1. General

- Oceanic Route is located over the Pacific Ocean and connecting South and North Pacific Ocean.
- Strong cumulonimbus prevails around the Equator. The maximum altitude of extremely strong cumulonimbus may exceed the cruising altitude of aircraft.
- High altitude turbulence due to cumulonimbus rather than clear air turbulence.

2. Disinfection

- If any insects are found in the cabin, crews should have detailed information from cabin then report this on the company frequency of destination airport as soon as possible.
- When disinfection is in progress on ground, GND staff should inform the PIC of this and a possibility of smoke alarm during the time.
- Air conditioning should be stopped for 5 minutes after completion of disinfection. If needed, maintain lowest level.
- After completion of disinfection,
  - PAX boarding should be initiated in 5 mins.
  - Pushback should be initiated in 1 hour.
- For Cargo only: cabin disinfection is required and should be done 30 mins prior to landing. PIC shall be ready for a possible interview with a quarantine officer upon arrival.
3. Communication

3.1 Requirements for ADS-B Services

- Check the suffix “B1” for ADS-B and “D1” for ADS-C in item 10 of the ICAO ATS flight plan
- Flight number (JNA000) entered in FMS should exactly match the aircraft identification in the ATS flight plan

• Whenever pilots expect that the estimated time at any previously reported way point will be changed more than **2 mins**, they must report this to ATC.

• When entering New Zealand FIR, aircraft reporting position via ADS-C is not required to downlink CPDLC position reports or report position using voice except:
  - A CPDLC position report is required at the FIR boundary on entry to the Auckland Oceanic FIR (includes outbound from New Zealand)
  - When requested by ATC

3.2 Traffic Information Broadcasting by Aircraft (TIBA)

• TIBA procedures are intended to inform of pilots of other aircraft in the vicinity and should be applied in the designated airspace where:
  - There is a need of supplement collision hazard information provided by air traffic services outside controlled airspace; or
  - There is a temporary disruption of normal air traffic services.

• Such airspace should be identified by the States responsible for provision of air traffic services within the airspace and promulgated in AIP or NOTAM with the VHF RTF frequency.

• TIBA example is as follows;
  e.g. “All stations, Jin Air 000, flight level 350, southeast bound, direct from CS to Eagle, position 1651 south 14545 east at 2300, estimating crossing route Romeo 213 at 1875 south 147 east at 2313, Jin Air 000, flight level 350, southeast bound out”

• Refer to Jeppesen ATC p477~478 and ATC Australia-15 for TIBA details.
3.3 Communication Failure

- In case of failure to contact with Brisbane ATC on VHF for any reason use SATCOM to reach the Operations Room Manager in Brisbane ATC Centre: +61 7 3866 3421

4. Navigation

4.1 Composition

- The routes for each sectors are as follows:
  - Sydney, Brisbane Route: A582, G339, A339, R204, Y177
  - Auckland, Christ Church Route: A582, G339, A597
  - Nadi Route: A582, G339, A597, B452
- The FIRs and ACCs along the routes above are like the picture below.

- RVSM is applicable in all the routes. RNP-10 is applied from FL290 to FL410 in Brisbane Oceanic Control Area (OCA), Nadi OCA, and Auckland OCA.

4.2 Track and Aircraft Separation Standards

- Standard Track Separation between aircraft at the same altitude and same track is 15 mins., lateral 120 NM. The vertical separation within the same track is 2,000 ft (1,000 ft separation in RVSM)
- In case of RNP-10 applied in Brisbane, Nadi, or Auckland OCA, horizontal separation will be 50 NM.
- As for longitudinal separation, it will be 15 mins for operations on
same altitude and same or crossing route, except where the Mach Number Technique is used among aircraft.

- The Mach Number Technique (MNT) may be used by ATC for longitudinal separation standards on routes within oceanic control areas (OCA) and Australian control areas (CTA). Crews must include the planned true Mach Number in their flight plans.

- Crews shall maintain the assigned Mach number by ATC. ATC approval must be obtained before making any changes.

- If an immediate temporary Mach Number change is essential (e.g., due to turbulence), crews must notify ATC of the change as soon as possible.

- Vertical separation of 1,000 ft. will be applied for FL290 to FL410 where RVSM is applied. For aircrafts operating on the same route and altitude, longitudinal separation will be 10 mins with effective Mach Number Technique.

- When entering oceanic controlled airspace from outside Australian administered airspace, pilots must report the current sustained TAS or Mach number to ATC.

  Note: A specific report via CPDLC may be used to meet the requirement.

- In Australian airspace, pilot must inform ATC if the sustained TAS or Mach number between reporting points varies, or is expected to vary by a value equal to or more than: 1) 10 kts TAS 2) 0.02 Mach from that given in the flight plan or previously notified to ATC.

- For enroute separation in Nadi (NFFF) FIR, crews must inform ATC whenever Mach number change is required and/or expected at or more than M 0.03 from

  - The Mach number at FIR entry or
  - Any subsequent speed change notified to ATC in flight.

4.3 Altitude Assignment

- RNP-10 Airspace

  - It is established over Brisbane, Melbourne, Auckland, and Nadi OCA
The airspace is established from FL255~FL460 in Brisbane OCA, from FL 245~FL460 in Auckland OCA, and from FL290~FL410 in Nadi OCA.

### 5. Flight Procedure

#### 5.1 RVSM/ RNP-10/ RNP-4 Area Operation Procedure

*Note: Refer to FOM for details of RVSM, RNP 10, RNP-4 Area operation procedure*

- **Flight planning and pre-flight**
  - Verify the aircraft is approved for RVSM/RNP-10(or RNAV-10) RNP-4 operations, reported and forecast weather conditions on the route, NOTAMs, required equipment for RVSM operations, operational restrictions within RVSM airspace, which are described in the POM.
  - Review maintenance log to verify the equipment required for RVSM operation and verify the maintenance status of the aircraft.
  - During the external inspection of an aircraft, the flight crew shall, thoroughly, check the condition of static sources, the fuselage skin near the each static source and any other component that affects altimetry system accuracy.
  - Verify accuracy of altimetry system. Confirm that the maximum on-the-ground altitude differences between primary altimeters and airport filed elevation must be less than ± 75 ft. when altimeter is set to QNH. Refer to POM for aircraft limitations.

- **Procedure prior to RNP-10/ RNP-4 RVSM airspace entry and in RVSM airspace**
  - Within RNP-10(or RNAV-10) airspace, the crew shall maintain the aircraft on the centerline of the airway. When it is unable to maintain RNP-10(or RNAV-10) performance (the aircraft within 10 NM either side of centerline) due to system malfunction, the flight crews shall report the situation to ATC and follow the new ATC clearance or contingency procedure.
  - RNP-4 operations are applied between the aircraft equipped with CPDLC and DS-C capability within RNP-10 airspace. In RNP-4 operations required navigation performance of aircraft requires error within less than 4 NM for cross track (or lateral error) and along track...
(or longitudinal error) during 95% of the flight time. It is capable of applying 30 NM longitudinal separations and 30 NM lateral separations.

- In RNP-4 operations, your flight information like speed, altitude, position is monitored through CPDLC even the oceanic area.
- B777 is approved for RNP-4.
- Verify all the equipment required for RVSM operating properly. If one or more required equipment is inoperative prior to entering RVSM airspace, the flight crew shall request ATC for a new clearance.
- During cleared transition between levels, the aircraft shall not be allowed to overshoot or undershoot the cleared flight level by more than 150 ft.
  - When climbing or descending in RVSM airspace while within 5 NM and 2,000 ft of other aircraft, the vertical speed should be limited to 1,000 FPM.
- At intervals of one hour, cross-checks between the primary altimeters shall be made and the two should agree within 200 ft. Otherwise, the altimetry system will be reported as defective and notified to ATC.
- If the pilot is notified by ATC of an error exceeding 300 ft then the pilot should return to cleared flight level (CFL) as quickly as possible.

5.2 Equipment Check

- A minimum of Two LRNSs are required to operate in Class II navigation area unless alternate routes and/or procedures are specifically authorized for use with degraded navigation capabilities. (apply contingency procedures designated for each airspace)
- At least two IRU are operative at IRU decision point and refer to FOM 10 for decision point.
- RNP-10(or RNAV-10), RNP-4 & RVSM Approval
  - Check the suffix “R” in item 10 of the ICAO ATS flight plan followed by “A1” in item 18 to and indicating approval for RNP-10(or RNAV-10) on the ICAO ATS flight plan item 10.
  - Pilot should confirm ATC flight plan which acquires approved RNP-4 whether or not as below .“R” in item 10 .“L1” in item 18
- Check the suffix “W” indicating approval for RVSM on the ICAO ATS flight plan item 10.

- Minimum required equipment for RNP-10(or RNAV-10) operations is as follows. Refer to FOM 10 for details
  - FMS, DUAL IRS and Single VOR/DME or
  - FMS, DUAL IRS and Dual DME or
  - FMS, DUAL IRS and Single GPS

- Minimum Navigation Equipment for RNP-4 operations
  - FMS, Dual IRU, Dual GPS (with RAIM)

- Check the maintenance status of any equipment that may have an effect on aircraft navigation performance for RNP-10 (or RNAV-10) and RNP-4.

- Initialize IRU precisely and be watchful of any unusual movement of aircraft during initialization. If there has been any unusual movement of the aircraft that may have adversely affected accuracy of navigation, the IRU must be reinitialized.

- Refer to FOM 10 for required Equipment for RVSM Operations. Check the suffix “W” indicating approval for RVSM on the ICAO ATS flight plan item 10.

### 5.3 Communication

- Normally handed over to “NAHA Control” at ‘AGIKA’

- You will be contracted with Tokyo Radio after ‘BIXAK’ by using HF.

  e.g. “Jin Air ----, radar service terminated, contact Tokyo Radio

  Primary ----, secondary ----”

- CPDLC Procedure
  - The pilot must log on 15 to 45 mins prior to CPDLC sector.
  - The flight number and tail number must be checked. The flight number used to log-on must correspond to that filed on the flight plan.
  - In case of failed initial log-on, the pilot must try it again at least 5 mins later.
  - CPDLC aircraft entering Guam airspace, contact Guam center with SQ2100, 250 NM before GUAM.
Note: Aircraft should make one CPDLC position report over Oakland (KZAK), Brisbane (YBBB) FIR boundary and discontinue CPDLC waypoint reporting after the FIR report.

- Refer to FCRM 1.5.1 ~ 1.5.10 for CPDLC procedure.
- In case of flying to Sydney or Brisbane:
  - Normally at SABGU, KEITH on R-204, pilot will be transferred to San Francisco
  - Normally handed over to Port Moresby Radio at KALIN. When using A216, handed over at FACED or at PIKOK if using B586
  - Minimum Obstacle Clearance Altitude of R204, A216, B586 is 16,400 ft.
- In case of flying to Nadi or Auckland
  - Normally fly via G339 and pilot will be transferred to San Francisco at PAKDO, and TOKYO Radio AT OMGOX.
  - Aircrafts are entering to Guam control area at NATSS, and transferred to San Francisco again after GALSS.
    e.g. “Jin Air ---, direct to GALSS contact San Francisco, primary --- , secondary ---- at GALSS”
  - Normally transferred to Brisbane Radio at ADBON. Aircrafts are transferred at ENOUS in case of flying to Auckland, or at LEGOT in case of flying to Nadi. Nadi OCA is RNP-10 area.
  - When flying to Auckland, aircrafts are handed over to Auckland Radio at LEKAX.
- In case of flying to ICN
  - Usually use same route used to fly to Sydney, Brisbane, Nadi, and Auckland.
- Gross Navigation Error
  - When the aircraft is deviated from assigned route more than 20 NM, it is called Gross Navigation Error
  - When you are aware of that situation, you should report to another aircraft position and altitude by using emergency frequency.
  - You should return to assigned route within 200 NM from current position.
6. Non-normal Procedure

6.1 Contingency Procedure

- If an aircraft is unable to continue the flight in accordance with its ATC clearance, and/or an aircraft is unable to maintain the navigation performance accuracy specified for the airspace, a revised clearance shall be obtained, whenever possible, prior to initiating any action.

- The pilot is advised to use distress signal (May Day) or urgency signal (Pan Pan) spoken 3 times to get ATC clearance before taking any actions.

- If prior clearance cannot be obtained, until a revised clearance is received the following contingency procedures should be employed and the pilot shall advise air traffic control as soon as practicable.

- The aircraft should be flown at a flight level and on an offset track where other aircraft are least likely to be encountered. Specifically, the pilot shall:
  - Leave the assigned route or track by initially turning at least 45 degrees to the right or to the left, in order to acquire a same or opposite direction.
  - Track offset 15 NM (28km) from the assigned track centerline.
  - Consider factors as follows when turning.
    - The direction of alternate airport, terrain clearance
    - Any strategic lateral offset being flown, and the flight levels allocated on adjacent tracks.
  - Broadcast call sign, altitude, and position including the route name or track code, and intentions through 121.5MHz (or, as a backup, on the inter-pilot air-to-air frequency 123.45 MHz).
  - Check the position of other aircraft by monitoring TCAS.
  - Turn on all aircraft exterior lights.
  - Keep the SSR transponder on at all times

- If unable to maintain the assigned flight level
  - Initially minimize the rate of descent to the extent that is operationally feasible (pilots should take into account the possibility that aircraft below on the same track may be flying a 1 or 2 NM strategic lateral offset procedure (SLOP)) and select a final altitude which differs from those normally used by 500 ft if at or below FL 410, or by 1,000 ft if above FL 410.

- If able to maintain the assigned flight level
  - Once the aircraft has deviated 10 NM from the assigned track centerline, climb or descend to select a flight level which differs from those normally used by 500 ft, if at or below FL 410, or by 1,000 ft if above FL 410.

- If the intention is to acquire and maintain an opposite direction offset track
  - Operational limitations on bank angles at cruising altitudes will normally result in overshooting the track to be acquired. In such cases a continuous turn should be extended beyond 180 degrees heading change, in order to re-intercept the offset contingency track as soon as operationally feasible; and
Furthermore, if executing such a turnback in a 30 NM lateral separation route structure, extreme caution pertaining to opposite direction traffic on adjacent routes must be exercised and any climb or descent, as above, should be completed preferably before approaching within 10 NM of any adjacent ATS route.

Strategic Lateral Offset Procedures (SLOP) in Oceanic Control Areas (OCA)

- Aircraft operating in OCA within Australian administered airspace are authorized to use strategic lateral offset procedures (SLOP) in accordance with the requirements detailed below.
- Crews shall use automatic offset tracking.
- The offset must be 1 or up to 2 NM to the RIGHT of track relative to the direction of flight.

  **Note:** Offsets to the left of track are not permitted.

- The offset must only be applied during the enroute phase of flight.
- The offset may only be used in OCA. Crews must fly the route centerline for any portion of their route within CTA. Crews must return to centerline before leaving OCA or, where the subsequent state does not allow SLOP, prior to leaving Australian administered airspace.
- The offset must not be used in addition to diversions or other offsets (e.g.: weather or wake turbulence, etc.).
- The offset must not be applied at levels where obstacle clearance would be affected.
- Identified aircraft may continue an offset in OCA; and must advise ATC prior to initiating or changing an offset.

- The decision to apply SLOP is the responsibility of the PIC — a clearance is not required.

- Except when an identified aircraft initiates or changes a lateral offset, Crews are not required to notify ATC that SLOP are being applied.

- The use of SLOP is recommended in OCA for aircraft cruising at levels not in compliance with the table of cruising levels.

EDTO (Extended Diversion Time Operation) Contingency Situation

- If the contingency procedures are employed by a twin-engine aircraft as a result of an engine shutdown or failure of an EDTO critical system, the pilot should advise ATC as soon as practicable of the situation, reminding ATC of the type of aircraft involved, and request expeditious handling.

  **Note:** Refer to Jeppesen Enroute chart P-1 or for details on Inflight Contingencies Procedure
Contingency procedures in Papua New Guinea

- Aircraft: B777, B737
- When cabin pressurization has failed, or one engine has failed, flight crew cannot maintain MOCA, which is 16,400 ft in R204. A216 and B586. Therefore detour route is operated as follows.

- **ICN/SYD, BNE**

<table>
<thead>
<tr>
<th>Airway</th>
<th>Position</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-204</td>
<td>North of S 5°</td>
<td>Direct WK - MD - GIZARUM PT (GZM or GIZAR) - GUA direct DOMARA (DOM or DOMRA) direct KAPKI</td>
</tr>
<tr>
<td></td>
<td>South of S 5°</td>
<td>Maintain 16,400 ft until S 7°, and then descent to 10,000 ft to continue to Cairns or Brisbane airport in Australia or Direct MT BOSAVI (MBV or BOSVI) - AYKK - PY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: South of S 7°, West of E 145° Area Minimum IFR altitude: 10,000 ft</td>
</tr>
<tr>
<td>A-216</td>
<td>North of S 5°</td>
<td>Direct MD - GIZARUM PT (GZM or GIZAR) - GUA direct DOMARA (DOM or DOMRA) direct KAPKI</td>
</tr>
<tr>
<td></td>
<td>South of S 5°</td>
<td>Maintain 16,800 ft until S 7°, and then continue to fly to Cairns or Brisbane airport in Australia or AYKK - B462 - PY (Port Moresby)</td>
</tr>
<tr>
<td>B586</td>
<td>North of S 6°</td>
<td>Direct GIZARUM PT (GZM or GIZAR) - GUA direct DOMARA (DOM or DOMRA) direct KAPKI</td>
</tr>
</tbody>
</table>

*Note: Transition Level or Transition Altitude is as follows*

- FL210 or above: set QNE
- FL200 or below: set QNH
### South Pacific Oceania

#### R-204

<table>
<thead>
<tr>
<th>Airway</th>
<th>Position</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>South of S 6° 30'</td>
<td>Direct AYKK - B462 - PY(Port Moresby), or PY - KAPKI direct DOMARA (DOM or DOMRA) - direct GUA - GIZARUM PT (GZM or GIZAR)</td>
<td></td>
</tr>
<tr>
<td>North of S 6° 30'</td>
<td>Maintain 16,400 ft until S 4° 30', and then descent to 10,000 ft to continue to GUM or Direct WK - MD - GIZARUM PT (GZM or GIZAR) - GUA direct DOMARA (DOM or DOMRA) direct KAPKI. Note: North of S 4° 30’, East of E 141° Area Minimum IFR altitude: 10,000 ft</td>
<td></td>
</tr>
</tbody>
</table>

#### A-216

<table>
<thead>
<tr>
<th>Airway</th>
<th>Position</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>South of S 7°</td>
<td>Divert to Port Moresby or another airport in Australia, or Direct PY(Port Moresby) - B586 - KAPKI direct DOMARA (DOM or DOMRA) direct GUA - GIZARUM PT (GZM or GIZAR)</td>
<td></td>
</tr>
<tr>
<td>North of S 7°</td>
<td>Maintain 16,800 ft until S 5°, and then descent to 10,000 ft to continue to GUM or Direct MD - GIZARUM PT (GZM or GIZAR) - GUA direct DOMARA (DOM or DOMRA) direct KAPKI</td>
<td></td>
</tr>
</tbody>
</table>

#### B586

<table>
<thead>
<tr>
<th>Airway</th>
<th>Position</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>South of S 8°</td>
<td>Divert to the Port Moresby or the other airport in Australia, or LEFT turn Direct PY -B586 - KAPKI direct DOMARA (DOM or DOMRA) direct GUA - GIZARUM PT (GZM or GIZAR)</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Transition Level or Transition Altitude is as follows.

- FL210 or above: set QNE
- FL200 or below: set QNH

---

[Image of map with flight routes and altitude details]
Rapid Depressurization:
Southbound Flight

- Airway R204
  - Before “S5° (KAPPU-53NM)”
    ; Descend to 14,000 ft immediately with making 180 degree left turn and go to “WK” directly. Proceed to “GUA” via ATS airway through “MD”, “GIZAR”. After “GUA”, go to direct “DOMRA” and “KAPKI” and then fly to the POM airport.
  - After “S5° (KAPPU-53NM)”
    ; Descend to 14,000 ft immediately and proceed to “KAPPU”, after that fly directly “BOSVI” then along the airway ATS, B462 until to the POM airport. Or after “KAPPU” descend to 10,000ft and continue to CNS airport.

- Airway A216
  - Before “S5°30’ (AYKK-115NM)”
    ; Descend and maintain 17,000 ft immediately with making 180 degree left turn and go to “RAMU” directly. After “RAMU” descend to 10,000ft and proceed to “GUA” via ATS airway through “MD”, “GIZAR”. After “GUA”, go to direct “DOMRA” and “KAPKI” and then fly to the POM airport.
  - After “S5°30’ (AYKK-115NM)”
    ; Descend to 17,000 ft immediately and proceed to along the airway A216 until passing “AYKK-57NM”, then descend to 14,000ft and maintain level until “AYKK”, then divert to the POM airport. Or after “AYKK” descend to 10,000ft and continue to CNS airport as appropriate via A216.

- Airway B586
  - Before “S7° (GUARI-68NM)”
    ; Descend to 17,000 ft immediately with making 180 degree left turn to “NZ” or proceed to “NZ”, then descend and maintain 10,000ft and proceed to “GUA” via ATS airway through “LAE”, “MORBE”. After “GUA”, go to direct “DOMRA” and “KAPKI” and then divert to the POM airport.
  - After “S7°(GUARI-68NM)”
    ; Descend to 17,000 ft immediately and maintain level until passing “GUARI”, then descend to 14,000ft and maintain level until to POM airport.
Rapid Depressurization:
Northbound Flight

• Airway R204
  - Before “KAPPU”
    ; Descend and maintain level 14,000 ft immediately with making 180 degree right turn and go to “BOSVI” directly. After “BOSVI” descend to 10,000ft and divert to the POM airport along the airway ATS, B462.
  - After “KAPPU”
    ; Descend to 17,000 ft immediately and maintain level until “S5° (KAPPU+53NM)”, then descend to 14,000ft and go to “WK” directly. Proceed to “GUA” via ATS airway through “MD”, “GIZAR”. After “GUA”, go to direct “DOMRA” and “KAPKI” and then fly to the POM airport. Or after “S5°” descend to 10,000ft then continue to GUM airport.

• Airway A216
  - Before “S6° (AYKK+85NM)”
    ; Descend to 17,000 ft immediately and proceed to along the airway A216 until passing “AYKK”, then descend to 10,000ft. Then divert to POM airport.
  - After “S6° (AYKK+85NM)”
    ; Descend to 17,000 ft immediately and go to “RAMU” directly. After “RAMU” descend to 10,000ft and proceed to “GUA” via ATS airway through “MD”, “GIZAR”. After “GUA”, go to direct “DOMRA” and “KAPKI” and then fly to the POM airport. Or after “S5°” descend to 10,000ft and continue to GUM airport.

• Airway B586
  - Before “S7° (NZ-26NM)”
    ; Descend to 17,000 ft immediately with making 180 degree turn and maintain level until passing “GUARI”, then descend to 14,000ft and maintain level until to POM airport.
  - After “S7°(NZ-26NM)”
    ; Descend to 17,000 ft immediately and proceed to “NZ”, then descend and maintain 10,000ft, fly to “GUA” via ATS airway through “LAE”, “MORBE”. After “GUA”, go to direct “DOMRA” and “KAPKI” and then divert to the POM airport. If passing “NZ”, descend and maintain 17,000ft and make offset and join “GIZAR” or “FIN”, then descend to 10,000ft and proceed to “GUA”. After “GUA”, go to direct “DOMRA” and “KAPKI”, then fly to the POM airport.
Since Papua New Guinea is a geographically rugged mountain area, it is necessary to be aware of local terrain and to prepare for the effects of Mountain Waves during the low altitude flight. For the 'GUA direct DOMARA direct KAPKI' leg, be careful not to deviate from the direct route. For terrain guidance, refer to the Jeppesen Area Chart ‘AYPY 10-1’

- May divert to BIAK (operations hours: 2100~1100 UTC):
  - Route: Direct WK B456 JPA W41 BIK
- There are several active volcanoes to the north of Papua New Guinea. Be careful of volcanic ash which can reach to FL250.

Weather Deviation Procedure

- Pilots can get precedence over other traffics using general terms by using the phrase "Weather deviation required" or "PAN PAN" when requesting weather deviation.
- If deviation from the route is required due to weather, request ATC approval.
- The pilot shall inform ATC when weather deviation is no longer required, or when a weather deviation has been completed and aircraft has returned to its cleared route.
- If unable to obtain clearance for weather deviation from ATC:
  - As you watch out for the traffic within the region you are flying, deviate to the right or left from the cleared route.
  - Broadcast call sign, current position, altitude, route designator or track code and intention through 121.5 MHz (use inter-pilot-air-to-air VHF 123.45 as extra means).
  - Watch for conflicting traffic both visually and by reference to TCAS.
  - Utilize all external lights to warn aircrafts in the vicinity.
  - When deviating within 10 NM from the route, maintain the assigned altitude.
  - For deviations greater than 10 NM, when the aircraft is approximately 10 NM from track, initiate a level change in accordance with Table below.
<table>
<thead>
<tr>
<th>Route centerline track</th>
<th>Deviations &gt;10 NM</th>
<th>Level change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastbound 000 ° - 179 ° magnetic</td>
<td>Right</td>
<td>300 ft Climb</td>
</tr>
<tr>
<td></td>
<td>Left</td>
<td>300 ft Descent</td>
</tr>
<tr>
<td>Westbound 180 ° - 359 ° magnetic</td>
<td>Right</td>
<td>300 ft Descent</td>
</tr>
<tr>
<td></td>
<td>Left</td>
<td>300 ft Climb</td>
</tr>
</tbody>
</table>

- When returning to track, be at assigned flight level, when the aircraft is within 10 NM of the center line.
- If ATC contact was not established prior to deviation, continue to attempt to establish contact with ATC.
## ADS-B Phraseology Quick Reference

The following table gives an overview of the new Radar and ADS-B phraseology.

<table>
<thead>
<tr>
<th>Circumstance</th>
<th>Radar phraseology</th>
<th>ADS-B phraseology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Termination of radar and/or ADS-B service</td>
<td>IDENTIFICATION TERMINATED [DUE (reason)] (instructions)</td>
<td></td>
</tr>
<tr>
<td>Radar or ADS-B ground equipment unserviceability</td>
<td>SECONDARY RADAR OUT OF SERVICE (appropriate information as necessary) or PRIMARY RADAR OUT OF SERVICE (appropriate information as necessary)</td>
<td>ADS-B OUT OF SERVICE (appropriate information as necessary).</td>
</tr>
<tr>
<td>To request the aircraft's SSR or ADS-B capability</td>
<td>ADVISE TRANSPONDER CAPABILITY</td>
<td>ADVISE ADS-B CAPABILITY</td>
</tr>
<tr>
<td>To advise the aircraft's SSR or ADS-B capability</td>
<td>TRANSPONDER (ALPHA, CHARLIE or SIERRA as shown in the Flight Plan) or NEGATIVE TRANSPONDER</td>
<td>ADS-B TRANSMITTER (TEN NINETY DATALINK) or ADS-B RECEIVER (TEN NINETY DATALINK) or NEGATIVE ADS-B</td>
</tr>
<tr>
<td>To request reselection of FLT ID*</td>
<td>RE-ENTER MODE S AIRCRAFT IDENTIFICATION</td>
<td>RE-ENTER ADS-B AIRCRAFT IDENTIFICATION</td>
</tr>
<tr>
<td>To request the operation of the IDENT feature*</td>
<td>SQUAWK ([code]) ([AND] IDENT)</td>
<td>TRANSMIT ADS-B IDENT</td>
</tr>
<tr>
<td>To request termination of SSR transponder or ADS-B transmitter operation*</td>
<td>STOP SQUAWK [TRANSMIT ADS-B ONLY]</td>
<td>STOP ADS-B TRANSMISSION [SQUAWK (code) ONLY]</td>
</tr>
<tr>
<td>To request transmission of pressure altitude*</td>
<td>SQUAWK CHARLIE</td>
<td>TRANSMIT ADS-B ALTITUDE</td>
</tr>
<tr>
<td>To request termination of pressure altitude transmission due to faulty operation*</td>
<td>STOP SQUAWK CHARLIE WRONG INDICATION</td>
<td>STOP ADS-B ALTITUDE TRANSMISSION ([WRONG INDICATION or reason])</td>
</tr>
</tbody>
</table>

*Note that some ADS-B installations may not provide for entry of FLTID, transmission of IDENT or isolation of pressure altitude by the pilot. Some ADS-B installations may share controls with the SSR transponder, meaning that independent operation of the two systems is not possible. If it is not possible to comply with a particular instruction advise ATC and request alternative instructions.
7. Event/IRR

- Crew failed to report the revised WPT ETA in spite of more than 2 min. difference from original ETA.
- Crew logged on CPDLC 80 minutes prior to entering YBBB airspace.
- A flight rejoined original airway using "INTERCEPT CRS TO" method after 40NM WX deviation but ATC informed that aircraft still deviated 7NM from the centerline of airway (ADS-C). The distance between two WPTs on the airway was 524NM.

Note: When intercepting to a segment of airway which has a long distance between two waypoints, depending on the manually inserted intercept course (INTC CRS TO), the flight track could be deviated from an airway centerline and it may exceed the limit of airway width due to a magnetic variation. So in that case, pilots may request direct to waypoint or radar vector, if not, do not delete the previous waypoint unless FMC sequences a next waypoint automatically. The displayed inbound course angle between two waypoints in FMS CDU LEGS page can be used as an intercept course to join a route.

- Crew reported "Back on track" after completion of their offset from the route by FREE TEXT, not DOWNLINK MESSAGE ELEMENT on CPDLC.