

Aircraft Fire Protection Engineering – How Safe Are You in the Friendly Skies?



**Albert Moussa, Ph.D.,
P.E.**

Founder and Technical Director
BlazeTech Corporation

Engineering Leadership Lecture

HOST: Prof. Yiannis Levendis

DATE Friday, April 24th, 2015

LOCATION 108SN

TIME 10:30-11:30AM

REFRESHMENTS WILL BE SERVED

Sponsored by the MIE Department

ABSTRACT

While air travel is the safest mode of transport, the advent of new technologies poses new fire safety challenges which have occasionally produced fires with grave consequences. Dr. Moussa will provide an overview of the main types of in-flight and post-crash fires involving engine, fuel tank, cabin and cargo areas in the aircraft. Using real life examples, he will illustrate how fires start and grow, and how accidents led to stricter safety requirements by the FAA such as fuel tank inerting. This is a multi-media presentation illustrated with slides and short video clips.

BIOGRAPHY

Dr. Moussa specializes in combustion, fire and explosion. He has practiced first-hand these disciplines in a number of industries and in four continents. Today, he will talk about his work on aircraft fire protection where he has developed a fundamental understanding of the problems and their solutions.

He has encapsulated this knowledge into specialized professional engineering courses that he taught to industry and government since 1998. He has published over 150 publications, presentations and reports including one book on flammability. He has consulted for government and industry and was involved in the investigation of several major aircraft fire accidents. His forewarning about the vulnerability of aircraft fuel systems has gained him prominence in the general media, including the New York Times, several European Newspapers, CBS and the BBC. Dr. Moussa has received numerous awards, including the William Littlewood Letureship Award by the AIAA/SAE, the Engineer of the Year Award by the AIAA New England Section, two best paper awards and several ASME citations. He has served on two national advisory committees, on the Editorial Board of an ASME journal and as Chairman of the FACT Division of the ASME. He received a B.S. from Stanford University and M.S./Ph.D. from MIT. He is the founder and the Technical Director of BlazeTech Corp. a contract R&D and engineering consulting firm in Woburn, MA, that specializes in technology and software development in the area of safety, energy and the environment.