
Operational Information
Extended Range Operations**Chapter 01**
Section ERO

MNPS and ETOPS Aide Memoire**Required Data**

- CIRRUS (Including ATC Flight Plan)
- Sig Weather Chart
- EROPA or Surface Facilities Chart
- NAT Track Signal
- CIRRUS Brief

EROPA Chart

- Check Routing is within ETOPS circles
- Check enroute Sig Wx

Note: If EROPA is unavailable route and circles must be drawn on SFC.

CIRRUS Plan

- ETOPS Valid Rule
- Check ETOPS MET FC WX vs ETOPS WX/MIN, CRIT FUEL
- Confirm Route with Flight Plan and NAT Track Signal
- Mark one CIRRUS plan as MASTER
- Confirm CIRRUS is most recent version

CIRRUS Brief and Planning

- Departure Alternate needed/suitable
- Destination weather suitable
- Destination Alternate weather suitable

Aircraft Requirements

- ETOPS Capable
- Confirm Daily Check complete

Departure Delays Greater than 60 Minutes

- Confirm weather is still acceptable for flight

Before Entering MNPS Airspace

- Check filed level is optimised (FCOM NP 2.44 Climb and Cruise Procedure)
- Request clearance between 90min and 30min before entry point
- Flights entering via New York OCA may be cleared 'as filed'. CIRRUS validity must be checked against the most up to date release and ATC flight plan. After which the MASTER CIRRUS is used as the clearance
- Confirm MNPS and RVSM status not downgraded
- Review contingencies

Route Checking & Reroute Procedure

- For full Procedure see B777 FCOM SP 3.30 MNPS Route Checking and Waypoint Crossing Procedures, or flowchart for pictorial representation
- Accept and Load CPDLC ATC Route Uplinks
- PM checks and modifies route (if required) working from clearance to FMC
- If exit point has changed, leave discontinuity between new exit point and planned domestic routing until specific domestic clearance is obtained
- PM checks unnamed waypoints using full lat/long against CIRRUS FMC page (if available) or Expansion in FMC NAV DATA.
- PF checks route working from FMC to clearance
- PF expands and checks unnamed waypoints in full lat/long using FMC scratchpad or NAV DATA
- PF reads each waypoint sequentially from the CDU LEGS page, PM checks and annotates master CIRRUS.
- Request and load new winds and temperatures as needed
- Confirm new route remains within ETOPS rule distance
- Following crew handover, the relieving pilot carries out the PF checking tasks detailed above in full
- For any discrepancy, at any stage, start procedure again.

Contingencies

- Contingency procedures
- Weather deviation procedures
- MSA vs MOA
- NAT MNPS FL285-420
- ETPs
- MET/AIS/Charts/Perf for ERAs (normal minima applies)

Entering MNPS

- Fix Mach No. in FMC
- ANP vs RNP
- SLOP 0, R1 or R2 after MNPS airspace
- VHF 121.5 and 123.45
- Squawk A2000 after 30 min

Waypoint Crossing Procedure

- ANP vs RNP
- Active waypoint matches clearance
- LNAV Roll FMA
- Aircraft turns towards next waypoint
- Record ATA & FOB on CIRRUS
- Revise ETAs

Leaving MNPS

- Obtain domestic clearance
- Remove any route discontinuity from exit point
- Delete SLOP and fly by MNPS exit point with 0 XTK ERROR
- Select ECON cruise and review optimised level
- ANP vs RNP

Systems Failures in Flight

Any failures after dispatch or in flight will be handled in accordance with Non-Normal Procedures in the QRH/ECL or elsewhere. There is no requirement for any limitations to be applied prior to entry into the ETOPS segment of the flight. For example, a pack failure in flight may be carried into the ETOPS segment without restriction on OFAR/OFCR occupancy, which would not be allowable if the defect was deferred prior to dispatch.

Route Checking Flowchart

