

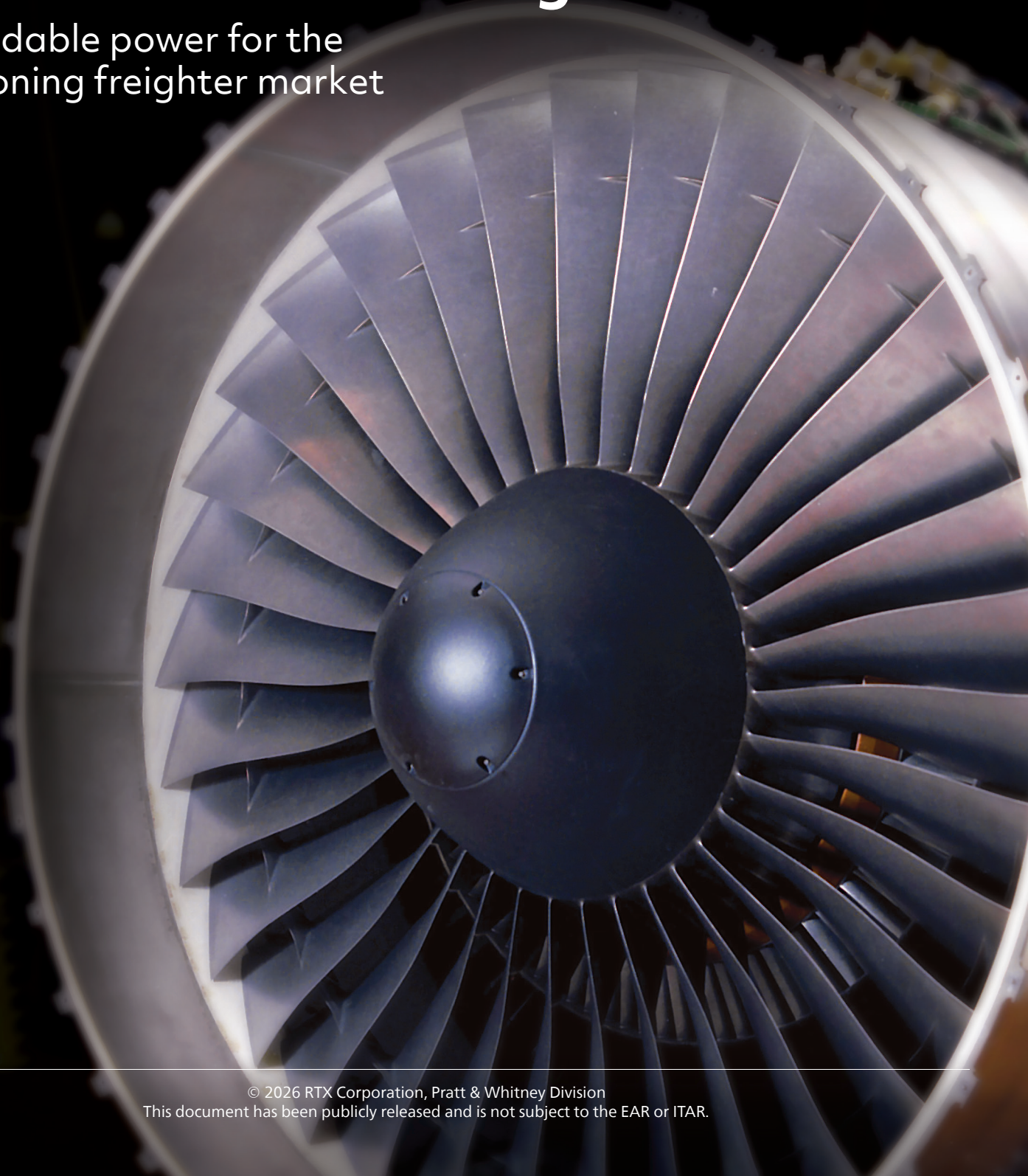


Pratt & Whitney
An **RTX** Business

Commercial Engines

PW4000-100" Cargo Conversion

Dependable power for the
burgeoning freighter market



PW4000-100" Cargo Conversion

Commercial Engines

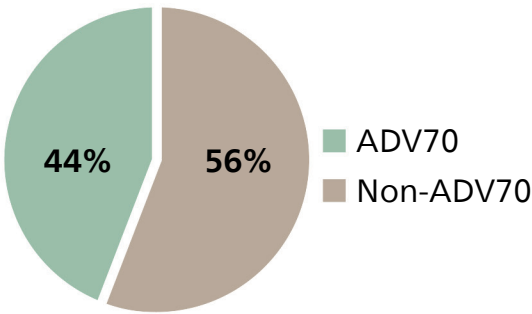
Powering Airbus A330-200/300 freighter conversions

Best-in-class fuel burn and emissions. World-class dependability.

Learn more at prattwhitney.com/en/products/commercial-engines/pw4000-100.

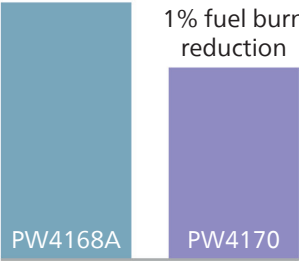
- The A330 is well suited to serve regional and long-haul routes.
- The A330 is gaining momentum as a go-to aircraft to serve the cargo market as freighter conversions start to takeoff.
- The PW4168A was developed specifically for the A330 and was the very first engine in history to receive Extended Twin Engine Operations (ETOPS) approval at entry into service and has had uninterrupted ETOPS service ever since.
- The Advantage70™ offers enhanced value, making the most reliable engine on the A330 even better.
- The PW4170 (Advantage70™) provides the highest thrust on the A330 at 71,700 lbs Airbus Equivalent Thrust (AET) and the lowest fuel burn and emissions.
- The PW4000 on the A330 meets ICAO Chapter 4 noise with margin and with the TALON IIB combustor; the engine has margin to the ICAO CAEP/6 emission requirements.

- More than half of the in-service fleet is in the Advantage70™ configuration:



- Advantage70™ engines can be intermixed with non-Advantage70™ engines at equivalent thrust ratings.
- Advantage70™ engine nacelle is interchangeable with prior engine configuration.
- The PW4168A, PW4168A-1D and PW4170 have ~40% part number commonality with the PW4000 on the A300, 747, 767 and MD-11.

Benefits of Advantage70™:



- \$150,000 fuel savings / year or \$18 / EFH
- 700 tonnes CO₂ avoided / year

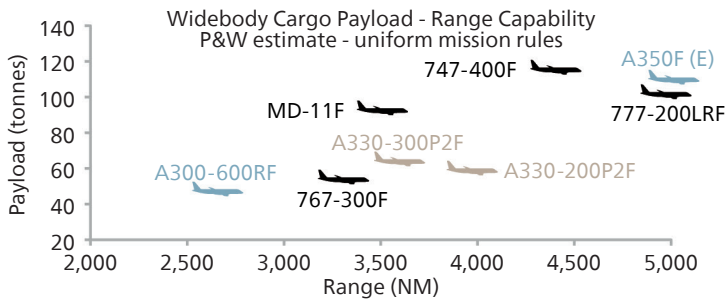
The freighter corner:

- A330F fills gap between medium and large freighters
- A330 converted freighters are a go-to freighter option

A la carte maintenance solutions:

- Access to fleet and operation support
- Flexibility to choose engine maintenance provider
- Choose and combine from a menu of options to provide the best solution and value for your operations

	Original	Advantage70™	
Engine model	PW4168A	PW4168A-1D	PW4170
Rating (lbs)	68,600	68,600	70,000
Airbus equivalent thrust	70,300	70,300	71,700
EIS	Dec 1994	Jun 2009	Jun 2009
ETOPS approval	180 Min FAA 240 Min EASA		
Fan diameter	100"		
Length, flange to flange	163.1"		



This document contains forward-looking statements concerning future business opportunities. Actual results may differ materially from those projected as a result of certain risks and uncertainties, including but not limited to changes in levels of demand in the aerospace industry, in levels of air travel, and in the number of aircraft to be built; challenges in the design, development, production support, performance and realization of the anticipated benefits of advanced technologies; as well as other risks and uncertainties, including but not limited to those detailed from time to time in RTX Corporation's Securities and Exchange Commission filings.

Contact us: help24@prattwhitney.com | USA: 860-565-4321