

Airport Cooperative Research Program

R. Marchi
ACI-NA

AIRPORT COOPERATIVE RESEARCH PROGRAM

ACRP

SPONSORED BY THE FEDERAL AVIATION ADMINISTRATION

First Annual
Report of Progress
2006

Research Sponsored by the Federal Aviation Administration

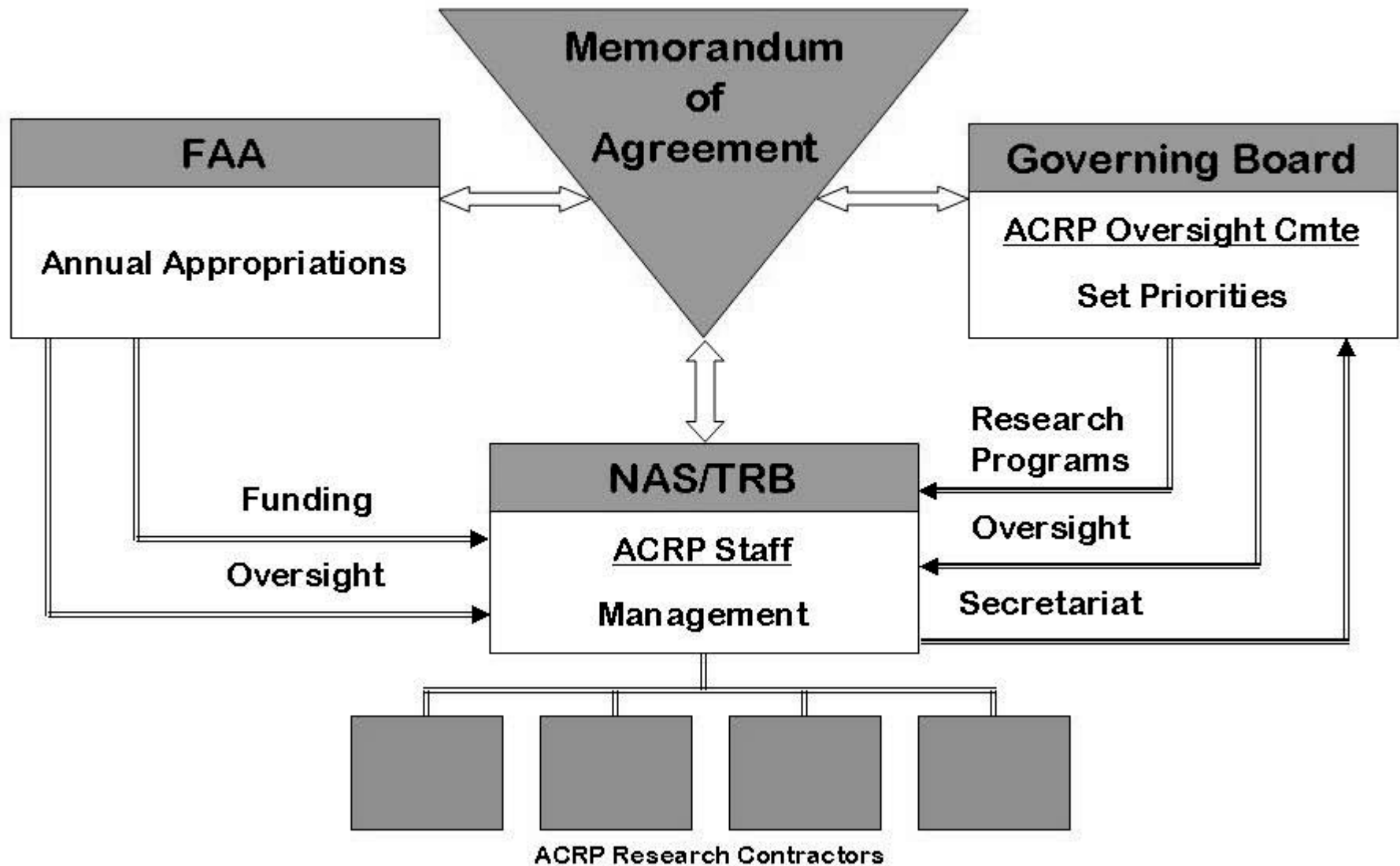
TRANSPORTATION RESEARCH BOARD

WASHINGTON, D.C.
2006
www.TRB.org

Legislative History

- AIR - 21 Directed FAA to Conduct Study
- FAA selected TRB for study
- TRB Special Report 272
 - “Airport Research Needs: Cooperative Solutions”
- Vision - 100 Authorized Pilot Program at \$10Million per year through F/Y 2007
- Needs Permanent Authorization Beyond 2007

Figure 1
Airport Cooperative Research Program
Organizational Structure



ACRP Oversight Committee

- J. Wilding, Chair
- S. Grossman, OAK
- J. Hamiel, MSP
- K. Dolliole, STL
- R. Tucker, HSV
- C. Motz, HGR
- J. Duval, BOS
- J. Crites, DFW
- Gina-Marie Lindsay, MBS
- C. Lang, FAA
- S. Johnson, EPA
- L. Porter, NASA
- T. Jensen, Safe Skies
- R. DeNeufville, MIT
- R. Marchi, ACI-NA
- Henry O, NASAO
- T. Zoeller, AAE
- J. Meenan, ATA
- R. Skinner, NAS

TABLE 1 SUMMARY OF PROJECT STATUS THROUGH DECEMBER 31, 2006

1: Administration

01-01	Guidebook for Managing Small Airports	\$400,000
01-02	Contract Award and Management-Best Practices for Airport Operators	\$300,000
01-03	Software Solutions for Airport Management Budget and Reconciliation Tools	\$300,000

2: Environment

02-01	Alternative Aircraft and Airfield Deicing and Anti-Icing Formulations with Reduced Aquatic Toxicity and Biological Oxygen Demand	\$600,000
02-02	Managing Runoff from Aircraft and Airfield Deicing and Anti-Icing Operations	\$300,000
02-03	Aircraft and Airport-Related Hazardous Air Pollutants Research Needs and Analysis	\$600,000
02-04	Research Needs Associated with Particulate Emissions at Airports	\$100,000
02-04A	Summarizing and Interpreting Aircraft Gaseous and Particulate Emissions Data	\$350,000
02-05	Primer for Airport Managers on Community Attitudes to Aircraft Noise	\$500,000

3: Policy and Planning

	Light Detection and Ranging (LIDAR) Deployment for Airport Obstructions Surveys	\$350,000
03-01		
03-02	U.S. Airport Passenger-Related Processing Rates	\$200,000
03-03	Enhancing Airport Land Use Compatability	\$500,000
03-04	Guidebook for Airport-User Survey Methodology	\$250,000
03-05	Airport Passenger Movement and Queuing Behavior Analysis	\$400,000
03-06	Guidebook for Planning Automated People Mover Systems at Airports	\$500,000
03-07	Performance Measures for Automated People Mover Systems at Airports	\$300,000
	Use of Incentives, Guarantees, and Subsidies for Air Carrier Service at Small Airports	\$300,000
03-08		
03-09	Guide for Developing Airport Strategic Plans and a Portfolio of Strategic Plans for U.S. Airport Operators for an Uncertain Future	\$425,000

4: Safety

04-01	Aircraft Overrun and Undershoot Analysis for Runway Safety Areas	\$250,000
04-02	Lightning-Warning Systems for Use by Airports	\$200,000
04-03	Runway End Approach Lighting Structure Hazard Mitigation Analysis	\$300,000
	Simulation-Based Training and Exercise of Civil Aviation Emergency Response Personnel	\$500,000
04-04		
04-05	A Guidebook for Developing Airport Safety Management Systems	\$300,000

5: Security

	Guidance for Developing Regionally Coordinated Airport Emergency Plans for CBRNE Events	\$250,000
05-01		

7: Design

07-01	New Concepts for Airport Terminal Landside Facilities	\$400,000
07-02	Airport Curbside and Terminal-Area Roadway Operations	\$400,000
07-03	Developing Improved Civil Arresting Systems	\$500,000
07-04	Use of Computer Tools for Airport Terminal Design	\$400,000
07-05	Updated Terminal Design Guidelines	\$400,000

9: Maintenance

09-01	Guidelines for the Collection and Use of Geospatially Referenced Data for Airfield Pavement Management	\$350,000
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10: Operations

10-01	Optimizing the Use of Aircraft Deicing and Anti-Icing Fluids	\$300,000
10-02	Planning Guide for Offsite Terminals	\$350,000
10-03	Guide to Evaluating Parking Concepts and Technologies at Airports	
10-04	Potential Impacts of Very Light Jets on U.S. Airports	\$250,000

11: Special Projects

11-01	Legal	\$200,000(06) \$200,000(07)
11-02	Quick Response for Special	\$590,000(06) \$350,000(07)
11-03	Synthesis of Information Related to Airport Practices	\$500,000(06) \$500,000(07)

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<http://www.trb.org/CRP/About/DivD.asp>