STATE OF LIBYA MINISTRY OF TRANSPORT CIVIL AVIATION AUTHORITY FLIGHT SAFETY DEPARTMENT



دولة ليبيا وزارة المواصلات مصلحة الطيران المدني ادارة سلامة الطيران

Flight Safety Department – Operations Section APPLICATION FOR ETOPS APPROVAL

| This form is designed to elicit all the required information from those operators requiring ETOPS Approval. Please read the 'Notes for Completion' before completing the form electronically. | | | | For Civil Aviation use only Operator: File Ref: Date: | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------|---------|-------------------------------------------------------------------------------------------------------------------------|--|
| information give Civil Aviation finalising appli | ven. If data is missing or or Authority may request the cation. | mitted the prod | cess m | be required to check and confirm the ay take considerably longer. The Libyan ion flights / dispatch capabilities before | |
| | OPERATOR DETAILS perator Name | | | | |
| | AOC Number | | | | |
| | AIRCRAFT DETAILS | | | | |
| , | Aircraft Type | | | | |
| Reg | gistration Marks | | | | |
| S | Serial Number | | | | |
| Engi | ne #1 Type / S/N | 1 | | | |
| Engir | ne #2 Type / S/N | 1 | | | |
| AI | PU Type / S/N | 1 | | | |
| SECTION III: | ETOPS APPROVAL CAT | EGORIES (Tid | ck as a | ipplicable) | |
| | 120 minutes | } | | | |
| | 180 minutes | } | | | |
| | Other (Please sp | ecify) | | | |
| | | | | | |

LYCAA.FSD.OPS.FRM.06 Form pages: 1 of 12

SECTION IV: INTENDED AREAS OF OPERATION & PLANNED UTILISATION

| AREAS | PLANNED UTILISATION (HRS) |
|-------|---------------------------|
| | |
| | |

SECTION V: DOCUMENTATION

| 1 | Required Documentation | |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | To process this application copies of the following documents (where relevant) are required: | |
| | Original AOC Variation form. | |
| | Relevant extracts/references from AFM and STC. | |
| | Maintenance Programme, CMP. | |
| | Relevant extracts/references from Operations Manual Part A, B, C and D. | |
| | MEL | |
| , | Original documents should not be sent, photocopies are sufficient. Do not send complete manuals, only the relevant sections/pages will be required. Failure to include all relevant documentation may result in a delay in processing your application. | |

SECTION VI: NOTES FOR COMPLETION

| 1 | Applicability |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Extended Range Operations with Two-Engine Aeroplanes (ETOPS) applies to operators wishing to use twin-engined aircraft more than 60 minutes' flying time from a suitable diversion aerodrome. Such routes could be long ocean crossings, polar routes or routes where there are limited diversions available, e.g. trans-Siberia. |
| | The requirements for Operator Approval to carry out ETOPS are laid out in LYCARs – OPS Part-SPA and GM1/ AMC 20-6 " EASA AMC 20-6 ". |
| | ETOPS is a major process, which will involve all aspects of a company's operation. It is therefore strongly recommended that your Flight Operations Inspector be contacted before submitting an application. It is likely that an MNPS, RVSM and RNP-10 approval will also be required. |
| 2 | Operator's ETOPS Approval Submission Matrices |
| | The completed Operator's ETOPS submission matrices must be submitted together with the Application for ETOPS Approval. All applicants should complete approval matrices in full. |
| | Failure to complete the Submissions Matrices may result in a delay in processing your application. |
| 3 | Submissions and Enquiries |
| | Address for submissions: LIBYAN Civil Aviation Authority Flight Safety Department Main Headquarter, Tripoli, Libya Contact details for enquiries: Tel: +213330256 Fax: +213605322 |

LYCAA.FSD.OPS.FRM.06 Form pages: 2 of 12

SECTION VII: ETOPS APPROVAL MATRIX – AIRWORTHINESS

ETOPS type design approval for the aircraft type

| AFM Status: | | | AFM Supple | ement: | | |
|----------------------------------------------------------------------------------------|---------------|-------|---------------|----------|--|--|
| STC (if applicable): | | | | | | |
| CMP Revision: | | | | | | |
| CMP Compliance: | | | | | | |
| Aircraft modification s | status for | | | | | |
| ETOPS Manual Refe | rence: | | R | evision: | | |
| Operator Experience | e and Reliabi | ility | | | | |
| Total Number of long/ and/or normal operati with airframe/engine combination: | | | | | | |
| Total number of airframe/engine hours cycles: | s and | | | | | |
| Total Number of IFSD |) : | | | | | |
| Unscheduled engine rate /1000FH: | removal | | | | | |
| Diversions or Turnbac | ck: | | | | | |
| Uncommanded power changes or surges: | | | | | | |
| Inability to control the engine or obtain desired power: | | | | | | |
| Problems with ETOPS critical systems: | | | | | | |
| APU Reliability records: | | | | | | |
| A/C Systems components Reliability Records: | | | | | | |
| Records of Major Eve | ents: | | | | | |

Maintenance Programme (make reference to the applicable heading in the referred documents) MP Ref: Amendment Status: Date: Identification of ETOPS **ETOPS** Related Tasks: Procedures: Non Duplication of **ETOPS Service Checks:** Tasks: Engine Trend Monitoring (make reference to the applicable heading in the applicable documents) Contracted Organisation: Contract Ref: Magnetic Chip Detector Trend Monitoring: Monitoring: Engine Adjustment Margin Control: Procedure: Spectrographic Oil Responsibilities: Analysis: Oil Consumption Record: **Maintenance** Part-145 AMO (Name and Approval Ref) Contracted Maintenance Organisation MOE (Scope and Procedure Reference) Inhouse Certifying Staff Training (Initial/Current): Certifying Authorisations (Scope and Currency):

LYCAA.FSD.OPS.FRM 06 pages: 4 of 12



SECTION VIII – FLIGHT OPERATIONS

| Subjects | Requirements | Operator's Operations Manual or Document Reference | LYCAA Use Only |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------|
| Operations Manual – Part A: General | | | |
| Documents/regulations used in compiling ETOPS Manual/Procedures | LYCARs –Air operations Subpart F SPA.ETOPS.100- PART.SPA.ETOPS.115 and AMC 20-6 based on EASA AMC 20-6 | | |
| Brief description of ETOPS | | | |
| Definitions | Extended Operations. Adequate aerodrome. Approved one-engine inoperative cruise speed. Threshold distance/time. Adequate ETOPS en-route alternate. Equal time points. Rule distance/time. ETOPS segment. ETOPS significant system. Maximum approved diversion time. Dispatch. | | |
| Criteria | Company AOC defined operating area. List of certified aircraft types/engine combinations. | | |
| Approval | Approved diversion time. | | |
| Qualifications | Crew qualifications. ETOPS qualified dispatcher personnel. ETOPS qualified operations staff. ETOPS qualified maintenance personnel. | | |
| Training (Initial and Recurrent) and Checking | Flight crew training and Operations Manual. Flight crew currency requirements. | | |

LYCAA.FSD.OPS.FRM.06 pages: 5 of 12



| Subjects | Requirements | Operator's Operations Manual or Document Reference | LYCAA Use Only |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------|
| ETOPS Authorisation | Commander's responsibilities. Statement to show when ETOPS are allowed. | | |
| ETOPS Flight Preparation and Planning | Aircraft serviceability and MEL. Communication and navigation facilities. Critical fuel scenario. Critical fuel reserve. ETOPS alternate aerodrome selection. ETOPS alternate planning minima. Pre-dispatch and post-dispatch weather minima. Computerised flight plan. Delayed dispatch. Maintenance check (pre-departure service check). Verification flights. | | |
| Flight Crew Procedures | Crew responsibilities. Flight documentation/chart handling. Fuel management. Weather monitoring. Change of routing. Diversion decision-making. Icing. Crew workload management. | | |
| Type-related ETOPS Operations | Identification of ETOPS aeroplanes. Types of ETOPS operations that are approved. Placards and limitations. One-engine inoperative speed. | | |

LYCAA.FSD.OPS.FRM.06 pages: 6 of 12



| Subjects | Requirements | Operator's Operations Manual or Document Reference | LYCAA Use Only | | |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------|--|--|
| Operations Manual – Part B: Type Sp | Operations Manual – Part B: Type Specific | | | | |
| Type-specific Planning Requirements | | | | | |
| ETOPS Fuel Planning | Including critical fuel scenario. | | | | |
| MEL/CDL | ETOPS-specific MEL/CDL items. | | | | |
| Aeroplane Systems | Performance data. Aerodrome technical differences, navigation fit, communications fit. | | | | |
| Non-normal Procedures | Navigation failures. Action to be taken on ETOPS significant system failure. Low fuel scenario. Crew incapacitation. | | | | |
| Operations Manual – Part C: Route and Aerodrome Instructions | | | | | |
| ETOPS Areas and Routes. | Approved area of operation. ETOPS en-route alternates. Performance restrictions and weather minima for en-route alternates. Meteorological facilities/information. Low altitude cruise information. Route minimum diversion altitudes. MSA restrictions. Route-specific oxygen requirements. | | | | |

LYCAA.FSD.OPS.FRM.06 pages: 7 of 12



| Subjects | Requirements | Operator's Operations Manual or Document Reference | LYCAA Use Only | | | |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------|--|--|--|
| Operations Manual – Part D: Training | Operations Manual – Part D: Training | | | | | |
| Ground, Simulator and Line Training | General: ETOPS overview. ETOPS regulations. ETOPS type design approval. Definitions Approved one-engine inoperative speed. Maximum approved diversion time. Operator's approved diversion time. ETOPS area of operation. ETOPS routes. ETOPS alternate aerodromes and weather minima. Navigation system accuracy, limitations and operating procedures. Meteorological facilities and information. In-flight monitoring and procedures. Computerised flight plan. Charts and position plotting. Equal time point. Critical fuel. | | | | | |

LYCAA.FSD.OPS.FRM.06 pages: 8 of 12



| Subjects | Requirements | Operator's Operations Manual or Document Reference | LYCAA Use Only | | | |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------|--|--|--|
| Operations Manual – Part D: Training | Operations Manual – Part D: Training | | | | | |
| Ground, Simulator and Line Training | General: ETOPS overview. ETOPS regulations. ETOPS type design approval. Definitions Approved one-engine inoperative speed. Maximum approved diversion time. Operator's approved diversion time. ETOPS area of operation. ETOPS routes. ETOPS alternate aerodromes and weather minima. Navigation system accuracy, limitations and operating procedures. Meteorological facilities and information. In-flight monitoring and procedures. Computerised flight plan. Charts and position plotting. Equal time point. Critical fuel. | | | | | |

LYCAA.FSD.OPS.FRM.06 pages: 9 of 12



| Subjects | Requirements | Operator's Operations Manual or Document Reference | LYCAA Use Only |
|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------|
| Operations Manual – Part D: Training | g (Cont'd) | | |
| Ground, Simulator and Line Training cont. | Normal procedures: Flight planning and dispatch. ETOPS fuel requirements. Route alternate selection – weather minima. MEL – equipment-specific. ETOPS service check and technical log. Pre-flight FMS set-up. Flight performance progress monitoring. Flight management, navigation and communication systems. Aeroplane system monitoring. Weather monitoring. In-flight fuel management (to include independent cross-checking of fuel quantity). Non-normal procedures: Diversion procedures and diversion 'decision making'. Navigation and communication systems, including appropriate flight management devices in degraded modes. Fuel management with degraded systems. Procedures for single and multiple failures in flight affecting ETOPS sector entry and diversion decisions. Operating on standby power. Operating restrictions associated with system failures including any applicable MEL considerations. | | |
| ETOPS Simulator Training and Line Flying Under Supervision. | Pilot's conversion course. Annual refresher course. | | |

LYCAA.FSD.OPS.FRM.06 pages: 10 of 12



| Subjects | Requirements | Operator's Operations Manual or Document Reference | LYCAA Use Only | |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------|--|
| Operations Manual – Part D: Training | g (Cont'd) | | | |
| Flight Operations Staff and Dispatchers. | Outline of training syllabus to include: ETOPS regulations. Operational approval. Aeroplane performance. Diversion procedures. Area of operation. Fuel requirements. Dispatch consideration: MEL, CDL, weather minima and alternate airports. Delayed dispatch. Documentation | | | |
| Safety Management System | | | | |
| Operational Risk Assessment | Attach an Operational Risk Assessment highlighted associated risks and mitigating actions. | | | |

LYCAA.FSD.OPS.FRM.06 pages: 11 of 12



| Further Comments to support your application: | | |
|--------------------------------------------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | |
| | | |
| | | |
| Continuing Airworthiness Manager | Name: | Signature: |
| | | |
| Nominated Person Flight Operations | Name: | Signature: |
| | | |
| Compliance Monitoring Manager | Name: | Signature: |
| Date: | | |
| | | |
| For Civil Aviation Directorate use only | | |
| Airworthiness Inspectorate | | Flight Operations Inspectorate |
| Conformity with Initial and Continuing Airworthiness Requirements: | | Conformity with operational criteria as contained in AMC 20-6, and all relevant provisions have been covered by operator's application and AOC variation form. |
| Satisfactory Yes No | | Satisfactory Yes No |
| Name: | | Manage |
| | | Name: |
| Signature: Date: | | Signature: Date: |