Title: Rotor drive Systems and Powerplant Analysis Flowchart Figure 2-3.1-Clarification

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Issue: Section 2-3. Aircraft Systems / Powerplant Analysis Procedure Figure 2-3.1, Systems and Powerplant Analysis Flowchart page 12 MSG-3 Volume 2 is not clear after Level 1 analysis is performed. Some information is missing, and the decision between systems (left path) and functions (right path) is inappropriate.

Problem: Flowcharts presented throughout the MSG-3 document are a visual aid to the analysts, during the analysis process.

The current systems / powerplant flowchart presented (Figure 2-3.1) does not mention that after the analyst has finished Level 1 analysis, he (she) needs to evaluate Rotors/Drive systems load carrying functions that where categorized either as a route 5 or as a route 8 at the previous Level 1 analysis. The path to follow after Level 1 analysis is not clear.
analysis should be easier to understand if all criteria leading to the right path (Supplemental analysis) are listed.

Moreover, the decision to run the right path or the left path should be taken on objects of the same nature, not between systems and functions.
Recommendation (including Implementation):
Modification of Figure 2-3.1

MSI Selection (Section 2-3-1)

Functions, Functional Failures, Failure Effects and Failure causes (Section 2-3-2)

Level 1 Analysis (Section 2-3-3 through 2-3-6)

Is the MSI Rotor / Drive Systems?

Yes

Is it FEC 5 or 8?

No

Yes

Does it carry flight or control loads?

No

Yes

Perform Supplemental Analysis (Section 2-3-9)

Perform Level 2 analysis (Section 2-3-7 and 2-3-8)

Systems / Powerplant Tasks
IMRBPB Position:
Date: 28 April 2016
Position: IMRBPB has agreed to the amended flow-chart, CIPR-2015-01 closed as IP 159

Status of Issue Paper (when closed state the closure date): 28 April 2016

Recommendation for implementation:
The changes to be included in the next revision of MSG-3 volume 2

Retroactive: Y/ N: N

Important Note: The IMRBPB positions are not policy. Positions become policy only when the policy is issued formally by the appropriate National Aviation Authority.