

# AIRPORT TECHNOLOGY R&D

PROGRAM MANAGEMENT:  
TECHNICAL AND FINANCIAL

Satish Agrawal

ANG-E 26

April 15, 2013

# AIRPORT TECHNOLOGY R&D

## MISSION

Our mission is to enhance the **safety** of airport operations, improve airport **capacity**, and improve airport pavement design criteria by supporting development of **standards** for design, construction, and operations.

# Budget Line Item

**Grants-In-Aids for Airports (AIP)**

**AIRPORT TECHNOLOGY RESEARCH (ATR)**

**\$29,250,000 for FY-2013**

**\$29,500,000 for FY-2014**

**\$29,632,000 for FY-2015 (Requested)**

# RESOURCES

- 23 FAA Employees; **3 with Ph.D.**
  - One Branch and Two Sections
  - 22 Delivery Orders covering 21 RPD
  - 14 RPD Managers Grades 13-15
  - 5 Major Facilities
  - 43 Field Installations/Projects in the US
- 2013 R&D Budget \$29,250,000 (Contract \$25 m )
- 43 Support Contract Employees; **7 with Ph.D.**

**ANG-E260**  
 Airport Technology  
 R&D Branch  
 Satish Agrawal, Manager  
 Barbara Davenport, Secy

**ANG-E261**  
 Airport Safety R&D Section  
 Jim Patterson, Sup. Mgr.

**ANG-E262**  
 Airport Pavement R&D Section  
 Jeffrey Gagnon, Sup. Mgr

**Technical Director**  
 Vacant

**Technician**  
 Murphy

**132**  
 Airport Planning  
 Cyrus

**134/140/152**  
 New Large Aircraft/Composite  
 Materials Firefighting/ Aircraft  
 Rescue and Firefighting  
 Bagot

**148**  
 Surface Operations  
 Subbotin

**151**  
 Visual Guidance/Incursion  
 Reduction  
 Gallagher

**154**  
 Innovative Measurement  
 Techniques  
 Bassey

**133/149**  
 Airport Design/Airplane  
 Sleep and Annoyance Data  
 Vitagliano

**147**  
 Aircraft Braking Friction  
 Breen

**150**  
 Airport Wildlife Hazards  
 King

**153**  
 Research Test Taxiway  
 Bassey & Garg

**135/137**  
 High-Temperature Pavement  
 Test Vehicle/Field  
 Instrumentation and Testing  
 Garg

**138**  
 National Airport  
 Pavement Test Facility  
 Barbagallo & Rutter

**144/145/146**  
 Advanced Airport Pavement  
 Designs/Pavement Design &  
 Evaluation/Center of Excellence  
 Brill

**136**  
 Improved Paving  
 Materials & Laboratory  
 Flynn

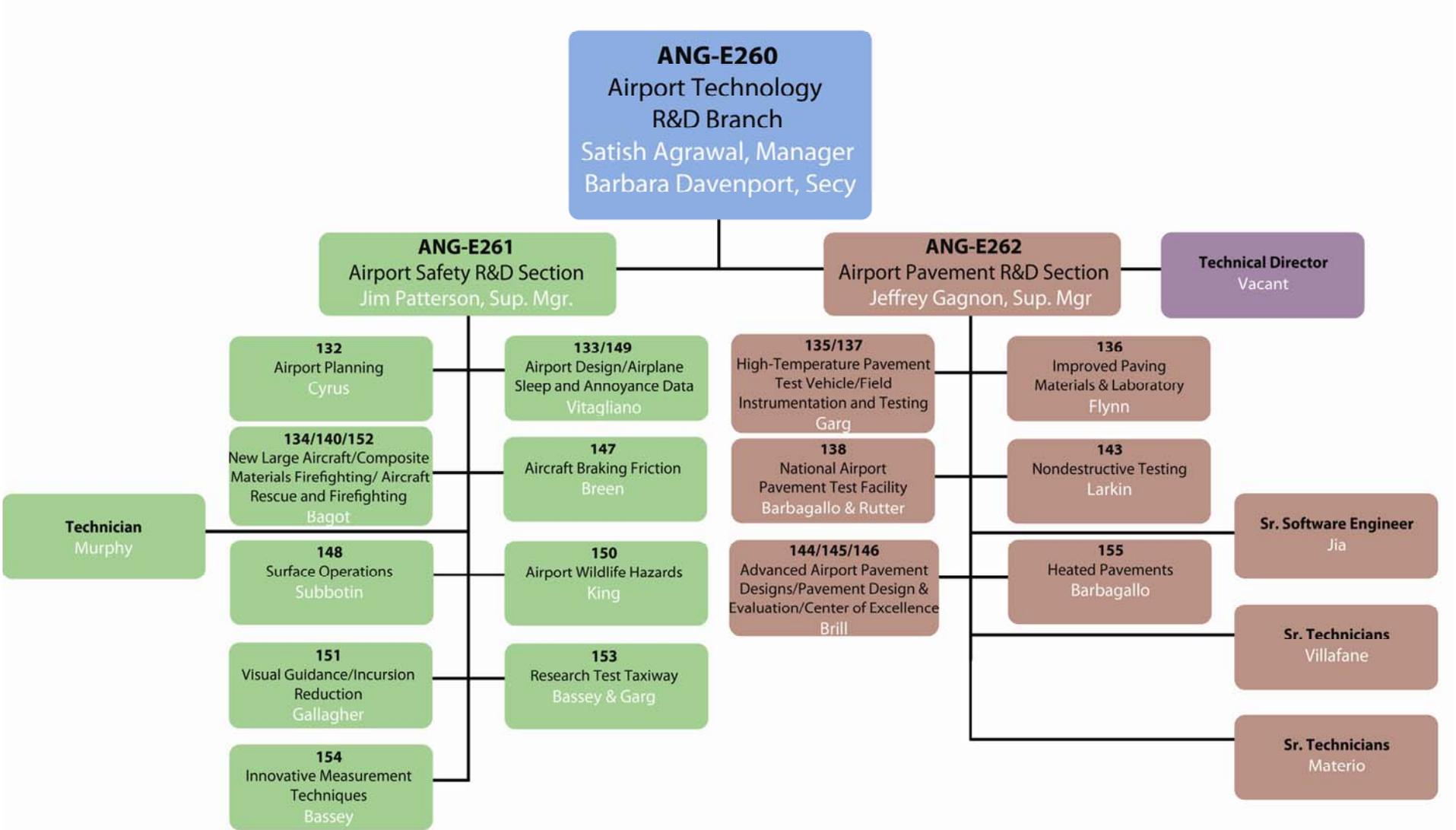
**143**  
 Nondestructive Testing  
 Larkin

**155**  
 Heated Pavements  
 Barbagallo

**Sr. Software Engineer**  
 Jia

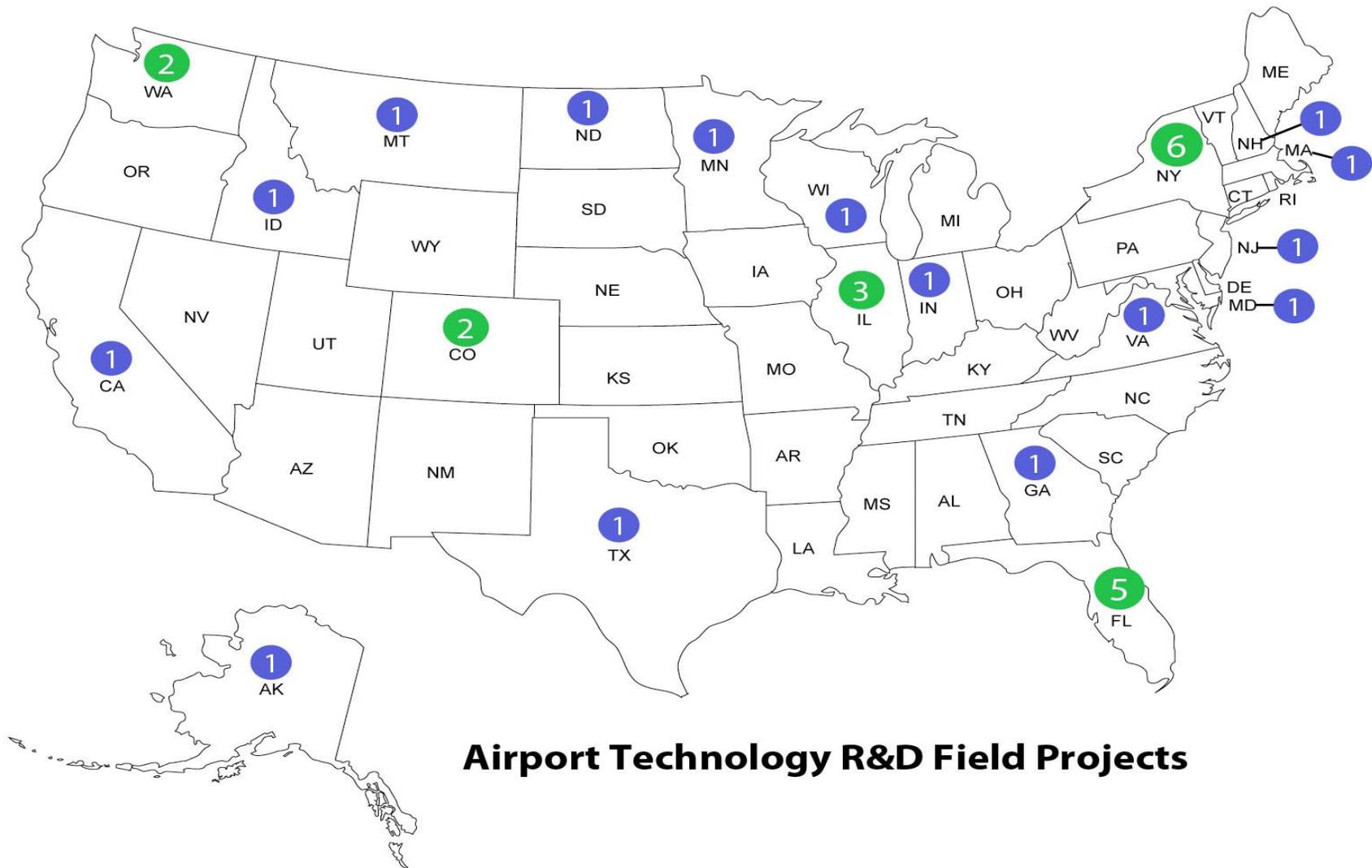
**Sr. Technicians**  
 Villafane

**Sr. Technicians**  
 Materio



# LABORATORIES

- National Airport **Pavement Test** Facility:
  - Subgrade **Storage and Processing** Facility
  - NextGen Pavement **Materials Laboratory**
- Braking **Research Aircraft**
- **High Temperature** Pavement Test Facility (2013)
- Airport Technology **Research Taxiway** at Cape May Airport
- FAA New Large **Aircraft Fire Test Facility** (Panama City)



**Airport Technology R&D Field Projects**

# MONTHLY INVOICES FOR MARCH & APRIL

1. ARFF R&D Tech Support	\$ 100,350	\$ 75,842
2. Visual Guidance R&D Tech Support	\$ 54,556	\$ 58,033
3. Field Instrumentation & Testing Support	\$ 2,472	\$ 13,512
4. Wildlife Hazards & Risk Mitigation	\$ 23,815	\$ 19,455
5. NDT Pavement Testing Support	\$ 16,628	\$ 14,159
6. Improvements to FAA PAVEAIR	\$ 23,676	\$ 20,524
7. Advanced Airprot Pavement Design	\$ 16,420	\$ 17,816
8. Aircraft Braking Friction	\$ 43,271	\$ 32,370
9. NAPTF Construction	\$ 78,832	\$ 111,614
10. Cape May Research Taxiway	\$ 17,728	\$ 198,982
12. NAPTF Technical Support	\$ 101,928	\$ 111,068
13. Runway Surface Technology	\$ 5,054	\$ 7,178
14. Pavement Design Technical Support	\$ 30,668	\$ 38,253
15. Airport Design Technical Support	\$ 14,593	\$ 22,181
16. Pavement Materials and Construction	\$ 2,903	\$ 2,766
17. Test Aircraft Support	\$ 5,069	\$ 4,597
18. HMA Design for High Pressure Tire	\$ 24,985	\$ 63,565
19. Data Mining	\$ 8,173	\$ 38,620
20. Administrative Support	\$ 7,906	\$ 7,451
21. Editing & Technical Writing Support	\$ -	\$ -
<b>TOTAL FOR THE MONTH</b>	<b>\$ 579,028</b>	<b>\$ 857,986</b>
<b>TOTAL FOR THE FY</b>	<b>\$3,659,903</b>	<b>\$4,517,889</b>

# Coordination with other Government Agencies

- US Fish and Wildlife Service (FWS)
- Environmental Protection Agency (EPA)
- Federal Communication Commission (FCC)
- Federal Emergency Management Agency (FEMA)
- Federal Highway Administration (FHA)
- United States Department of Agriculture (USDA)
- Federal Interagency Committee on Aviation Noise (Combination of DOD, Department of Interior, EPA, NASA, and Department of Housing and Urban Development)
- Department of Homeland Security (Federal Air Marshal Service)

# Coordination with other Government Agencies

- US Army Corps of Engineers Cold Regions Research and Engineering Laboratory (CRREL)
- US Army Engineer Research and Development Center (ERDC)
- US Naval Air Engineering Center – Lakehurst
- US Air Force
- Animal and Plant Health Inspection Service (APHIS)
- National Museum of Natural History (NMNH)
- Smithsonian Institution (SI)
- Air Force Research Laboratory (AFRL)
- Department of Energy (DOE)

# Transition of Research Results

- Results of research are published as Final Reports, Technical Notes, or Papers.
- These documents are provided to the Office of Airport Safety and Standards (AAS) for consideration.
- Office of Airport Safety and Standards use our research results as a basis for developing new advisory circulars, safety standards, or FAA Part 139 Regulations.