At 10 DME north of VTK, turn left for HOSBA Holding Area (HHA) to jettison fuel, maintaining 7,000ft;
c. After fuel jettison, proceed to SAMKO Holding Area (SHA) via Airway G580 and SINJON DVOR. Maintain 7,000ft. At SHA descend for an instrument approach on RWY 02L/02C/02R. Identify the runway-in-use in accordance with paragraph 1.8 above.

1.9.3 When radio communication failure occurs immediately after the aircraft has departed on RWY 20R/20C/20L, the pilot shall proceed according to the following procedures:

a. Proceed straight ahead to SAMKO Holding Area (SHA) climbing to the last assigned altitude. At SHA climb/descend to maintain 7,000ft;
b. Hold at SHA for 4 minutes. Leave SHA for HOSBA Holding Area (HHA) via SJ DVOR and Airway G580 to jettison fuel, maintaining 7,000ft;
c. After fuel jettison, proceed to NHA via Airway W401. Maintain 7,000ft. On crossing VTK 042R turn right to intercept VTK 023R. At NHA descend to carry out an instrument approach on RWY 20R/20C/20L.

1.9.4 ATC action is based on the assumption that the aircraft will take a minimum of 10 min to jettison fuel. An aircraft therefore should not leave earlier than 10 min after arrival at HOSBA Holding Area even if fuel jettison is completed at a shorter time or if jettisoning is not necessary or possible unless circumstances require an immediate return.

1.9.5 Alternatively, aircraft may jettison fuel between HOSBA and point 80NM from VTK DVOR/DME on Airway G580.

1.10 TOTAL RADIO FAILURE - SPECIAL PROCEDURES - SELETAR AP - ARRIVALS

1.10.1 If total radio communication failure occurs in VMC during daylight hours to an aircraft bound for Seletar AD, the pilot shall continue to fly in VMC and land at the most suitable aerodrome.

1.10.2 If in IMC or when weather conditions are such that the total radio communication failure aircraft cannot complete its flight in accordance with paragraph 1.10.1, the pilot will EITHER:

a. proceed in accordance with the last acknowledged clearance from ATC; OR

b. if no specific instructions or clearances have been received and acknowledged:

i. maintain the last assigned level and proceed via flight planned route, then to OMKOM;
ii. commence descent from OMKOM at or as close as possible to the ETA Seletar AD as indicated on the flight plan or last EAT passed by ATC and acknowledged by aircraft;
iii. leave OMKOM at 2,500ft and proceed to overhead Seletar;
iv. if Seletar Aerodrome is visual, initiate the standard arrival procedures for RWY 21;
v. if unable to effect a landing on RWY 21, carry out a missed approach at or below 1,500ft and land on RWY 03.

1.10.3 ATC will assist the pilot in identifying RWY-in-use by switching on the RWY lights and appropriate PAPI.

1.10.4 The pilot shall keep a look-out for light signals from Seletar Tower. On receipt of a green light from Seletar Tower, a landing may be made.

1.10.5 If unable to land within 30 minutes of ETA Seletar as indicated in the flight plan or last acknowledged EAT, aircraft will proceed to its flight planned alternate.

1.10.6 It is the pilot’s responsibility to ensure that he is clear of other traffic while carrying out the standard arrival procedure.

1.11 TOTAL RADIO FAILURE - SPECIAL PROCEDURES - SELETAR AP - DEPARTURES

1.11.1 If total radio communication failure occurs to a departing aircraft within the Seletar Control Zone, the pilot shall maintain 2,500ft and if Seletar AD is visual, initiate the standard arrival procedures for RWY 21. If unable to effect a landing on RWY 21, carry out a missed approach at or below 1,500ft and land on RWY 03. When in the circuit, the pilot shall keep a look-out for light signals from Seletar Tower.

1.11.2 If departing aircraft experiences total radio communication failure outside the Seletar Control Zone, the pilot shall follow procedures as set out in paragraph 1.10.

1.11.3 At night, aircraft experiencing total radio communication failure will proceed to its flight planned alternate.

1.12 RADIO FAILURE - SPECIAL PROCEDURES - SELETAR AP - HELICOPTERS

1.12.1 Helicopters experiencing RTF failure should approach low level (not above 300ft) and fly past the Control Tower on the eastern side of the runway rocking laterally.

1.12.2 Unless the pilot unmistakably sees a green light from the Tower, he is not to assume that he is cleared to land but is to carry out the same procedure again.

1.12.3 In each circumstance, it is the pilot's responsibility to ensure that he is cleared of other circuit traffic and does not encroach on the approach of the runway.

1.13 RADIO FAILURE - SPECIAL PROCEDURES - SELETAR AP - FIXED WING AIRCRAFT

1.13.1 Aircraft experiencing radio failure are to descend on the western side of the runway to 600ft and rock the aircraft when passing abeam the Control Tower.

1.13.2 Unless the pilot unmistakably sees a green light from the Tower, he is not to assume that he is cleared to land but is to carry out the same procedure again.

1.13.3 When carrying out radio failure procedure, the pilot-in-command shall not infringe the helicopter circuit whenever it is active and shall keep a sharp look-out for helicopters and other aircraft operating in the aerodrome circuit.

1.14 ACTION TAKEN BY ATC DURING RADIO FAILURE

1.14.1 In addition to the action specified in paragraph 1.6.2, if unable to establish normal communication with an aircraft, ATC will:

a. Maintain separation between the aircraft and other aircraft known to be operating in its vicinity;
b. Transmit essential information to the aircraft, including the flight levels reserved for its use, route to be flown, and any significant weather information, such as terminal weather, areas in which VMC may be expected, etc.;
c. Advise other aircraft in the vicinity of the presumed position of the aircraft experiencing radio failure;
d. Use ground radar to check whether the aircraft is receiving and complying with ATC instructions, and to ensure separation from other aircraft;
e. Inform the operator concerned or his representative;
f. Inform the alternate aerodrome of the circumstances of the failure and request attempts to establish communication with the aircraft;
g. Inform all concerned and end all radio failure actions if communication with aircraft is established and when aircraft lands.

1.15 VOICE AND CPDLC POSITION REPORTING REQUIREMENTS

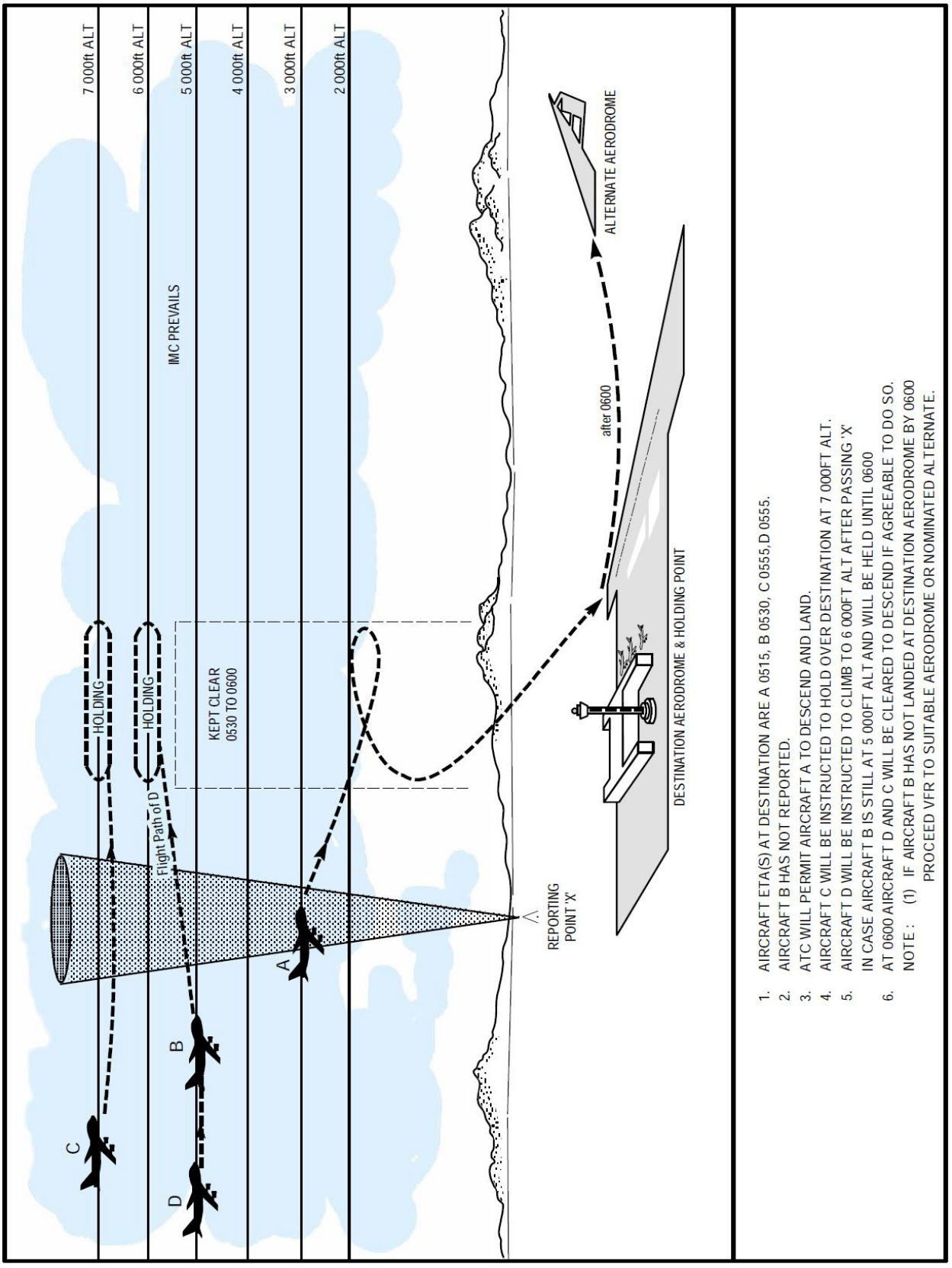
1.15.1 There are no voice and CPDLC position reporting requirements for the Primary Radar coverage area stipulated in paragraph 1.16.1.

1.16 AREA OF PRIMARY RADAR COVERAGE

1.16.1 Maximum operating range of the Primary Radar is 250 NM from Singapore Changi Airport.

ATC PROCEDURE FOR RADIO FAILURE

APPENDIX 'A'

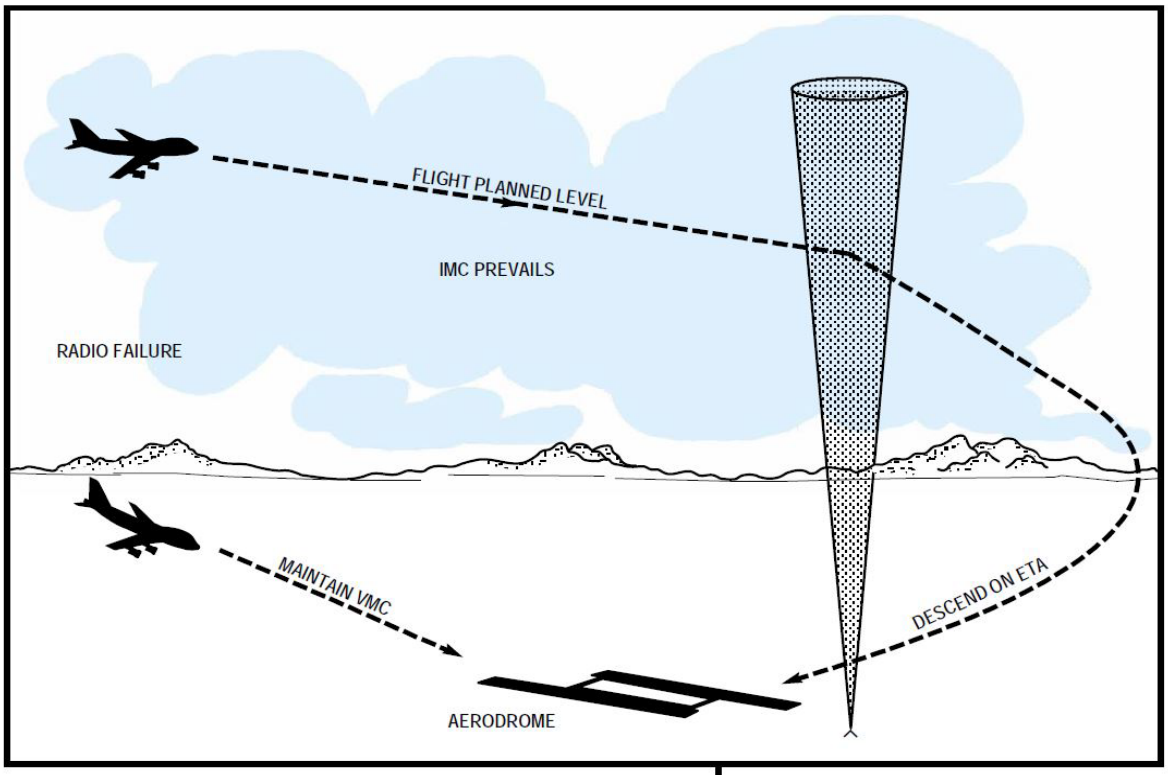


1. AIRCRAFT ETA(S) AT DESTINATION ARE A 0515, B 0530, C 0555,D 0555.
2. AIRCRAFT B HAS NOT REPORTED.
3. ATC WILL PERMIT AIRCRAFT A TO DESCEND AND LAND.
4. AIRCRAFT C WILL BE INSTRUCTED TO HOLD OVER DESTINATION AT 7 000FT ALT.
5. AIRCRAFT D WILL BE INSTRUCTED TO CLIMB TO 6 000FT ALT AFTER PASSING 'X'
   IN CASE AIRCRAFT B IS STILL AT 5 000FT ALT AND WILL BE HELD UNTIL 0600
6. AT 0600 AIRCRAFT D AND C WILL BE CLEARED TO DESCEND IF AGREEABLE TO DO SO.

NOTE : (1) IF AIRCRAFT B HAS NOT LANDED AT DESTINATION AERODROME BY 0600
PROCEED VFR TO SUITABLE AERODROME OR NOMINATED ALTERNATE.

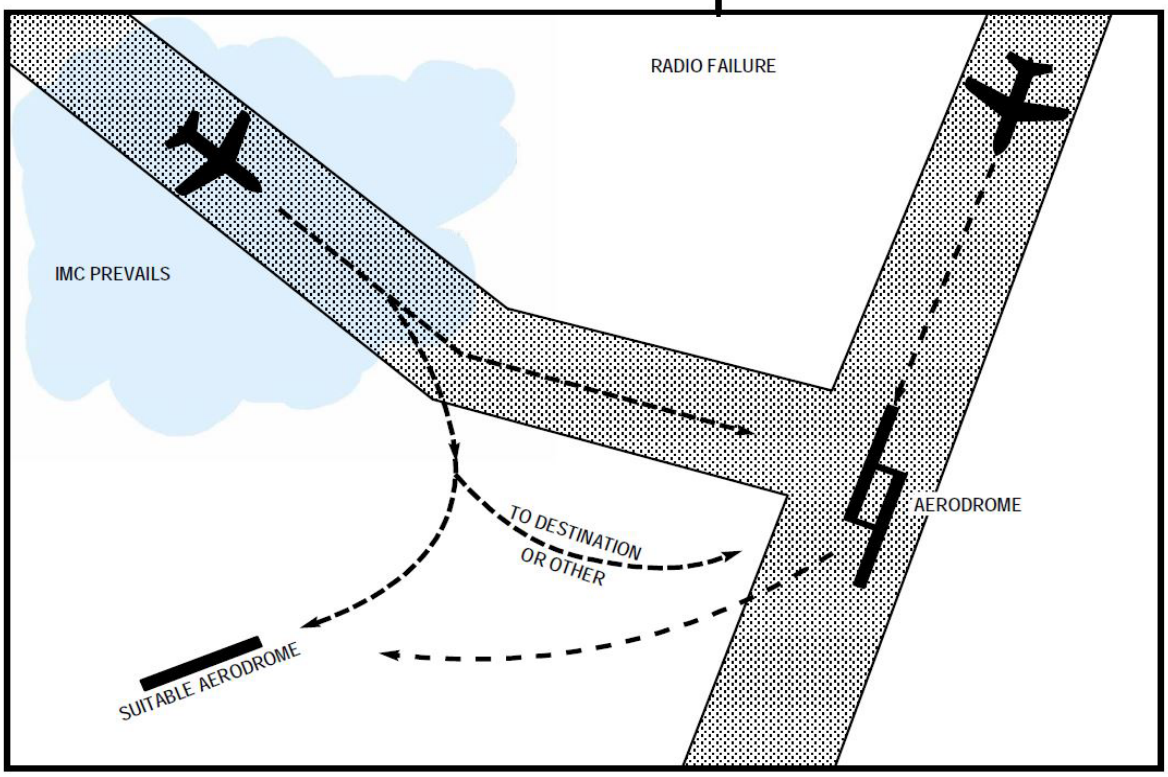
PILOT PROCEDURE FOR RADIO FAILURE

APPENDIX 'B'



IF IFR, DIVERT OFF AIRWAYS, ESTABLISH VMC AND LAND AT SUITABLE AERODROME OR, PROCEED IN STRICT ACCORDANCE WITH CLEARANCE OR FLIGHT PLAN TO DESTINATION.

IF VFR, MAINTAIN VMC TO DESTINATION OR OTHER SUITABLE AERODROME



2 SECONDARY SURVEILLANCE RADAR (SSR)

2.1 DESCRIPTION OF SSR OPERATING PROCEDURES

2.1.1 All aircraft operating in controlled airspace where Singapore is responsible for the provision of ATS are required to operate SSR transponders selecting Mode 3/A (4096 codes) and Mode C simultaneously.

2.1.2 Aircraft departing Singapore shall operate transponders in accordance with instructions given by ATC.

2.1.3 Pilots who have received specific instructions from ATC concerning the setting of the transponder shall maintain that setting except in circumstances detailed in paragraphs 2.2, 2.3 and 2.4 below.

2.1.4 Aircraft bound for Singapore shall operate on the SSR code last assigned to them by the adjacent FIR, or if no code has been previously assigned, advise the ATC unit concerned who will provide the required code.

2.1.5 Aircraft will be identified by ATC before providing ATS surveillance services using one of the following methods:

a. Verification of compliance to assigned discrete SSR transponder code;
b. Observation of compliance with an instruction to set a specific SSR transponder code;
c. Observation of compliance with an instruction to squawk IDENT.

2.2 EMERGENCY PROCEDURES

2.2.1 Pilot(s) of aircraft encountering a state of emergency shall set their transponder as follows:

NATURE OF EMERGENCY	TRANSPONDER CODE
Lost C2 Link state	7400
Unlawful Interference	7500
Radio Failure	7600
General Emergency	7700

2.3 RADIO COMMUNICATION FAILURE

2.3.1 Aircraft experiencing total radio communication failure shall set transponder code as per paragraph 2.2.1 and adopt the procedures specified in paragraph 1.6

2.3.2 Aircraft experiencing partial radio communication failure shall set transponder code as per paragraph 2.2.1. The possible scenarios are:

a. Aircraft is unable to receive ATC transmissions, pilots shall adopt the appropriate procedures specified in paragraph 1.6 to 1.13.
b. Aircraft can receive ATC transmissions, ATC will continue to issue instructions and/or clearances to pilots. Such instructions and clearances will be repeated. Pilots may squawk ident to acknowledge.

2.4 SYSTEM OF SSR CODE ASSIGNMENT

2.4.1 Aircraft operating in the Singapore FIR and airspace where ATS is provided by Singapore (see ENR 2.1) will be assigned the following codes except for those aircraft already assigned codes by adjacent FIRs:

INTERNATIONAL	DOMESTIC
0100 - 0177	0001 - 0077
2200 - 2277	4200 - 4277
	4300 - 4377
	4600 - 4677

2.5 VOICE AND CPDLC POSITION REPORTING REQUIREMENTS

2.5.1 There are no voice and CPDLC position reporting requirements for the SSR coverage area stipulated in paragraph 2.6.1.

2.6 AREA OF SSR COVERAGE

2.6.1 Maximum operating range of the SSR is 250 NM from Singapore Changi Airport.

3 AUTOMATIC DEPENDENT SURVEILLANCE-BROADCAST (ADS-B)

3.1 DESCRIPTION OF ADS-B OPERATING PROCEDURES IN ADS-B OUT EXCLUSIVE AIRSPACE

3.1.1 Aircraft that operate within Singapore FIR at or above F290 must carry serviceable ADS-B transmitting equipment that has been certified as meeting:

a. European Aviation Safety Agency - Certification Considerations for the Enhanced ATS in Non-Radar Areas using ADS-B Surveillance (ADS-B-NRA) Application via 1090MHz Extended Squitter (AMC 20-24), or
b. European Aviation Safety Agency (EASA) CS-ACNS (Subpart D - Surveillance - SUR), or
c. Federal Aviation Administration - Advisory Circular No: 20-165A (or later versions) Airworthiness Approval of Automatic Dependent Surveillance - Broadcast (ADS-B) Out Systems, or
d. An 'approved ADS-B Out equipment configuration' as specified in Part 91 (General Operating and Flight Rules) Manual of Standards 2020, issued by the Civil Aviation Safety Authority of Australia.

3.1.2 Aircraft that does not comply with the requirements stipulated in paragraph 3.1.1 will not be accorded priority in the delineated airspace and flight level assignments would be subjected to air traffic conditions.

3.1.3 If an aircraft carries ADS-B transmitting equipment but does not comply with the requirements stipulated in paragraph 3.1.1, the equipment must be deactivated or set to transmit only a value of zero for the Navigation Uncertainty Category - Position (NUC-P) or Navigation Integrity Category (NIC).

3.1.4 Aircraft will be identified by ATC before providing ATS surveillance services using one of the following methods:

a. Direct recognition of the aircraft identification in an ADS-B label displayed to ATC on their air situation display system;
b. Observation of compliance with an instruction to TRANSMIT ADS-B IDENT.

3.2 EMERGENCY PROCEDURES

3.2.1 The pilot-in-command, upon awareness of an onboard ADS-B equipment failure, must inform ATC as soon as possible. ATC would then provide the necessary clearance to ensure separation with other flights operating in the delineated airspace as stipulated in paragraph 3.1.1.

3.2.2 Pilot(s) of aircraft encountering a state of emergency shall set their transponder as stipulated in paragraph 2.2.1.

3.3 RADIO COMMUNICATION FAILURE

3.3.1 Aircraft experiencing total radio communication failure shall set transponder code as per paragraph 2.2.1 and adopt the procedures specified in paragraph 1.6

3.3.2 Aircraft experiencing partial radio communication failure shall set transponder code as per paragraph 2.2.1. In the event whereby:

a. Aircraft is unable to receive ATC transmissions, pilots shall adopt the appropriate procedures specified in paragraph 1.6 to 1.13.
b. Aircraft can receive ATC transmissions, ATC will continue to issue instructions and/or clearances to pilots. Such instructions and clearances will be repeated. Pilots may squawk ident to acknowledge.

3.4 FLIGHT PLANNING REQUIREMENTS

3.4.1 Aircraft operators complying with the requirements stipulated in paragraph 3.1.1 are to indicate the appropriate ADS-B designator in Field 10b of the ICAO flight plan:

a. B1: ADS-B with dedicated 1090 MHz ADS-B "out" capability
b. B2: ADS-B with dedicated 1090 MHz ADS-B "out" and "in" capability

3.4.2 Aircraft operators are to include the aircraft address (24 bit Code) in hexadecimal format in Field 18 of the ICAO flight plan as per the following example: CODE/7C432B

3.4.3 Aircraft identification (ACID) not exceeding 7 characters must be accurately indicated in Field 7 of the ICAO flight plan and replicated exactly when set in the aircraft avionics (for transmission as Flight ID) as follows:

a. The three-letter ICAO designator of the aircraft operator followed by the flight number (e.g. SIA123, MAS123, GIA123), when radiotelephony callsign consists of the associated ICAO telephony designator for the aircraft operator followed by the flight number (e.g. SINGAPORE123, MALAYSIAN123, INDONESIA123).

b. The aircraft registration (e.g. N555AB, 9VABC) when the radiotelephony callsign consists of the aircraft registration.

Important: ACID entered should not have any leading zeros unless it is part of the flight number as indicated in Item 7 of the ICAO flight plan. Hyphens, dashes or spaces are NOT to be used.

3.5 VOICE AND CPDLC POSITION REPORTING REQUIREMENTS

3.5.1 There are no voice and CPDLC position reporting requirements for the ADS-B coverage area .

4 OTHER RELEVANT INFORMATION AND PROCEDURES

NIL