Abstract

The goals that are being set for aviation growth in the near future, combined with the growth in service provision, are unattainable without active health management of airplanes. Numbers associated with door to door travel time and accident rates, coupled with availability demands to provide cost-effective transport, simply do not allow time for unscheduled maintenance. Therefore we are going to experience a step jump in the take up of Integrated Vehicle Health Management (IVHM) on these platforms in order to give accurate warning of sub-system and component degradation, allowing for maintenance to be carried out in a timely, scheduled, manner.

The presentation will describe the development of IVHM. It will examine the historical basis for the subject, covering emerging services, standards, technology and IVHM as used in various industry sectors. This will lead to the commercial picture of today with the top level goals that are being set, providing the business push for the technology, balanced with the current status. Finally, examples of research being conducted in the field will be shown, to support the claim that real progress is being made with implementation of this technology on the horizon.