

THE EJ 200 ENGINE

DESIGN, DEVELOPMENT AND TEST STATUS

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Abstract

The paper describes the EJ200 engine requirements for the EFA as well as the relevant main design features.

The development programme is broken down into distinct milestones, each of which represents the progress made with regard to meeting the specification targets.

The impressive progress made to date is highlighted. From this it can be seen that there is good expectation of fulfilling the development objectives according to schedule.

Introduction

The definition of the EJ200 called for an engine that would meet all the requirements (fig. 1) placed on the next generation of fighter aircraft engines by the European partner countries (Germany, Italy, Spain and Great Britain).

At first sight, the requirements, which were to be fulfilled in every detail, were not easily satisfied by one engine. They reflect the individual needs of the partner countries, whose flight missions differ greatly as a result of each country's geographic location and its role within the Western defensive alliance.

In response to the challenge presented by this engine project, FIAT, SENER (ITP), Rolls-Royce and MTU formed a consortium with the corporate name "Eurojet" (fig. 2).

Europe has a "Staff Requirement" (ESR) for a new fighter aircraft. Agreement by the armement directors of 4 countries at Turin August 1985

- Twin engined aircraft
- Airframe mass 9.75 tonnes
- Wing area 50 square metres
- Engine reheated thrust 90 kN class

Specified parameters:

- Performance
- Cost
- Operational targets

FIGURE 1: REQUIREMENTS

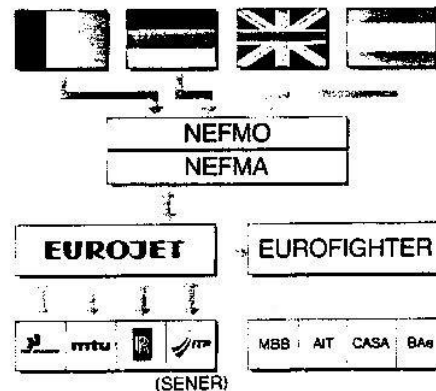


FIGURE 2: ORGANISATION

For the development phase a workshare allocation of 33% for MTU, 33% for Rolls-Royce, 21% for FIAT and 13% for SENER (ITP) was established (fig. 3).