



Sixth-Generation Fighter: Status Update on the GCAP Program

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The **Global Combat Air Programme (GCAP)** – the sixth-generation fighter program uniting **the United Kingdom, Italy, and Japan** – was the main highlight of the **Farnborough Airshow**. With the recent setback of the rival European project **FCAS** (among France, Germany, and Spain), the GCAP stands as the only truly active international sixth-generation fighter program (except for the unilateral F-47 project of the United States).

Here is a detailed overview of all the new developments that emerged during the fair:

Canada's Entry (for now as an Observer)

The most significant geopolitical development is the official entry of **Canada**, joining the program as an “**observer**”.

- **What it entails:** This initial phase does not involve financial commitments from Ottawa, but allows Canada to gain a deep understanding of the project and paves the way for

possible future discussions for full industrial involvement.

- **Prospects for other partners:** With the crisis of the FCAS program, there has been much talk of a possible inclusion of other European nations, such as Germany. However, **Lorenzo Mariani (CEO of Leonardo)** warned that the entry of new industrial partners could cause delays, reaffirming the firm intention to meet the service entry date set for **2035**. Similarly, Airbus Defence and Space (through CEO Michael Schoellhorn) reiterated its willingness to consider a role, but only with a significant share of leadership and workload.

Program Costs and Workshare

The leaders of the industrial consortium **Edgewing** (composed of BAE Systems, Leonardo, and JAIEC) reiterated that it is still “premature” to define the overall costs of the multinational program, as it is currently in the conceptual phase.

- **Recent investments:** In June, the United Kingdom allocated **£8.6 billion** (\$11.5 billion) over four years, followed shortly by a joint investment by the three partner countries of **£4.6 billion** to support the concept and assessment phase.
- **Workshare:** The architecture of the GCAP aims to maintain a strict equal balance (**1/3, 1/3, 1/3**), while also valuing the specific skills and technological strengths of each country. The decision on the location of the final assembly is expected in the coming months.
- **Propulsion:** The **GCAP Power and Propulsion System** consortium (formed by Avio Aero for Italy, IHI Corporation for Japan, and Rolls-Royce for the United Kingdom) announced that they have made decisive progress towards the final approval of the design of the new central engine demonstrator.

The “Wingman” and the Drone Ecosystem

The GCAP fighter will not fly alone but will be accompanied by a fleet of unmanned **Combat Collaborative Aircraft (CCA)**.

- During the show, BAE Systems unveiled the **Brontanax (Thunder King)**, a new “loyal wingman” drone demonstrator set to fly in **2027**.
- Initially designed to integrate with Eurofighter Typhoon fighters (in view of NATO exercises such as *Steadfast Defender*), the Brontanax represents a fundamental piece in the Royal Air

Force's strategy to become the first European sixth-generation air force and subsequently integrate with the GCAP.

The Technological “Bridge”: The UK's Flying Demonstrator

To transition technologies from the fourth (Eurofighter Typhoon) to the sixth generation, BAE Systems has confirmed that the first flight of the **UK Combat Air Flying Demonstrator** is scheduled for the **first part of 2028**.

- **Production status:** The project is in an advanced stage; about **90% of the parts** (approximately 11,500 components) are in various stages of production, and the main sections of the fuselage and wings have been in the works for over 18 months. Final assembly in Warton will begin shortly.
- **Objectives:** The manned and supersonic aircraft will serve to de-risk the critical technologies of the GCAP, particularly testing maneuverability, propulsion integration, complex air duct systems, and stealth capabilities (low observability).
- **Data sharing:** Although the United Kingdom is developing this demonstrator independently with an investment of £2 billion, the data and information collected will be shared with the partners from Italy and Japan through Edgewing.