

# **Commercial Aviation Alternative Fuels Initiative**

Supporting solutions for secure and sustainable aviation

#### Background

"CAAFI brings together manufacturers, airlines, airports, the Dept. of Defense, the Dept. of Energy and the Environmental Protection Agency and puts them at the same table. When you get that kind of firepower together and you start to explore, good things happen."

> Marion Blakey Former FAA Administrator

## **CAAFI Sponsors**

Airports Council International-North America (ACI-NA)

Aerospace Industries Association (AIA)

Air Transport Association (ATA)

Federal Aviation Administration (FAA)

# The Commercial Aviation Alternative Fuels Initiative (CAAFI) seeks to enhance energy security and environmental sustainability for aviation through alternative jet fuels. CAAFI is a coalition focusing the effort of U.S. Commercial Aviation to engage the emerging alternative fuels industry. It enables its diverse stakeholders to build relationships, share and collect data, identify resources, and direct research, development and deployment of alternative fuels.

CAAFI sponsors include three trade associations: Airports Council International-North America (ACI-NA) representing commercial airports, the Aerospace Industries Association (AIA) representing U.S. manufacturers, the Air Transport Association (ATA), representing U.S. airlines; and the Federal Aviation Administration's (FAA) Office of Environment and Energy. CAAFI stakeholders are drawn from all elements of the international commercial aviation industry, fuel suppliers, universities and multiple U.S. government agencies.

#### Goal

CAAFI's goal is to promote the development of alternative fuel options that offer equivalent levels of safety and compare favorably with petroleum based jet fuel on cost and environmental bases, with the specific goal of enhancing security of energy supply.

Aviation is well positioned to pursue alternative fuels. The industry is international in scope, highly networked within its supply chain and has a unique capacity to function in an aligned and coordinated manner.

CAAFI stakeholders are working on teams in four areas:

- 1) Fuel Certification and Qualification;
- 2) Research & Development;
- 3) Environment; and
- 4) Business and Economics.

Stakeholders meet to update alternative fuel developments in these areas, identify gaps and hurdles, and decide on next steps required for the earliest possible development and deployment of jet fuel alternatives.

#### Accomplishments in 2008 & 2009

- Initiated early alternative fuel deployment in aviation bringing together 45 energy suppliers and airline jet fuel users
- Focused international and interagency cooperation and alignment across multiple U.S. government agencies, with other States and with ICAO
- Created unified R&D roadmaps, biofuel feedstock roadmaps and a "Fuel Readiness Level" scale to inform investment decisions by the public and private sector
- Created an aviation specific "well to wake" life-cycle environmental impacts framework incorporating multiple public and private efforts, a mechanism for peer review, and FAA aircraft emissions modeling
- Developed a fuel certification plan and targets that enable alternative jet fuel options from a full range of candidate feed-stocks and processes
- **Represented commercial aviation fuels efforts** in domestic and international aviation, energy, and financial industry forums, and with the news media

#### CAAFI Leadership:

Richard L. Altman (CAAFI Executive Director) Nate Brown, FAA (CAAFI Deputy Director) Dave Daggett & Marty Bradley, Boeing (R&D Leads) Lourdes Maurice, FAA (Environmental Lead) Mark Rumizen, FAA (Certification and Qualification Lead) Michael Baer, US Airways (Business & Economics Lead)

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