NIGERIAN CIVIL AVIATION AUTHORITY
AVIATION HOUSE
P. M. B. 21029, 21038, Ikeja, Lagos, Nigeria

CL: O-OPS 031 EXTENDED DIVERSION TIME OPERATIONS (EDTO)

Instructions for Use:

1. Check **`S**' column if you reviewed the record, procedure or event and it is **`Satisfactory'**.
2. Check **`U**' column if you reviewed the record, procedure or event and it is **`Unsatisfactory'**.
3. Check **NS** (**not seen**) column if you did not review the record, procedure or event or you do not have adequate information to make a valid comment.
4. Check **NA** (**not applicable**) column, if the line item is not required in this particular situation.
5. 'Enter any notes on reverse side regarding a 'U' answer for transfer to the Safety Issues Resolution Report.
6. For later reference, precede any notes with the appropriate question number.

S/N	OVERALL MANUAL APPEARANCE	S	U	NS	NA
0	COMPLETE CHECKLIST CL: O-OPS 020B				

S/N	APPROVAL PROCESS	S	U	NS	NA
	Two engine airplane systems design items for Type Design Approval includes:				
1	Electrical System Redundancy				
2	Battery Life				
3	Full Time APU				
4	Emergency/Standby Electrical Generation Systems				
5	Redundancy in Hydraulic and Pneumatic Systems				
6	Increased Endurance of Time-Limited Equipment				
7	Improved Ice Protection				
8	Reduction of crew workload in normal and non-normal flight situations				
9	Cargo Fire Suppression Longevity				
	OPERATIONAL APPROVAL	**S**	**U**	**NS**	**NA**
	Compliance with ALL of the following aspects:				
10	Airplane Configuration				
11	Maintenance Practices				
12	Special Training/Briefing for Engineers, Pilots and Dispatchers				
13	Flight operations one engine in-operational flight procedures				
14	Flight dispatch and continuous flight watch and control of EDTO operations				
15	Definition of en-route aerodromes and alternate minima				
	FLIGHT OPERATIONS ASPECT	**S**	**U**	**NS**	**NA**
16	Two engine airplane Minimum Equipment List [MEL] is in place				
17	Two engine airplane component reliability record and assurance programme is established				
18	Pilots and dispatchers have undergone the requisite two engine airplane training				
19	Two engine airplane aspects have been included in the various operational documentation				
20	Successful operation of validation flight[s] – observed by the NCAA				
	MAINTENANCE ASPECT	**S**	**U**	**NS**	**NA**
21	The airplane configuration and subsequent changes captured in the CMP standards				
22	The airframe/engine combination has met the required reliability standards; e.g. IFSD rate of 0.0022/1000 hours for 180 minutes two engine airplane				
23	The two engine airplane maintenance practices and procedures are demonstrated to be in place				
	PILOTS AND DISPATCHERS TRAINING	**S**	**U**	**NS**	**NA**
24	Two engine airplane - Regulations/Operational Approval				
25	Aircraft Performance and Diversion Strategies				
26	Area of Operations				
27	Fuel Requirements				

28	Dispatch considerations MMEL, CDL, weather minima				
29	Flight crew documentation and procedures				
30	Line and recurrent training and check				
	MAINTENANCE PERSONNEL TRAINING	**S**	**U**	**NS**	**NA**
31	Two engine airplane – Regulations/Operational Approval				
32	Dispatch considerations				
33	Airplane configurations; additional maintenance tasks [CMP]				
34	Engine and systems review				
35	Two engine airplane service checks:				
	a] Spare parts control				
	b] Engine/APU preventive maintenance				
	c] IFSD preventive programme				
	d] Use of on-board maintenance facilities				
	FLIGHT PLANNING ANALYSIS	**S**	**U**	**NS**	**NA**
36	Operational Flight Plan:				
	a] Manually generated/computer generated				
	b] Appropriate routing				
	c] Weather acquisition system				
	d] Fuel planning system				
	e] Contingency Information				
37	Suitable En-route Alternate Airports				
	a] Fire protection				
	b] Passenger handling [including lodging]				
	c] Fuel and Oil servicing				
	d] Approach facilities				
	e] Airport lighting				
	f] Airport facilities				
	g] Maintenance facilities				
	h] Stable weather conditions				
	i] Medical facilities				
38	Alternate weather validity period [1hr before earliest ETA until 1hr after latest ETA]				
39	Dispatch alternate weather minima:				
	a] 1 runway: DH/MDA +400 feet and vis +1500 meters				
	b] 2 runways [with approach facilities]: DH/MDA +200ft and vis +800 meters				
40	EDTO fuel burn performance tables or graphs available				
41	Fuel planning [FL100, one engine out, ice accumulation]				
42	Critical fuel scenario description				
	LONG RANGE ROUTE REQUIREMENTS	**S**	**U**	**NS**	**NA**
43	Survival equipment and its use				
44	Communication Equipment [VHF, HF, SATCOM]				
45	Navigation [RNAV, GPS, IRS, RVSM, MNPS]				
46	Passenger and crew oxygen [time and distance]				
	CONTINUING SURVEILLANCE AND REPORTING SYSTEM	**S**	**U**	**NS**	**NA**
47	Any significant service event in the EDTO fleet				
48	Corrective actions for short and long term				
49	Statistical reliability indicators for essential systems and engines				
	SPECIFIC SAFETY RISK ASSESSMENT	**S**	**U**	**NS**	**NA**
50	Has the operator conducted a specific safety risk assessment which demonstrates how an equivalent level of safety will be maintained, taking into account the following:				
	a] Capabilities of the operator				
	b] Overall reliability of the airplane				
	c] Reliability of each time limited system				
	d] Relevant information from the airplane manufacturer				
	e] Specific mitigation measures				
51	As regards alternate aerodromes, specific safety risk assessment to be demonstrated shall contain the following:				
	a] Capabilities of the operator				

	b] Overall capability of the airplane and its systems				
	c] Available aerodrome technologies, capabilities and infrastructures				
	d] Quality and reliability of meteorological information				
	e] Identified hazards and safety risks associated with each alternate aerodrome variations				
	f] Specific mitigation measures				
52	**RESERVED**				
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54	**RESERVED**				
55	**RESERVED**				
56	**RESERVED**				

REMARKS & OBSERVATIONS

INSPECTOR NAME:_____ **SIGNATURE:**_____

DATE: _____