

Motivation and Objectives

- Independently assess technologies proposed under the Continuous Lower Energy, Emission, and Noise (CLEEN II) program
- CLEEN II Objectives:
 - Reduce fuel burn 40% relative to year 2000 best in class
 - Reduce NOx emissions 70% relative to 2011 ICAO standard without increasing other emissions
 - Reduce noise to 32 EPNdB relative to Stage IV
 - Expedite the commercialization of "drop-in" sustainable jet fuels
- Desire for introduction of technologies on aircraft by 2026
- Use Georgia Tech's EDS to assess contractor technologies Model CLEEN II technologies
 - Assess impacts at a vehicle and fleet level
 - Provide FAA with independent system level assessment

Evaluated Scenarios

- Before defining specific technology packages GT & FAA developed three scenarios
- Each scenario subdivided into N+1 and N+2 ullet
- Aggressive w/o CLEEN can be compared to Aggressive to identify CLEEN contribution

Scenario	Description
Evolutionary	'Normal' technology evolution TAPS II only CLEEN technology included
Aggressive	Represents higher rate of technology dev Includes all CLEEN Techs in N+1
Aggressive w/o CLEEN	Identical to aggressive with all CLEEN te removed and PW GTF cycle constrained technology level

Project 37 and Assessment



echnologies d to current

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- FAA CLEEN team