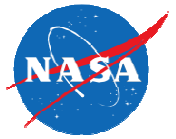


NASA Aeronautics Research Discussion with ASEB

Dr. Jaiwon Shin
Associate Administrator
Aeronautics Research Mission Directorate

April 5, 2012

NASA Aeronautics' Priorities

Accelerate implementation and **enhance** the capabilities of NextGen

Innovate to close critical gaps in both ATM and vehicles to achieve the full potential of NextGen

Lead the country with a vision and revolutionary capabilities for the Nation's future aviation system

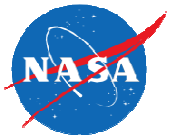
NASA Aeronautics is making tangible and compelling impact today in all three priorities

FY 2013 Budget Request

Program Funding

Budget Authority ($M)	FY 2011 Actual	FY 2012 Estimate	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
			Outyears are notional				
Aeronautics	**$533.5**	**$569.4**	**$551.5**	**$551.5**	**$551.5**	**$551.5**	**$551.5**
Aeronautics Research	533.5	569.4	551.5	551.5	551.5	551.5	551.5
Aviation Safety	67.3	80.1	81.1	81.0	81.4	81.9	82.5
Airspace Systems	87.2	92.7	93.3	92.6	91.9	91.2	90.5
Fundamental Aeronautics	206.3	186.3	168.7	171.3	173.3	175.3	177.1
Aeronautics Test Program	76.4	79.4	78.1	78.0	78.0	78.1	78.2
Integrated Systems Research	75.9	104.2	104.0	102.3	101.2	100.1	98.8
Aero Strategy and Management	20.4	26.7	26.4	26.2	25.7	25.0	24.4

National Aeronautics Research Agenda



What we have

- Several national-level reports identifying aeronautics technologies for research and development
  - National Aeronautics R&D Plan to benefit the national enterprise, with goals, objectives (0-5 yrs, 5-10 yrs and 10+ yrs)
    - Principles of responsibility and interaction among members of the community
  - Joint Planning and Development Office Integrated Work Plan
    - R&D gaps required to enable NextGen
  - NRC Decadal Study for Aeronautics Research
    - 51 technology areas, discipline based
- NASA-sponsored systems analysis efforts
  - Internal systems analysis to assess and prioritize current portfolio
  - Externally funded studies on future vehicles (N+2, N+3 vehicle studies, future ATM concepts)
  - Aeronautics Research and Technology Roundtable (ARTR) for dialogue on future needs and research direction
- Agencies determine own R&D agenda and implementation plan according to technical capabilities, existing budget and agency priorities

National Aeronautics Research Agenda

What we need

- Community action plan to achieve national goals and objectives
  - Realistic implementation plan aligned with available funding
    - Priorities
    - Relevance
    - Life-cycle perspective
    - Staged timeline – what we can accomplish in 2 yrs, 5 yrs, 10 yrs, etc
  - Assessment of contributions by each participant
    - Federal
    - Academia
    - industry
- Translation of national R&D plans into a national research agenda
- Desire to build off of existing efforts, including ARTR contributions and existing systems studies