

RTX Corporation: Where Should Pratt & Whitney Add Capacity?

Internal ID: S&F-STR-485

Topic: Operations Strategy, Customer Strategy, Capital Allocation

Industry: Aerospace & Defense

Source: Strategy & Finance

Publication date: 5 October 2026

License: Not specified

Student strategy case | Information cutoff: July 23, 2026, 4:49:36 p.m. ET. All dollar amounts are U.S. dollars. The committee assignment and alternatives are hypothetical classroom constructs, not a disclosed RTX decision.

A capacity choice with two clocks

In July 2026, Pratt & Whitney (P&W) was managing two time-sensitive demands on its GTF engine family. Airlines needed engines returned to service as powder-metal inspections and shop visits continued to pressure the PW1100-powered A320neo fleet. At the same time, P&W had a large GTF backlog, new orders, and a certified GTF Advantage specification moving toward production.

Assume you advise a hypothetical RTX strategy committee considering the next increment of capacity investment at P&W. The committee has asked for a recommendation on where to focus and what evidence should govern subsequent releases of capital. This is a classroom decision exercise: public information does not show that RTX had a specific MRO-versus-production budget decision or management disagreement.

Three paths are available for discussion:

1. **Prioritize MRO and repair capacity.** Emphasize shop, repair, parts, and process constraints that could improve turnaround and support customer operations.
2. **Prioritize commercial production and transition readiness.** Protect current-GTF output and the phased transition to the interchangeable Advantage specification.
3. **Stage investment across both.** Continue targeted MRO work while releasing further production or transition capacity against defined operating and customer-outcome gates.

The paths need not use identical resources, and the public record does not establish which resources are fungible. A recommendation should identify the suspected constraint, specify measurable gates, and say what evidence would change the sequence.

The installed fleet and the MRO response

P&W's powder-metal matter had a long horizon. RTX's second-quarter 2026 filing said the inspection plan continued to require significant incremental shop visits for PW1100 engines. RTX expected aircraft-on-ground levels for the affected A320neo fleet to remain elevated through 2026. RTX had recorded a \$2.9 billion pre-tax charge in 2023, reflecting P&W's net 51% program share, and estimated approximately \$0.7 billion of full-year 2026 cash impact. That cash estimate included customer credits and depended on visit timing and count, inspection findings, parts, turnaround, capacity, and customer negotiations. It is not a remaining-liability balance or a P&W investment budget.

P&W had announced several U.S. MRO investments. The company described more than \$100 million across facilities in Irving, Texas; West Palm Beach, Florida; and Springdale, Arkansas, plus a separate \$70 million expansion in Columbus, Georgia. P&W reported that Irving's used-serviceable-material inventory had increased 60%, West Palm Beach GTF MRO capacity had increased 40%, Springdale additive repair time had fallen 60%, and Columbus annual capacity had increased 25%. These are company-reported facility effects. The announcements do not provide site utilization, added shop visits, engine turnaround distributions, incremental cost per visit, or project payback.

P&W described a network of 21 GTF engine centers and about 40 component repair facilities as of April 2026. It had delivered GTF-powered aircraft to more than 90 customers, with more than 2,700 aircraft delivered and 13,000 orders and commitments across GTF platforms. The delivery count describes the installed fleet; orders and commitments are not deliveries or guaranteed future revenue.

The broader industry picture was difficult to reduce to floor space. An IATA/Emerton report estimated that 648 GTF-powered aircraft, or 28% of the fleet, were grounded at a March 2025 peak. The report identified constraints that included parts availability, spare engines, repair approvals, and access to MRO capacity. It represents an airline-side industry analysis, not a current RTX fleet count or a finding about P&W's binding constraint in 2026.

Production demand and the Advantage transition

P&W's production question involved both current-GTF output and a specification transition. RTX said the GTF Advantage had been certified for the A320neo family; the first Advantage-spec production engines were delivered in Q2 2026, and RTX expected the engine to enter service later that year. P&W described Advantage as fully interchangeable with the current GTF, expected it to become the production standard, and said full production cutover was expected in 2028. Advantage is a phased specification transition within the GTF family, not a separate engine-family choice.

By July 22, P&W had announced more than 800 GTF orders and commitments year to date in 2026; the total GTF backlog exceeded 8,000 engines. These figures signal demand but do not show delivery timing, cancellation or conversion rates, attainable output, or engine-level contribution economics.

Q2 2026 P&W commercial aftermarket sales increased 25%; management attributed the increase to higher commercial aftermarket volume. The measure covers commercial aftermarket activity and is not a GTF shop-visit count. It does not establish MRO throughput, PW1100 turnaround, aircraft availability, or fleet recovery. P&W's commercial original-equipment sales declined 8% in the quarter, which RTX attributed to large-engine mix despite increased deliveries. The reported segment figures combine product mix and business lines; they do not resolve the marginal capacity choice.

GE Aerospace offers a competitor signal, with important scope differences. In Q2 2026, GE reported Commercial Engines & Services total revenue growth of 27%, services revenue growth of 26%, and internal shop-visit revenue growth of 25%. It also reported record internal shop output during the quarter and total engine deliveries up 31% in the first half. Those percentages measure different things and cover a broader, differently composed business than P&W. They are not a direct performance or margin benchmark.

What the public numbers do and do not answer

P&W reported Q2 sales of \$8.889 billion and operating profit of \$738 million; its adjusted operating profit was \$740 million. These are segment measures, not P&W free cash flow or project returns. The quarter's commercial aftermarket growth and the company's MRO capacity announcements do not reveal whether additional parts, labor, repair engineering, test cells, shop slots, or spare engines would deliver the greatest incremental benefit.

At RTX level, the company forecast 2026 capital expenditure of about \$3.1 billion and free cash flow of \$8.50-\$8.75 billion. These are corporate outlook measures, not an allocation available to P&W. The separate estimate of approximately \$0.7 billion in 2026 powder-metal cash impact is an expected cash burden, not capex. Public disclosures do not provide GTF-specific shop economics, contract margins, facility utilization, project-level returns, or a complete investment menu.

The academic literature offers possible mechanisms, not an answer for RTX. A partially accessible study of Atlas Copco compressor subsidiaries reports possible complementarity between product and service sales and a nonlinear relationship between service scale and profitability. The full tables and appendices were unavailable for this case, and the compressor setting differs from aerospace engines. A second paper was available only in abstract and excerpt form. Neither supplies an RTX return estimate, capacity threshold, or forecast.

The assignment

Recommend how P&W should sequence its next increment of capacity investment. Your proposal should:

- Identify which constraint you believe is most likely to bind and separate capacity inputs from fleet-availability outcomes.
- Distinguish shop, repair, parts, and process capacity from current-GTF production and the Advantage-spec transition.
- Set near-term priorities and release gates for any later investment. Include customer, safety, quality, throughput, and delivery measures, and explain the time lag between capacity changes and fleet outcomes.
- State what facility, engine, and customer data you would request before scaling the plan, and what evidence would lead you to revise it.
- Treat management targets, third-party estimates, academic mechanisms, and your assumptions as different evidence types. Do not transfer a study coefficient to RTX.

There is no single capital-allocation answer established by the public record. A useful recommendation makes its assumptions visible and explains what would falsify them.

Exhibits

Exhibit 1. Selected P&W Q2 2026 results

Measure	Q2 2026	Comparison or context
P&W segment sales	\$8.889B	RTX-reported segment measure
Reported operating profit	\$738M	8.3% of sales
Adjusted operating profit	\$740M	Non-GAAP; 8.3% of sales
Adjusted sales growth	16%	Organic growth 17%
Commercial aftermarket growth	25%	Management cited higher commercial aftermarket volume; not specifically GTF MRO or shop visits
Military sales growth	23%	Management cited F135 volume and award timing
Commercial OE sales growth	(8%)	Large-engine mix offset increased deliveries

Q2 2025 included a four-week work stoppage. Segment totals and growth rates are mix-sensitive; adjusted figures are non-GAAP.

Exhibit 2. Announced MRO projects and company-reported effects

Site	Announced investment	Reported focus or effect
Irving, Texas	\$78M	Used-serviceable-material inventory +60%
West Palm Beach, Florida	\$20M	GTF MRO capacity +40%
Springdale, Arkansas	\$4.7M	Additive repair time down 60%
Columbus, Georgia	\$70M	Annual capacity +25%

The first three sites form the announced package exceeding \$100 million; Columbus was a separate expansion. Effects are management-reported. No utilization, throughput, turnaround, cost-per-visit, or payback data were disclosed in the reviewed sources.

Exhibit 3. GTF scale, fleet disruption, and production transition

Indicator	Reported figure or timing	Source and interpretation
GTF-powered aircraft delivered	More than 2,700 to 90+ customers	Company-reported, April 2026; installed-base scale
GTF orders and commitments	More than 13,000 across platforms	Company-reported, April 2026; not the same as deliveries
GTF backlog	More than 8,000 engines	Company-reported, July 2026; not a guaranteed delivery schedule
Aircraft-on-ground estimate	648 aircraft / 28% of GTF fleet at March 2025 peak	IATA/Emerton estimate using Emerton/Cirium; historical, third-party estimate
PW1100 fleet outlook	Elevated AOG levels expected through 2026	RTX Q2 2026 filing; management expectation
GTF Advantage transition	First production engines delivered Q2 2026; service entry expected later in 2026; full production cutover expected in 2028	RTX/P&W statements; the Advantage is interchangeable with current GTF and is a specification transition

Exhibit 4. Different aftermarket and delivery measures

Company / measure	Period	Reported change or observation	Caution
P&W commercial aftermarket sales	Q2 2026	+25%	Commercial aftermarket volume; does not identify GTF shop visits or fleet recovery
GE CES total revenue	Q2 2026	+27%	Segment total revenue
GE CES services revenue	Q2 2026	+26%	Different scope from shop visits
GE internal shop-visit revenue	Q2 2026	+25%	Revenue measure, not shop output
GE internal shop output	Q2 2026	Record	Output observation, separate from revenue growth
GE total engine deliveries	H1 2026	+31%	Delivery measure, different period and scope

GE measures are competitor-reported and not directly comparable with P&W.

Exhibit 5. Publicly stated cash and outlook measures

Measure	Amount	Scope
RTX 2026 capital expenditure outlook	About \$3.1B	Consolidated company outlook
RTX 2026 free-cash-flow outlook	\$8.50B-\$8.75B	Consolidated outlook; not a P&W project budget
Estimated PMM cash impact in 2026	About \$0.7B	RTX estimate; not capex or remaining liability
2023 PMM pre-tax charge	\$2.9B	Historical charge at P&W's net 51% program share

Selected sources

1. RTX, Q2 2026 Form 10-Q, filed July 23, 2026, accession 0000101829-26-000027: [SEC filing](#). Powder-metal matter: Note 16, printed pp. 19-20 / HTML lines 914-929; P&W results: Item 2, pp. 41-42 / lines 1740-1774; 2026 PMM cash estimate: p. 46 / lines 1917-1924; R&D and segment tables: Notes 3 and Item 2, lines 1047-1105 and 1512-1534.
2. RTX, "RTX Reports Q2 2026 Results," July 23, 2026: [release](#); companion [presentation](#), slides 5, 7-8, 13-14, and 22.
3. Pratt & Whitney, "Invests more than \$100M to expand MRO footprint in the U.S.," April 21, 2026: [release](#), paragraphs 1-8.
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5. Pratt & Whitney, "GTF engines surpass 800 orders and commitments in 2026 year to date," July 22, 2026: [release](#).
6. IATA with Emerton, *Single Aisle Aircraft Engines MRO: Strategic Levers to Address Supply Chain Challenges*, June 2026: [report](#), pp. 2-3, 5, 10. Industry analysis; grounded-aircraft count attributed to Emerton/Cirium.
7. GE Aerospace, Q2 2026 results, July 16, 2026: [release](#).
8. Visnjic Kastalli and Van Looy, "Servitization: Disentangling the Impact of Service Business Model Innovation on Manufacturing Firm Performance," *Journal of Operations Management* 31, no. 4 (2013): 169-180: [article](#). Partial indexed-text access only; full PDF/tables/appendices unavailable. Non-load-bearing context.
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Prepared for classroom discussion. Public information cutoff: July 23, 2026, 4:49:36 p.m. ET. No information published after the cutoff is used.