

# M250 Series IV

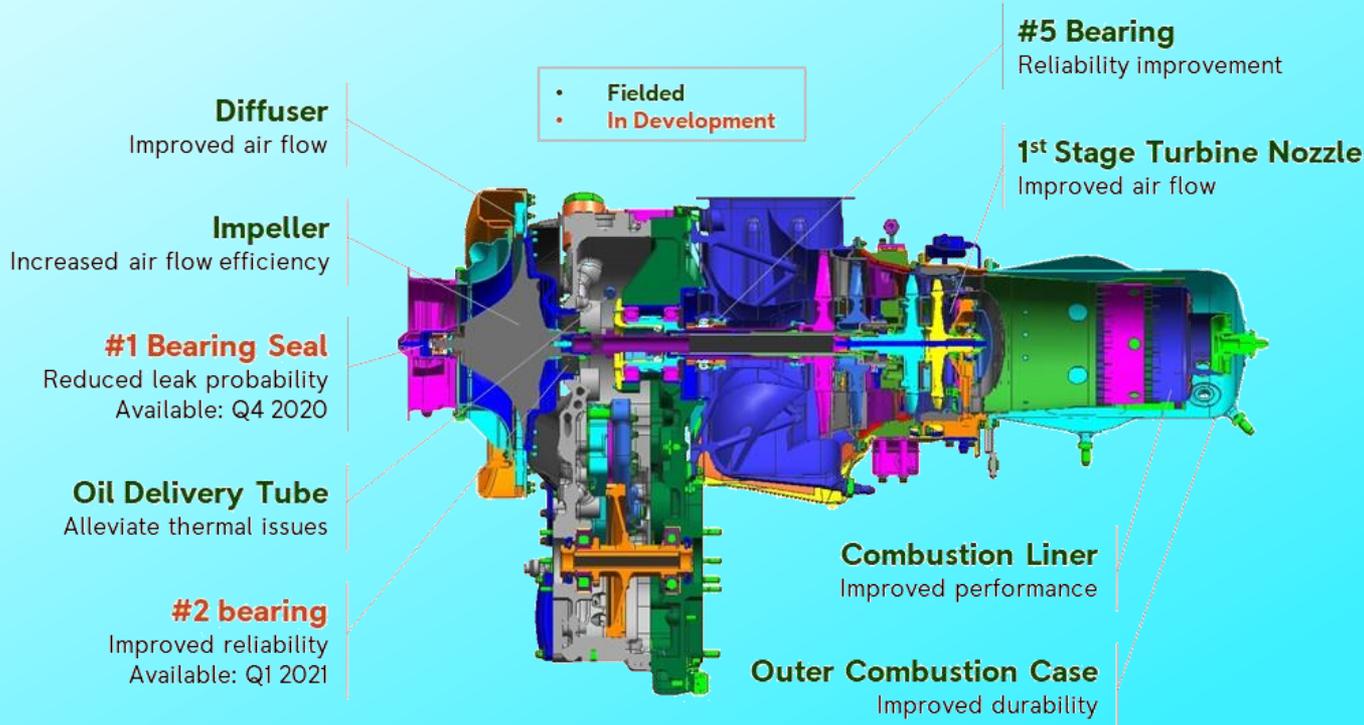
Commitment to Product Improvement





# Commitment to Product Improvement

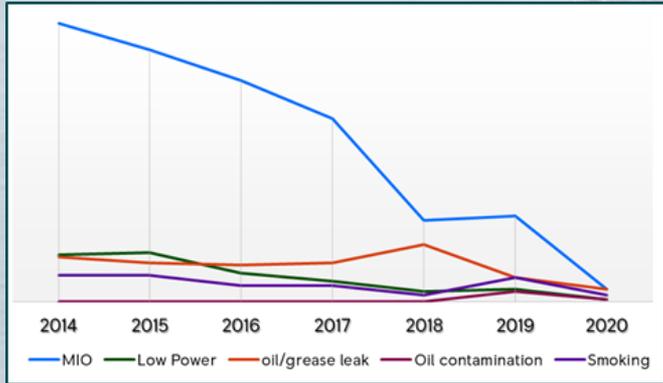
## M250 Series IV Configuration Upgrades



- Highly responsive to address all reliability & safety issues
- Major investments into product performance improvements
- Configuration upgrades have resulted in more reliable performance
- Ensuring compliance to OMM reduces unscheduled removal risk

# SIV Unscheduled Removal Improvements

Year-on-Year reduction in Unscheduled Removals



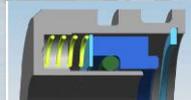
## #5 Bearing

Re-design introduced improved retaining ring feature and assembly process to reduce propensity of metal generation  
**Over 3,000 fielded**



## Oil Deliver Tube

Redesign to improve oil spray targeting for better lubrication onto the #2 bearing  
**Over 1,500 fielded**



## #1 Bearing Seal

Reduced leak probability through replacing wave spring with coil spring that is less prone to nesting  
**Field Release: Q4 2020**



## #2 Bearing

Redesign to change the number of roller elements for improved reliability  
**Field Release: Q1 2021**

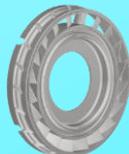


# SIV Engine Performance Improvements



## Impeller

Redesign to optimize air foils for improved air flow



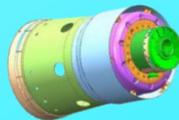
## 1<sup>st</sup> Stage Turbine Nozzle

Redesign of Nozzle air foils to increase airflow performance and in-service life



## Diffuser

Redesign of airflow passages and air foils to increase air flow efficiency



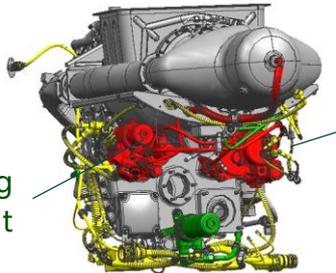
## Combustion Liner

Redesign of Liner configuration to increase efficiency of air flow characteristics

***Air path components redesigned for increased performance and reliability***



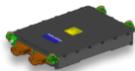
# Small Gas Turbine FADEC (SGTF) Available on Bell GXi



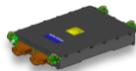
Fuel Pump & Power Unit

Fuel Metering Unit

Dual Electronic Control



Primary



Secondary



## Fully Redundant Dual Channel FADEC

### Increased safety of Flight

- More capable system with electronic backup, removing manual mode and increasing safety

### Improved Reliability & maintainability

- Line replaceable configuration, reduced airframe mounting, eliminated potentiometers

### Increased maintenance efficiency

- Time before overhaul increased 2x legacy configuration; reducing maintenance disruption



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