



Airworthiness Standards Department
ETOPS Airworthiness Approval Process Form

• Name of the Operator			
• Address			
• Applicant Focal Point	Name	Telephone No.	E-Mail

Aircraft Manufacturer, Model and Series	Aircraft Registration	Identification of Group 1 and Group 2 ETOPS Significant System attachment(s)

- General:**
- (1) Accelerated ETOPS Operations Approval application, with the required supporting data, is submitted **six (6) months** before the proposed start of ETOPS.
 - (2) In-Service ETOPS approval application, with the required supporting data, is submitted at least **three (3) months** prior to the proposed start of ETOPS with the specific airframe/engine combination,
 - (3) The Operator's Approved Diversion Time is an operational limit that should not exceed either:
 - the Maximum Approved Diversion Time or,
 - the time-limited system capability minus 15 minutes.
 - (4) Authorized maximum diversion time may be progressively increased as the operator gains experience on the particular airframe/engine combination. Not less than 12 consecutive months experience will normally be required before authorization of ETOPS up to 180 minutes maximum diversion time, unless the operator can demonstrate compensating factors,
 - (5) Each operator requesting Approval to conduct ETOPS beyond 180 minutes should already have ETOPS experience and hold a 180 minutes ETOPS approval.

I	Airworthiness application's attachments	Attachment no./ref.	Submitted		Inspector comments
			Yes	No	
(a)	<p>For <i>Accelerated ETOPS Operations</i>, an approval plan, which define:</p> <ul style="list-style-type: none"> • ETOPS diversion time, • The proposed one-engine-inoperative cruise speed, • How to comply with the ETOPS Airworthiness Processes, • The resources allocated to each ETOPS process, • How to establish compliance with the build standard required for Type Design Approval, e.g. CMP document compliance, • Review Gates. <p>For <i>In-Service ETOPS approval</i>, a report indicating the operator's capability to maintain and operate the specific airframe/engine combination for the intended extended range operation.</p>				
(b)	<p>Airworthiness documents showing ETOPS compliance, i.e. Airframe/engine combination and engine compliance to ETOPS Type Design Build Standard (CMP).</p>				



Airworthiness Standards Department
ETOPS Airworthiness Approval Process Form

	<p>AFM, AFM Revision, AFM Supplement and Type Certificate Data Sheet (<i>Aircraft and Engine</i> TCDSs) showing ETOPS operation eligibility.</p> <p>If Aircraft/Engine are modified/or in process to be modified to meet ETOPS standards. Submit the documentation and records of modification.</p>				
(c)	<p>ETOPS Systems</p> <p>Identification and listing of aeroplane propulsion system and any other aeroplane systems whose failure could adversely affect the safety of an ETOPS flight, or whose functioning is important to continued safe flight and landing during an aeroplane diversion.</p>				
(d)	<p>Maintenance and reliability programs</p> <p>ETOPS maintenance and reliability programs developed to maintain an acceptable level of safety for the propulsion system and the ETOPS Significant Systems of the particular airframe/engine combination.</p>				
(e)	<p>Minimum equipment list (MEL) showing the system redundancy levels appropriate to ETOPS Operations.</p>				
(f)	<p>Training</p> <p>ETOPS initial and recurrent training program in place for CAMO and AMO personnel.</p>				
(g)	<p>Policies and procedures (P&P)</p> <p>Appropriate CAME procedures to be used by all personnel involved in the continuing airworthiness and maintenance of the aircraft, including supportive training program, duties, and responsibilities are developed by the CAMO.</p>				
(h)	<p>Plan for Validation of the Operator's ETOPS Airworthiness Processes</p>				
(i)	<p>Review Gates tracking plan (for accelerated ETOPS approval)</p>				
II	Assessment of Eligibility for ETOPS Operations	AMC 20-6	Operator submitted compliance document/ attachment	Inspector review/comments	
(a)	<p>Aircraft and System eligibility; Airframe/engine combination and engine compliance to ETOPS Type Design Build Standard (CMP).</p>	<p>Ch-III, 5.1/A/5&B/1</p>			



Airworthiness Standards Department
ETOPS Airworthiness Approval Process Form

1.	The Type design approval, the Maximum Approved Diversion Time and demonstrated capability of any time-limited systems is reflected in the approved AFM or AFM-Supplement, and the Type Certification Data Sheet or Supplemental Type Certificate	Ch-II, Sec. 10; Ch-III, Sec. 5&6		
2.	Engine ETOPS Type Design approval and Maximum Approved Diversion Time is reflected in the engine Type Certification Data Sheet or Supplemental Type Certificate	Ch-II, Sec. 10; Ch-III, Sec. 5&6		
(b)	Continuing Airworthiness (CA); Maintenance and Reliability Programs	Ch-III, 5.1/A/3, & Appendix 8		
1.	Specific ETOPS maintenance tasks identified by the (S)TC holder in the CMP document or equivalent is included in the maintenance program and identified as ETOPS tasks.	Appendix 8/3.1		
2.	The maintenance program includes tasks to maintain the integrity of cargo compartment and pressurization features, including baggage hold liners, door seals and drain valve condition.	Appendix 8/3.1		
3.	ETOPS service check is developed to verify the status of the aeroplane and the ETOPS significant systems	Appendix 8/3.1.1		
4.	RELIABILITY PROGRAM is event oriented and incorporate;	Ch-III, 5.1/A/3, Appendix 8/3.2		
i	Occurrence reporting	Appendix 8/2		
ii	Operator's assessment of propulsion systems reliability	Ch-III, 5.1/A/3, 5.1/B/4, or 6.3 as applicable & Appendix 8/3.2.2		
iii	APU in-flight start program	Appendix 8/3.2.3		
iv	Oil consumption program	Ch-III, 5.1/A/3, Appendix 8/3.2.4		
v	Engine Condition Monitoring program	Ch-III, 5.1/A/3, Appendix 8/3.2.5		
vi	Verification program	Ch-III, 5.1/A/3, Appendix 8/3.2.6		
(c)	MEL The system redundancy levels appropriate to ETOPS is reflected in the Minimum Equipment List (MEL).	Appendix 4/2		
(d)	ETOPS Systems Identification and listing of aeroplane propulsion system and any other aeroplane systems whose failure could adversely affect the safety of an ETOPS flight, or whose functioning is important to continued safe flight and landing during an aeroplane diversion.	Ch-I, Ch-2&Ch-3		



Airworthiness Standards Department
ETOPS Airworthiness Approval Process Form

(e)	<p>ETOPS training program for personnel involved in the continuing airworthiness and maintenance of the ETOPS Fleet.</p> <p>ETOPS initial and recurrent training program is developed by the CAMO.</p>	Appendix 8/5.1		
(f)	<p>Competence of Continuing Airworthiness and Maintenance Personnel</p>			
1.	Ensure that personnel involved in the continuing airworthiness management of the aircraft have knowledge of the ETOPS procedures of the operator.	Appendix 8/5		
2.	Ensure that maintenance personnel that are involved in ETOPS maintenance tasks:	Appendix 8/5		
i	Have completed an ETOPS training program reflecting the relevant ETOPS procedures of the operator,	Appendix 8/5		
ii	Have satisfactorily performed ETOPS tasks under supervision, within the framework of the Part-145 approved procedures for Personnel Authorizations.	Appendix 8/5		
(g)	CAME addresses;			
1.	General description of ETOPS procedures	Appendix 8/4		
2.	ETOPS maintenance program development and amendment	Appendix 8/4		
3.	ETOPS reliability program procedures	Appendix 8/4		
4.	Parts and configuration control program	Ch-III, 5.1/A/3, Appendix 8/4		
5.	Maintenance procedures that include procedures to preclude identical errors being applied to multiple similar elements in any ETOPS significant system.	Appendix 8/4		
6.	Interface procedures with the ETOPS maintenance contractor, including the operator ETOPS procedures that involve the maintenance organization and the specific requirements of the contract.	Appendix 8/4		
7.	Procedures to establish and control the competence of the personnel involved in the continuing airworthiness and maintenance of the ETOPS fleet.	Appendix 8/4		
(h)	Validation of the Operator's ETOPS Airworthiness Processes	Ch III, Sec-5, 5.2 & 5.3 or Sec-6, 6.4, <i>as applicable.</i>		
1.	Demonstration that the continuing airworthiness processes are in place and functions as intended.			
3.	Demonstration that the ETOPS continuing airworthiness processes are being properly conducted.			
2.	Demonstration competence to safely conduct and adequately support the intended operation.			
(i)	Review Gates (for accelerated ETOPS approval)	Ch III, Sec-5, 5.1, A/6		
1.	Review gate process start six months before the proposed start of ETOPS and continues until at least six months after the start of ETOPS.			



Airworthiness Standards Department
ETOPS Airworthiness Approval Process Form

2.	The review gate process help ensure that the proven processes comply with the provisions of the requirements and are capable of continued ETOPS operations			
(j)	Specific Requirements	7.2		
1.	Approval for 90 minutes or less diversion time	7.2.1		
2.	Approval for Diversion time above 90 minutes up to 180 minutes	7.2.2		
i	Considerations for aircraft with 120 minutes Maximum Approved Diversion Time	7.2.2(i)		
ii	Considerations for aircraft with 180 minutes Maximum Approved Diversion Time	7.2.2(ii)		
3.	Approval for diversion time above 180 minutes	<i>7.2.3 & 7.2.4 as applicable</i>		

Applicant Declaration:		
I confirm that the information contained herein is correct and complete		
Organization CAMO Manager Name	Signature	Date

FOR CARC USE ONLY

III	CARC Survey and Inspection	Inspection Report Ref.	Corrective Actions (CA) Ref.	CA Acceptance Ref.
	If necessary, a formal inspection and or validation flight are (is) arranged with the operator. During such activities, the operator is required to demonstrate how the requirements are being met.			

CARC/AWSD Recommendation			
Issue Airworthiness Approval Letter <input type="checkbox"/> Yes <input type="checkbox"/> No			
Airworthiness Inspector			
	Name	Signature	Date