

MID/FAR EAST AREA

This briefing sheet is not intended to supersede information provided in the relevant Operations Manual and NOTAMS.

For weather information see separate “Weather Notes” briefing.

GENERAL

RVSM

RVSM is now in force across many FIRs within the Middle East region and is being implemented in stages throughout the Asia region.

HAJJ PILGRIMAGE – JEDDAH, KINGDOM OF SAUDI ARABIA

HAJJ BACKGROUND INFORMATION

The Hajj is a pilgrimage to Makkah in Saudi Arabia. It is the largest annual pilgrimage in the world, and is the fifth pillar of Islam, an obligation that must be carried out at least once in their lifetime, by every able-bodied Muslim who can afford to do so. For many the journey starts with the flight to Jeddah. Because the Islamic calendar is a lunar calendar, 11 days shorter than the Gregorian calendar used in the western world, the apparent date of the Hajj changes from year to year. The Hajj pilgrimage lasts for approximately 10 days, but the Saudi Arabian Authorities publish official Pilgrimage travel dates that last for approximately one month outbound to Jeddah. BAVirtual must comply with these travel dates and are not permitted to carry pilgrims outside of these dates. For a defined period outside of the Hajj dates, Muslims can travel to Makkah to perform the pilgrimage known as Umrah (al-Umrat al mufradah), providing they are holding a specific Umrah visa.

About two million Muslims from more than 70 countries journey to the holy city of Makkah each year to make the spiritual pilgrimage. Over the course of the Hajj, pilgrims travel the nine miles from Makkah to the Plain of Arafat and back, stopping at the sacred sites of Mina and Muzdalifa to perform prayerful rituals.

The close of the Hajj is marked by a festival, the Eid al-Adha, which is celebrated with prayers and the exchange of gifts in Muslim communities everywhere. This, and the Eid al-Fitr, a day of celebration commemorating the end of Ramadan, are the main festivals of the Muslim calendar. Pilgrims generally travel to the Hajj in groups as an expression of unity.

During the Hajj, male pilgrims are required to dress only in the ihram, a garment consisting of two sheets of white un-hemmed cloth, with the top draped over the torso and the bottom secured by a white sash; plus a pair of sandals. Women are simply required to maintain their hijab – normal modest dress, which does not cover the hands or face. The majority of customers will have already changed into the ihram before boarding the aircraft.

OPERATIONAL

The Hajj generates an enormous amount of traffic into and out of Jeddah, including widebody charter aircraft from all over the world. The number of flights, particularly East/West traffic in the North and central part of the AFI region increases dramatically, and special attention is required to reduce the risk of Mid Air Collision. IATA IFBP procedures should be rigorously applied.

The airport is well versed in handling this volume of traffic, however, many of the crews involved are not used to the ATC situation and procedures in Africa. To ease traffic flows many of the temporary ATS routes created for HAJ are now becoming permanent and will therefore see traffic year round. It is hoped that this will lessen the impact of HAJ as crews will become familiar during the year to these cross routes.

OFP will use **Riyadh** as the first Commercial Alternate. Riyadh is by far the preferred destination alternate with Hajj passengers onboard. OFP should plan 15 minutes contingency.

Hajj traffic will have the word 'Hajj' in their callsign.

PRE-FLIGHT

Please ensure potable water levels are loaded to full prior to departure.

DURING THE FLIGHT

Throughout the flight there may be a high demand for the toilets as cleanliness is of great importance during prayer. Clothes, the body and the place of prayer must be clean. Pilgrims will want to perform "Wu'du" (ablution) where they will wash their hands, arms, face and feet before praying. There will be extra demand for water during this period therefore potable water levels will be loaded to full.

Flight crew should be aware of two communication requirements that we would be grateful for your assistance with; exact timings should be sought from ATC.

- **Approximately one hour before landing the flight crew should announce over the PA system that the aircraft is entering the "ihram" zone (pronounced "ee-ramm"). Those on pilgrimage will commence some rituals involving cleansing and changing attire, and the recitation of their "intention" prayer.**

These rituals place the pilgrim into the ihram sacred state, which is required before they cross the pilgrimage boundary of "Miqat" (pronounced "Mee-kaht").

- **Please confirm with ATC the time at which you pass the Miqat boundary, and make a further PA to the passengers informing them of this. This PA would likely be concurrent with the "20 minutes to landing" PA.**

THE MIDDLE EAST

There are pre-planned routes across the Middle East towards the Persian Gulf which are used as the political situation dictates. They are a Southern route via Egypt and Saudi Arabia, a Mid route across Syria and a Northern route via Iraq or Iran.

FIR BOUNDARIES

Some ATC units require contact to be made at least 10 minutes before arrival at their boundary. This is highlighted on OFP plans and charts. At times it is difficult to make such contact and use of relays by other aircraft or through other ATC units may be necessary.

HAJJ PILGRIMAGE SEASON

During the HAJJ Pilgrimage Season, the timing of which is variable, the number of flights and particularly E-W flights entering Saudi airspace from North and Central Africa increases dramatically and with it the risk of ATS incidents.

TURKEY

Airway closures for missile firing occur; check Operational Flight Plan against AIS information.

EASTERN MED

In the Eastern Med ATC co-ordination is poor and several VHF frequencies need to be monitored at one time. It is strongly recommended that all/both crewmembers be on the flight deck for this portion of the flight.

The area carries much Europe to MID/FAR EAST traffic and is extremely busy. Along the route between Nicosia and Bahrain changes in flight level are extremely difficult to obtain.

When routing through Turkey (via MUT-VESAR-NIKAS), at MUT, control will be passed to ERCAN freq 126.7 (another Turkish unit pronounced "ERJAN") who will require position reports at VESAR and NIKAS even though these points are in Nicosia FIR.

However this portion of the airway is in fact controlled by Nicosia and conflicting clearances may be given. In such cases it is important to check any clearance from ERCAN with Nicosia before it is followed.

Nicosia have long-range VHF and should be contacted as early as possible to ensure optimum levels and co-ordination through their airspace.

Damascus should be contacted (via Latakia Radio for relay if necessary) 10 minutes prior to NIKAS, although co-ordination between Nicosia and Damascus is good.

The same procedure in reverse will be required when flying westbound.

JORDAN

There is a mandatory speed restriction of 250 kts max below 10,000ft.

RED SEA

A listening watch must be maintained on 121.5. Information requests made on 121.5 must be replied to with:

1. Aircraft callsign.
2. Transponder code.
3. Heading.
4. Altitude.
5. Ground speed.

Deviations from an ATC clearance must be advised to ATC. Company comms must not interfere with the above.

SAUDI ARABIA

Usually there are route and flight level restrictions over Saudi Arabia, see AIS for current situation.

VHF contact with Jeddah ATC, while en-route to airports in the Gulf area, is sometimes at extreme range; loss of VHF communication does occur.

Aircraft bound to/from Israeli aerodromes are not permitted to operate in Saudi Arabian airspace.

There is a mandatory speed restriction of 250 kts max below 10,000ft.

There are large flights of migratory birds (up to 1 metre wing-span) in the periods March to May and September to November Jeddah shows a statistically high likelihood of a bird strike.

IRAN

Diversion to airfields in Iran should be avoided if at all possible.

Extensive high terrain requires requires the use of decompression profiles on routes into Iran.

Due to the geological configuration in the Tabriz area, considerable differences in the local atmospheric pressure may occur in the winter, leading to discrepancies in terrain clearance when operating at Flight Levels. Pilots should be aware that the difference could potentially be over 1,000ft.

Speed Control

Aircraft inbound to Tehran should maintain 280 kts IAS or less when at or below FL200 and a maximum of 220 kts IAS within 25 nm of airports, when at or below FL140.

ADIZ Procedures

All aircraft entering Iranian airspace shall be at FL150 or above; if unable to comply, prior permission is required. Crews should ensure that FIR estimates are to within a tolerance of five minutes. All foreign aircraft must use established ATC routes; failure to comply could lead to interception.

Before entering Tehran FIR all flights are required to contact either TABRIZ Radar or MASHHAD Radar, on 127.800 or 135.100 Mhz, 10 minutes prior to entry for the purpose of military identification. In addition, the appropriate Tehran ACC must be contacted. Where range prevents two-way communication with air defence Tehran ACC will relay.

RVSM procdures adopted.

Prohibited area P10 (60 nm north of Esfahan VOR) centred on a highly sensitive nuclear enrichment plant. Vertical extent of area must be considered without upper limit.

Caution advised particularly on airway UT211. Avoidance of P10 is assured on airway – any ATC vectors or weather avoidance off airway in vicinity of P10 must be considered carefully and challenged if necessary.

ISRAELI AIRSPACE

Tel Aviv Air Defence Radar must be contacted (box2/3) not later than BGN180d. when arriving from the West Nicosia FIR, or 10 minutes before passing Sharm El-Sheikh when arriving from the South Cairo FIR (freq 124.3 or 132.05). This is stated on Lido AOI pages for Tel Aviv (TLV/LLBG).

If entering via SOLIN contact Tel Aviv no later than 180 nm from BGN, Com 123.05 or 124.3.

From Amman FIR (TALMI) contact Tel Aviv CTRL 121.4 or 132.05 as soon as practical after take-off from Amman and no later than 10 nm East of position TALMI.

Overflight Israeli Airspace into Amman expect early descent for crossing at 11,000ft. Departing Amman maintain 12,000ft on departure.

FLIGHTS OVERFLYING OR ARRIVING TO ISRAEL FIR**Advance Cabin Landing Preparation**

All passengers must be seated and belts fastened, at least 30 minutes before landing in Israel and until landing.

Overflights

Flights to Jordan: All passengers must be seated and belts fastened, at least 30 minutes before landing in Jordan and until landing.

Flights from Jordan: All passengers must be seated and belts fastened, at least 15 minutes after takeoff from Jordan.

BAHRAIN

Aircraft bound to/from Israeli aerodromes are prohibited from Bahrain airspace.

GULF OF OMAN – INDIA**GENERAL**

The area contains its share of politically sensitive borders. This gives rise to restrictions near the India/Pakistan borders which are under military control. Air Defence Clearance Numbers may be allocated. Adherence to promulgated routes and procedures (e.g. obtaining onward clearance) is essential. Failure to do so will risk interception by military aircraft. There are a number of advisory routes and ATC co-ordination over India and Pakistan is poor. Lack of radar coverage means only procedural service is offered in many areas, with its accompanying limitations. Aircraft are frequently held down and occasionally en-route holding is necessary.

Communications are a mix of VHF and HF. Reports are often passed to ATC via en-route airport VHF installations as highlighted on OFP plans and charts. HF is often extremely difficult due to inadequate equipment and poor RT standards; frequencies are very cluttered. This has the effect of making SELCAL less useful than normal.

FIR BOUNDARIES

Contact 10 minutes before arrival at FIR boundaries is usually required (15 minutes before Karachi and Lahore FIRs) and is highlighted on OFP plans and charts.

LISTENING WATCH

A listening watch on 121.5 Mhz should be maintained.

BLIND BROADCAST PROCEDURE

This procedure is detailed in the Africa Area brief and should be used over the Indian Ocean in FIRs Antananarivo, Beira, Dar es Salaam, Mauritius, Mogadishu and Nairobi.

INDIA

Cruising Levels Up to: FL140 – QUADRANTAL RULES APPLY.

FL150 AND ABOVE – SEMI-CIRCULAR RULES APPLY.

PAKISTAN

Flights operating into or over Pakistan must contact Karachi ACC 15 mins prior OPRK FIR to request Air Defence clearance number. Flights departing Pakistan must obtain Air defence clearance number before departure. There is significant mountainous terrain towards the western and northern borders of Pakistan.

Areas of High MSAs

Airways and airway segments affected by Driftdown and De-pressurisation procedures are contained below.

Note the high Safety Altitudes in the area of Almaty (24,000ft) and Kabul (over 19,000ft). This is of significance in case of a pressurisation failure.

AFGHANISTAN

Overflight of Afghanistan may be restricted due to hostilities.

When Westbound from Lahore FIR in to Kabul, at least 10 mins prior to FIR BDY, contact Kabul on VHF 128.5 or HF 10018, 5658 and 3467.

Failing contact on VHF or HF, attempt relay with other aircraft. In the event that contact cannot be established with Kabul, continue on Flt Plan route as Lahore will have provided Kabul with an estimate for the FIR crossing point and Kabul will be expecting you. Continue to try and establish two-way contact with Kabul.

MSAs – for navigationally well equipped aircraft (e.g. 747-400/777/787) the MSA calculation may sometimes be based on 10 nm either side of track as opposed to 20 nm. This is to allow operation at FL280 and will have been approved by the CAA. (The 10 nm dimension is the basic EASA OPS requirement).

All flights at or above FL210 operate under IFR. En-route procedural service is provided by Kabul ACC, upper and lower airways network.

An advisory service is provided within 75 nm of Kabul.

For ATC reasons changes of flight level over Afghanistan should, if possible, be avoided.

Over Afghanistan communication is carried out on HF, but VHF frequencies for terminal areas are available and can be used en-route when flying within their range. Communication problems are common in the Afghanistan area, especially with Kabul. There is often sufficient traffic to make relays on VHF feasible. In case of difficulty try HF Lahore, Karachi, or Delhi and relay.

In Kabul and Lahore FIRs maintain a listening watch on Kabul and Lahore ACC control VHF frequencies for intercept of other traffic.

Kabul ACC 128.5, backup 126.325.

BOBCAT Trial – Slot Requirements

There is to be a operational trial of ATFM (air traffic flow management) from Asia to Europe for flights via Afghanistan.

This starts on 20 July 2006; no end date for this trial has been given.

It applies to all westbound flights transiting the Kabul FIR between 2000-2359 UTC on Afghan airways A466, N644, L750 and G792.

Pilots Responsibility

Pilots should be aware of the Allocated Wheels Up Time (slot), route and gateways and their estimated time and flight level at these points.

The Allocated Wheels Up Time (slot) shall be included in the initial ATC clearance request.

There is a 5 minute buffer to the slot, if unable to meet this time please request a new slot from ATC, or via the dispatcher if a long delay is anticipated.

Afghan airways and associated gateways as follows:

A466 – SITAX

N644 – PAVLO

L750 – ROSIE

G792 – ASLUM.

DRIFTDOWN AND DEPRESSURISATION PROCEDURES**Driftdown/Oxygen Procedures for routes from India to LHR via N636 (Westbound)****B777-200ER GE90-85B****India to LHR via N636 Westbound****Minimum Flight Level for Crossing**

Flight plans will be issued with minimum recommended flight levels of FL310.

FL310 is the minimum acceptable level. Should levels below FL310 be offered, all efforts must be made to negotiate higher to avoid a turn back. Delaying, en-route holding, negotiating with other aircraft in the vicinity are options. A re-route is required if clearance to FL310 or above is not obtained.

If the FMC engine out performance indicates that the aircraft would have sufficient terrain clearance, no critical point and escape route are required.

Critical Points

BURTA (N32 37.5 E064 26.5)

Actions Following In Flight Shutdown

Dependent on position as follows:

1. **Before BURTA:** turn back and initially proceed 6 nm offset along the airway and divert to suitable airfield. Return to airway centre line when cleared by ATC.
2. **After BURTA:** continue with an initial 6 nm offset along the airway toward MASHHAD and divert to suitable airfield. Return to airway centre line when cleared by ATC.

Actions Following Depressurisation

No action required – continue on route as planned.

MSAs and Turns

Turns are permitted in either direction.

Fuel Jettison

The analysis has shown that the terrain will be cleared without using fuel jettison. However, it is recommended that fuel jettison is selected as soon as workload permits. 30,000 kg fuel remaining will be sufficient fuel for diversion to all likely alternates. Further fuel jettison may be necessary to reduce weight below MLW.

Driftdown/Oxygen Procedures for routes from India to LHR via N644 (Westbound)**B777-200ER GE90-85B****India to LHR via N644 Westbound****Minimum Flight Level for Crossing**

Flight plans will be issued with minimum recommended flight levels of FL310.

However FL280 is the minimum acceptable level to meet driftdown criteria. Should levels below FL280 be offered, all efforts must be made to negotiate higher to avoid a turn back. Delaying, en-route holding, negotiating with other aircraft in the vicinity are options. A re-route is required if clearance to FL280 or above is not obtained.

If the FMC engine out performance indicates that the aircraft would have sufficient terrain clearance, no critical point and escape route are required.

Critical Points

VUVEN (N34.328 E066.558)

Actions Following In Flight Shutdown

Dependent on position as follows:

1. **Before VUVEN:** turn back and initially proceed 6 nm offset right along the airway toward Delhi. Return to airway centreline when cleared by ATC.
2. **After VUVEN:** continue with an initial 6 nm left offset along the airway toward suitable diversion airfield (e.g. OIMM/UTAA/UBBB). Return to airway centre line when cleared by ATC.

Actions Following Depressurisation

No action required – continue on route as planned.

MSAs and Turns

The above turns will take the aircraft to the west side of the airway.

Fuel Jettison

The analysis has shown that the terrain will be cleared without using fuel jettison. However, it is recommended that fuel jettison is selected as soon as workload permits. 30,000 kg fuel remaining will be sufficient fuel for diversion to all likely alternates. Further fuel jettison may be necessary to reduce weight below MLW.

Driftdown/Oxygen Procedures for routes on Airway M875 (East/Westbound)**B777-200ER GE90-85B****Route KHOLM M875 SITAX / SITAX M875
KHOLM****Minimum Flight Level for Crossing**

Flight plans will be issued with minimum recommended flight levels of FL330.

FL330 is the minimum acceptable level to meet driftdown criteria. Should levels below FL330 be offered, all efforts must be made to negotiate higher to avoid a turn back. Delaying, en-route holding, negotiating with other aircraft in the vicinity are options. A re-route is required if clearance to FL330 or above is not obtained.

If the FMC engine out performance indicates that the aircraft would have sufficient terrain clearance, no critical point and escape route are required.

Critical Points

TAPIS

Actions Following In Flight Shutdown

Dependent on position as follows:

1. **East of TAPIS:** 6nm offset to North along OFP route towards Delhi (DEL).
2. **West of TAPIS:** 6nm offset to South along OFP route towards Termez (TRZ).

Actions Following Depressurisation

No action required – continue on route as planned.

MSAs and Turns

No restrictions

Fuel Jettison

The analysis has shown that the terrain will be cleared without using fuel jettison. However, it is recommended that fuel jettison is selected as soon as workload permits. 30,000 kg fuel remaining will be sufficient fuel for diversion to all likely alternates. Further fuel jettison may be necessary to reduce weight below MLW.

Driftdown/Oxygen Procedures for routes on Airway M875-L509 (East/Westbound)**B777-200ER GE90-85B****Route KHOLM M875 TAPIS L509 HANGU /
HANGU L509 TAPIS M875 KHOLM****Minimum Flight Level for Crossing**

Flight plans will be issued with minimum recommended flight levels of FL330.

FL330 is the minimum acceptable level to meet driftdown criteria. Should levels below FL330 be offered, all efforts must be made to negotiate higher to avoid a turn back. Delaying, en-route holding, negotiating with other aircraft in the vicinity are options. A re-route is required if clearance to FL330 or above is not obtained.

If the FMC engine out performance indicates that the aircraft would have sufficient terrain clearance, no critical point and escape route are required.

Critical Points

TAPIS

Actions Following In Flight Shutdown

Dependent on position as follows:

1. **East of TAPIS:** 6nm offset to North along OFP route towards Delhi (DEL).
2. **West of TAPIS:** 6nm offset to South along OFP route towards Termez (TRZ).

Actions Following Depressurisation

No action required – continue on route as planned.

MSAs and Turns

No restrictions

Fuel Jettison

The analysis has shown that the terrain will be cleared without using fuel jettison. However, it is recommended that fuel jettison is selected as soon as workload permits. 30,000 kg fuel remaining will be sufficient fuel for diversion to all likely alternates. Further fuel jettison may be necessary to reduce weight below MLW.

Driftdown/Oxygen Procedures for routes on Airway UL125/R660/UW704 (Westbound)**B777-200ER GE90-85B****Route IKA-CRM****Minimum Flight Level for Crossing**

N/A

If the FMC engine out performance indicates that the aircraft would have sufficient terrain clearance, no critical point and escape route are required.

Critical Points

DASIS

Actions Following In Flight Shutdown

Dependent on position as follows:

1. **Before DASIS:** Turn back DCT previous waypoint. To OITT, OIIE or other suitable diversion airfield.
2. **After DASIS:** Continue on planned route. Divert as per fuel state.

Actions Following Depressurisation

Initial descent to 16,000ft then per MTCA.

MSAs and Turns

No restrictions

Fuel Jettison

The analysis has shown that the terrain will be cleared without using fuel jettison. However, it is recommended that fuel jettison is selected as soon as workload permits. 30,000 kg fuel remaining will be sufficient fuel for diversion to all likely alternates. Further fuel jettison may be necessary to reduce weight below MLW.

Driftdown/Oxygen Procedures for routes on Airway R659 through Iran (Northbound)

B777-200ER GE90-85B
B777-200 GE90-76B

AUH/BAH/DXB – LHR via UL123 (R659)
northbound (SHIRAZ)

Minimum Flight Level for Crossing

Flight plans will be issued with minimum recommended flight levels of FL260.

FL260 is the minimum acceptable level to meet driftdown criteria. Should levels below FL260 be offered, all efforts must be made to negotiate higher to avoid a turn back. Delaying, en-route holding, negotiating with other aircraft in the vicinity are options. A re-route is required if clearance to FL260 or above is not obtained.

If the FMC engine out performance indicates that the aircraft would have sufficient terrain clearance, no critical point and escape route are required.

Critical Points
CP123 (N31.459 E052.039)

Insert in FMS at a time of low workload. This critical point is coincident with waypoint GESIP (Route R659 only).

Actions Following In Flight Shutdown

Dependent on position as follows:

1. **Before CP123:** turn back (right) and initially proceed L6 offset along the airway toward the South. Return to airway centre line when cleared by ATC.
2. **After CP123:** continue with an initial R6 offset along the airway toward the North. Return to airway centre line when cleared by ATC.

Actions Following Depressurisation

The same routings, including the published escape route, will apply in the event of a depressurisation. The initial level off height will be 15,600 ft. Further descent as permitted by MSA.

MSAs and Turns

The above turns will take the aircraft to the East side of the airway.

Fuel Jettison

The analysis has shown that the terrain will be cleared without using fuel jettison. However, it is recommended that fuel jettison is selected as soon as workload permits. 30,000 kg fuel remaining will be sufficient fuel for diversion to all likely alternates. Further fuel jettison may be necessary to reduce weight below MLW.

Driftdown/Oxygen Procedures for routes on Airway UP975/UT36/G208/R661 (Eastbound)
B777-200ER GE90-85B
Route UNVUS-OIIE
Minimum Flight Level for Crossing

N/A

If the FMC engine out performance indicates that the aircraft would have sufficient terrain clearance, no critical point and escape route are required.

Critical Points

ULTED

Actions Following In Flight Shutdown

Dependent on position as follows:

1. **Before ULTED:** Turn back direct previous waypoint and route to suitable diversion airfield.
2. **After ULTED:** Continue on planned route. Divert as per fuel state.

Actions Following Depressurisation

Initial descent to 15,300ft then per MTCA

MSAs and Turns

No restrictions

Fuel Jettison

The analysis has shown that the terrain will be cleared without using fuel jettison. However, it is recommended that fuel jettison is selected as soon as workload permits. 30,000 kg fuel remaining will be sufficient fuel for diversion to all likely alternates. Further fuel jettison may be necessary to reduce weight below MLW.

Driftdown/Oxygen Procedures for routes from Kuala Lumpur via REGET (Westbound)
B787-9 Trent J
KUL-LHR via Route REGET N644 LEMOD
Critical Points

NEVIV (N33 5.84 E067 47.0) for engine failure

Actions Following In Flight Shutdown

1. **Before NEVIV:** Turn back with 3nm offset and divert to Lahore (OPLA) or Delhi (DEL) or nearest suitable alternate advising ATC as early as possible.
2. **After NEVIV:** Divert to Mashhad (OIMM) or Ashgabat (UTAA) or nearest suitable alternate advising ATC as early as possible.

Actions Following Depressurisation

Initial descent altitude: 19,000ft

Note: Operations from UK to KUL on N644 via LEMOD are unrestricted for decompression and driftdown considerations due to the reversal of the terrain profile and lower gross weight over the high terrain.

INDIA – HONG KONG

Routes to Malaysia, Indonesia, Bangkok, Hong Kong, China and The Philippines.

GENERAL

Generally en-route communications are good, using VHF with HF back-up.

Over Large areas of Eastern Russia and China VHF frequencies for Datalink are locked out (more expensive than Satcom) and datalink services are routed via Satcom. If Satcom datalink fails then Company Comms and D-ATIS are unavailable until approaching HKG.

Part of Calcutta FIR lies E of Dhaka and just N of Chittagong. If this is entered without permission from Calcutta ATC, due weather avoidance etc, a violation may be filed.

Hong Kong Control on 127.1 MHz has an extended range of 350 nm beamed to the SW (with SELCAL).

When communicating with Chinese controllers it is essential that standard phraseology is strictly adhered to. They have a very pronounced accent but otherwise communications are good. Initial contact is on HF well before the border.

Reporting points are normally referred to by the navaid ident. e.g. KILO MIKE GOLF for Kunming.

When routing to Hong Kong across China, Hong Kong ATC should be contacted as soon as possible on HF and the forward estimate monitored.

On the route via Kunming (KMG) they can normally be reached by Lashio (LSO) over Myanmar (formerly Burma). See Central Asia or Far East Flight Progress Chart.

En-route Radar coverage is sparse.

Approaching Hong Kong, communications will be transferred to VHF and Hong Kong will provide Radar monitoring and issue an onward clearance.

VOLCANIC ACTIVITY

GALUNGGUNG, 90 nm SE of Jakarta. A BA 747, flying downwind of this volcano, at normal cruising levels, suffered failure of all 4 engines.

PINATUBO, 50 nm NW of Manila. Volcanic ash was reported to 45,000ft and Manila Airport was closed.

MAYON, 170 nm SE of Manila. Significant eruption Feb 2000.

DRIFTDOWN AND DEPRESSURISATION PROCEDURES

Driftdown/Oxygen Procedures for Operation on Airways A368/B215 through China en-route to Hong Kong (Eastbound)

B747-400**LHR-HKG via A368/B215****Critical Points**

YABRAI (YBL) (N39 25.7 E102 46.3) for engine failure.

OXY1 (N43 38.1 E090 25.1) 152 nm North of HMI, 110 nm South of FKG for decompression.

OXY2 (N34 30.3 E104 13.4) 69 nm North of OMBON, 162 nm South of JTA for decompression.

Actions Following In Flight Shutdown

Dependent on position as follows:

Once established at driftdown altitude, establish Two engine inoperative level-off height. Compare with MSAs on route ahead, and if adequate clearance is not available, divert as appropriate.

1. **Before YABRAI (YBL):** Proceed to YBL and route via A596 or B330 to ZBAA or ZBHH dependant on fuel.
2. **After YABRAI (YBL):** Proceed to destination.

Actions Following Depressurisation

1. **Before OXY1 (after Fukang):** Return to Urumqi area. Either land at Urumqi or divert back to CIS on A368 via SARIN.
2. **Between OXY1 (after Fukang) and OXY 2 (after JTA):** Proceed/return to Yabrai (YBL) as appropriate and route A596 to Beijing or destination dependant on fuel.
3. **After OXY 2 (after JTA):** Proceed to destination.

Note: Sufficient oxygen capacity is available to cover a decompression at OXY1 and divert to Urumqi or if this is not available, diversion by A368 via SARIN to the CIS. If routing via A368 – SARIN no special oxygen handling procedures are required. (MSAs to the West of SARIN are low enough that oxygen is not required.)

Escape Route

Escape route available via A596 towards Beijing ZBAA or Hohhot ZBHH dependant on fuel.

MSAs and Turns

Turns are permitted in either direction.

Driftdown/Oxygen Procedure for Operation on Airways B215/A368 through China en-route from Hong Kong (Westbound)
B747-400
HKG-LHR via B215/A368
Critical Points
OXY1 (N43 38.1 E090 25.1) 152 nm North of HMI, 110 nm South of FKG for decompression.

Actions Following In Flight Shutdown

Dependent on position as follows:

Once established at driftdown altitude, establish Two engine inoperative level off height. Compare with MSAs on route ahead, and if adequate clearance is not available, divert as appropriate.

Actions Following Depressurisation

1. **Before OXY1 (between Hami HMI and Fukang FKG):** Proceed/return to Yabrai (YBL) as appropriate and route A596 towards Beijing ZBAA or Hohhot ZBHH dependant on fuel.
2. **After OXY1:** Route to CIS or divert to Urumqi.

Note: Sufficient oxygen capacity is available to cover a decompression at OXY1 and divert to Urumqi or if this is not available, diversion by A368 via SARIN to the CIS. If routing via A368 – SARIN no special oxygen handling procedures are required. (MSAs to the West of SARIN are low enough that oxygen is not required.)

Escape Route

Escape route available via A596 towards Beijing ZBAA or Hohhot ZBHH dependant on fuel.

MSAs and Turns

Turns are permitted in either direction.

Driftdown/Oxygen Procedure for Operation on Airway B330 through China en-route to HKG (Eastbound)
B747-400
LHR-HKG via B330 MORIT
Critical Points
OXY2 (N34 30.3 E104 13.4) 69 nm North of OMBON, 162 nm South of JTA for decompression.

Actions Following In Flight Shutdown

Dependent on position as follows:

Once established at driftdown altitude, establish Two engine inoperative level off height. Compare with MSAs on route ahead, and if adequate clearance is not available, divert as appropriate.

Actions Following Depressurisation

1. **Before OXY2:** Proceed on airway A596 towards Beijing ZBAA or Hohhot ZBHH dependant on fuel or turnback and proceed to Novosibirsk (UNNT/ OVB) on airway B330.
Continuation past OXY2 on routing or a return to Urumqi/Kazakhstan past OXY1 is not permitted due to terrain critical oxygen requirements.
2. **After OXY2:** Continue to HKG.

Escape Route

Escape route available via A596 towards Beijing ZBAA or Hohhot ZBHH dependant on fuel.

MSAs and Turns

Turns are permitted in either direction.

B787-8 Trent AE
LHR-CTU via B330 MORIT
Critical Points

TEKOR (N45 4.36 E099 16.31) for decompression

OMBON (N33 21.24 E104 16.18) for decompression

Actions Following In Flight Shutdown

Dependent on position as follows:

Once established at driftdown altitude, establish Two engine inoperative level off height. Compare with MSAs on route ahead, and if adequate clearance is not available, divert as appropriate.

Actions Following Depressurisation

Initial descent altitude: 20,000ft

1. **Before TEKOR:** Turn back with 3 nm offset and divert to nearest suitable alternate advising ATC as early as possible.
2. **Between TEKOR and OMBON:** Divert to Lanzhou (ZLLL) or nearest suitable alternate.
3. **After OMBON:** Continuation to CTU is permitted or nearest suitable alternate.

MSAs and Turns

Turnbacks are not permitted in West bound direction due to significant terrain.

Restricted airspace up to FL 270 exists 10 nm to the East and for a distance of 70 nm North from DOREX.

Driftdown/Oxygen Procedure for Operation on Airway B330 through China en-route from Hong Kong (Westbound)
B747-400
HKG-LHR via B330 MORIT
Critical Points

OXY2 (N34 30.3 E104 13.4) 69 nm North of OMBON, 162 nm South of JTA for decompression.

Actions Following In Flight Shutdown

Dependent on position as follows:

Once established at driftdown altitude, establish Two engine inoperative level off height. Compare with MSAs on route ahead, and if adequate clearance is not available, divert as appropriate.

Actions Following Depressurisation

1. **Before OXY2:** Turn back and return to HKG
2. **After OXY2:** Continue to Novosibirsk (UNNT/OVB) on airway B330 or proceed on airway A596 towards Beijing ZBAA or Hohhot ZBHH dependant on fuel.

Escape Route

Escape route available via A596 towards Beijing ZBAA or Hohhot ZBHH dependant on fuel.

MSAs and Turns

Turns are permitted in either direction.

B787-8 Trent AE
CTU-LHR via B330 MORIT
Critical Points

DOREX (N31 8.48 E104 22.5) for engine failure

OMBON (N33 21.24 E104 16.18) for engine failure

OMBON (N33 21.24 E104 16.18) for decompression

TEKOR (N45 4.36 E099 16.31) for decompression

Actions Following In Flight Shutdown

1. **Before DOREX:** Turn back and return to CTU
2. **Between DOREX and OMBON:** Turn back to CTU must be made to the East. Restricted airspace exists 10 nm East of the airway between DOREX and 70 nm North from DOREX. In the event of an airborne return advise ATC immediately. ATC have indicated that the restricted area can be entered during the turn. However, every effort should be made to reduce the time within it and regain a 3 nm West offset of the airway centreline expeditiously.
3. **After OMBON:** Continue or turn back with 3 nm offset on airway B330 to Lanzhou ZLLL or nearest suitable alternate and advise ATC as early as possible.

Actions Following Depressurisation

Initial descent altitude: 20,000ft

1. **Before OMBON:** Turn back to CTU must be made to the East. Restricted airspace exists 10 nm East of the airway between DOREX and 70 nm North from DOREX. In the event of an airborne return advise ATC immediately. ATC have indicated that the restricted area can be entered during the turn. However, every effort should be made to reduce the time within it and regain a 3 nm West offset of the airway centreline expeditiously.
2. **Between OMBON and TEKOR:** Continue or turn back to Lanzhou ZLLL with 3 nm offset or to nearest suitable alternate advising ATC as early as possible.
3. **After TEKOR:** Continue with 3 nm offset and divert to nearest suitable alternate advising ATC as early as possible.

MSAs and Turns

Turnbacks are not permitted in West bound direction due to significant terrain.

Restricted airspace up to FL 270 exists 10 nm to the East and for a distance of 70 nm North from DOREX.

The following MSAs can be used instead of CIRRUS MSAs for this portion of the flight:

From	To	MSA
DOREX	OMBON	15,600
OMBON	JTA	16,500
JTA	YBL	11,300
YBL	MORIT	8,100
MORIT	TEKOR	11,000
TEKOR	DILAT	11,900

CHINA

Within China, air-routes vary in width between 8-20 km. Deviation from the specified air routes is prohibited. Crews should note that the civil controllers only have responsibility for aircraft within the 20 km width of the airway. Airspace outside of the airway is controlled by the military. Crews requiring

deviation for weather should only request vectors within the airway width. Crews having to deviate outside the airway will be under military control and may be instructed to land at a nearby military airfield. In such cases consideration of returning to airport of origin or diversion must be considered. If necessary a PAN call should be made.

Diversion

Provided that the original destination is Chinese, the CAAC (who are responsible for all aircraft handling in China) additionally consider themselves responsible for handling at the alternate. Thus ground handling and fuel will be available on diversion to a mainland Chinese alternate.

Border Crossing

This is only allowed within a specified air corridor or over a specified entry/exit point. ATC must be contacted 15-20 mins prior to the border giving call sign, ETA for border and FL.

Border crossing clearance should then be issued. The border must not be crossed without ATC permission. A position report must be made when crossing the border. These rules apply for both entry and exit.

Forced to Return

If it becomes necessary, an aircraft is permitted to return by its original route, air corridor or entry/exit point. ATC should be informed of the following:

1. Call sign.
2. Reason for forced return.
3. Time when beginning return.
4. Altitude.
5. Aerodrome of intended landing.

If no instructions are received from ATC, the return flight over China shall be at a Flight Level immediately below that originally flown. If this is below the MSA then the Flight Level above that originally flown shall be used.

Altimetry

All altimeter clearances are given in metres, QNH.

China uses RVSM at cruising altitudes. Check correct feet setting in MCP versus cleared metric flight levels.

Dimensional Units

Horizontal distances in km. Speeds and Upper Wind km per hr. Surface winds metres per sec.

Approx conversions: $(\text{km/hr})/2 = \text{knots}$

$(\text{m/sec}) \times 2 = \text{knots}$

Routes from C.I.S across China

MSAs are high over much of northern China; over 21,000ft at Urumqi and over 22,000ft N of Chengdu. This necessitates careful planning for engine failure and decompression.

HONG KONG**Routing from LHR to HKG:**

Routing does not vary significantly and is to the south of Helsinki then via the Baltic states to the North of Moscow across Siberia where it turns south east over Mongolia and into China.

There is high terrain in Sichuan province in China along airway B330 (Lanzhou and Kunming FIRs) which is subject to decompression escape routes provided above. Escape routes MUST be programmed in the FMS prior to transit.

Russian and Chinese airspace is RVSM. Russia operates to ICAO FL rules. China/Mongolia operates in metric levels and the equivalent semi-circular cruising levels are subtly different, so FL330 becomes FL10100 m which is flown as 33,100 feet. This requires a small altitude change at the boundary which must be flown otherwise Chinese controllers will challenge your level.

Hong Kong is standard ICAO levels.

CPDLC is not yet available in Russia in the FIRs we fly through.

Mongolia (Ulanbaatar) has a trial CPDLC service with ADS-B.

The Chinese will often assign offsets for significant distances through their airspace which you are required to fly. Some crews apply their own offset in Russian airspace, ATC may query any such offset especially if more than 1 nm.

Hong Kong – Notification of Arrival Delay

Effective from August 2013 – A delay notification message will be included in the arrival ATIS when an arrival delay is expected to exceed 30 mins. ATC will supplement this information as required on first contact. UNLESS informed by pilots ATC will consider flights that decide to continue inbound to HKG will have the required holding fuel to absorb the notified delay. If further delay develops pilots will be informed accordingly.

VIETNAM

Aircraft operating over Vietnam may require an over flight Clearance Number.

HONG KONG – TOKYO

In this area there is good ATC and co-ordination.

TAIWAN

Aircraft must contact Taipei Control prior to crossing the FIR boundary for clearance. BAV services to TAIPEI – to satisfy political sensitivities, at no time should the aircraft be landed in MAINLAND CHINA.

JAPAN

Japanese controllers have a pronounced accent and a tendency to talk quickly making it difficult at times to understand clearances. It pays to be prepared in advance for clearances, listening out to other aircraft going the same way can be very useful.

Be prepared for a full clearance as far as the first major airway. Only after this will the term “flight planned route” be given. Beacons will usually be referred to by their “name” rather than callsign.

Pressure settings provided by ATC are usually in ‘inches of Hg’ but may be provided in ‘Hpa’. Exercise caution as a combination of these two settings may also be used at the same time.

Transition Altitude 14,000ft.

250 kts Max at or below 10,000ft within approach control areas.

Volcanic activity is a continuing hazard over Japan.

All Japanese airfields have markings on the runway indicating its midpoint. The markings consist of 3 parallel white stripes running across the runway.

Airfields which are likely to see heavy snow fall in the winter months have orange runway markings instead of white ones to improve recognition.

Minimum Fuel Advisory

Advise ATC when fuel has reached a state where any undue delay at destination is unacceptable. This call does not declare an emergency and does not imply a need for traffic priority. On initial contact the term "MINIMUM FUEL ADVISORY" should be used after your callsign. IF TRAFFIC PRIORITY IS REQUIRED YOU MUST DECLARE AN EMERGENCY, reporting fuel remaining in minutes.

Radar Advisory Service

This network exists primarily for air defence around Japan but will provide assistance on request. This assistance may be withdrawn without prior notice.

When using the service it is the pilots responsibility for obtaining changes in ATC clearances prior to contact with radar stations, but ground stations will assist in obtaining clearances if necessary.

Departure Clearances

Departure clearances from Japan ATC may include, for example, A110. This is a clearance to an altitude of 11,000ft. This clearance does not, in itself, override the need to comply with the altitude constraints on the SID.

FAR EAST – AUSTRALIA

Communications and ATC are good with a mixture of VHF and HF.

OFP highlights the requirement for the sending of Met reports which is quite extensive.

REFER TO AUSTRALASIA AREA BRIEFING for details of Australian operations.

INDONESIA

250 kts Max at or below FL100 in Jakarta, Palembang, Surabaya or Bali controlled airspace.

SINGAPORE – JAKARTA

There are special level assignments for aircraft flying between these FIRs.

PHILIPPINES

Aircraft entering Manila FIR from the south are to report at 2°N giving FL and estimate for 4°N.

Speed Control – 250 kts Max within 30 nm of Manila below FL100.

YANGON FIR

IFBP should be followed in the Yangon FIR. See details in the Africa Area brief.