

ADVANCED FLIGHT TEST DATA SYSTEM FOR
NEXT GENERATION AIRCRAFT PROGRAMMES

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ABSTRACT

The advanced Flight Test Data System is currently being integrated by the Projects and Systems Division of CASA in Spain. The system makes use of the latest in Telemetry pre-processing and distributed architectures designed by Loral Instrumentation.

The FTDS will provide CASA with an overall system for the Company's next generation aircraft programmes, i.e. Mirage III Modernisation, EFA and AX.

The paper focuses on and stresses the remarkable features of the Flight Test Data Centre such as:-

- Distributed architecture of the installation
- Parallel processing capabilities
- Use of standard relational data base
- General Basic software for monitoring and data processing
- Integrated analysis environment for real time, inter-maneuvering and after flight modes
- Software suitable to be used in different environments (e.g. system integration and testing rigs)

INTRODUCTION

The Projects and Systems Division of CASA is currently integrating a new Flight Test Data Centre to be used in the next generation aircraft programmes.

This Centre must fulfil the following objectives:-

- Real time monitoring of the flights, making extensive use of symbolic representations
- Inter-maneuvering analysis, using hardware plus software specially tailored for this environment
- After flight analysis