CMH-17-EASA-FAA Workshop on Sandwich Structure

Event Type: Workshop

Date:
09 Jul 2019 to **10 Jul 2019**

Event Materials

Documents

Presentations

Description

Date
09/07/2019 - 10/07/2019

Location
Technical University of Denmark (DTU), Copenhagen, Denmark

Description
The Technical University of Denmark (DTU) hosts a Sandwich Structure Workshop on behalf of CMH-17, EASA, and FAA. This forms part of the global Composite Materials Handbook - 17 (CMH-17) Delamination/Disbond Task Group (TG) activities intended to improve understanding of sandwich structure designs and damage tolerance, noting the potential significant stiffness and strength to weight benefits offered by such structures and also noting a series of sandwich structure incidents extending across a range of products and sandwich structure configurations.

Recent activities have been led by Airbus and CMH-17, focusing upon better understanding of the Ground - Air - Ground (GAG) cycle behaviour of thin skinned sandwich structures, typical of large passenger aircraft flight control applications. Airbus has provided a very positive example of open sharing of 'lessons learned' which has resulted in better understanding of such sandwich structures. Outcomes have included a draft Mode I ASTM standard, developed via the CMH-17 Delaimination/Disbond TG, intended to better characterise sandwich structure skin to core damage growth.

Building upon this positive example, and the developed knowledge base of this established group of engineers, this Workshop extended invitations to industry interested in applications beyond large passenger aircraft, including rotorcraft, propulsion, General Aviation (GA) etc, and consideration of Primary Structures, Principal Structural Elements (PSEs), and large non-Primary Structures, e.g. fairings, nacelles, intakes etc. Such future activity is to be focused upon finding appropriate practical engineering solutions to existing engineering challenges, with both safety and commercial benefits in mind.

This activity was aligned with EASA intent communicated in recent EASA GA and Rotorcraft Structures Workshops, the EASA Sandwich Structure CM-S-010, and the EASA Bonded Repair Size Limit CM-S-005 (Harmonised with FAA PS-AIR-100-14-130-001).

Other documents

Agenda

Letter of invitation