

CAFE Foundation / EAS 2016 Strategic Concept Statement

“First impressions of a technology often go a long way toward shaping its fate... This is why Tesla's Autopilot plays such an important role. Its appearance on the market this year will have a significant impact on how people think about, talk about and write policies about next-generation vehicles in the months to come.”¹

Electric Flight

In 2015 electric flight hit a tipping point. A solar powered plane completed a significant portion of its around-the-world flight and stands poised to complete that flight in 2016. We saw the first crossing of the English Channel in an electric plane. Orders have been placed for electric trainers by several pilot training schools. Electric flight has received coverage in major mainstream media sources around the world. From single propellers to distributed propulsion, from conventional takeoff to VTOL, from single source to hybrid propulsion, and from piloted to autonomous, electric flight is becoming a practical reality.

Not only have technologies advanced, but electric aircraft themselves are being designed, produced, certified, sold and flown. From individuals to major aerospace companies, the aviation industry has recognized the potential and the importance of electric flight. Eco-friendly propulsion systems, advanced materials and processes for lightweight structures dramatically lower operating costs. Safety and reliability make electric flight compelling.

CAFE Foundation

CAFE Foundation occupies a unique position in the electric aircraft industry. As a nonprofit organization, CAFE's mission is to advance the development of low-emission flight by fostering and promoting early entry practical market opportunities. CAFE accomplishes this by bridging disciplines and industries, helping to identify trends and innovations, building strategic collaborations and ensuring on-going coordination. In order to achieve this mission, CAFE focuses on three areas:

¹ <https://www.washingtonpost.com/news/the-switch/wp/2015/12/29/5-turning-points-for-technology-in-2015/>

1. Technology

Goal: Promote the commercial implementation of cutting-edge technologies needed to achieve near-term practical electric flight. These technologies include propulsion, batteries, aerodynamics, materials, airframe design, flight operations, controls, and information integration.

Activities:

- a. Work with professional associations, government agencies and industry to accelerate the deployment of key technologies.
- b. Assist the industry, through smart collaboration, to import key technologies and innovations, thus reducing risk and expense, and shortening the innovation cycle.
- c. Connect manufacturers, entrepreneurs, funders, investors and other stakeholders.
- d. Facilitate technology demonstrations.

2. Business and Marketing

Goal: Facilitate the communications, strategies and market opportunities that support industry growth and success.

Activities:

- a. Provide a forum for collaboration among industry, government, academia and other stakeholders.
- b. Recognize development in the industry through awards and prizes.
- c. Identify trends and innovations, build strategic collaborations, and ensure on-going coordination.

3. Public Education and Advocacy

Goal: Assist in obtaining regulatory and funding support for the industry.

Activities:

- a. Convene regular stakeholder meetings to assess challenges and develop solutions.
- b. Develop and implement a public education campaign to raise public awareness regarding electric flight.
- c. Work with other agencies and organizations to ensure that the appropriate standards and regulations are in place in order to help the industry move forward.

Electric Aircraft Symposium

CAFE Foundation's annual EAS conference brings together industry leaders to share the latest developments in future air mobility to reduce aviation's environmental footprint. The two-day conference includes presentations, discussions and demonstrations, and a unique opportunity to network with experts in low emission propulsion, cutting edge materials and structures, autonomous flight, deep learning systems and efficient operations. EAS is the only conference solely dedicated to advancing practical, low-emission flight. It has been acknowledged as an "international who's who in electric aviation" and "represent(ing) the most original thinkers in the field."²

The CAFE Foundation sees the 2016 Symposium as a clear opportunity to expand the impact that this conference brings to the aviation industry, while retaining its core value as a networking meeting for leaders in this field. Over the past nine years, EAS has grown into a well-respected, top-level conference that brings in the best and brightest in the electric aviation field. Its speakers come from around the world, and include leaders in industry, government and academia. However, CAFE believes that this year's tenth anniversary, coupled with the advances in electric flight, warrant a quantum leap in the scope, format and size of EAS, as follows:

- **Scope** - CAFE plans to broaden the scope of topics and speakers at EAS 2016 to include propulsion, batteries, airframe design, flight operations, autonomous flight, and information integration. EAS 2016 will look at the challenges facing electric flight, and how the aviation industry can reach beyond its own walls for technological solutions and business opportunities.
- **Format** - In addition to the presentation format that EAS has used in the past, EAS will have demonstrations and displays. CAFE would also like to have electric aircraft on static and, if possible, flight display. As more planes are developed, EAS will become a dedicated electric fly-in.
- **Size** - Over the years, the EAS audience has grown to a healthy size. However, given the strides being made in electric flight at all levels (personal, business and commercial), this audience could be much larger. CAFE believes that broadening the scope and format will contribute to this. CAFE also believes that holding the conference in a more central location such as the Silicon Valley will also contribute to this goal.

² <http://www.aopa.org/News-and-Video/All-News/2015/May/04/CAFE-Foundation-holds-ninth-conference>

