COURSE CONTENT: AMAZING AIRCRAFT - LOOKING AHEAD

Amazing Aircraft – Looking Ahead will be conducted as a series of five fully illustrated lectures documenting some of the principal ways aircraft structures and propulsion systems will evolve over the next ten to twenty years. The course structure will be as follows:

Week 1 – The history and evolution of helicopters and the types of aircraft structures likely to replace helicopters in the future.

Week 2 – The rapid growth and development of various types of unmanned aircraft, those without pilots, for both military and commercial applications.

Week 3 – The significant increase in the types and applications of electric energy to power aircraft, including the use of solar cells, batteries, and super-conducting systems.

Week 4 - Propulsion systems and aircraft designs enabling hydrogen to be used as fuel for aircraft engines, including its use with the latest fuel cell technologies.

Week 5 – The Artemus program, including the latest designs of spaceplanes and spacecraft and the intended schedules for travel to the Moon and then on to Mars and beyond.