

Honors Study Abroad Poster Honors 399: Keep Calm and Research On

Ingenuity of the Concorde

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Overview

This project examines the development process of Concorde and documents the most notable developments therein.



Key points

Fly-by-wire: introduced fly-by-wire controls to civil aviation, which uses a computer to stabilize flight

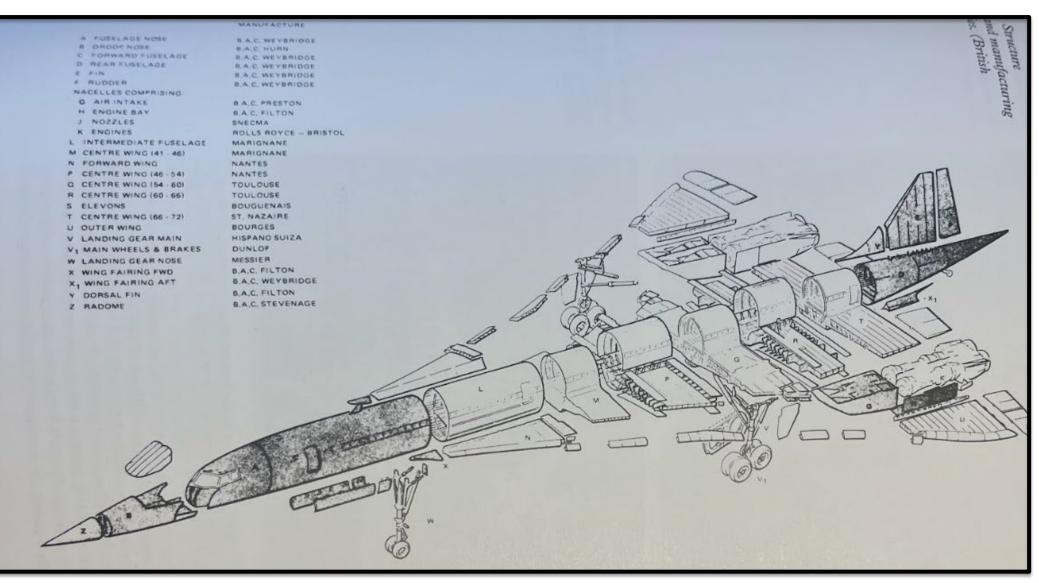
Droop Nose: adjustable nose to allow for more efficient aerodynamics or visibility

Hinduminium RR58: aluminum alloy allowed Concorde to stretch by ~8 inches from heat without permanent deformations

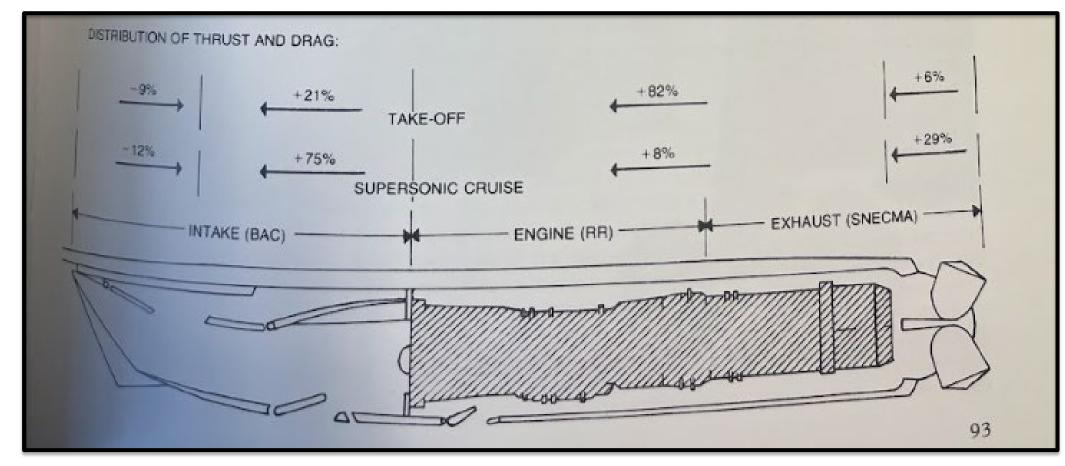
Impact

Even 20 years after its retirement, Concorde is still considered by many to be the apex of civil aviation. Despite its cost-ineffectiveness and noise, it remains the inspiration for modern supersonic commercial aviation projects.

Further, although this project does not focus on the cultural impact of Concorde, its significance to British popular culture can not be understated. Seen by many as the pinnacle of British engineering, it became such a great point of pride for Britons that planning weddings on Concorde became relatively common practice, and children would drop what they were doing to watch it fly by. Intake Ramps: Adjustable Ramps in air intake slowed air down by up to 1,000 mph



Production Factories of Concorde Parts. Kenneth, Owen



Distribution of Thrust and Drag. Kenneth, Owen

Bibliography/References:

1 Owen, Kenneth. *Concorde: Story of a Supersonic Pioneer*. National Aerospace Library, 2002. 2 Buttler, Tony and Carbonel, J.C. *Building Concorde: From Drawing Board to Mach 2.* National Aerospace Library, 2018.

3 Onera. Picture of Concorde Wind Tunnel Test. Date Unknown.

4 Fly Away Simulation. *The legendary Concorde making a landing in London*. Date Unknown. 5 Royal Aeronautical Society. *Concorde - The Supersonic Achievement : Celebrating 40th Anniversary of the First Flight of British Prototype* National Aerospace Library.

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