Innovation, Science and Economic Development Canada
Innovation, Sciences et Développement économique Canada

Canada

State of Canada's Aerospace Industry Report

Summer 2024

AIAC
Aerospace Industries Association of Canada
L'Association des industries aérospatiales du Canada

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THE REPORT CONTEXT

The report is a partnership:

- Multi-year collaborative analytics agreement with the Aerospace Industries Association of Canada (AIAC) and Innovation, Science and Economic Development Canada (ISED)

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AIAC

The report is fact-based:

- Data sourced from government agencies and international independent subject matter experts
- Economic impact models and innovation indicators[1] informed by experts from the Organisation for Economic Co-operation and Development (OECD)

This year's report continues to include a focus on the Canadian and global aerospace industries' recovery from the COVID-19 pandemic:

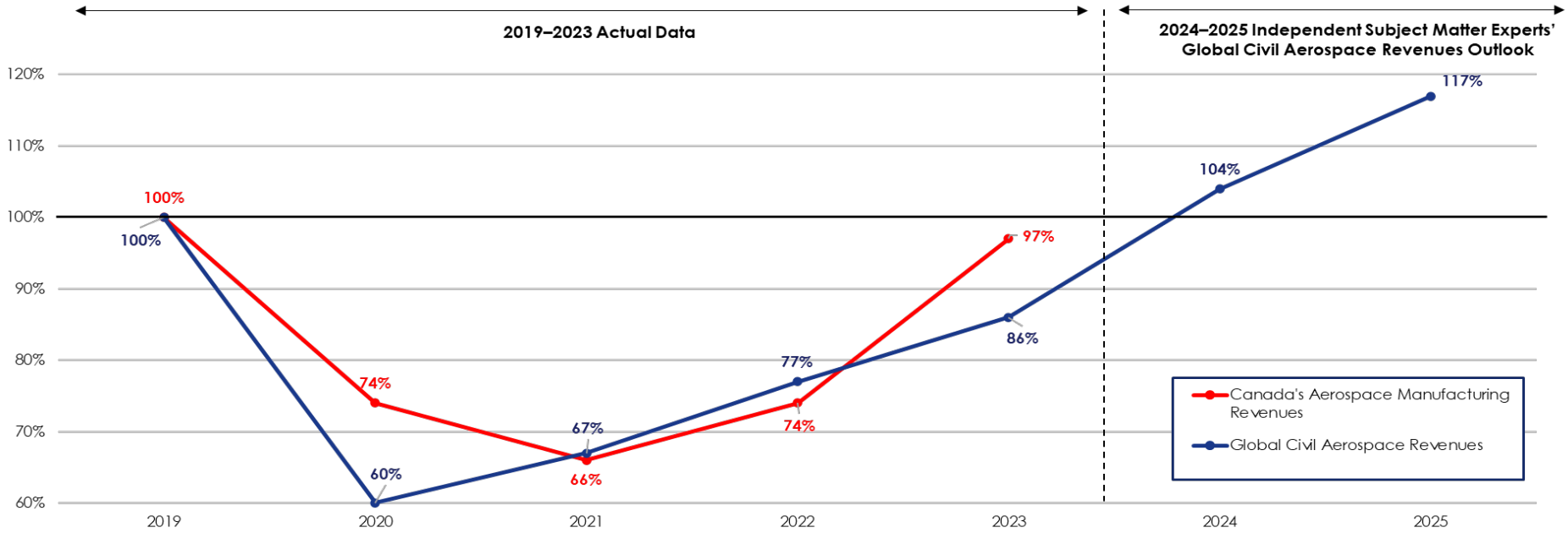
- International comparison and global market outlook
- 2019–2023 comparative analysis

[1] See Annex 2 for detailed methodology principles.

GLOBAL MARKET PERSPECTIVE

Canada's aerospace manufacturing [2] revenues[3] reached 97% of pre-pandemic levels in 2023

Global Civil Aerospace Revenues Recovery Index, 2019–2025



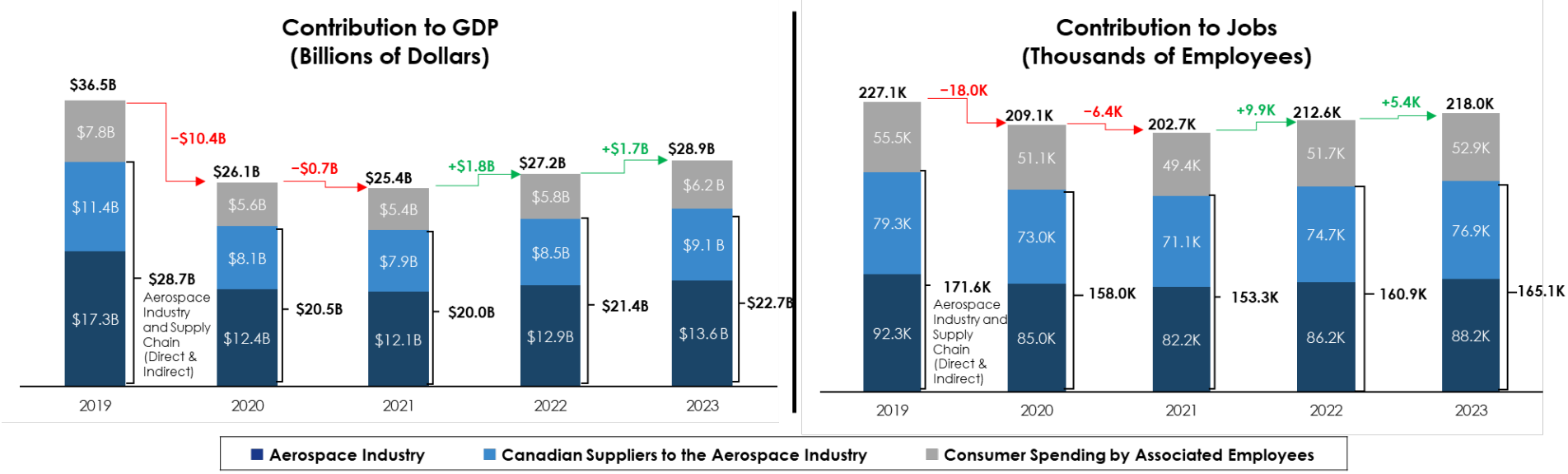
- According to international independent subject matter experts, global civil aerospace revenues are forecast to return to pre-pandemic levels by 2024

[2] Canadian aerospace manufacturing includes production of aircraft (airplanes and spacecraft), helicopters, flight simulators, engines, avionics, landing gears, and other parts and components.
[3] See Annex 3 for a comparative analysis of aerospace revenues from 2019 to 2023.

ECONOMIC IMPACT

In 2023, the Canadian aerospace industry contributed $28.9B to GDP[4] and 218,000 jobs to the Canadian economy

Aerospace Industry Contribution to the Canadian Economy, 2019–2023[5]



- Between 2022 and 2023, the industry contributed an additional $1.7B to GDP and 5,400 jobs to the Canadian economy

- Canada’s aerospace industry reached 96% of pre-pandemic employment levels in 2023

[4] Gross Domestic Product (GDP)
[5] See Annex 2 for detailed methodology principles and Annex 3 for industrial indicators.

REGIONAL BREAKDOWN

Between 2022 and 2023, all regions maintained their relative employment share across the aerospace manufacturing and MRO[6] services sectors

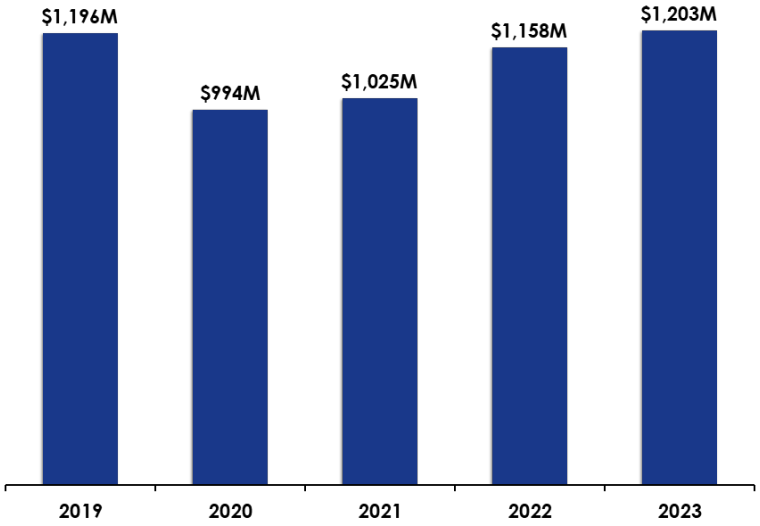
Share of Aerospace Industry Employment by Region, 2023[7]

[6] Maintenance, repair, and overhaul (MRO). See Annex 1 for a list of the main activities associated with Canadian aerospace manufacturing and MRO services.
[7] See Annex 3 for a comparative analysis of aerospace employment from 2019 to 2023 and Annex 4 for a comparative analysis of the share of aerospace employment by region from 2022 to 2023.

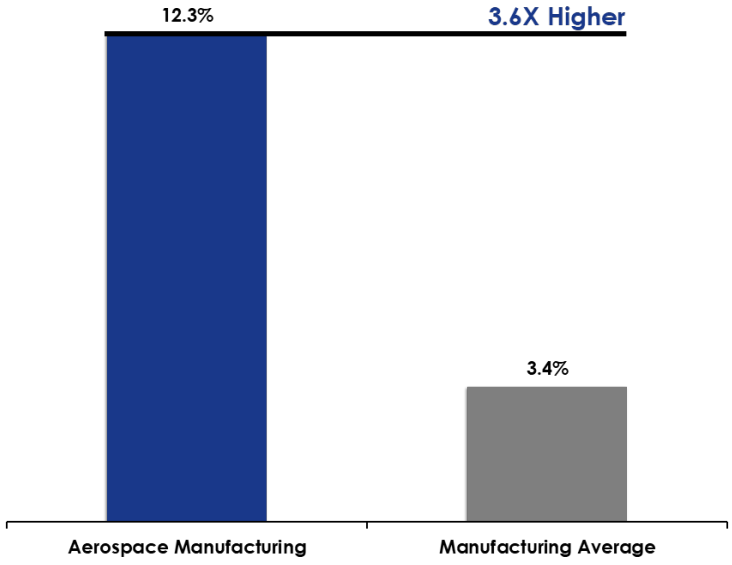
INNOVATION

The Canadian aerospace industry maintained its #1 R&D[8] ranking among all Canadian manufacturing industries in 2023

Aerospace Industry Total R&D Expenditures, 2019-2023 (Millions of dollars)



R&D Intensity, 2023



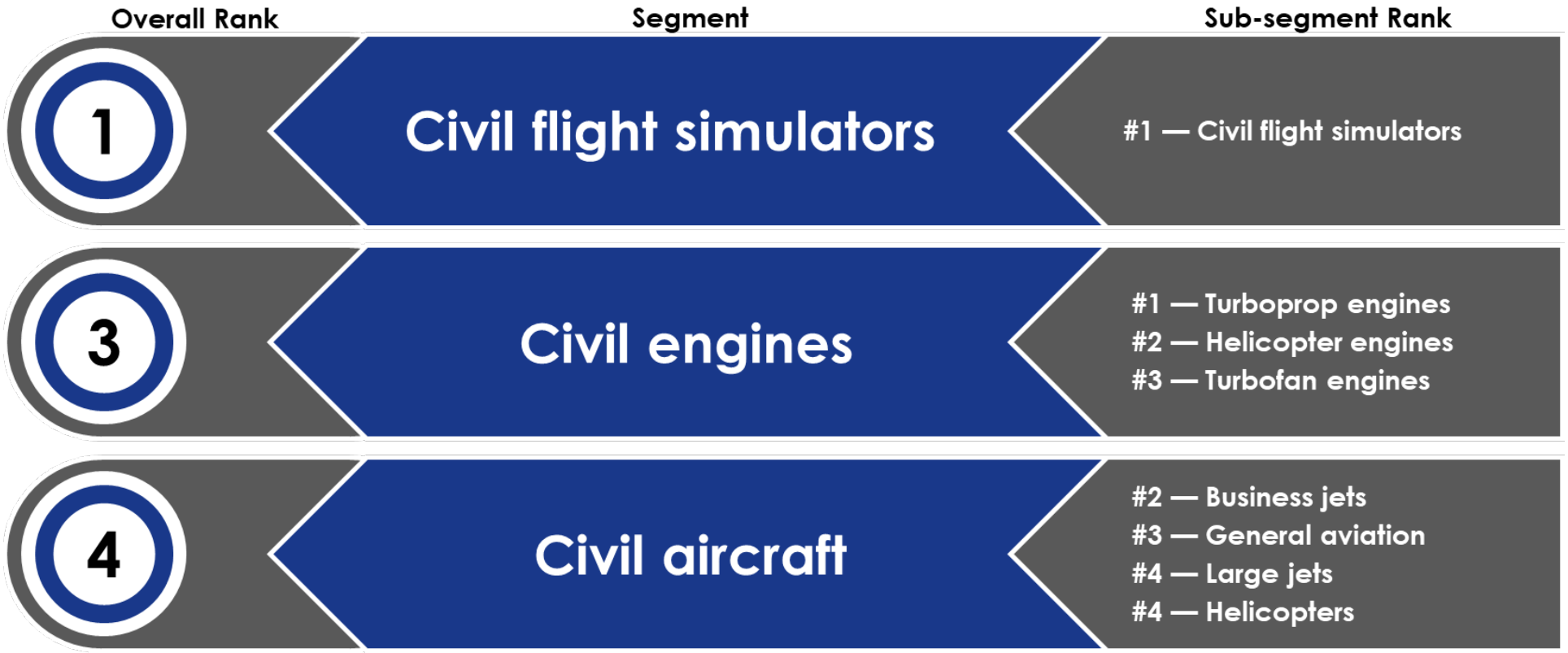
- In 2023, the aerospace industry's R&D expenditures returned to pre-pandemic levels

[8] Research and development (R&D) is measured in terms of the dollar value of R&D activity. Industry-level R&D intensity is measured as the ratio of current R&D performed by a given industry or sector relative to its chained 2017 GDP contribution. See Annex 3 for a comparative analysis of aerospace R&D from 2019 to 2023.

GLOBAL RANKINGS

Canada ranked in the top 5 across civil flight simulators, engines, and aircraft segments in 2023

Canada's Civil Aerospace Rankings[9], 2023[10]



[9] General aviation includes all aircraft not operated by commuter or airline service providers and excludes business jets and helicopters.
[10] Rankings are based on the dollar value of final production. According to international independent subject matter experts, Canada was not active in the regional aircraft production market in 2023.

EXPORTS

In 2023, the Canadian aerospace manufacturing industry exported over $19B and actively participated in global supply chains

Share of Aerospace Industry Exports by Product[11] Category, 2023[12]

- More than 75% of aerospace manufacturing revenues were export-oriented in 2023, of which close to 60% were supply chain-related[13]

[11] Aircraft include airplanes and spacecraft.
[12] Share is based on the dollar value of exports.
[13] Engines and landing gear include their respective systems and components.

KEY FINDINGS

In 2023, the Canadian aerospace industry:

- Increased its revenues, GDP, jobs and R&D
    - Canada's aerospace manufacturing revenues reached 97% of pre-pandemic levels
- Contributed $28.9B to GDP and 218,000 jobs to the Canadian economy
- Maintained its #1 R&D ranking among all Canadian manufacturing industries
    - R&D expenditures returned to pre-pandemic levels
- Ranked in the top 5 across civil flight simulators, engines, and aircraft segments
- Exported over $19B and actively participated in global supply chains

ANNEXES

Annex 1: Main Activities Associated with Canadian Aerospace Manufacturing and MRO Services

Aerospace Manufacturing	Aerospace MRO Services[14]
Main activities: • Aircraft assemblies, subassemblies, and parts • Aircraft engines and engine parts • Aircraft fuselage, wing, tail, and similar assemblies • Tail and wing assemblies and parts (empennage) • Flight simulators • Aerospace product prototypes • Space systems • Telecommunication satellites and components • Avionics • Helicopters, propellers, and parts	Main activities: • Aircraft heavy maintenance, servicing and repairing • Aircraft engines maintenance, servicing and repairing • Aircraft components and other systems maintenance, servicing and repairing • Aircraft line maintenance (aircraft servicing at airports, excluding sales of fuel revenues) • Aircraft ferrying services • Aircraft inspection services • Aircraft testing services • Aircraft upholstery repair

[14] Excludes MRO activities performed by manufacturers and airlines.

Annex 2: Economic Impact Methodology Principles

- Aerospace industry data is compiled from Government agencies, such as Statistics Canada and the Canada Revenue Agency, and international independent subject matter experts, with firm-level adjustments to include key manufacturers of space products, avionics, and flight simulators as well as aerospace MRO service providers.

- The model measures the economic structure of Canada through Statistics Canada's 2019 Input-Output (I/O) economic impact multipliers.

    - Note: While ISED normally uses the most current multipliers, the latest (2020) multipliers were not used due to Statistics Canada guidance which indicates: Due to the COVID-19 pandemic in 2020, the structure of the economy was significantly altered. The 2020 input-output multipliers and input-output models should be used for analysis of economic impacts in 2020. For economic impact analysis for more current periods, the 2019 input-output multipliers and models may be considered as more reflective of current economic structures.

    - Aerospace activities have been linked to the closest related specific economic impact multiplier.

    - Total economic impact includes the aerospace industry (direct economic impact from enterprises for which aerospace is the main activity), Canadian suppliers to the aerospace industry (indirect economic impact from enterprises for which aerospace is not the main activity), and consumer spending by associated employees (induced economic impact).

    - Economic model estimations are not comparable to older estimates in previously published reports as Statistics Canada's administrative data and Input-Output multipliers are updated on a yearly basis for previous years.

- Economic impact analysis is based on gross domestic product (GDP) and full-time equivalent (FTE) employment.

    - GDP is the total unduplicated value of the goods and services produced in an industry, country or region during a given period.

    - GDP better represents activity that occurs within Canada in contrast to revenues, which include R&D, employment, and revenues from outside of Canada.

Annex 3: Industrial Indicators (2019–2023)

	Industry	2019	2020	2021	2022	2023	% Change 2022–2023	% Change 2019–2023
GDP (Billions of Dollars)	Aerospace Manufacturing	$12.4	$9.1	$8.9	$9.0	$9.4	4.4%	−24.2%
	Aerospace MRO	$4.9	$3.3	$3.2	$3.9	$4.2	7.7%	−14.3%
	Aerospace Total	**$17.3**	**$12.4**	**$12.1**	**$12.9**	**$13.6**	**5.4%**	**−21.4%**
Jobs (Thousands of Employees)	Aerospace Manufacturing	62.6	57.8	54.5	56.3	56.6	0.5%	−9.6%
	Aerospace MRO	29.7	27.2	27.7	29.9	31.6	5.7%	6.4%
	Aerospace Total	**92.3**	**85.0**	**82.2**	**86.2**	**88.2**	**2.3%**	**−4.4%**
Revenues (Billions of Dollars)	Aerospace Manufacturing	$30.8	$22.8	$20.3	$22.9	$29.9	30.6%	−2.9%
	Aerospace MRO	$6.0	$5.8	$6.7	$7.3	$8.0	9.6%	33.3%
	Aerospace Total	**$36.8**	**$28.6**	**$27.0**	**$30.2**	**$37.9**	**25.5%**	**3.0%**
R&D (Millions of Dollars)	**Aerospace Total**	**$1,196**	**$994**	**$1,025**	**$1,158**	**$1,203**	**3.9%**	**0.6%**

Annex 4: Share of Aerospace Employment by Region (2022–2023)

Region	Aerospace Manufacturing		Aerospace MRO	
	2022	2023	2022	2023
Western Canada	12%	12%	38%	38%
Ontario	24%	24%	35%	35%
Quebec	61%	61%	22%	21%
Atlantic Canada	3%	3%	5%	6%

DATA SOURCES

1. **Global Market Perspective**
    a. ISED estimates based on latest revised data from Statistics Canada (2019–2023), 2024
    b. Forecast International (2019–2025), 2024
    c. Teal Group (2019–2025), 2024

2. **Economic Impact**
    a. See 1(a)
    b. ISED economic model estimates (GDP in 2017 chained dollars) based on Statistics Canada's 2019 Input-Output multipliers, 2024

3. **Regional Breakdown**
    a. ISED estimates based on latest revised data from Statistics Canada (2023), 2024

4. **Innovation**
    a. ISED estimates based on latest revised data from Statistics Canada and firm administrative data (2019–2023), 2024

5. **Global Rankings**
    a. Flight Global Civil Simulator Census (2021), 2024
    b. Forecast International (2023), 2024
    c. Teal Group (2023), 2024

6. **Exports**
    a. See 3(a)
    b. S&P Global, Global Trade Atlas (2023), 2024

7. **Annex 3**
    a. See 4(a)

8. **Annex 5**
    a. See 3(a)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