



DEFENSE LOGISTICS AGENCY

AMERICA'S COMBAT SUPPORT LOGISTICS AGENCY



Defense Logistics Agency Energy Alternative Fuels Overview

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DLA Energy Mission, Vision and Values

Mission

To provide the Department of Defense and other government agencies with comprehensive energy solutions in the most effective and efficient manner possible.

Vision

Our customers first choice for energy solutions.

Values

- Warfighter needs guide us
- Integrity defines us
- Diversity strengthens us
- Excellence inspires us



Defense Logistics Agency Energy

COMMANDER ★

DLA COUNSEL - ENERGY

DEPUTY COMMANDER 🏆

EXECUTIVE DIRECTOR 🏆

CHIEF OF STAFF 🦅

REGIONS: AMERICAS, EUROPE & AFRICA, PACIFIC, MIDDLE EAST 🦅

ACQUISITION POLICY & OVERSIGHT

AUDITABILITY OFFICE

PUBLIC AFFAIRS OFFICE

SMALL BUSINESS OFFICE

INTERNAL REVIEW OFFICE

OPERATIONS 🦅

OPERATIONS SUPPORT 🦅

PLANS & OPERATIONS CENTER

QUALITY TECH SUPPORT OFFICE

DLA INFORMATION OPERATIONS

BUSINESS PROCESS SUPPORT

PLANS DIVISION

OPERATIONS DIVISION

DLA INSTALLATION SUPPORT

DLA FINANCE ENERGY

COMMAND ADMIN SUPPORT

MANPOWER & WORKFORCE ANALYSIS

ENERGY PLANS & PROGRAMS

MOBILITY FUELS 🦅

INSTALLATION ENERGY/ENTERPRISE 🦅

RESEARCH & DEVELOPMENT

EXECUTIVE AGENT

BUSINESS DEVELOPMENT

GOVERNMENT FUEL CARD PMO

DIRECT DELIVERY FUELS

DFSP MANAGEMENT

AEROSPACE ENERGY

BULK PETROLEUM

INSTALLATION ENERGY

ENERGY ENTERPRISE



DLA Energy Enterprise

Military Fuel FY10

Inventory	59.9M barrels*
Storage Locations	630
Barrels Sold	130.5M
Fuel Cards	\$699.7M
Aerospace Energy Sales	\$69.6M

Petroleum Sales: All Customers

FY06 Net Sales	133.9M barrels	\$12.7B
FY07 Net Sales	132.4M barrels	\$12.6B
FY08 Net Sales	132.5M barrels	\$17.5B
FY09 Net Sales	129.0M barrels	\$12.2B
FY10 Estimate	130.5M barrels	\$15.3B
FY11 Estimate	125.5M barrels	\$18.0B

Foreign Military Sales FY10

Net Sales	3.54M barrels - \$340.5M
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* 42 Gallons = 1 Barrel

Expanding Energy Solutions FY10

Natural Gas Business	\$492M
<i>Electricity Business</i>	\$36.5M
<i>Coal Contract Business</i>	\$31.8M
Renewables	\$1M
Energy Savings Performance	\$33.5M
<i>Estimated U.P. Awards</i>	\$616M

multi year awards

Forward Presence FY10

Co-located: 3 Service Control Points
4 Geographic Regions: approx. 283 personnel

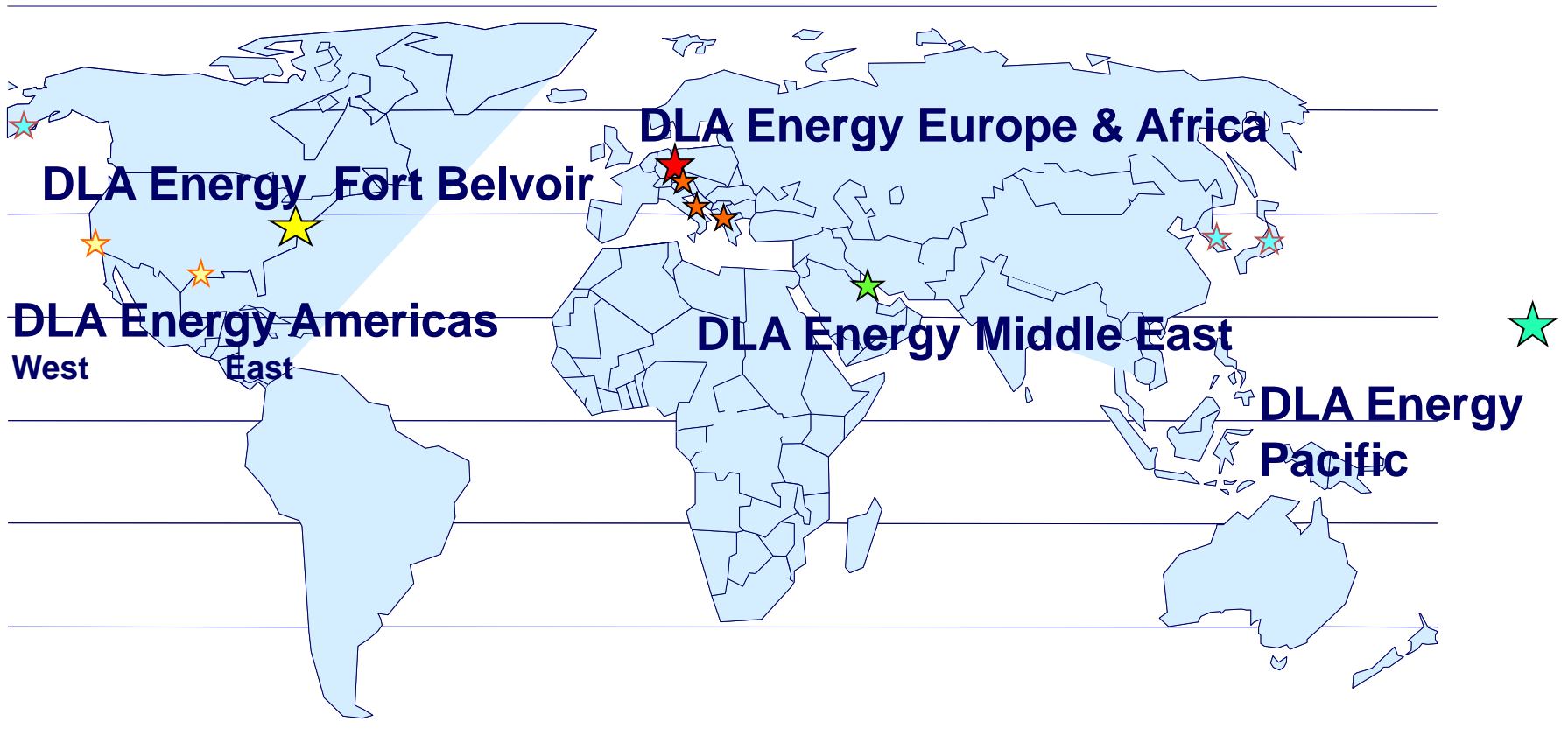
Personnel On Board FY10

Civilians	1148
Military	63



How We Support the Warfighter

DLA Energy Regions



Approximately 1100 military and civilians worldwide



Established Military Service Alt Energy Goals

Air Force

- *AF Energy Plan 2010* – “Increase Supply” Goals
 - By 2016, be prepared to acquire 50 percent of domestic aviation fuel via alternative blends greener than petroleum
 - Increase non-petroleum-based fuel use by 10 percent per annum in motor vehicle fleet

Navy

- *A Navy Energy Vision for the 21st Century*, published October 2009
 - 2012 - Green Strike Group local ops in 2012
 - By 2016 - Sail Green Fleet
 - By 2015 - Reduce petroleum by 50 percent in the commercial vehicle fleet
 - By 2020 – 50 percent of total energy consumption from alternative sources

Army

- *Army Energy Security Implementation Strategy* – 2009
 - ESG 3: Increased use of Renewable/Alternative Energy
 - ESG 4: Assured Access to Sufficient Energy Supply
 - ESG 5: Reduced Adverse Impacts on the Environment
 - Established a Tactical Fuel and Energy Implementation

Quantification of Goals

- Air Force
 - 2016: **387,000,000** USG HRJ-8
- Navy
 - 2012: **100,000** USG HRJ-5; **350,000** USG HRF-76
 - 2016: **1,680,000** USG HRJ-5; **1,680,000** USG HRF-76
 - 2020: **336,000,000** USG HRJ-5 & HRF-76

Quantities are “neat”



Alternative Fuel Supply Chain “Pillars”

- Must be a drop-in-replacement fuel
- “Competitive” price
- Environmentally compliant with Section 526
- Complies with existing procurement statutes/regulations
- Leverage private sector demand



Efforts to Date

- Support Service testing & certification efforts
- Fischer-Tropsch
 - Four contracts: JP8, F76
 - 730,000 USG delivered
 - Coal-to-liquid, Gas-to-Liquid
- Hydrotreated Renewable
 - Seven contracts: HRJ8, HRJ5, HRF76
 - 761,500 USG
- B-20/E-85
 - Over 36,000,000 USG since 2006



Service Test and Certification

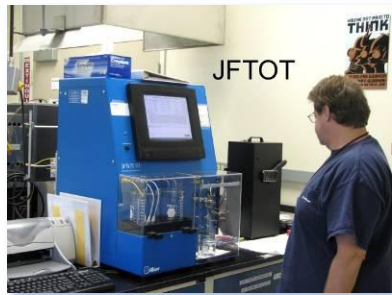
- Air Force
 - FY11: Entire Fleet certified on FT 50-50 blend
 - FY12: Entire Fleet certified on HRJ
- Navy
 - FY12: Platform certification & “Great Green Fleet” demonstration



F/A-18 “Green Hornet” Flight – Earth Day 2010



Industry Qualification (ASTM D4054 Process)



Specification Properties



Fit-For-Purpose Properties



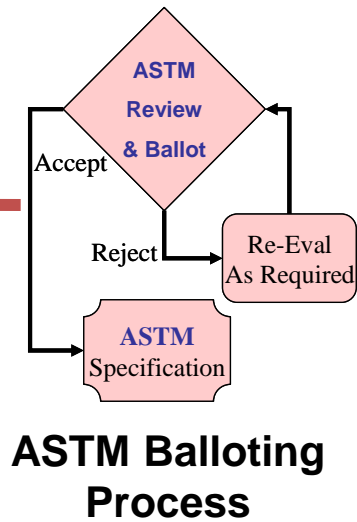
Component/Rig Testing



Engine/APU Testing



Revised or New ASTM Spec



ASTM Balloting Process



FAA & OEM Review & Approval



ASTM Research Report

There is a rigorous specification approval process!



Strategic Considerations

- Alternative fuels have a growing role in our economy
 - Mandates under Renewable Fuel Standards (RFS) 2
- Strong projections of Renewable and Cellulosic Biodiesels
 - Unlike FAME, is fungible with existing infrastructure
 - Cost competitive
 - Potential for ships bunker fuel support
- But....



Strategic Considerations (cont'd)

- No RFS2 mandates for jet fuel
 - Competition for refining capacity/biomass feedstocks
- Unclear price competitiveness
- Jet Fuel ~ 4 percent of U.S. energy consumption
 - DoD only 10 percent of total jet fuel demand
- Section 526 compliance
- Departmental assessment of recent relevant studies

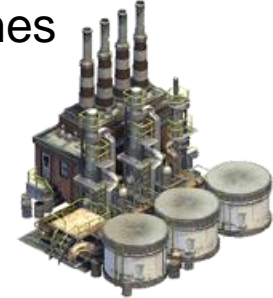


Bridging the Gap

Testing and Certification
Volumes



Full Production Level
Volumes



- Continued support of testing & certification efforts
 - Must have approved specifications to solicit
- Continued intergovernmental & private sector collaboration
 - Synergism required to make alternative aviation fuels a reality
- Blue-print to feasible objectives
 - A game of “singles” vs. home runs
- Continued unified commitment: Budget, requirements



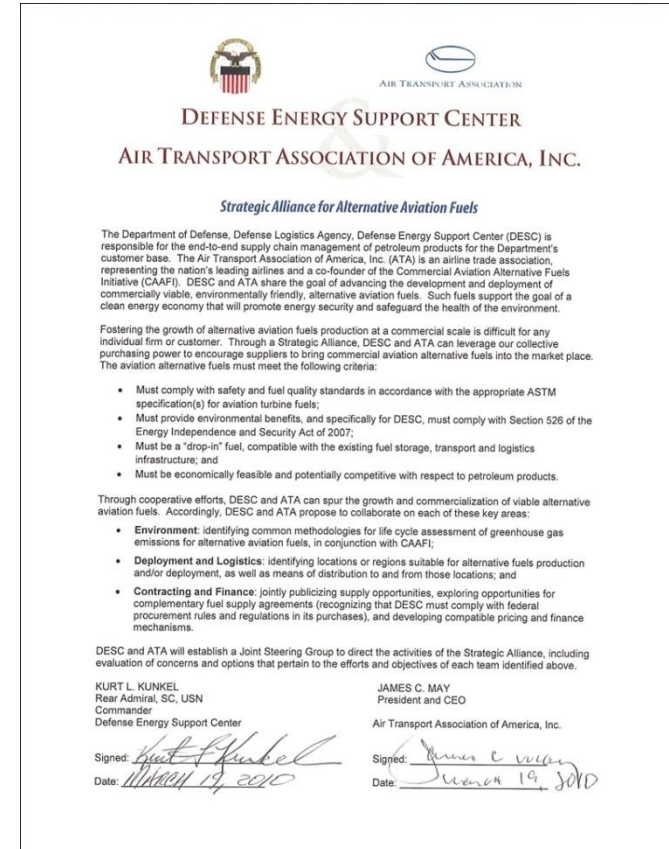
BACKUP



Strategic Alliance for Alternative Aviation Fuels



RDML Kurt Kunkel and ATA President and CEO James May sign the Strategic Alliance for Alternative Aviation Fuels agreement March 19, 2010.





Air Transport Association Strategic Alliance

- Shared goal
 - Advancing the development & deployment of commercially viable, environmentally friendly, alternative aviation fuel
- Joint Steering Group established to direct activities
- Three Collaborative Teams
 - Contract and Finance
 - Environment
 - Deployment and Logistics



FY 10 NDAA, Section 334

Not later than February 1, 2010, the Secretary of Defense shall submit to the Committees on Armed Services of the Senate and House of Representatives a report on the use and potential use of renewable fuels in meeting the energy requirements of the Department of Defense. Such report shall include each of the following: (1) An assessment of the use of renewable fuels, including domestically produced algae-based, biodiesel, and biomass-derived fuels, as alternative fuels in aviation, maritime, and ground transportation fleets (including tactical vehicles and applications). Such assessment shall include technical, logistical, and policy considerations. (2) An assessment of whether it would be beneficial to establish a renewable fuel commodity class that is distinct from petroleum-based products.”



Section 334 Status

- Report completed Nov. 24, 2010
- Submitted to Director of Operational Energy Plans & Programs Office
- DOEPP Office will conduct Departmental Coordination prior to submission to Congress