

THE SAAB2000 FLIGHT TEST PROGRAM

by

Sture Rodling
Civil Aircraft Test Engineering
Saab Aircraft Division
Saab-Scania AB
S-581 88 Linköping, Sweden

Abstract

The Saab2000 is a new fast turboprop airliner built on the knowledge of its forerunner the Saab340. However to meet the market demands it features several new designs which will require careful and extensive testing.

The test program which comprises several test rigs and three test aircraft started with rig testing in 1990 and most of the rig testing will be finished at the time of the first flight. Pre-flight check-out of the first test aircraft started November 18, 1991 and the first flight was scheduled for the first quarter of 1992.

This paper will briefly present the aircraft and its unique designs and the overall lay-up of the entire test program. It also deals with the build up of work forces and other resources in order not to interfere with Saab's military test programs, the test equipment and instrumentation to be used, the approach towards new requirements and special conditions applied, and the status of the program at the time of presentation of this paper.

Introduction

Following a market survey the project definition started early 1989 and a program go-ahead was given by the SAAB-SCANIA board in mid 1989.

The SAAB2000 concept is:

- Jet performance with turboprop economy
- Operational flexibility
 - High climb performance
 - Efficient both on long and short routes
 - Interior flexibility
- Jet comfort
- Commonality with SAAB340

As a 50-seater twin engine turboprop the SAAB2000 will be a natural complement to our successful 34-seater, the SAAB340, of which now over 300 have been delivered to all over the world. Though the similarity with the 340 is evident, with the scaled up wings and empennage and its retained cross section and extended fuselage the 2000 has several new and technical front edge designs which will create an exciting and challenging test program.