

# **Flight Operations Manual Review**

**Polar FOM was used for this outline**

**Compiled by Lionel Largmann**

**For training purposes only**

**September 1st 2014**

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## Bulletins Section:

**B-17** Do not Block out greater than 15 minutes before ETD.

**B-18** Crew usage of harness & seatbelts: / RNAV 1=RNP 1.0 & RNAV 2=RNP 2.0

**B-19** Dispatch / Flight release: 121 Flights conducted IFR / Fuel requirements for Flag and supplemental: flights greater than 6 hour *but re-dispatch* less than 6 no alternate req. for dispatch planning.

**B-20** -8 References added to FOM

**B-21** Adverse weather phenomena defined:

- Mod to severe Turb.
- Surface winds greater than 30kts
- LLV Windshear
- Thunderstorms
- Mod to severe icing
- Icing effecting ground ops
- R/W contamination
- Sand or dust storms
- Cyclones, hurricanes, typhoons, & Trop. Storms etc.
- Volcanic ash and other Natural Haz.

EWINS: (Enhanced Weather Information System) Company maintains a program according to section 10 of ops specs.

Movement forecasts are determined by EWINS authority, which will be noted on the flight plan, and the WSI TAF will be included in the weather section of the briefing package. Identified by the RAMTAF ICAO forecast. WSI issues 24 hour TAF's.

**B-22** Nav Tech OFP changes to flight plan: Use 5 digit code for uplink and flight plan retrieval.

**B-23** Kathmandu Operations: PIC must be checked out Sim or line check-airman.

**B-24** Age 60 Line checks every 6 months.

**B-25** SBKP (Campinas, Brazil) No Autoland / Capt landing on R/W 23 & night or IMC all R/W's

**B-26** Autoland must be accomplished every 15 days / 28 days if not revert to Cat I till performed.

**B-27** High mins Captain exemption: IF as PIC or SIC has 300 hours in a turbo-jet A/C & qual. (Cat II) OK

**B-28** Pilot minimum qualifications: ATP / 1500TT etc.

## **Definitions Section:**

## **Abbreviations Section:**

## **Chapter 1: Organization & Resp.**

### **1.1.2 to 1.2.5 Duties & Responsibilities for all Ops Positions**

**1.1.8 – 1.1.9 Captain Responsibilities & Accountabilities**

**1.1.10 – 1.1.12 First Officer Responsibilities & Accountabilities**

**1.2.1 -1.2.5 Crew responsibilities / Dispatch / Operational Control / PIC defined:**

## **Chapter 2: General Policy**

### **2.2.1 Ops / Aircraft Authorization**

**2.1.2 Alcohol & Drugs:** No consumption of Alcohol within 8 hours of reporting for duty.

### **2.2.2 Personal Standards: Uniforms / Dress / Behavior / Appearance**

### **2.3.1 Personal Equipment:**

#### **Flight Crew Equipment**

1. Airman Certificate
2. Current FAA Medical
3. FCC radio License Permit
4. Valid Passport / Visa's
5. Atlas Air Cargo ID
6. Flashlight

### **2.4.1 Cockpit Ops & Rest:**

#### **Crew compliment:**

<b>Basic 8 hours or less:</b>	Capt / FO
<b>Augm. 8-12 hours:</b>	Capt / FO / Add. Capt or FO rated
<b>Dbl. Augm: CBA Duty:</b>	Capt / Three FO's one rated.

#### **Augment: PIC Brief / Capt. Relief Pilot Brief.**

- .2 **Pilot pairing**
- .2 **Stand / Sterile Flt. Deck**
- .3 **Flt Deck station O2 FL250 one leave O2 req. / Manipulation controls**
- .4 **Airplane Control (PIC)**
- .5 **Automation policy**
- .6 **ATC Comms / Headset use below 18,000 / A/C lighting / ATC clearance**
- .7 **Dev. FPL 4K or 15min / Flt Alt min 1K -5 miles & 2K-5 Miles Mtn. / O2 above 10K**
- .8 **Col. Avoidance / NADP 1 "close in Noise" NADP 2 "high speed distant"**  
**Flight Deck Rec. / CPDLC auth. A056 /**
- .9 **Altimeters Temp. / RNAV 1 & 2 & Q Nav. RNV 1 = 1.0 & RNV 2 & Q = 2.0**
- .10 **Stars term. / LNAV Arm before T.O. for all RNAV dep. Verify engaged & AP.**

### **2.5.1 Duty and Rest:**

- .2 **Flight Time Limitation Chart**
- .3 **AIMES monitoring**
- .4 **Domestic Operations Flight Time limitations**
- .4 - .5 **Flight Time Limitations & Rest Requirements**

#### **Flag operations Two Pilot Airplanes**

1000 Hours Calendar year  
100 Hours Calendar Month  
32 Hours in 7 consecutive days

\* 8 Hours between rest periods  
Note this can be reduced as follows over 8 less then 9 (10 rest req.) Over 9 (11 hours rest req.)  
After 7 consecutive days of duty 24 hours rest is required

- .5 Flag Operations with two pilots and one additional crew-member (400/-8)**  
Max scheduled time for a crewmember under this section is 12 hrs. total flight time  
Duty time scheduled shall not exceed 16 hours / 18 hrs. Maximum.

1000 Hours in 12 Calendar Months  
300 Hours in 90 Consecutive Days  
120 Hours in 30 Consecutive Days

- .5 Two Pilot Aircraft with Double augmented Crew**  
Max scheduled time for a Atlas / Polar crewmember under this section is 16 hrs  
total flight time Duty time scheduled shall be not exceed 20 hours / 22 max

1000 Hours in 12 Calendar Months  
350 Hours in 90 Consecutive Days

- .6 Rest / Layover Facilities /**  
**.7 Crew Notification Resp.**

#### 2.6.1 Qualifications:

##### **Line Qualifications crewmembers PIC / SIC**

- .2 PWP Program**  
**.2 Landing currency = Three T.O Three Landings within 90-day period**  
**.3 Recent of Exp. / Cert. / Line checks**  
**.4 - .7 Special Airports List**  
**.7 Special Airport Qual. (12 months) at least one of the following:**  
PIC or FO has landed at the special airport  
Review Jepp airport qaul. Pictorial  
Review special airport video.  
**Or Wx Forecasted at least 1K above lowest MEA, MOCA, IAA and 3 miles**
- .8 Company Additional Special Airports Qualifications:**
- Bogota Colombia
  - Kathmandu
  - Guatemala City
  - Quito
- .9 DOD Certification Airfields List**  
**.10 Route Qualification & Familiarization/ Dispatch Qualifications**

#### 2.7.1 - .4 Medical Sections:

## **Chapter 3**

### **3.1 Flight Planning**

Operational Control of Airline = Atlas Air Cargo / Polar Air Cargo

**3.1.2 Dispatch Release** = Dispatcher and PIC are solely responsible for planning a safe flight. Flight release will contain latest weather and forecasts for destination and alternates. The PIC must sign the flight release before each flight segment in concurrence with dispatch rules. After flight is dispatched if there is *any change in the release* the party who notices the problem will inform the other and amend thereof (change / time / initials must be recorded on MFP).

### **3.1.3 Dispatch Release Rules**

Valid Domestic 1 hour after issuance

Valid International 6 hour after issuance

### **3.1.3 Amendment to the Release**

Required if Aircraft change, Alternate, min. release fuel, MEL item, Aircraft performance limitation.

All flights must be dispatched IFR except training and ferry flights.

Verbal amendments require dispatcher initials and time.

### **3.1.4 Atlas / Polar Dispatching**

Can only dispatch an aircraft to any regular, provisional, or refueling airport in domestic and Flag carrier operations that are listed in section C-70 of the Operations Specifications. Those airports *not listed* in C-70 are flights that can only operate under *supplemental Flight rules*. As far as the crew is concerned they will operate under the appropriate rules and will use Flag rules pertaining to all FAA flight hour requirements.

### **3.1.4 Planned Re-dispatch Re-release**

PIC must be provided weather information *within 2 hours* of re-dispatch point.

At the POR point fuel remaining *must be equal or better* than the burn from the POR to final destination, plus reserves, alternate (if req.) and holding fuel.

### **3.1.4 Wet or slippery Runways:**

All flights will be dispatched assuming wet runways at the destination, unless economics dictate otherwise.

3.1.5 **Runway Length:** (must be adequate)

3.1.5 **Enroute Navigation:** (must be adequate)

3.1.5-6 **Airplane Weight Limitations:** (must not exceed structural / performance limitations)

3.1.6 **Airport & Route Quals:** (PIC & Crew qualified –signing release verifies this)

3.1.6 **Notams:** (Req. review & evaluate)

3.1.7 **Intams:** (Company operation safety items sheet reviewed)

3.3.7 **Weather** (Req. review & evaluate)

3.3.7-8 **Dispatcher / Captain Briefing Checklist**

3.3.8 **Aircraft Performance:** Sent via AeroData via ACARS / Valid TLR is a backup

3.3.9 **Cruise Speeds:** (Econ, will be normally used)

3.3.9 **Aircraft Airworthiness:** (PIC must review logbook & DDG for airworthiness of aircraft)

3.1.10 **Airworthiness Release:** (Maintenance must sign logbook after all completed work is done)

3.1.10-11 **Remote release / Load manifest** (PIC signs) / Last minute changes / W&B Data

### **3.1.12 Flight Documents: (Required in A/C for flight)**

1. Flight Plan
2. Signed copy of Dispatch Flight release
3. Weather, NOTAM, & INTAM
4. Load Manifest form (W&B signed)
5. Aircraft Log with signed Airworthiness Release
6. Pilot Route Qual. certification (signed release covers this)
7. Fuel Receipts
8. NOTOC (signed)
9. General Declaration
10. Permit to proceed (if req.)
11. Load planner form (if req. & signed)
- 12 ODM/TLR (if req.)

### **Documents left at Departure station:**

1. Copy of flight plan
2. Dispatch Release (signed)
3. Load Manifest (W&B signed)
4. Load Planner Form (if req. & signed)
5. NOTOC (signed)

### **3.1.12 Manuals req. in aircraft Library:**

1. Jepp. Manuals
2. O.S.I & Insurance Manual
3. F.O.M.
4. F.S.M.
5. D.D.G.
6. F.P.P.M
7. Weight and Balance (CD format)
8. A.O.M. Vol. I and II
9. QRH
10. Normal / Emergency checklist
11. Aircraft Logbook
12. Hazardous Material Manuals
13. WBM
14. Maintenance Manuals (GMM), (AMM)
15. Airworthiness Certificate
16. A/C Registration
17. A/C Radio license
18. A/C Insurance Card
19. General Declaration / Crew Forms
20. Aeronautical Charts and Plates

### **3.2.1 Fuel Policy / Conservation / Factors**

#### **3.2.2 Minimum Diversion Fuel: (MDF)**

Defined: Fuel to fly to Alt. thereafter for 45 min. and hold at 1,500 AGL. (FMC Reserves)

#### **3.2.2 Tankering Fuel**

### **3.2.2 Fuel Requirements: Domestic**

48 states;

Destination, Alternate, +45 minutes @ .84 FL250

### **3.2.3 Flag & Supplemental Rules:**

Destination, +10% of total flight time, +Alternate, +30 minutes @1500 feet (Alt. airport)

### **3.2.4 Flag & Supplemental (No Alternate available)**

Destination, + 2 hours (normal cruise consumption)

### **3.2.4-5 Redispatch:**

(A) Destination, +10% of total flight time to initial destination, + Initial Alt. + 30 min. @ 1,500 feet

(B) POR final destination, +10% (POR to FD), + Final alternate + 30 minutes @ 1,500 feet

### **3.2.5-6 Terrain Clearance / ETP Drift down & Decompression**

Any time the A/C is more than 90 min. (all engines) from a suitable airport, ETP will be established and flight planning to a suitable airport will be based on one or two engine drift-down using LRC and 15 minutes hold computed by TOD fuel consumption rate. Decompression: 15min. @1,500 + Appr.

### **3.3.1 Airport Classification:**

Regular:	Normal ops load & unload freight or pax
Refueling:	Re-fueling only
Provisional:	Airports that are used when regular airports are temporarily not avail.
Alternate:	May land if unable at intended destination is unfeasible.
Special Airport:	Requires special crew qualifications
Not Authorized:	T.O can be made if a landing was made due to emergency.
Destination Airport:	Scheduled dispatch ops to regular, provisional or re-fueling.

### **3.3.2-3 Alternate Airports:**

#### **Domestic:**

+ - 1 hour, 2000 feet, 3 miles visibility

**6 Hours or Less see below (6 Hours or greater always list an alternate Flag Rules.)**

#### **International:**

+ - 1 hour 2000 feet or 1500 feet above lowest min., 3 miles or 2 added to lowest vis., minima.

**ETP Airports:** Must be at or above approach minimums at forecasted time of arrival.

### **Takeoff from unlisted & Alt airports:**

Facilities and airport is adequate

1. Pilot can comply with operating limitations of aircraft.
2. Dispatched according to rules pertaining to an approved airport
3. Weather at airport forecasted above Minimums at time of arrival.
4. Alternate provided in flight release. 800/2, 900/11/2,1000/1

### 3.3.4 Inop lights / no Tower

#### 3.5.1 Enroute Dispatch Rules:

- .1 Requirements for Redispatch
- .2 Fuel: See fuel section
- .2-.3 RDM (Re-dispatch message components & Sample form)

#### 3.5.4 PRD Wx:

**Open** = 3000 feet and 5 miles visibility.

**Operational** = 1000-3000 feet and 3 to 5 miles visibility.

**Instruments** = 600- 1000 feet less than 3 miles visibility

- .4 **Re-dispatch Acceptance:** RDA UTC time / Capt. Initials
- .5 **No Comms:** Captain must comply and land at initial destination.

#### 3.6.1 Fight Plan:

- .1 Label "Master" on Front of flight plan

##### .1 Prior to Departure:

1. Verify tail number and circle
2. Record altimeters RVSM req.
3. Check all loaded waypoints on FMC'S
4. Verify ZFW & TOGW

##### Enroute:

1. Once each hour verify A/C performance & fuel.  
Record: ATA / FL / Temp / Wind / AFRM

Record above on Mandatory / random Rep. points on Atlantic crossings  
Circle Altitude for all RVSM verify altimeters agree (within 200 feet)

##### .2 Takeoff Weight Verification:

1. Verify ZFW does not exceed MZFW (record and compare)  
If ZFW greater than planned less than 10K Adjust burn (on Flt plan)  
If ZFW is greater than planned more than 10K (Get new or amended release)

- .2-.4 Min Fuel Adj: 1hr. Dest. Or 45 min at alternate / Cost Index ECON / Enroute Climb & Des. / Flight following

#### 3.6.4 -.32 Flight Plan (Layout / Definitions & Key)

#### 3.7.1-10 Weather:

- .1 Weather forecasts at release must be at or above auth. Mins at ETA at the dispatched airport Ref. (FAR 121.613). If flight is extended overwater (50nm.) forecast Wx. must at or above auth. Mins at either the dispatch airport OR req. alternate (s). I.E. destination airport in this case may be below airport minimums. (FAR 121.615a).



## **Alternate Wx Min:**

### **.2 Standard:**

Precision 600 / 4

Non-Prec. 800 / 2

### **.2 Lower than Standard Mins:**

One operational navigation facilities:

Cat I / Prec. / Non prec. = Add 400 ft. to MDA / DH + add Vis 1 mile / 1600m to landing minimums.

Two operational navigation facilities different R/W's

Cat I / Prec. / Non prec. = Add 200 to MDA / DH + add Vis ½ mile (800m) To the higher of the landing minimum of two approaches listed.

## **3.8.1-10 METAR Decoding**

## **3.9.1-4 TAF Decoding**

## **3.10-3 Significant WX Charts Decoding**

## **Chapter 4**

### **Hazmat**

PIC Hazmat notification form is required on all Polar / Atlas flights.

### **4.1.6 Hazmat incidents & Procedures**

## **Chapter 5**

### **Security/Upper Deck Occupants**

#### **Admissions to the Flight Deck**

24 Hours notice must be given to Polar / Atlas Ops. Director of Ops approval in necessary. Four Super numuries on most aircraft is the maximum allowed depending on inertial descent reels. Listed on Load Manifest is required.

#### **5.1.1**

Aircraft security

Identification

Screening

GSI

ISC (PIC is the *inflight security coordinator* Block out to Block in)

Boarding procedures

Prohibited Items / FAM / FFDO / Flt deck admission access table

## 5.2.1

Flight Deck Jump-seat & Upper deck occupants.  
Flight Deck Door  
Bomb & Sabotage threats  
Jump seat

## Chapter 6

### Departure Procedures

#### 6.1.2 Flight Departure:

Flight considered departed at the first movement of A/C push back etc.

#### .2 Discrepancies after Block out:

Contact MCC / GCC and review applicable discrepancy  
Use non-normal or alt procedure  
Return back to blocks if (M) procedure in DDG

**Note:** If Maintenance cannot be reached the flight may continue if item can be deferred per DDG

**6.1.6 Max power T.O. Policy:** Accomplish every 28 days

**6.1.6 Initial turn in VMC:** 400 ft.

#### 6.1.8-9 Visibility T.O & Landing:

Takeoff alternate: is required anytime a takeoff is made with below minimum weather at the departure airport. Within 2 hours cruise speed, 1 Engine inoperative (approx. 750nt).

**Note:** If destination airport is marginal a second alternate shall be listed.

**.10 -.11** Lower than Standard Takeoff minimums see QRH or Chart located here

**.11 Departure message:** Call station and communicate after 10K if not contact ACARS

## Chapter 7

### 7.1.1 Navigation-Communications

#### **.1 Class I & II Authorization**

**.1 Equipment failures: Notify ATC**

**.2 Plotting Charts: Navigation facility exceeds 725 nm.**

**.2 RNP-10 -5 / B-RNAV equipment requirements.**

**.3 Ops CEP**

**.3 Ops NOPAC**

**.4 NAT / MNPS (Between: 27N and 90N / CTA / Tracks FL285 to FL420)**

**.5 Ops Areas of Mag Unreliability**

**.6 RVSM Equip Requirements:**

1. Two indep. Alt.
2. Mode c SSR Transponder
3. Alt Alert system
4. Alt hold device (autopilot)

**.6 Strategic lateral Offset Procedure (SLOP):**

PIC can offset 1 to 2 NT. miles offset  
Back on track by oceanic entry point or oceanic exit point

**7.2.1-2 Communications**

FAR required, by dispatch and PIC through en-route portion of flight  
must maintain a continual watch.

**.4 Monitor Emergency Freq. (121.50 at all times possible)**

**.4 Air-to-Air Freq. (123.45)**

**.4 Reports to Dispatch:**

Arrival eta + 20  
Flight plan change  
Maintenance Discrepancy  
Diversion

**.5 Enroute Position Reports: (Once within each 4 hours)**

Flight number  
Position  
Time over position  
Flight level  
Fuel remaining in Kilos  
ETA destination  
Remarks

## **Chapter 8**

### **Approach & Landing:**

**In-Range Call:** ETA / Est. Fuel / Maint message / Special request

Mandatory: for AMC operations

**.1 LGW Limitation:** Not to exceed: SLGW / Climb limited / Field length limited.

**.1 Short R/W's:** Less than 8,000 Captain landing Vert. Guidance avail / high mins Prec. Appr.

**.1 Instrument Approaches:** Verify Op Specs C059 to determine Cat. II approach capability  
Verify Op Specs C060 to determine Cat. III approach capability  
**Above is for all foreign airports / Domestic is OK**

**.2 Circling approaches:** 1000 HAT /3 miles vis.  
**.2 Aircraft Category:** Cat D 747(400) Cat D (L) for 747 -8

**.3 Straight in Cat. 1 Approaches (non ILS)**

NDB: With FAF add 50 ft. HAT

No FAF add 100 ft. HAT

VOR: No FAF add 50 HAT

**.4 Precision Approaches:**

**TDZ req. MID RVR may be substituted... MID is usually advisory only.**

**.4 Cat II Ops High Min Capt:** Capt must have 300 hrs. Turbo jet PIC / 100 hrs. in type.

**.5 Cat II Ops Req:** Autoland / Foreign in C059 / Fac. Operational / TD & RO req.

TD RVR controlling & RO advisory only

Mid may be substituted if TD not available.

DH not less than 100RA

**.5 Cat III Ops:** 300 ft. RVR minimum or (75M) Foreign listed in C060

**.5 Definition Wet R/W:** RVR less than 4,000 (1,200m) or ¾ mile vis. Are wet.

**.6 Autoland:** Must be accomplished every 15 Days if not next station must be done.

**.6 Definition Stabilized Approach:**

**No later than 1,000 ft. HAT in IMC & 500 ft. HAT VMC:**

1. Aircraft in a proper position to land (final flap & Gear D.N.)
2. Acceptable lateral displacement
3. On vertical profile: +/- 300 FPM return normal bracketing
4. Rate of descent not to exceed 1,000 FPM
5. Airspeed not greater than VREF +20 and not less than VREF
6. Thrust in normal range
7. ILS & Cat. II within G/S and LOC limits
8. Wings level by 300 Feet airport elevation

If above parameters are not met or PIC judgment approach is not stabilized.  
Go-around / MAP should be executed immediately.

**.7 IAF / Low alt. ops / Poor Vis. Rec coupled approach / Visual illus.**

**.8 Heavy rain:** Consider additive of up to 20Kts to VREF

**.8 Thunderstorm activity**

**.8 Circle to land maneuvers: (listed previous section) Terps 165 man & 205 Cat. D**

**.9 PRM Approaches:** PIC flown approach / listen to two freq. during approach. Etc.

**.9 Visual approaches:** Allowed better than basic VFR 1,000 HAT/ 3miles visibility

**.10 Contact approaches:** Not authorized.

**.10 Cancelling IFR Criteria:**

**.12 Visibilities for approaches:** Cat I minimums RVR 1,800 ft.

**.12 Weather Minima for SIC**

Prevailing weather must be above Cat 1 minimums

**.13 Cat II / Catt III / UK & UAE approach criteria**

**.13 Descents to MDA, DA (H) or AH**

**.14 Descents below (above) Minimums if:**

**Cat. I**

RW Lights / RW Threshold & Zone Markings / RW end Identifier lights, Zone lights, Threshold lights / VASI

**Cat. II**

Descending below DH 100 Threshold, markings, lights / Touchdown zone, markings, lights.

**Cat. III**

Descending below AH is permitted provided no failure of req. equipment prior to AH below AH equip failure does not req. a MAP, A/C will not land in touchdown zone, etc.

**.15 MAP if: NO**

**.15 Cat. I**

Approach Lights  
Threshold, markings, lights  
Touchdown zone, markings, lights  
A/C Not is a position to land  
Other Pilot decision

**.15 Cat. II**

Same as above or loses visual cues thereafter to preclude a safe landing.  
Crosswind exceeds CFM limits.

**.16 Cat. III**

Landing cannot be made in the touchdown zone.  
Failure occurs of a req. system before alert height.  
Any ground element becomes inop. Except seq. lights and approach lights become inop.  
Crosswind exceeds 15 knots.

**.16 Captain Only Landings:**

1. Short R/W
2. Circle to land maneuver
3. PRM Approaches
4. Cat. II & III Ops.
5. Landings at Special Airports listed:

Bogota-	Capt. Approach & Landings / FO day VMC
Campinas Brazil-	No Autoland. Capt only R/W 33 or night, IMC

- |                  |  |
|------------------|--|
| Eldoret Kenya-   | Capt. Only night and or IMC.   |
| Guantanamo Cuba- | Capt only (Must Land Runway 28 / T.O. Rwy 10)                          |
| Guatemala City-  | Capt. Approach and landing   |
| Quito-           | Capt. Only landing. Check-airman must accomp. 1 <sup>st</sup> time in. |
6. Prior to release from high minimums restrictions (FAR 121.652)

**.17 First Officer Requirements (less than 100 Hours in type):**

Captain must land if he is not a check Airman in the following situations:

1. All special airports
2. Vis less than  $\frac{3}{4}$  miles visibility.
3. RVR less than 4,000 feet
4. R/W is considered contaminated (water, slush, snow etc.)
5. Breaking action less than "Good"
6. Crosswind greater than 15 knots
7. Windshear reported in the vicinity of airport.
8. Captains prerogative

**.17 Weather Criteria for High Mins Capt. (less than a 100 hours in type):**

Add 100 ft. to minima  
 Add  $\frac{1}{2}$  mile to minima  
 Not less than 300 and 1 mile  
 Not reducible if PIC has less than 100 PIC FAR 121  
 Does not apply to alternate airport minima  
 Advise Approach control of increased mins if applicable

**.18 High Mins Capt. Exemption:**

**Cat. I**

High mins Capt. May use the lowest Cat. 1 minimum if he is Cat II or III trained / qualified and uses Autoland procedures. Except the WX. may not be less than  $\frac{3}{4}$  mile vis. 4000 RVR and crosswind may not exceed 15knots.

**Cat. II**

High mins Capt. May use the lowest Cat. II minimum if both the Capt and FO are trained /qualified for Cat. II or Cat. III instrument approach procedures  
 The A/C is qualified for Cat III ops. Autopilot approach coupled is used. The  
 \*\*\*\*Capt has at least 300 hours as PIC in Turbojet aircraft.

**.18 Release from High Minimums:**

All high mins Capt will keep a log of hours and then notify Flight ops upon completion. If Capt has 100 hours PIC in 121 ops subtracting 1 hour for each landing made in line ops not to exceed 50 hours can reduce the 100 hours experience requirement. Capt must make all T.O & Ldgs. until released from HM.

**.18 Land Hold Short ops: (LAHSO) Not authorized**

**.18-.19 Runway Edge Lights Inop:** Refer to lighting modify mins in this section.

**.19 Breaking Action:** No takeoff / landings or dispatch with breaking action reported  
“NIL” or unreliable.

**.19 Flight arrival / Messages:** Transmit block / fuel remaining as soon as possible.

**.20 Disposition of Flight Documentation:** Flight Envelope contents;

1. Log Book Entries / Filled out & Signed
2. Sign Master Flight Plan
3. Weather and Notams
4. INTAM
5. Weight & Balance Form (verify signed)
6. Fuel Receipts
7. Plotting Chart
8. Copy of NOTOC or military equivalent
9. Copy of Load Planning sheet
10. 400/-8 ODM

## **Chapter 9**

### **Mission Specifics:**

#### **.1.1-.2 Charters:**

**.1 Company is authorized:** Routes found in B050 Ops Spec and supplemental Ops.

**.2 Operational Expenses:** Keep in envelope for processing.

#### **.2.1-.14 Military Operations:**

**.2 In-Range reports:** Required per contract with Airlift Command Post

**.2 Arrival messages:** Same as above

**.5 Prior Permission Required:** Adhere to specific time of arrival

**.6-.14 Flight Info Public Charts & Examples**

#### **.3.1-.3 Non-Revenue Operations Section**

## **Chapter 10**

### **Emergencies / Irregularities:**

#### **.1 Emergencies:**

**.1 Emergency Authority:** PIC may take any action as necessary to ensure safety of flight. FAR 121.557,559,91.3 if declaring an emergency notify DO within 10 days.

**.2 Identification & Actions:** Clearly announce the emergency / Silence warning Fly the Aircraft / Evaluate / Call for Checklist / Complete req. procedures. PIC delegation; one flies the A/C the other works the problem. Verbal confirmation is req. by two flight crewmembers for movement of any critical A/C system controls: I.E. Eng. Thrust lever / Fuel control switch / Fire Handles / Eng. Fire ext. switches / & IDG disc.

**.2 Review & Plan**

**.2 Notifications:**

1. ATC
2. Crew members
3. Dispatch
4. Director of Flt. Ops / or Chief Pilot
5. If on ground: All ground crew

**.3 Declarations Guidelines:**

**Red:** May lead to injury or A/C damage / ATC equip. / Prep. Emerg. land or ditch

**Yellow:** Non-normal but an emerg. is declared to ATC. Ops. Not deemed unsafe Airport equip may or may not be required.

“Brace” command: Req. for Red emergencies / PA made 3X / 1 min. to 30 Seconds before collision or impact.

**Blue:** Medical related

**.4 Emergency Radio Comms:** VHF: 121.50 / HF: 2182 or 4125

**.4 Message Addresses**

**.4 Emergency Message Priorities:** Two categories

*Distress Message:* “Mayday”

Aircraft and Crew are in imminent danger & need of immediate assistance.

Content of message:

1. Announce: “Mayday, Mayday, Mayday”
2. Radio call sign (repeat three times)
3. Nature of emergency
4. Capt. Intentions
5. Position or est. position

Transponder Distress code: 7700

*Urgency Message:* “Pan”

Concerns safety of flight but secondary priority in nature.

1. Announce: “Pan, Pan, Pan”
2. Radio call sign
3. Message details



**.5 Succession of Command:** PIC delegation / Relief Capt. / FO / Relief FO

**.6 ELT Over Water / Land / Life Rafts.**

**.7 Fires Inside The Aircraft:** Descripts and procedures

**.8 Crash Ax / Vol. Fuel threat / Landing unauthorized airport / A/C Evac.**

**.9 A/C Security after Accident or Evacuation**

**.9 Crew Action:** Reporting incidents & Accidents defined.

**.10 Notification / Voice Rec. –** Pulled after Sec. Chk List

**.10 Public relations: News / Gov. & Flight Continuance:** OPS Authorization req.

**.11 Following an Emergency:** De-brief flight crew.

**Following Evac.** PIC directs all Crew & Pax to safety.

#### **Accident / Incident Review Procedures:**

1. Safety & Sec. of Crew & Aircraft
2. Crew remains with the A/C
3. Contents of flight envelope verified
4. Crew avail for drug & alcohol testing
5. Interview of Crew by Company personnel
6. Chief Pilot: Informs crew of their status
7. Review board of the matter & crew notification
8. Training action considerations

## **.2 Irregularities:**

### **.1 Rejected Takeoffs:**

#### **Second attempt may be made:**

If non-mechanical / external conditions deem it is safe to do so. Or if a result of A/C malfunction treat discrepancy as if after departure consult DDG and if safe continue verifying the following conditions:

1. Fuel remaining is greater than required
2. Brake temps are in normal range
3. PIC determines it is safe to do so

Flight must return to the blocks if: (negative to items listed above 1-3)

Returning: Contact GCC / file flight crew report for all rejected takeoff's.

**.1 Minimum Fuel Advisory:** PIC determines min fuel will exist at destination:

Advise ATC: “minimum fuel” after stating; “call sign”

**.1 Emergency Fuel:** PIC determines fuel onboard will be less than 30 min after landing.

**.2 Diversion:** PIC considerations / Notify Dispatch if time permits / dump fuel consider.

**.2 Oceanic Contingency:** Offset =15nm. Refer to orientation chart

**.2-.3 Coordination req. / Airport / Sched. / Responsibilities / Departures**

**.3 Approach without Charts:** Considerations List

**.3 Overweight Landings:** Authorized if PIC believes safe to do so.

**.4 ATC Clearance Deviation:** Notify ATC immed./And or Broadcast intent. 121.50

**.4 Use Distress / Urgency messages above if needed**

**.5 Special Procedures Oceanic:** Notify ATC / Broadcast urgency message 121.50  
State: Call sign / Flight level / Track Code or ATS / Position / Intentions etc.

**.5 TCAS Events Phraseology:**

Responding to RA:

Maneuver as req. then state: “XYZ Center, Aircraft ID, TCAS RA”

When clear of traffic:

Return to ATC assignment: “XYZ Center, Aircraft ID, Clear of conflict, returning to (assigned clearance) /or (assigned clearance) resumed.”

ATC Conflict with RA:

“XYZ Center, Aircraft ID, unable TCAS RA”

**.6 Communications Failure:**

**VMC:**

1. Set transponder: 7600
2. Continue flight VMC
3. Land at nearest suitable airport
4. Report arrival time to GCC ASAP.

**IMC:**

1. Set transponder: 7600
2. *Route:* Assigned / RV to route or fix being vectored / expected route if not given / or Expected route in clearance on the filed flight plan
3. *Highest:* Alt or Flt Level assigned by ATC / Minimum Flt. Level prescribed FAR 91.12 / Alt or Flt Level expected given by ATC.

**EFC:**

Arrive at the Fix or altitude assigned by the EFC / If approach fix: Arrive over the fix at EFC and commence approach and landing as appropriate.

**.7 European Regions:**

**.8 ICAO Loss Comm. procedures:**

**.9 Air/Ground Comms failure / Receiver failures**

**.9 Gross Navigation Error:** Deviation in oceanic areas of 25nt. / 20 FAA in jurisdiction or more from centerline of route assigned. NATS Altitude deviation of 300 feet or more.

**.10 If Gross Error occurs:**

1. Notify ATC immediately
2. Do NOT turn back to the cleared track without ATC approval.
3. Periodically broadcast A/C position on 121.50
4. Turn on all exterior lights.

**.10 Unintentional Landing: Notify dispatch & approval before departure**

**.10 Engine Stoppage Inflight:**

**.10 Malfunction of Comms / Navigation Equip:** Report to ATC

**.11 Deviations from ATC / Haz / Irreg. / Safety / Sightings**

**.12 National Defense Emerg. / CIRVIS / ADIZ:**

Maintain heading and altitude & monitor 121.50

**.13 Interception Procedures: Pictorial Chart**

**Phase I:** Approach Phase – A/C will approach from the stern.

**Phase II:** Identification Phase – Wingman approach from the right side

**Phase III:** Post Intercept Phase – Depart the area or gives follow me dir.

**.15- .16 Intercept Aircraft Signals: Table 10.2.1**

If intercepted follow direction: Notify controlling ATC facility, attempt to contact on 121.50 / Select code 7700 in transponder. Rocking wings follow intercept A/C / Night flashing nav. Lights. Abrupt break away proceed 90 turn away from aircraft flight path. Circling landing airport- Land here respond by lowering landing gear. Etc. reference Section...

**10.3.1 Bomb Threats:**

**.1 Bomb Warning Classifications:**

Indirect – Non-specific normal operations recommended.

Direct – Immediate implementation of warning procedures

**.1 In-Flight Comms:** Use terminology “bomb warning”

**.1 Notification of Capt**

**.1-2 Moving of Explosive Device**

**10.4.1 Medical Emergencies:**

**.1 General** = Defined injury, illness or death on board an A/C

**.1 Med Link / Gate Pre-Screening**

**.2 In-Fight**

**.2 Flight Crew Incapacitation** – Don’t use AED on flight deck

**.3 Death Onboard**

**.4 Emergency Medical Kits** – Capt authorization, qualified personnel

**.5 Medical Emergency Decision Tree pictorial\*\*\*\*\***

**10.5.1 Arctic/ Polar Survival:**

**.2-.3 Polar Survival Kit Contents**

## 10.6.1 Areas of Magnetic Unreliability (AMU)

- .1 N/S Polar Regions / concept
- .2 Converging of Meridians / Compass Indic. / DRN / Req. / OPS
- .3 Plotting Chart / AMU Entry & Exit / Emerg. Landing / Comms
- .4 Alt Airports / INS degradation / Updates / Fuel temp. / Surv. Kit
- .5 Equipment Degradation / Prior T.O / After T.O / Alaskan AMU

## Chapter 11

### Special Airspace / Areas:

#### .1.1-1.3 Sensitive Areas: Ops Specs B50

- .1 Afghanistan = VFR ops only, special permission for IFR
- .1 Cuba = Approval call 10 min prior to airspace entry (OFP)
- .2 Ethiopia = Prohibited north Latitude 12 degrees
- .2 Lagos = Allowed to land (Direct flights USA to Logos not permitted)
- .2 Iran = Over-flight permitted with (OFP)
- .2 Lebanon, Syria, Angola, & Sudan = Over-flt permitted / OPS appr. for landing
- .3 North Korea = Over-flight allowed East of 132 deg. Longitude only.
- .3 Serbia-Montenegro = Over-flt permitted / OPS appr. for landing (no Kosovo)
- .3 Vietnam = Via A1 corridor permitted / Landing Saigon / Danang recommended

#### 2.1-2.22 Operations in Common Wealth of Independent States: (Form USSR)

- .1 Comms: Maintain listening watch at all times (129.0 backup)
- .2 ATC Services & Comms
  - .3 Transfer of control
  - .4 Rules of the Air-to-Air traffic Control
  - .5 Diversions
    - Russian Airways:
      - 2.5 Nautical Miles Wide / 5 Kilometers wide
      - Stay on course and avoid deviation unless necessary
  - .5 Naviaids
  - .6 Altimetry: Use QNH is preferred, QFE is authorized if needed
  - .6 Holding
  - .6 Meteorology
  - .7 Takeoff / Departures
  - .8 Enroute Flight
  - .8 Approach & Landing
  - .9 Radio Comm. Failure Procedures

#### 2.10 Russian Airports: All are considered special Airports

- |                         |             |
|-------------------------|-------------|
| .10 Almaty, Kazakhstan  | (UAAA/ ALA) |
| .10 Astana, Kazakhstan  | (UACC/TSE)  |
| .11 Baku, Azerbaijan    | (UBBB/BAK)  |
| .11 Bishkek, Kyrgyzstan | (UAFM/FRU)  |
| .12 Khabarovsk          | (UHHH/KHV)  |
| .13 Kiev                | (UKBB/KBK)  |

<b>.14 Magadan</b>	<b>(UHMM/GDX)</b>
<b>.15 Mensk</b>	<b>(UMMS/MSO)</b>
<b>.17 Moscow</b>	<b>(UUEE/SVO)</b>
<b>.18 Petropavlovsk- Kamchatsky</b>	<b>(UHPP/PKC)</b>
<b>.20 St Petersburg</b>	<b>(ULLI/LED)</b>
<b>.21 Tashkent, Uzbekistan</b>	<b>(UTTT/TAS)</b>

**.3.1-.8 People Public of China (PRC) Operations:**

**.1 Units Chart:** PRC uses Meters for all altitudes

**Flight Planning:** A/C delayed 30 min. Flight Plan amended / revised OFP

**.2 ICAO Holding Speeds apply:**

Up-to 1850 (M) or 6,000 feet	210 Kts
Above 1850 (M) to 4250 (M) 6,000 to 14,000 feet	240 Kts
Above 4250 (M) or 14,000 feet	265 Kts

**.3 Border Crossing:** Report 15-20 min. before crossing border entry / exit  
Call sign / ETA crossing / Flt. Altitude

**.4 Startup Clearance Req:** Must ask ATC to start / Start within 5 min.

**.5 En-route PRC & Pakistan:** At reporting point PURPA notify Lahore / Urumqi centers.

**.5 Comms:** ATC route A470 contact next ACC 5-min prior to cross DOTMI Intl.

**.6 China RVSM Chart:** Refer to onboard Aircraft Chart

**.7 RVSM Equip Req. / SLOP procedures:** Non-radar 1nm to 2nm right of course  
Radar – suggest 1nm (ATC approval req.)

**.8 Contingency Actions**

**Chapter 12**

**Manuals & Forms:** Various Company Manual & Forms

**.1 Manuals Overview:**

**.1 General**

**.2 Safety Management**

**.4 Aircraft Library**

**.5 Dispatch Library**

**.7 Manual Listing:** Lists all req. Manuals needed onboard A/C.

**.2 Aeronautical Data:** Jepps / Wx / OPS / Aero Data / FMS database

### **.3 Required Reports**

- .1 Flight Crew Reports ref. List: Flt control / Damage / Fire / Elec. / Hyd. Etc.
- .3 In-Flight Engine Shutdown
- .3 Occupant Issues Crew / Pax
- .3 Bird Strike
- .4 Hard Landings
- .4 Overweight Landing
- .4 Near Midair Collision
- .5 TCAS Event
- .5 Weight & Balance Error or Omission
- .5 Aviation Safety Action Program
  
- .6 Table Reports: Accepted / Not Accepted: Time & Req.
- .7 Samples: ASAP Form
- .8 Off Course
- .8 Aviation Safety Reporting Program

### **.4 Aircraft Log:**

#### **.3-.11 Aircraft Log & Sample page / Completion Instructions**

PIC is responsible for all Logbook entries.

PIC is responsible to determine prior to flight that all log entries are completed i.e.

1. Required Inspections
2. Airworthiness Release

#### **.11-.12 Deferred Items:**

Capt. review of mechanical irregularities DMI, CDL, DMI and reference DDG

- Orange sticker = Maintenance action required before departure
- White sticker = No immediate action required

- Log: Max Power T.O. = 28 Days / Auto lands: 15 Days

**.13 Sample MEL/CDL Deferred Maint:** Placard / Stickers etc.

### **.5 Forms List:**

## **Chapter 13**

**Marshaling:** Signals Descripts & Examples

## **Chapter 14**

**CRM/TEM:** Cockpit Resource Management / Threat Error Management

## **Chapter 15**

**Tables & Codes:** Extensive list off all Wx / Lighting / Altitude Tables etc.

## **Chapter 16**

**FAR and Op Spec Compliance:** Listing of all references and compliance