

Research, Engineering and Development Advisory Committee (REDAC)
Subcommittee on Airports
Spring Meeting, April 1-2, 2014

Meeting Minutes

Day One

Tuesday, April 1, 2014

Meeting started at 9:00am with remarks by Mr. Christopher Oswald, Subcommittee Chairperson. Mr. Oswald thanked everyone for attending followed by introductions of Subcommittee members.

Mr. Dennis Filler, Director, FAA WJH Technical Center, spoke on the retirement of Dr. Satish Agrawal and welcomed Dr. Michel Hovan as the new Branch Manager. Mr. Filler gave an overview of the FAA FY 2014 budget and spoke of the importance of the research and development (R&D) Program. He explained currently only 1% of the 10% that is dedicated to Aviation goes towards research and believes that number needs to be increased. He expressed his concern for research having missed opportunities and falling short in the ability to deliver maximum economic value not only to the aviation industry but to the American public as well.

Dr. Eric Neiderman, Acting Manager, Aviation Research Division, thanked everyone for attending. Dr. Neiderman reiterated the retirement of Dr. Satish Agrawal and his dedication to the FAA R&D program. He thanked Jeff Gagnon and Jim Patterson as well as the employees at the Branch for their continued dedication to the R&D program. Dr. Neiderman made special mention to Dr. Cathy Bigelow for stepping in as acting Branch Manager. Dr. Neiderman introduced Dr. Michel Hovan as the new Branch Manager, and gave a brief overview of his expertise in the aviation field. He spoke on the importance of the need for increasing funding for the R&D program.

Mr. James White, Deputy Director, Office of Airport Safety and Standards, Designated Federal Official (DFO), thanked everyone for attending. He welcomed Dr. Michel Hovan and thanked Dr. Cathy Bigelow for accepting the role as acting Branch Manager while a replacement for Dr. Agrawal was being sought. Mr. White explained FAA Headquarters is working on three budgets at this time. This includes executing the FY 2014 budget, defending the FY 2015 budget request in Congress and developing the FY 2016 budget request. The current budget for Airport Technology Research is \$29.3 million. The FY 2016 budget request will be submitted in a month and is projected to stay around \$30 million.

Dr. Michel Hovan, Branch Manager, introduced himself and gave a brief synopsis of his expertise. He introduced SRA International, Inc. and explained SRA's contract support for the FAA. He gave a brief overview of the budget FY 2013-FY 2016. There are 25 projects planned

and the numbers are stable. He believes this is a good environment and the research is being effective.

A member of Subcommittee posed a question regarding whether money comes with a request for a project. Mr. White explained that when FAA Headquarters sends a request for R&D to the Tech Center, the Tech Center will develop a project plan, schedule, and cost estimate. The Tech Center will determine if the project can be included in the current year's plans without significant impact to ongoing projects. If not, then Headquarters will request funding for the project in future years.

Mr. Jim Patterson, Section Manager- Review of REDAC Recommendations:

Mr. Patterson gave a brief overview of the fall 2013 REDAC meeting recommendations and how they were addressed.

1. ***Heated Pavements***- Construction of a prototype heated pavement section at the Greater Binghamton Airport is to be completed by end of April 2014. Once construction is completed, data will be collected and that will provide inputs to help assess the life cycle costs of heated pavement. A full winter of data collection will be obtained. A grant was awarded to Iowa State University through the PEGASAS Center of Excellence (PEGASAS is the Partnership to Enhance General Aviation Safety, Accessibility and Sustainability) and a report will be provided December 2014. The Subcommittee decided to close this recommendation but continue further discussion in the spring on heated pavement at the spring 2015 REDAC meeting.
2. ***Trapezoidal Grooving***- As of April 2014 this is still under review in the FAA Office of Airport Safety and Standards. The Subcommittee was concerned that FAA had not yet issued a change to the Advisory Circular (AC) to allow trapezoidal grooves on airport pavement. Mr. White agreed FAA Headquarters is being slow on this and explained that Headquarters still has some concerns to resolve on long term maintenance of trapezoidal grooves and on friction. He said they would try to have an answer to move ahead with the AC or if more research would be required at the August meeting. The recommendation was tabled to be re-addressed during the discussion and recommendations portion of meeting.
3. ***High Strength Research***- FAA agreed with the REDAC Subcommittee decision to continue to look at suggestions. Subcommittee decided to close out this recommendation.
4. ***Safety Database Development and Management***- The Subcommittee recommended the need for greater situational awareness, such as looking at data and finding high risk issues specifically, Taxiway Geometry. The Subcommittee was concerned how FAA would use the database. The Subcommittee discussed the process of gathering information for the database, sharing the database with other FAA lines of business and airports, keeping database current, and improving overall functionality. The need of all incidents to be reported in the database including pilot, traffic controllers, taxiway, and runway was also discussed. It was decided by the Subcommittee to keep this recommendation open until

response from FAA is more reflective of concern expressed in the recommendation. The recommendation and response will be discussed further during the discussion and recommendation portion of the REDAC meeting.

5. ***Safety Mitigation-*** A better response needed to be developed as part of the Airport Safety Database Project. The Subcommittee recommended the FAA establish a Safety Working Group to be a sounding board for FAA. The FAA agreed. The Subcommittee decided to close out this recommendation.
6. ***Prioritization of New Research Tasks-*** The Subcommittee suggested the FAA seek input and advice from the Subcommittee when new research requirements are developed. The FAA agreed and has implemented this idea. The Subcommittee decided to close out this recommendation.
7. ***FAA Research in existing Airfield Pavement Life Cycles-*** The Subcommittee suggested, when researching life cycles that a) the type of paving and sub-base material characteristics be considered as to how they impact the life of the pavement and that b) the FAA pavement design program needs to include this information in the design. The FAA agreed. The Subcommittee decided to close out this recommendation.

Mr. Patterson continued his presentation with an overview of Safety Projects and Plans. He touched briefly on the Safety Research Program Description (RPD) Budget and new RPD 156 - Airport Tech Database and Software. He explained the RPD will serve both Safety and Pavements and it will be the sole conduit for all databases. The goal is to keep the databases six months current. Mr. Patterson touched on staffing, partnerships, other activities, resources and publications. He mentioned a new project for FY 2014, which is considered to be a pop up project. It is assisting in the Surface Safety Initiative Team (SSIT). The SSIT is reviewing the surface safety needs of the five airports that are no longer scheduled to receive Runway Status Lights, and the five airports where the prototype Low Cost Ground Surveillance Systems were removed. The Tech Center Support contract will assist the SSIT with analysis and preparing the individual airport reports.

Mr. Charles Ishee-Heated Pavements RPD 155

Discussion - Mr. Ishee provided an update on the RPD 155 current projects, future projects, including FY 2014, FY 2015, and FY 2016 budget plans. He included an overview of Nano Structured Superhydrophobic Coatings. Mr. Ishee explained that the Greater Binghamton Project was delayed to funding issues at the airport, but it is now expected to be completed by April 23, 2014. Data will be collected on a monthly basis including cost efficiency information and a report will be prepared by May 2015. The Energy and Financial Viability program of this project was also discussed.

Mr. Joe Breen- Aircraft Braking Friction RPD 147

Discussion - Mr. Breen gave an update on the testing performed and presented data that was collected during testing on dry and wet pavement areas. He explained that the testing on natural snow, originally scheduled for winter 2013-14, was not performed due to an aircraft brake malfunction and the time required to obtain parts and repair the brakes. Mr. Breen explained that the testing is anticipated to be completed on manufactured snow the week of April 7, 2014, during the overnight hours when temperatures should be able to keep conditions right for test bed. He also discussed the upgrades and changes that have been completed on the aircraft.

The Subcommittee questioned the percent (%) of mu slip and why the testing did not reach the peak of mu curve. Mr. Breen responded that a) 6%-8% reflected what the percentage was, b) the reason the peak could not be reached was due to the risk of damage to the aircraft, and c) there was no real benefit to doing so. The Subcommittee voiced concern over the age of the aircraft as compared to newer aircraft in regards to collecting accurate and fair data as well as cost of repairing and maintaining aircraft. The missed opportunity of the winter 2013-14 testing was also discussed. Mr. Breen also discussed the Takeoff Landing Performance Assessment/Braking Availability Tester (TALPA/BAT) Pilot Project Concept and how the FAA could integrate the information into the current project. Trapezoidal Grooving was not discussed due to time constraints. A brief overview of project schedule was presented.

Conclusion - Mr. Breen agreed to update Subcommittee on results collected during April 7-11 2014 testing. The Subcommittee decided to address this project again during the discussion/recommendation portion.

Mr. Jim Patterson- Trapezoidal Grooving

Discussion - Mr. Patterson gave a brief overview of the Trapezoidal Grooving Project. Based on previous REDAC recommendations, the FAA referred to past evaluations of Runway Grooving. Mr. Patterson presented the Quantico Project and data results. The Subcommittee expressed some concerns regarding the outcome of the project.

Conclusion - the Subcommittee agreed to re-address this project during the discussion and recommendations portion of the meeting.

Ms. Sandy Lozito- NASA Research

Discussion - Ms. Lozito started her presentation introducing Airspace Systems Program, a new project being developed and potentially funded for FY 2015. She introduced herself and gave a brief overview of her expertise and background. Ms. Lozito presented programs developed by NASA. The Subcommittee was pleased with the presentation and interested on how to integrate these systems into FAA systems.

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Mr. Jim Patterson presented Airport Noise & Problematic Taxiway Geometry RPDs 151& 149

Discussion – Mr. Patterson gave an explanation on the four phases of the project and updates on each. Questions were raised in regards to development and distribution of the noise surveys. Mr. Patterson explained that the Airports Cooperative Research Program (ACRP) was used as precursor to determine how the study should be compiled. He also informed the Subcommittee that they will coordinate with the airport prior to distribution of surveys. At this time, Rebecca Cointin, Manager, Noise Division, AEE-100, Office of Environment and Energy, Federal Aviation Administration, joined the meeting via conference call. The Subcommittee asked several questions:

1. Was a web-based questionnaire considered for use for this study? Response: The web engineer that was hired did not see a better response with web-based questionnaires vs. mailings in past studies.
2. Was a city-based website considered? Response: No, due to the fact this would give a more centralized selection of people and they want to do a more random selection of participants.
3. How are the criteria for mailings set, by zip code or random zip codes? Response: Details on how the zip codes are used is not known. At this time, it is known that the zip code is not the only criteria. For more information on demographic and mailing criteria, Ms. Cointin will respond to Subcommittee at a later time.

Mr. Patterson then provided an overview and update on the Safety Database, Mitigation Plans, including accomplishments since last meeting, and Problematic Taxiway Geometry and the process of data collection and results of data collection. The Subcommittee raised a concern as to how and who decides the primary cause of incidents and the coding of these incidents. Mr. Patterson deferred to Garrison Canter, Airport Operations Research Analyst, SRA International, Inc.; Garrison explained the database is based on internal FAA studies and Airport Design ACs. The Subcommittee expressed some concerns with hotspot determination, usage of data, and accessibility to data.

Conclusion- This project will be further discussed in the Discussion and Recommendation portion of the meeting.

Don Gallagher-Visual Guidance and Runway Incursion Reduction, RPDs 133 & 151

Discussion - Mr. Gallagher presented an overview on the Lighting- and Rumble Strip- Projects. He presented the four phases of the lighting project and presented data that was collected during research. He detailed Phase 4 collaborating with PEGASAS and universities for future testing with the lighting project. The Rumble Strip presentation began with an overview of the project. Mr. Gallagher informed the Subcommittee PEGASAS has experts that have completed this with highways so the research won't have to start at the beginning. The final feasibility study will be

submitted September 2014. One concern raised that the Subcommittee felt should be taken into consideration is how Rumble Strips could affect emergency response time.

Mr. Nick Subbotin- Surface Operations; Baffle Efforts; EMAS RPD 148

Discussion - Mr. Subbotin gave an overview on Runway Friction, equipment used, and activities current and future. He highlighted the Penn State Workshop and TALPA Technical Note published in 2013. He spoke about the FY 2015 budget of \$700K for full scale Hydroplane Testing that is planned with the B727 in ACY.

The EMAS presentation began with Mr. Subbotin stating that the CRDA (Cooperative Research Development Agreement) with Norwegian Glass Recycling (NGG) expired in October 2013. The Subcommittee inquired as to how the CRDA works. Mr. Subbotin explained it is on a 2 year renewal cycle and there were some issues with NGG and the agreement was allowed to expire. They are now trying to pursue a teaming agreement with a U.S. manufacturer. Mr. Subbotin presented updates on testing and products by ESCO (manufacturer of airport arrestor beds), testing of Engineered Materials Arrestor System (EMAS) at the San Francisco Airport (SFO), and EMAS Test Bed Relocation Plans. EMAS Marking Signage updates were also presented, as well as the potential for future activities.

Mr. Subbotin also provided an overview of the Baffling Project and definition of research.

The Subcommittee raised a concern with the material of the NGG EMAS bed in regards to evacuation. Based on documentation presented, the material looks as it would break up and not only risk damaging or puncturing the evacuation slide but also cause potential problems for passengers or First Responders that may have to walk through the bed after it was disturbed by the aircraft.

Conclusion - The Subcommittee advised FAA to review how the material reacts in regards to evacuation.

Mr. Keith Bagot- Cargo Firefighting & Biofuel RPDs 134, 140, & 152

Discussion - Mr. Bagot began his presentation with citing two published reports since last REDAC meeting in September 2013. He mentioned two reports that are in the editing cycle and three reports are under draft review. He presented strategies for New Large Aircrafts (NLA's) that are published and explained how they pertain to different aircraft. Mr. Bagot informed the Subcommittee of plans of investigating better technologies, what testing will be completed, and future planned testing. Mr. Bagot then stated the literature review on Biofuels was under editorial review. He spoke of all materials being tested and the process of the tests. He touched on the Fire Test facility upgrade and plans for the L-1011 Test Aircraft acquired from the Federal Air Marshalls and the cooperative participation from Tyndall Air Force Base and Dallas Fort Worth Airport.

Mr. Robert Bassey- Research Taxiway; Low Cost Ground Surveillance; Electrical Infrastructure Research Team (EIRT); Regulator Project; Windcone Study; Airport Construction Sign RPD's 151,153 & 154

Discussion - Mr. Bassey presented the Subcommittee an overview of projects detailing phases and completion dates for each. He mentioned working with the Army Corps of Engineers to revise the original bid for the Cape May Research Project and that construction on project is still planned to begin in June 2014. Mr. Bassey presented recommendations for EIRT Test Team and the scheduled roadmap going forward. Beta testing through the PEGASAS Program was highlighted and he summarized Project Objectives. Mr. Bassey explained the lighting project and was asked by the Subcommittee if the project was considered a pop up project to which Mr. Bassey responded that it was. He gave an overview of the issues and the process for testing solutions with a schedule completion dates. Mr. Bassey presented the Low Cost Ground Surveillance project and the cooperation from the Seattle-Tacoma International Airport. He presented examples of the different types of surveillance equipment being tested and the processes of the tests. Mr. Bassey explained Phase 2 of this project and the changes in testing being performed.

Mr. Bassey gave an overview of the Runway Construction Signs project. He showed examples of different signs that were used in the test and explained the results were based on findings from pilots and vehicle operators from five different airport sites as well as simulations. He explained the Take Off Run Available (TORA) sign findings have to be put on hold due to pilots not understanding the acronym TORA. The team is currently working with Los Angeles International Airport (LAX) and John F. Kennedy International Airport (JFK) on constructing new signs. A final report will be completed and submitted after the findings from LAX and JFK are completed.

The Subcommittee raised questions regarding the Low Cost Ground Surveillance concerning the goal or end result for the research. Mr. Bassey explained the initial goal was to gain information for Airport Operations but that has expanded due to the type of data being collected, to possibly being a beneficial tool for air traffic controllers as well as the airport surveillance department.

Conclusion- The Subcommittee suggested creating a standard of acceptance to supply products of surveillance as well as creating a clear definition as to what problem this project is trying to solve and developing a plan with more structure and clearly defined goals of this project.

Day Two

Wednesday, April 2, 2014

Mr. Christopher Oswald began day two of the meeting by welcoming everyone back and briefly going over the agenda.

Mr. Ryan King, Wildlife Mitigation, Strike Database-Detections/Deterrents RPD 150

Discussion- Mr. King gave a brief overview of projects and budgets.

He stated that funding for the Wildlife Mitigation program allows for a broad array of projects. He gave a synopsis of Thermal Imaging Enhancements and how it is used with bird radar, the NextGeneration Radar (NEXRAD) Integration with BSTAR (Bird Radar produced by the SRC Company) and Dallas Fort/Worth (DFW) Airport. Mr. King showed examples of Live Radar from DFW and explained how this tool can provide data to monitor bird activity. He presented an update at the last meeting and the future direction of research and activities for this project. Mr. White commented that the budget for Data Analysis for this project has increased by \$150K to 415K which falls under the operational budget of the FAA's Office of Airports.

Ms. Holly Cyrus, Airport Planning RPD 132

Discussion- Ms. Cyrus gave an overview of Software Package Enhancements and of the project budget. She highlighted the Simulation Model Enhancements 4.1 & 4.2 (Engine Version) that was released in March 2014. Ms. Cyrus explained the Performance Data Analysis and Reporting System (PDARS) Data is 90% complete. Ms. Cyrus gave an overview of the plan for the next 6 months including Airspace Simulator Model Enhancements. The Subcommittee raised concerns of workload intensity and cost. The subcommittee also suggested integrating this tool for Risk Analysis to assess possible issues.

Mr. Mike DiPilato, SRA International, Inc., Safety Surface Initiatives Team (SSIT)

Discussion- Mr. DiPilato gave an overview of the project and went over Team Organization. Mr. DiPilato highlighted the CARP team (Comprehensive Airport Review Plan). Mr. DiPilato explained how the project is progressing and included the upcoming meetings and touched on the budget for FY 2014. Mr. DiPilato talked about DFW and how they have become fully integrated in this project. He spoke on data collection and types of data sources that are being used. The Subcommittee discussed how to proceed with this project and suggested, as the project progresses, creating a standardized approach to data collection and usage. It was suggested that this information is extremely important and should be communicated with other airports and shareholders. Mr. DiPilato informed the Subcommittee those conversations with the airports are already in progress. The Subcommittee also suggested including infrastructure, technology, and risk assessment in the project data. Mr. DiPilato agreed and stated this could be a combined effort with the Problematic Taxiway Geometry project and the Subcommittee agreed that both databases should be used to supplement each other.

Conclusion- Data retrieval and sharing, as well as ways to enhance the system, will be discussed at the full REDAC meeting in two weeks.

Mr. Jeff Gagnon, Section Manager, Overview of Airport Pavement Section

Discussion- Mr. Gagnon discussed current projects and plans and budget summary. He spoke about the FAA PAVEAIR (PAVEAIR is a pavement design computer program) software project, industry activities and upcoming meetings within the industry that the Airport Pavement R&D Section will be participating in.

Dr. David Brill, 40 Year Design Life Initiative, RPD 144

Discussion- Dr. Brill reviewed current activities and talked about the SME (Subject Matter Expert) Group. Dr. Brill detailed future activities and gave an update on the Runway Data Collection Project that started in 2012, adding that two years' worth of work has been completed. He detailed the process in which they are choosing the airports to collect data from and how the data is collected, more specifically naming SurPro (trademark name of a portable profiling device), the FAA Inertial Profiler (FIP), and laser imaging. Dr. Brill went over the FAA PAVEAIR Implementation and the future goals for the project. He detailed the Lab and how materials testing are completed. Dr. Brill stated the National Airport Pavement Test Facility (NAPTF) Lab is equipped to handle all but three tests that need to be performed. He gave a lab test summary and overview of the upcoming schedule, including meetings. Dr. Brill gave a brief summary on FY 2015 and FY 2016 budgets. Concerns the Subcommittee raised were the affordability of the airports to implement. Dr. Brill stated that it is too soon to quantify as this is a work in progress.

Conclusion- The Subcommittee suggested building a database and to be aware of variability in test results, explaining that is a critical component in test results for this type of project.

Mr. Al Larkin, FAA PAVEAIR Update NDT Update Pavement Roughness Update, RPD 143

Discussion- Mr. Larkin gave an overview of the budget and updated the Subcommittee on the status of the project. He talked about Prediction Modeling and how that could be useful to airports. He gave an overview of the Climate Module and Traffic Module. Mr. Larkin presented the Life Cycle Cost Analysis (LCCA) review and went over the process. He mentioned CMS Engineering was brought on board to assist with the review of LCCA and the FAA will reach out to CMS to determine how to proceed. Mr. Larkin spoke about the goals for how airports will be using FAA PAVEAIR and examples of how to integrate the software.

Mr. Larkin proceeded to give an update of NDPT (Non Destructive Pavement Testing) and the current testing that is ongoing. He presented visual examples of the testing equipment and vehicles and gave details on how the equipment is used and data is captured.

Mr. Larkin then gave an update on the Pavement Roughness Project. He explained the Roughness Simulator testing done in Oklahoma City and went over data collected from that test. Mr. Larkin gave an update on the test completed at VA Tech Smart Road and the data compiled and went on to talk about future plans for the project.

Conclusion- The Subcommittee suggested creating a new standard for the project including new criteria for pavement smoothness and possibly integrating this with the 40 year Design Life Initiative project.

Mr. Ryan Rutter, Facility Update, RPD 138

Discussion- Mr. Rutter gave an overview of the facility and showed examples of Construction Cycle CC6 and CC7. Mr. Rutter spoke about the NAPTF Vehicle and informed the Subcommittee of the maintenance and upgrades that have been performed on the vehicle as well as upgrades to the NAPTF. He presented examples of data that have been collected during testing in the facility with the NAPTF vehicle.

Mr. Charles Ishee then spoke about Reflective Cracking Testing being performed in the facility. He went over the 2014 construction and provided visual examples of testing and data collection.

Mr. Murphy Flynn, Construction Update, RPD 136

Discussion- Mr. Flynn gave an overview of upgrades to the NAPTF vehicle and overall progress. He went over the Strain Gage project and mentioned the install rate is 100% success and that the FAA is first in using them in this type of testing. Mr. Flynn processed to speak of other testing processes such as Fiber Optic gages that did not fare well for this type of test. He presented visual examples to highlight the construction and testing performed. Mr. Flynn gave an update on the new facility. He explained construction has been delayed slightly due to bad winter. He also explained the need to revise the next plan for asphalt testing and take in consideration for construction. Mr. Flynn felt the last plan was too aggressive and more time will be needed going forward.

Mr. Jeffrey Gagnon, Heavy Vehicle Simulator-Airport Model RPD 135

Discussion- Mr. Gagnon gave an overview of the Heavy Vehicle Simulator (HVS) and of the testing that will be performed. He spoke of future research that is planned and gave an overview of what is available for testing on site including Lab, NAPTF, and HVS. He concluded his presentation with a video on the delivery and construction of the HVS.

Mr. Murphy Flynn, Field Instrumentation Projects, RPD 137

Discussion- Mr. Flynn gave a current project overview and spoke about the Kahului, Maui project. Mr. Flynn spoke about the airport being owned by the Department of Transportation (DOT) in Hawaii and the difficulties as a result. He expressed some challenges with the project and commended the University of Hawaii for their participation. Mr. Flynn updated the Subcommittee on future schedule and plans for the project. Mr. White asked the Tech Center to review this project and explain when it had been restarted.

Dr. David Brill, Pavement Software Upgrades and Update, RPD's 144&145

Discussion- Dr. Brill gave an overview of FAARFIELD 1.4 (FAARFIELD is a Pavement Design Computer Program) and the enhancements that will be introduced. Beta 1.41 was released for internal review on March 7, 2014. He described how the new enhanced version will perform over the earlier version and how it will be used. Dr. Brill highlighted FAA Technical Notes that have been published and spoke of future activities planned for the project. Also cited were past, current and future workshops that have been attended worldwide.

Discussions/Report

Mr. Christopher Oswald began this portion of the meeting by opening discussion for the fall 2015 REDAC Meeting. It was discussed possibly adding a half day to the current schedule. That possibility was included in the planning of the 2015 meeting but will not be decided upon until the dates get closer. The tentative dates for the 2015 meeting are Tuesday, March 31, 2015- Thursday, April 2, 2015 with a new location as well, Building 300 at the FAA Technical Center. Agenda will be decided as dates get closer and everyone will be notified accordingly.

Mr. Oswald directed discussions with Recap of Recommendations and Open Items:

1. Trapezoidal Grooving - the recommendations are to keep this open. The question of additional research is not answered. Headquarters still has to decide whether it is ready to move forward with the development of an AC. FAA HQ will provide a status in August on the potential development of a new AC or whether additional research is needed.
2. Safety Database - the recommendations are to keep this open. Going forward it is recommended accessing external stakeholder and explores mechanism as to how Airport Operations can get access to data. Explore the feasibility of the database based on practicality and affordability. The Subcommittee made recommendation to change the name of the database, taking out the word Safety and having the name reflect what it is, a tool for research. An example being Data Collection and Analysis Tool. There was discussion on data collection and concerns for how it will be perceived and used. Final Comments: There needs to be an effort on awareness and how the tool will be used. Needs to be further discussion on how the data will be used and where the data is coming from. Provide and define mechanism for airports to review data and the possibility of providing specific reports for specific airports. The Subcommittee also reiterated the importance of changing the name.
3. Heated Pavements - this was more of an internal recommendation. Add detail as cost benefit as it becomes available. Mention to REDAC progress is being made.
4. Aircraft Braking Friction - Presenting at REDAC. The Subcommittee was concerned that no winter testing on real snow was conducted due to the brake failures on the test aircraft. There are still risks that this project will be able to produce successful results but the

value of being able to predict stopping distance on contaminated runways warrants continuing this project. Hopefully we can get data next winter. FAA needs to provide written research plan going forward to Phase 2.

5. Low Cost Ground Surveillance - the Subcommittee discussed the feasibility for low cost surveillance equipment and mentioned how the project seems to be expanding without direction. They agree this is a good project. The Subcommittee would like to see more collaboration with other resources performing similar studies. They would advise the FAA to create a clear definition and structure to the project, defining the goal of the research analysis, and stating the objective in what is trying to be solved with this research.
6. Wildlife Mitigation - the Subcommittee was very impressed with the presentation and progression of this project.
7. Airport Planning - Subcommittee suggested continuing the integration of data sources.
8. Safety Surface Initiatives - the Subcommittee stated this would be highlighted at REDAC. It was suggested trying to gain assistance in getting better controller data.
9. Pavement - Reflective Cracking- the Subcommittee is pleased with the progress made.
10. 40 year Design Life Initiative - CC7 – pleased with participation with 40 yr. life working group and projecting to receive good data from CC8.
11. Heavy Vehicle Simulator - It is suggested by the Subcommittee to define criteria so results can be implemented more quickly.

Mr. Oswald asked members of the Subcommittee for any special interests they would like to see possible future research on.

It was suggested to research pavement grinding. More specifically with both concrete and asphalt, finding out if there is a problem with grinding. If there is no problem then finding out how much you can grind, how deep you can go. It was stated the Army Corps of Engineers states grinding exposes aggregate and causes pop out issues. The members of the Subcommittee feel it would be beneficial to identify the issues and to profile specifications in acceptance criteria.

Mr. Oswald thanked everyone and the meeting was adjourned.

Attendance

Members:

Barbara Busiek	Rick Kessel	Flavio Leo
Paul Martinez	Gary Mitchell	Alfred Pollard
Michael Roginski	Stephanie Saracco	Monte Symons
James Wilding	Chris Oswald (Chair)	James White (FAA-DFO)

Other Attendees:

Keith Bagot	Robert Bassey	Erin Heffron
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Jennifer Klass
Peter Sparacino
Murphy Flynn
Gloria Dunderman

Ryan King
Donald Gallagher
Al Larkin

Seth Young
Charles Ishee
Cathy Bigelow