Design Change Categorization Checklist

Instructions:

The purpose of this checklist is to assist in determining that a proposed design change is correctly categorized as 'Minor' or 'Major' and to record the results.

1. **Part 1 – Design Change Information.** Insert the relevant information. Include references to relevant design change description and analysis data.
2. **Part 2 – Design Change Categorization Questions.** Answer all of the questions in Part 2. If the response to one or more of the checklist questions is 'Yes', then the design change has 'an appreciable effect' and must be categorized as 'Major'. If the responses are all 'No' then the change is categorized as minor.
3. **Part 3 – Design Change Categorization Review and Approval.** This section is to be completed by an individual authorized by the TAA to accept/approve the categorization results.

PART 1 – DESIGN CHANGE INFORMATION			
Project / Design Change Title:			
Aircraft Designation:			
System/Component(s) Affected:			
Description of Change:			
Design Change File #:		**RDIMS #**:	
OPI:			
	NAME	**DESIGNATION**	**PHONE #**

PART 2 – DESIGN CHANGE CATEGORIZATION QUESTION SET

(See Annex B for advisory information on answering Part 2 questions)

A. GENERAL CRITERIA – Applicable to all of the Aircraft Systems

(Also see Advisory Material in Annex B – Para 2.1)

No.	QUESTION	RESPONSE	COMMENTS
A1	Does the System Safety Assessment (SSA) / Functional Hazard Assessment (FHA) for the design change result in an increase in the severity of the hazard classification level?	☐ Yes ☐ No	
A2	Will the change require the addition of any new airworthiness requirements, or a new interpretation of the certification requirements in the design certification basis?	☐ Yes ☐ No	
A3	Will the change require the use of a means/methods of demonstrating compliance that is appreciably different from the one previously used in certifying the type, or one that the TAA had not previously accepted?	☐ Yes ☐ No	
A4	Will the change alter (add, remove or amend) any of the aircraft limitations or restrictions?	☐ Yes ☐ No	
A5	Will the change introduce a new or revised standard or means of compliance as compared to those used in the original certification of the design?	☐ Yes ☐ No	

B. AIRCRAFT USAGE, PERFORMANCE AND FLIGHT CHARACTERISTICS

(Also see Advisory Material in Annex B – Para 2.2)

No.	QUESTION	RESPONSE	COMMENTS
B1	Will there be an appreciable change to the aircraft roles, missions or capabilities?	☐ Yes ☐ No	
B2	Will there be any appreciable changes to the aircraft operating environment?	☐ Yes ☐ No	
B3	Will the change appreciably affect the ability of the aircraft to operate in controlled airspace?	☐ Yes ☐ No	
B4	Will the change have an appreciable effect on the aircraft's performance characteristics or limitations?	☐ Yes ☐ No	
B5	Will the change have an appreciable effect on the exterior profile of the aircraft?	☐ Yes ☐ No	
B6	Will the change appreciably affect the installation, configuration, service life or performance of any propellers, main rotor or tail rotors?	☐ Yes ☐ No	
B7	Will the change appreciably affect the ability of the aircraft to continue to meet the environmental noise standards established during the original certification of the design?	☐ Yes ☐ No	

C. STRUCTURES AND MECHANICAL SYSTEMS
(Also see Advisory Material in Annex B – Para 2.3)

No.	QUESTION	RESPONSE	COMMENTS
C1	Will the change have an appreciable effect on the structural strength, loads applied or dynamic response related to the airframe, dynamic components, flight controls, mechanical systems or mission equipment?	☐ Yes ☐ No	
C2	Will the design change alter the physical characteristics or performance of a life limited part or structural components that are subject to damage tolerance or fatigue evaluation?	☐ Yes ☐ No	
C3	Will the change have an appreciable effect on the configuration, operation, function or performance of any of the aircraft systems? Example include: • undercarriage, wheels, and brakes • mechanical, hydraulic or electro-mechanical portions of the flight control system • ice protection • air data	☐ Yes ☐ No	
C4	Will the change introduce new structural components or materials to the aircraft compartments, such as mission consoles, equipment racks or crew seats?	☐ Yes ☐ No	

D. FLIGHT AVIONICS – INSTRUMENTS AND DISPLAYS, FLIGHT CONTROL AND MANAGEMENT SYSTEMS, NAVIGATON AND COMMUNICATION SYSTEMS
(Also see Advisory Material in Annex B – Para 2.4)

No.	QUESTION	RESPONSE	COMMENTS
D1	Will the change replace, modify or introduce new avionics systems, equipment functions or capabilities that have failure effects with a system safety classification of 'Catastrophic, 'Hazardous' or 'Major'?	☐ Yes ☐ No	

E. AIRBORNE SOFTWARE AND AIRBORNE ELECTRONIC HARDWARE (AEH)
(Also see Advisory Material in Annex B – Para 2.5)

No.	QUESTION	RESPONSE	COMMENTS
E1	Will the change modify, add or remove functions, features, capabilities or software life cycle data that could affect existing airborne software that has a system safety classification requirement of 'Catastrophic', 'Hazardous', or 'Major'?	☐ Yes ☐ No	

E2	Will the change introduce the use of a “new” airborne software that has a system safety classification requirement of ‘Catastrophic’, ‘Hazardous’ or ‘Major’? “New” is used in this context to designate a software that has never been certified for this particular platform (aircraft). This includes a new developed software or a previously certified software from other civil or military platforms.	☐ Yes ☐ No	
E3	Will the change modify the software Design Assurance Level (DAL) classification or the Software Criticality Indices (SwCl) classification?	☐ Yes ☐ No	
E4	Will the design change affect software that has been previously been assigned a DAL level of A, B or C or a SwCI classification of 1, 2, or 3?	☐ Yes ☐ No	

F. AIRBORNE ELECTRONIC HARDWARE (AEH)
(Also see Advisory Material in Annex B – Para 2.6)

F1	Will the change modify, add or remove functions, features, capabilities or AEH life cycle data that affect existing AEH that has a system safety classification requirement of ‘Catastrophic’, ‘Hazardous’ or ‘Major’?	☐ Yes ☐ No	
F2	Will the change introduce the use of a “new” AEH that has a system safety classification requirement of ‘Catastrophic’, ‘Hazardous’ or ‘Major’? “New” is used in this context to designate an AEH that has never been certified for this particular platform (aircraft). This includes a new developed AEH or a previously certified AEH from other civil or military platforms.	☐ Yes ☐ No	
F3	Will the design change affect airborne hardware that has been previously assigned a DAL level of A, B or C?	☐ Yes ☐ No	

G. ELECTRICAL SYSTEMS
(Also see Advisory Material in Annex B – Para 2.7)

No.	QUESTION	RESPONSE	COMMENTS
G1	Will the change increase the load or affect the electrical generation capacity?	☐ Yes ☐ No	
G2	Will the change alter the battery time available during an emergency?”	☐ Yes ☐ No	
G3	Will the change have an appreciable effect on any instrument lights, landing lights, wing icing detection lights, position lights, emergency lighting or other flight critical lights, including lighting required by regulation?	☐ Yes ☐ No	

G4	Will the change involve significant wiring modifications that affect the design features that ensure the separation of aircraft wiring-related ignition sources from flammable fluid lines and storage tanks?	☐ Yes ☐ No	

H. OCCUPANT / CABIN SAFETY
(Also see Advisory Material in Annex B – Para 2.8)

No.	QUESTION	RESPONSE	COMMENTS
H1	Will the change to the cabin or flight deck configuration adversely affect any aspects of passenger/crew safety and/or survivability, or be appreciable enough to require a re-assessment of emergency evacuation capability?	☐ Yes ☐ No	
H2	Will a change affect any of the following: 1) the pilot's ability to fly the aircraft; 2) the crew's ability to egress the aircraft or; 3) the seat and seatbelt functionality?	☐ Yes ☐ No	
H3	Will the change introduce new materials to the aircraft compartment interiors that may affect flammability, smoke or toxic gas certification requirements?	☐ Yes ☐ No	
H4	Will the change include a *new cargo handling system and/or nets/bulkheads introduced to protect the occupants in front of the cargo*?	☐ Yes ☐ No	
H5	Will the change have an appreciable effect on any of the fire detection and suppression systems in the cabin, flight station or cargo compartment?	☐ Yes ☐ No	
H6	Will the change have an appreciable effect on the sound pressure levels, as required by human factors requirements, in areas of the air vehicle occupied by personnel during flight or ground operations?	☐ Yes ☐ No	

I. POWERPLANT AND FUEL SYSTEMS
(Also see Advisory Material in Annex B – Para 2.9)

No.	QUESTION	RESPONSE	COMMENTS
I1	Will the change alter the installation or configuration or performance of any engine, transmission or gearboxes?	☐ Yes ☐ No	
I2	Will the change have an appreciable effect on any power-plant, APU or transmission operating limitations, caution/warning systems or fire protection systems?	☐ Yes ☐ No	
I3	Will the change have an appreciable effect on the engine, propeller or rotor ice detection and protection systems?	☐ Yes ☐ No	
I4	Will the change have an appreciable effect on the fuel system (including jettisoning) and related pumps, valves, and piping?	☐ Yes ☐ No	

I5	Will the change have an appreciable effect on the environmental characteristics of noise, fuel venting or engine emissions?	☐ Yes ☐ No	
I6	Will the change involve a new or different means of propulsion or type fuel?	☐ Yes ☐ No	

J. AIRCRAFT STORES – CARRIAGE AND RELEASE
(Also see Advisory Material in Annex B – Para 2.10)

No.	QUESTION	RESPONSE	COMMENTS
J1	Will the change add any new stores or weapons to the approved aircraft configuration, including external fuel tanks, pylons and racks?	☐ Yes ☐ No	
J2	Will the change have an appreciable effect on the manner or operational procedures in which a store is carried, released and/or jettisoned from an aircraft, such that it could affect the safe flight of the aircraft?	☐ Yes ☐ No	

K. ELECTRO-MAGNETIC COMPATIBILITY (EMC), HIGH INTENSITY RADIATED FIELDS (HIRF) AND LIGHTNING
(Also see Advisory Material in Annex B – Para 2.11)

No.	QUESTION	RESPONSE	COMMENTS
K1	Will the change have an appreciable effect on the EMC, HIRF or Lightning clearance of existing aircraft systems or equipment?	☐ Yes ☐ No	
K2	Does the change include new equipment and components that could require an EMC, HIRF or Lightning clearance?	☐ Yes ☐ No	
K3	Does the change have an appreciable effect on systems or equipment that could require an assessment for operation in a HIRF environment?	☐ Yes ☐ No	
K4	Does the change have an appreciable effect on systems or equipment that could require an assessment for lightning protection?	☐ Yes ☐ No	

L. AIRCRAFT CYBERSECURITY
(Also see Advisory Material in Annex B – Para 2.12)

No.	QUESTION	RESPONSE	COMMENTS
L1	Does the change introduce a new data connectivity path or modify the configuration of an existing data connectivity path to external systems or networks, which may affect systems with a safety classification of ‘Catastrophic’, ‘Hazardous’, or ‘Major’?	☐ Yes ☐ No	
L2	Was the design change categorized as ‘Major’ by answering ‘yes’ to any of the questions in section E (Airborne Software and Airborne Electronic Hardware) above?	☐ Yes ☐ No	

L3	Will the design change modify a DAL D or a non-safety related system that is connected to a system with a safety classification of 'Catastrophic', 'Hazardous', or 'Major'?	☐ Yes ☐ No	
M. HUMAN FACTORS (Also see Advisory Material in Annex B – Para 2.13)			
M1	Will the change have an appreciable effect on the flight deck design such that a human factors re-evaluation may be required?	☐ Yes ☐ No	
M2	Will the change have an appreciable effect on the passenger/cabin crew compartment design such that a human factors re-evaluation may be required?	☐ Yes ☐ No	
M3	Will the change have an appreciable effect on the flight deck crew or cabin crew safety of flight procedures, such that a human factors re-evaluation may be required?	☐ Yes ☐ No	
N. APPROVED FLIGHT MANUAL (Also see Advisory Material in Annex B – Para 2.14)			
N1	Will the change modify the approved set of Technical Airworthiness Data (TAWD) information contained in the Flight Manual (FM) or Aircraft Operating Instructions (AOI)?	☐ Yes ☐ No	
N2	Will the change have an appreciable effect on the system operating information in the FM or AOI?	☐ Yes ☐ No	
O. MISSION EQUIPMENT (Also see Advisory Material in Annex B – Para 2.15)			
O1	Will the change have an appreciable effect on the functioning or failure modes of the mission equipment such that it will affect the safe flight of the aircraft, or the ability of the occupants to safely egress the aircraft?	☐ Yes ☐ No	
O2	Does the design change to the mission equipment affect any existing hazards that are classified as 'Major', Hazardous' or 'Catastrophic', in the Functional Hazard Assessment?	☐ Yes ☐ No	

PART 3 – DESIGN CHANGE CATEGORIZATION REVIEW AND APPROVAL

(To be completed by an Authorized Individual (AI))

DESIGN CHANGE APPROVED AS: ☐ **MAJOR** ☐ **MINOR** (check as applicable)

Comments:	
Approved By:	_____ Signature _____ Date

NAME	**DESIGNATION**	**PHONE**