A340 DESCRIBED

MONITORING, GROWING AND BUILDING THE A340

D

erived from the central flight data
system of the A320, and with
considerably more power, the
A340 central maintenance system
(CMS) will monitor all aircraft systems, provide information on them to the flight crew and, for maintenance personnel, yield a quick means of displaying, interrogating and testing those systems.
The CMS is based around two dedicated central maintenance computers (one a "hot" spare), the three flightdeck multi-purpose control and display units (MCDUs), and the built-in test equipment (BITE) in every A340 system. There is also a flightdeck

printer for maintenance purposes.
To speed turnaround, two MCDUs can be used simultaneously to interrogate two dif-ferent systems. The processing power neces-sary to run the CMS is located mainly in each system's BITE, the result being a decentralised intelligence that, according to Airbus, allows the use of simple, reliable maintenance computers. BITE is responsible for identifying faults, transmitting failure messages in "plain English", and storing and formatting maintenance data for display on the MCDUs.
There are three classes of failure. Class 1 requires reference to the minimum equip-

ment list (MEL) and the failure is automat-ically displayed in real-time. With Class 2 there is no need to refer to the MEL; the failure is displayed by manually activating the correct status page, and no correction is needed until the next visit to main base. A Class 3 failure, when the MEL does not apply, needs no attention until the next maintenance opportunity.
Basic CMS functions include "normal" and "interactive" reporting modes, the latter allowing maintenance engineers to interro-gate any of the electronic systems during stopovers or maintenance periods.
The normal mode provides:

CABIN FLEXIBILITY A KEY FEATURE

Much A330/A340 marketing is based

around the variety of cabin configu-
rations offered, ranging from high-density
single-class to long-range three-class.
The A340-300 will seat 295 in long-
range three-class configuration, with 18 first-class "sleeperette" seats at 150cm pitch (60in), 81 business class at 92cm and 196 economy at 86cm. In two-class me-dium-range configuration the aircraft seats 335: 30 first at 102cm and 305 economy at 86cm or 84cm. A single-class high-density A340-300 is offered with 440 seats in a nine-abreast, 78.7cm-pitch configura-tion.
The A340-200, with its shorter fuselage and ultra-long range, is offered with 262 seats in a long-range three-class layout: 18 first, 74 business and 170 economy. Also on offer is a two-class medium-range layout with 303 seats: 30 first and 273 economy.
An A340-300C combi is offered which can carry 221 passengers — 12 first, 51 business and 158 economy — plus four cargo pallets.
The A340 is offered with a lower-deck crew rest compartment. This was first developed in 1987 by Airbus Industrie and its German partner Deutsche Airbus. It is

based on a 2.4m pallet, shaped like an LD6 cargo container, installed at the front end of the aircraft's rear cargo hold. Reached by descending a short flight of stairs, the compartment provides
area with minimum loss
of revenue-earning
cabin space", says Air-
bus.
Lufthansa, which will
take delivery of the first
Airbus A340 in January
1993, was the first cus-
tomer to select the crew
rest pallet. The airline
will have the compart-
ment, plus a separate
rest area for pilots just
behind the cockpit, on
all of its A340s.
All Nippon Airways,
Continental Airlines,
Northwest Airlines and
THY Turkish Airlines
have also expressed in-
terest in specifying
lower-deck and pilot-
rest compartments for
their A340s. The below-
deck compartment as

specified by Lufthansa features six beds. The lower-deck compartment would be
empty during take-off and landing, and is
should be occupied only during cruise.
There are stowage drawers for the use of
each occupant, plus the services normally
provided to each passenger, such as audio
entertainment and emergency oxygen. • .an attractive rest
Six-abreast first class seating is one A340 option

A340 long-range cabin configuration

18 first 81 business 196 economy

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