

Chapter 2CORROSION PREVENTIONIntroduction

1 This Section of the Corrosion Manual is concerned with the prevention of corrosion throughout an aircraft's life. Corrosion prevention is an important factor at the design stage, during production, in service, during storage and during transport of aircraft and parts. Corrosion protection methods employed at these stages are complementary to each other: foresight in design to forestall corrosion problems during production and service, and similarly the choice of correct protection schemes during production and service affect corrosion resistance during later life.

2 Chapter 2-1 'The design aspects of corrosion prevention' gives Service personnel background information and an indication of some of the factors that aircraft designers consider when designing aircraft. One particular aspect, the selection of aircraft materials with corrosion resistance in mind, is highly technical and engineering materials textbooks should be consulted if this subject is pursued.

3 Chapter 2-2 'Prevention in production' outlines protection methods applied at the production stage and gives references to other sources. See the list of related publications (preliminary pages) for references giving corrosion prevention information.

4 Chapter 2-3 'Prevention in service' may be used as a guide to the prevention of corrosion in service. It deals with detection of corrosion, the routine use of protective treatments and inhibitors, prevention and treatment of microbiological corrosion, etc. The Chapter cross refers to relevant APs and specifications.

5 Environmental conditions (industrial, marine, tropical, arctic, etc.) affect rates of corrosion and the kind of protection required in a particular application. These are discussed in Chapter 1 and Chapter 2-5.

6 Aircraft storage procedures are detailed in AP 100E-20 and the respective aircraft Topic 7. Further information is available from the Authority for FW Aircraft Storage, HQRAFS, or DAMR (N) RP for helicopter storage.

7 AP 100E-20, Leaflet 040, Aero Engines in Reserve Aircraft, in conjunction with the Topic 7 for the aero engine concerned, covers all aspects of aero engine and ECU storage.

8 Preservation and storage of components is the subject of AP 830 Vol 2 (3rd Edition).