NASA Advisory Council (NAC)
Aeronautics Committee

February 16-17, 2010
NASA Headquarters Aeronautics Conference Room
Room 6B42

Meeting Minutes

Participants:

First	Last	Organization	Role
Marion	Blakey	AIA	Chair
Ilan	Kroo	Stanford U.	Member
Preston	Henne	Gulfstream	Member
Mark	Lewis	U. of MD	Member
John	Hansman	MIT	Member
Harry	McDonald	U. of Tenn	Member
Mark	Anderson	Boeing	Member
Jaiwon	Shin	NASA	Presenter
Tom	Irvine	NASA	Presenter
Susan	Minor	NASA	Executive Sec.
Brian	Ellsworth	AIA	Observer
Chris	Farrell	AMA	Observer
Robie Samanta	Roy	NASA	Observer

Except as noted all discussions were open to the public.

February 16th:
The meeting was called to order at 1:04 p.m.

Welcome, Introductions and Opening Remarks (*Marion Blakey, Susan Minor)*

After introductory meeting logistics from Susan Minor, Marion Blakey welcomed both the returning committee members and the new committee members to the meeting and gave a brief synopsis on what she hoped for the committee to accomplish in the upcoming year. The members and other participants introduced themselves, with the members giving their thoughts on the state of NASA Aeronautics. Dr. Ken Ford, the NASA Advisory Council Chair, thanked everyone for their contributions and gave some "instruction" to the committee on the differences between findings, observations, and recommendations. He also went through the process for reporting out to the Council and dealing with significant differences in recommendations.

Overview of NASA Aeronautics Program and Discussion *(Dr. Jaiwon Shin, Tom Irvine, Committee Members)*

Dr. Shin gave an overview briefing of the structure and status of the NASA Aeronautics program. He addressed in some detail the research philosophy and principles, the engagement of academia and industry through partnerships, the process for using NASA Research Announcements and Space Act Agreements. The Committee discussed the current NASA programs, the current model for innovation within the programs, the need for more engagement of junior faculty in academia, and the path of technology transfer. Members agreed that it would be useful for this Committee to interact with the NAC Technology and Innovation Committee to assess where Aeronautics fits into the broader scheme of technology innovation within NASA. Dr. Shin also discussed the current budget profile for NASA Aeronautics and how executive agencies (such as the Office of Management and Budget and the Office of Science and Technology Policy) interact with and influence the conduct of the program portfolio. The members expressed their support of the general direction of the Aeronautics research portfolio and noted that the increases in the FY11 budget from the White House level was a positive sign.

The meeting was adjourned February 16th, at 5 p.m.

February 17th:

Overview of NASA Aeronautics Program and Discussion (continued from previous day) *(Dr. Jaiwon Shin, Tom Irvine, Committee Members)*
Tom Irvine continued the previous day's briefing, focusing on the performance evaluation and review process that Aeronautics conducts. In particular, detail was provided on the conduct of the Independent Annual Reviews, the makeup of the review panels, and how the results of the reviews are disseminated and "tracked" by each of the programs. The members were also interested in Agency level reviews (such as the Senior Management Council) and how active Agency management was in the review of Aeronautics programs.

<u>Future Directions for NASA Aeronautics</u>: (*Dr. Jaiwon Shin, Tom Irvine, Committee Members)*

Dr. Shin discussed his thoughts on where NASA Aeronautics should be heading in the future. He focused on the following elements:

(1) Encouraging the program directors of the Fundamental Aeronautics Program and the Integrated Systems Research Program to have clear and distinct focus and balance between them;

(2) Have clear linkages to national priorities for the programs and that this linkage is well communicated to all program and project personnel;

(3) Showing the value of research being conducted in the Integrated Systems Research Program in addressing national challenges. Dr. Colladay asked how these national challenges were communicated. Dr. Shin indicated that the National Aeronautics Research and Development Policy and Plan were the governing documents for articulating current goals and objectives associated with national challenges. Ms. Blakey wanted to know how well the current administration supported these documents, given that they were developed during the previous administration. Dr. Shin stated that an update to the Plan had just been developed and would be approved and signed by the new administration. He also stated that he knew of no forthcoming changes to the Policy.

(4) The need for a strengthened focus on flight experiments. Although budget can limit activity in this area, Dr. Shin felt that the need of flight experiments to augment assessment and validation of research – particularly at a systems level – was necessary. Dr. Kroo added that he felt this aspect was at risk of being lost within the Agency. He stated that the Aeronautics Program should address the use of flight experiments in concert with research alignment to national goals, i.e., what the flight experiments will accomplish in attainment of national goals. Dr. Shin stated that he had proposed an over guide to OMB addressing these needs but was not successful in getting this area funded completely. However, he also indicated that he had not had substantive discussions with OMB to understand their concerns. The ensuing discussion between the members focused on cost and partnership issues in regards to developing flight experiment programs. ;

(5) Coordinating technology research in general and hypersonics research in particular with the new NASA Office of Chief Technologist. Entry, descent, and landing (EDL) research was cited as an example of research that is currently funded jointly by three mission directorates (ARMD, ESMD, and SMD) and is coordinated by the Office of Chief Engineer. Dr. Shin expressed his intent to talk to Dr. Bobby Braun (the recently

appointed NASA Chief Technologist) about the type of technology represented by EDL and the future direction of such technology research within the Agency.

Committee 2010 Work Plan *(Committee Members, Dr. Jaiwon Shin, Tom Irvine)*

The committee members discussed the draft calendar year 2010 work plan. Dr. Harry McDonald asked about the synergy between work being done by Aeronautics and the recently formed Office of Chief Technologist. He felt there was a significant opportunity and that close coordination between the Aeronautics Committee and the Technology and Innovation Committee would be of value.

The committee discussed, at some length, the work plan item centering on public outreach and the wider community understanding of ARMD program goals and objectives. Ms. Blakey felt that there was some opportunity in this area for discussion and coordination with the Education and Public Outreach Committee. Dr. Shin acknowledged that ARMD does indeed have important and exciting stories to convey, but the organization does need to do more of an organized effort into this area. Dr. Hansman inquired about using the public affairs organization within NASA more effectively. Dr Shin believes there will be more opportunity to use the full capability of that organization under the present NASA leadership. The intent is to make sure that the public understands that NASA does more than space, and how aeronautics touches their lives.

In response to questions from the committee, Dr Shin indicated that one of the most important items he was looking for the committee to aid in was support and advice on the new initiatives as well as any new things that NASA Aeronautics should be looking at. Ms. Blakey recognized this and said that the work plan is somewhat dynamic and can be altered over the year based on future meetings and deliberations of the committee.

Closing Remarks *(Marion Blakey)*

Ms. Blakey thanked everyone for their contributions to the meeting and thought that the discussions and presentations were very helpful to the committee.

The meeting was adjourned February 17th, at 3 p.m.