



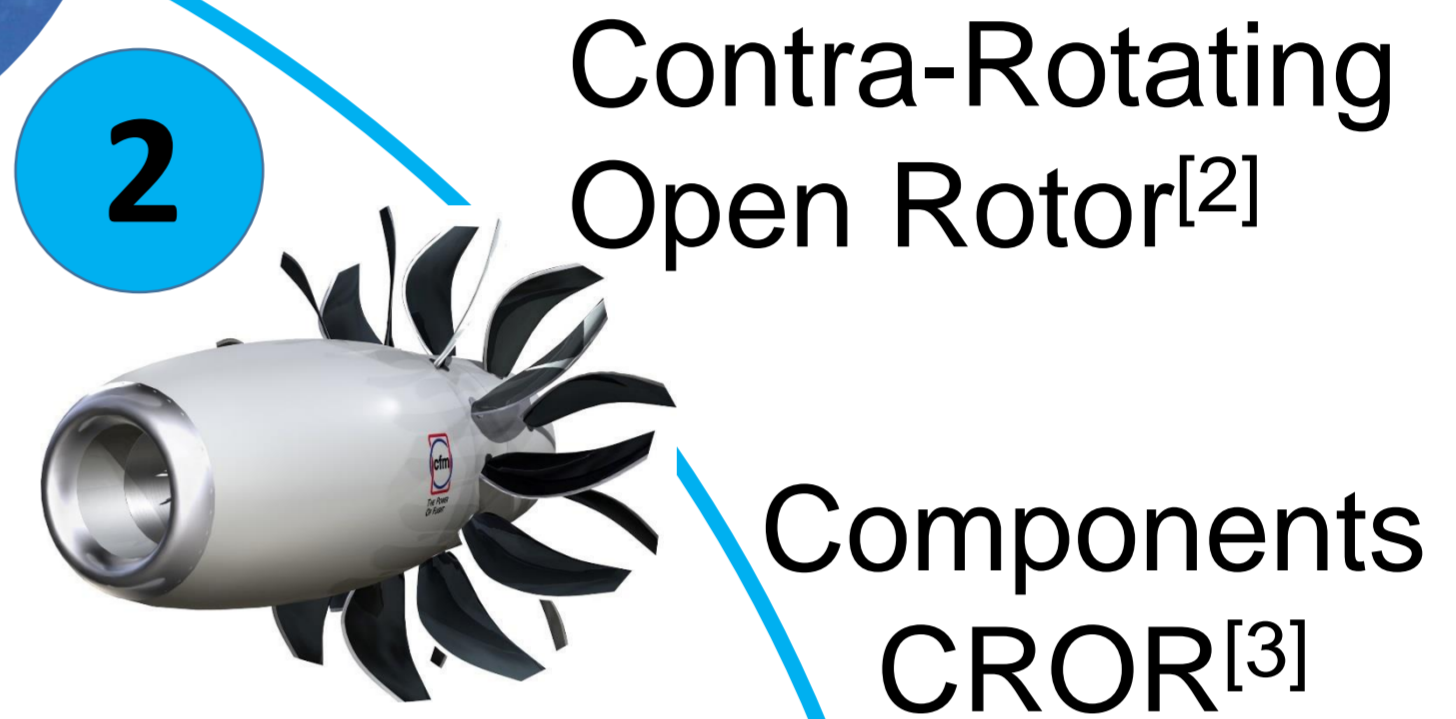
Power Gearbox and Pitch Control Mechanism for Open Rotors - Investigation of Preliminary Design Methodologies

Contribution
Development of life assessment methodologies for power transmission components (PCM & PGB) for a conceptual CROR

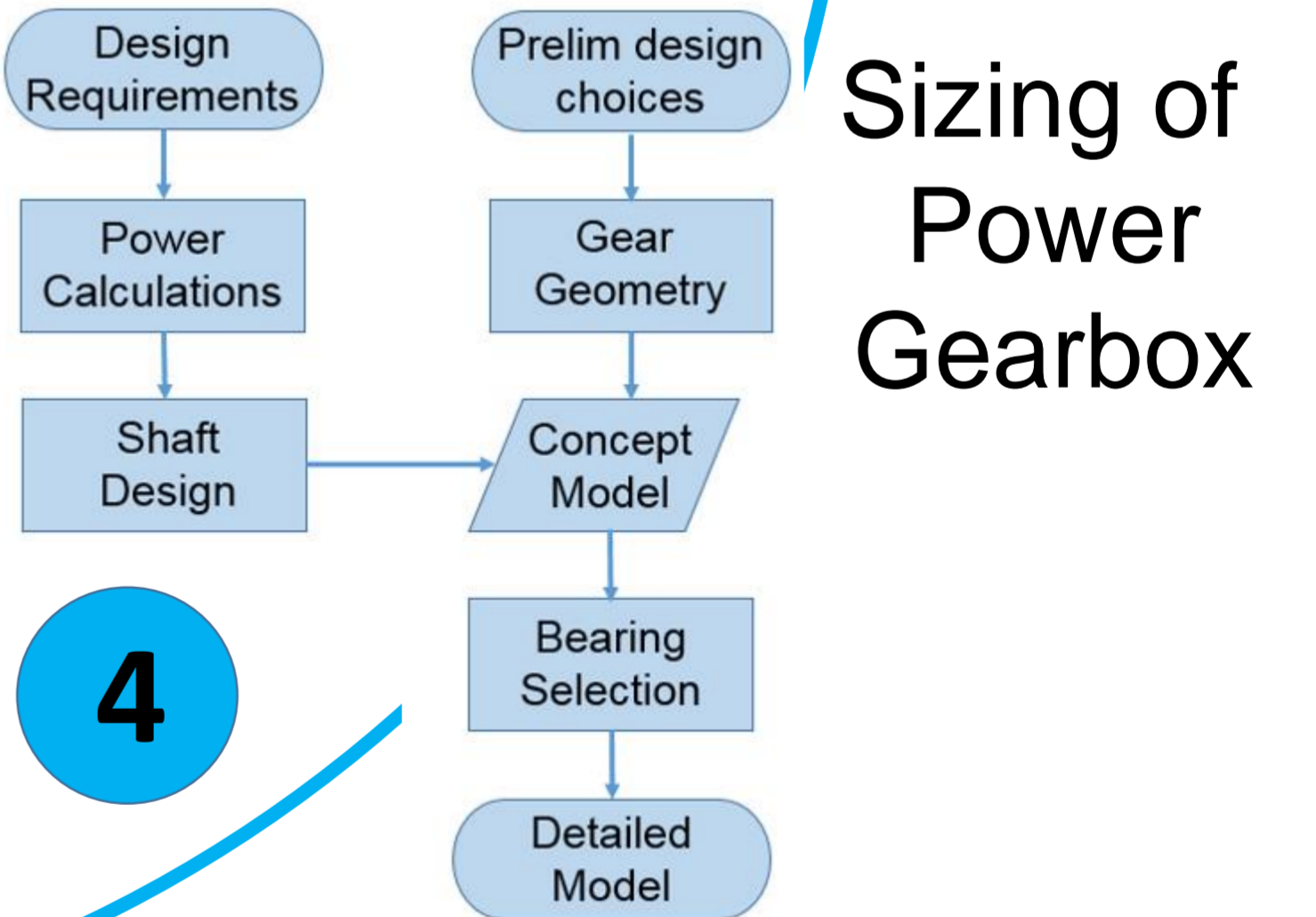
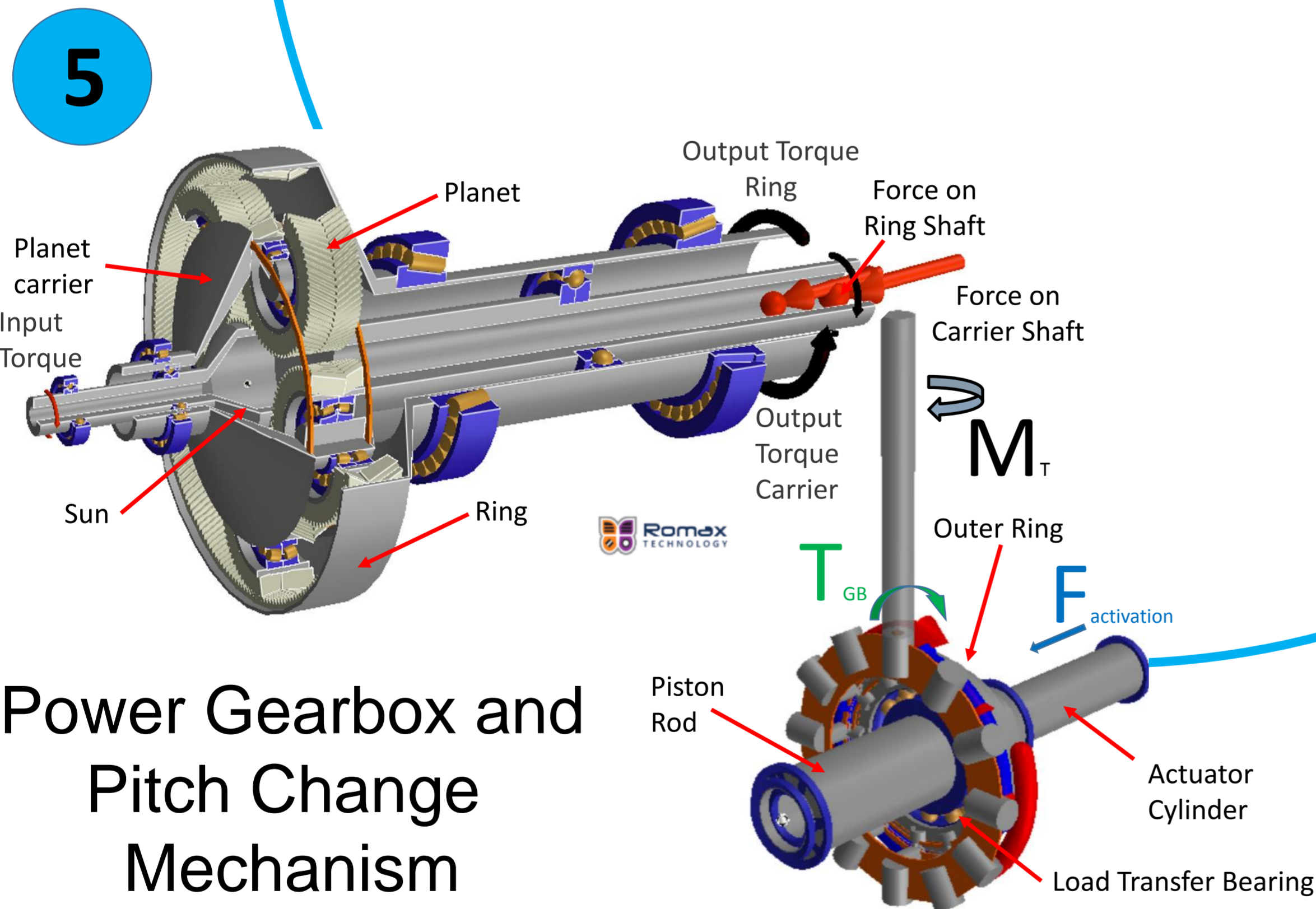
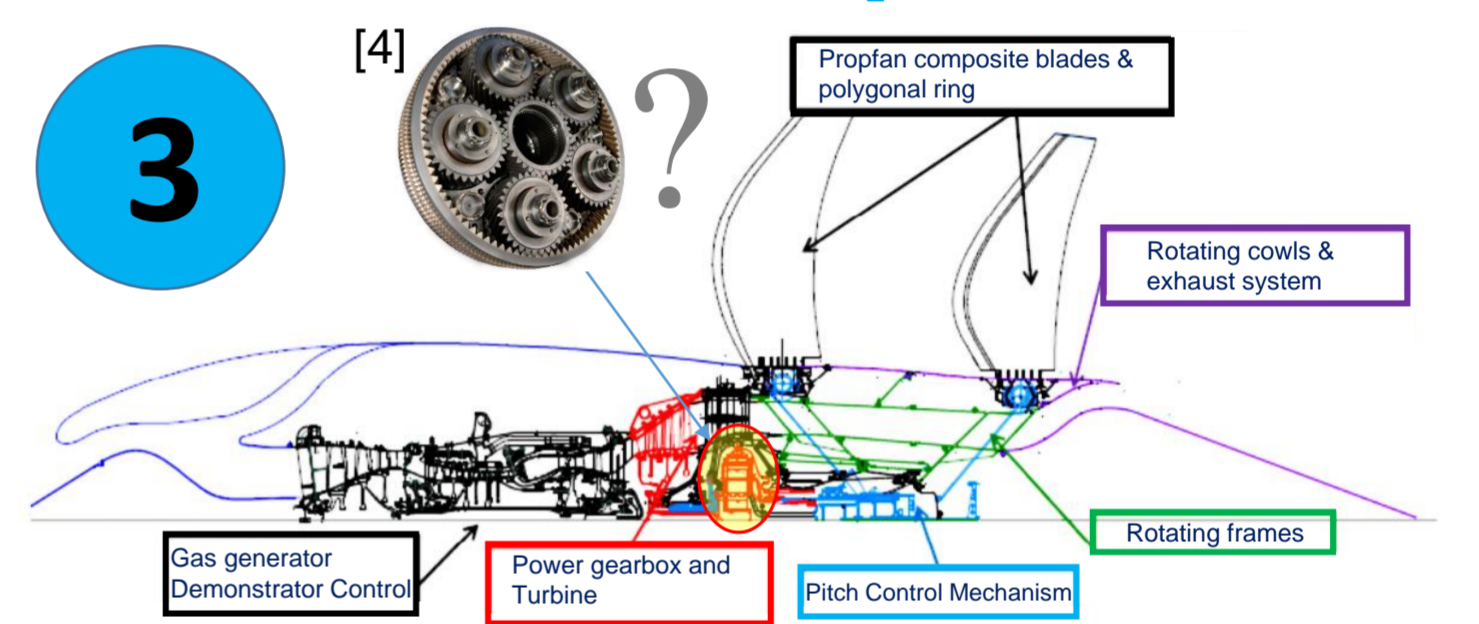
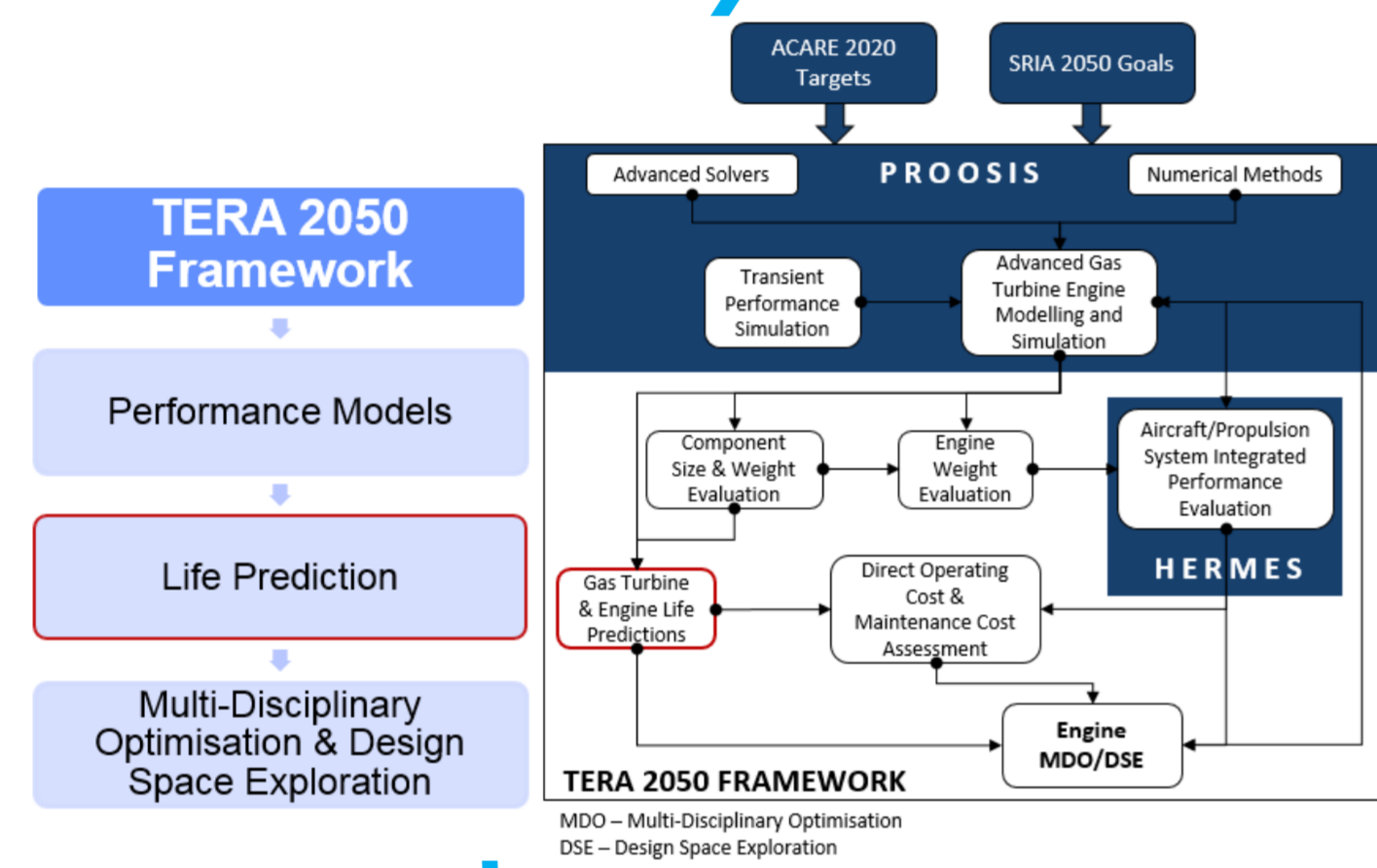
Aircraft with Open Rotor^[1]

Aims & Objectives

1. Size novel components for life compliance
2. Use size constraints in performance calculation
3. Explore the feasible design space for the CROR and identify suitable configurations for the power transmission component



Mission Analysis and Life Estimation



References

[1] Velardo, J. Open Rotor: One more step to the future (2015). <https://goo.gl/images/pTpbCi> (accessed 25th August 2018)

[2] CFM Open Rotor. http://2.bp.blogspot.com/-EGw_T12z09s/UJUX4XL1Wyl/AAAAAAAAAGTI/14VQ-CNL8aA/s1600/10-open_rotor.jpg (accessed 25th August 2018)

[3] SAGE 2 (SAFRAN/Snecma) Demo Configuration. http://www.forum-ae.eu/system/files/9-open_rotor_technological_achievements_velfsn-f_mirville.pdf (accessed on 20th August 2018)

[4] PW1000G gearbox, https://leehamnews.com/wp-content/uploads/2017/01/pw1100g_gear_system.jpg (accessed 30th August 2018)

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