REDAC - Subcommittee on Environment and Energy
MEETING MINUTES

Meeting Date: March 26-27, 2013
Meeting Location: Volpe Transportation Center, Cambridge MA

Purpose
Environment & Energy Subc.
Guidance & Review for FY 2015
R&D Budget

Facilitator Jim Hileman, FAA, DFO

Note taker Jim Hileman

Minutes from Day 1 – March 26, 2013

Presentation What’s New in AEE | Presenter Lourdes Maurice

Discussion – Lourdes gave an update on new items in AEE. This includes new hires and the E&E Review that was held in accordance with FAA Reauthorization Section 912.

Presentation REDAC Vision | Presenter John Wiley

Discussion - John discussed some changes in how the REDAC will be operating based on the outcomes of the REDAC Working Group. John also made some requests for the E&E Subcommittee in regards to the April 24 meeting that are listed as an action item below here.

Action items

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<th>Person responsible</th>
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<td>Steve Alterman</td>
<td>April 1</td>
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Presentation Response to REDAC Recommendations/Findings | Presenter Jim Hileman

Discussion - Jim went through Spring 2012 and Autumn 2012 Recommendations and Action Items.

Conclusion – All recommendations were closed out. All action items were marked as complete except for a briefing that provides an overview of the ACRP Program. The Subcommittee did not request a briefing so this action was also closed.

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<td>Jim Hileman</td>
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Presentation FY13/FY14 Budget Update | Presenter Mike Gallivan

Discussion - Mike presented on the FY13 president’s request, the FY14 process, and the impacts of CR/sequestration.

Conclusion - There is considerable uncertainty and we are waiting for clarity on the budget.

Presentation FY15 Program Proposal | Presenter Mohan Gupta

Discussion - Mohan presented the FY15 program plan.

Conclusion - The subcommittee was supportive of the plan and the above target request.

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<tr>
<td>Change box plots to have “FY15 Milestones” and not “FY15 Accomplishments.”</td>
<td>Mohan Gupta</td>
<td>March 27</td>
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<tr>
<td>Fix math entry on FY13 budget and change above target entries to note where the line item that includes this item.</td>
<td>Mohan Gupta</td>
<td>March 27</td>
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Presentation CAEP Update | Presenter Lourdes Maurice

Discussion Lourdes discussed outcomes from the recent CAEP/9 meeting, noise stringency, and the CAEP/10 work plan for CO2 emissions and PM emissions.

Presentation COE Update – Setting the Scene | Presenter Jim Hileman

Discussion - Jim presented an update on recent accomplishments and future plans with the existing PARTNER COE as well as the plans for the new COE for Alternative Jet Fuels and Environment.

Conclusion - The subcommittee expressed much interest in providing input on the new COE. The discussion focused on the Advisory Board for the new COE and it led to a recommendation.

Presentation REDAC Roles and Responsibilities | Presenter Cathy Bigelow

Discussion - Cathy reminded everyone about the roles and responsibilities for the REDAC and how this applies to the E&E Subcommittee.
**Presentation** Noise – Update and COE Tech Areas | **Presenter** Rebecca Cointin

**Discussion** - Becky provided an update on the Noise Program and presented the Noise Technical Areas within the COE Solicitation.

**Conclusion** – If FAA wants input before the next REDAC E&E meeting, Steve offered to set up a meeting with interested members to go over progress in the roadmap. Else, it can be covered during August meeting – see action item. The Subcommittee thinks that the list of tech areas is good in encompassing a wide area.

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<td>Set aside two hours for noise roadmap within the agenda for the next Subcommittee meeting – one hour for briefing and one hour for questions. Sandy, Ian, and Katherine will provide feedback with the airport perspective.</td>
<td>Becky Cointin</td>
<td>August 1</td>
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**Presentation** Emissions – Update and COE Tech Areas | **Presenter** Ralph Iovinelli

**Discussion** - Ralph provided an update on the Emissions Program and presented the Emissions Technical Areas within the COE Solicitation.

**Conclusion** – The subcommittee was very complimentary of Slide 6 as it shows how research is being used in the real-world. The subcommittee thinks AEE deserves credit for the work it has done on emissions and in moving research forward.

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<td>Be prepared to set up calls with the REDAC Subcommittee to deal with pop-up issues that arise between REDAC Subcommittee meetings. Noise Roadmap review could be one of these.</td>
<td>Jim Hileman</td>
<td>August 1</td>
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**Presentation** Tools – Update and COE Tech Areas | **Presenter** Mohan Gupta

**Discussion** - Mohan provided an update on the Tools Development work and presented the Tools Technical Areas within the COE Solicitation.

**Conclusion** - One of the committee members noted that AEE should provide additional credit to NASA on slide 4 as they are also providing funding to all of the underlying modules within EDS.

**Presentation** Operations – Update and COE Tech Areas | **Presenter** Pat Moran

**Discussion** - Pat provided an update on the Operations Roadmap and presented the Operations Technical Areas within the COE Solicitation.

**Conclusion** - There was some discussion on how AEE interacts with others in FAA. Subcommittee thought there was good interaction between AEE and other agencies within FAA who are developing operational procedures.
**Presentation** Aircraft Tech – Update and COE Tech Areas | **Presenter** Rhett Jefferies

**Discussion** - Rhett provided an update on the CLEEN Program and presented the Aircraft Technology Technical Areas within the COE Solicitation.

**Conclusion** - The subcommittee is very supportive of this work and asked for an updated fact sheet on its progress. If possible, they would like this to include industry implementation of the technologies. This discussion led to a recommendation.

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<td>Update the CLEEN one page fact sheet to include latest successes and industry implementation (if possible).</td>
<td>Rhett Jefferies</td>
<td>August 1</td>
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<td>Determine additional means of conducting outreach on CLEEN and its successes.</td>
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**Presentation** Alternative Jet Fuels – Update and COE Tech Areas | **Presenter** Rhett Jefferies

**Discussion** - Rhett provided an update on the alt jet fuels research and presented the five Alt Jet Fuels Technical Areas within the COE Solicitation

**Presentation** Previous Year Budgets (within Section 912 Briefing) | **Presenter** Mohan Gupta

**Discussion** – Mohan presented FY09 to FY12 budgets broken out by strategic pillar. These were within the Section 912 briefing that was provided as read-ahead materials.

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<td>For future meetings, develop budget pie charts that give skeleton for coming years in addition to historical break-outs.</td>
<td>Mohan Gupta</td>
<td>August 1</td>
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<td>Refine how budget is divided in previous year budget pie charts to improve clarity.</td>
<td>Mohan Gupta</td>
<td>August 1</td>
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**Presentation** NextGen Environmental Management System | **Presenter** Don Scata

**Discussion** - Don provided an update on the research being conducted under the Goals and Targets Benefits Analysis, the development of an AEE-wide Strategic Plan, and the process to solicit stakeholder input via the NextGen EMS.

**Conclusion** – The subcommittee asked FAA to provide additional details on this analysis – see action item.
Refine the underlying assumptions in G&T Benefits Analysis (particularly for alt fuels) and improve the manner in which the data is presented to appropriately give caveats. Report on these at the next REDAC E&E Subcommittee Meeting.

**Presentation Operations Research Update | Presenter Pat Moran**

**Discussion** - Pat provided an update on the research being conducted on operations within AEE.

**Conclusion** – The subcommittee asked FAA to check on other work on UAS – see action item.

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AEE should reach out to other areas of FAA to know what all is happening in UAS space to ensure efforts are well aligned.

**Presentation CAEP CO2 Analysis | Presenter Ralph Iovinelli**

**Discussion** - Ralph provided an update on the analysis that is being done to support the development of a CO2 standard.

**Conclusion** - The FAA have done great work here and they need to keep this effort going.

**Presentation Noise Survey | Presenter Becky Cointin**

**Discussion** - Becky provided a research update on the national airport noise survey.

**Conclusion** - The subcommittee recommended that FAA continue to work on their communication plan with the stakeholders involved, especially with regards to the airports that will be a part of the survey. See action items.

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Provide a briefing on the noise survey at the next Subcommittee meeting.

If possible, have AEE participate during the noise survey briefing that takes place within the next Airports Subcommittee meeting.

**Presentation ACCRI Program | Presenter Daniel Jacob**

**Discussion** - Daniel provided an update on the ACCRI research program. There was much interest in what will follow on once ACCRI completes its report.
Rangasayi Halthore August 1

Jim Hileman August 1

Jay Dryer August 1

Jay Dryer August 1
Subcommittee Discussion of Open Recommendations: All recommendations were closed by the members.

Next Meeting: August 6-7 in Washington DC at Airlines for America.

Meeting was adjourned at 2:00 pm on Tuesday, March 27, 2013.

Attendance

Members:
Steve Alterman (Chair)  Leslie Riegle  Don Wuebbles
Charles Etter  Dimitri Marvis  Darcy Zarubiak
Mahendra Joshi  Katherine Preston  Ian Redhead
Steven Hamburg  James Hileman, (FAA, DFO)
Jay Dryer (Telcon)  Nancy Young (Telcon)

Other Attendees:
Gregg Fleming, USDOT/Volpe  Joe Zelina, GE  Gloria Dunderman, FAA
Mohan Gupta, FAA  Sandy Lancaster, DFW

Telcon:
Lourdes Maurice, FAA  Rhett Jefferies, FAA  Mike Gallivan, FAA
John Wiley, FAA  Cathy Bigelow, FAA  Patrick Moran, FAA
Beck Cointin, FAA  Ralph Iovinelli, FAA  Don Scata, FAA
Daniel Jacob, FAA