# Research Transition (RT)

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# RT Accomplishments in FY10

- **Developed/managed an interim RT process that completed "stalled" AWTT-managed capabilities**

  – G-AIRMET approved

  – GTG2 approved for operational production as a supplementary product on ADDS

  – FIPS approved for operational production as a supplementary product on ADDS
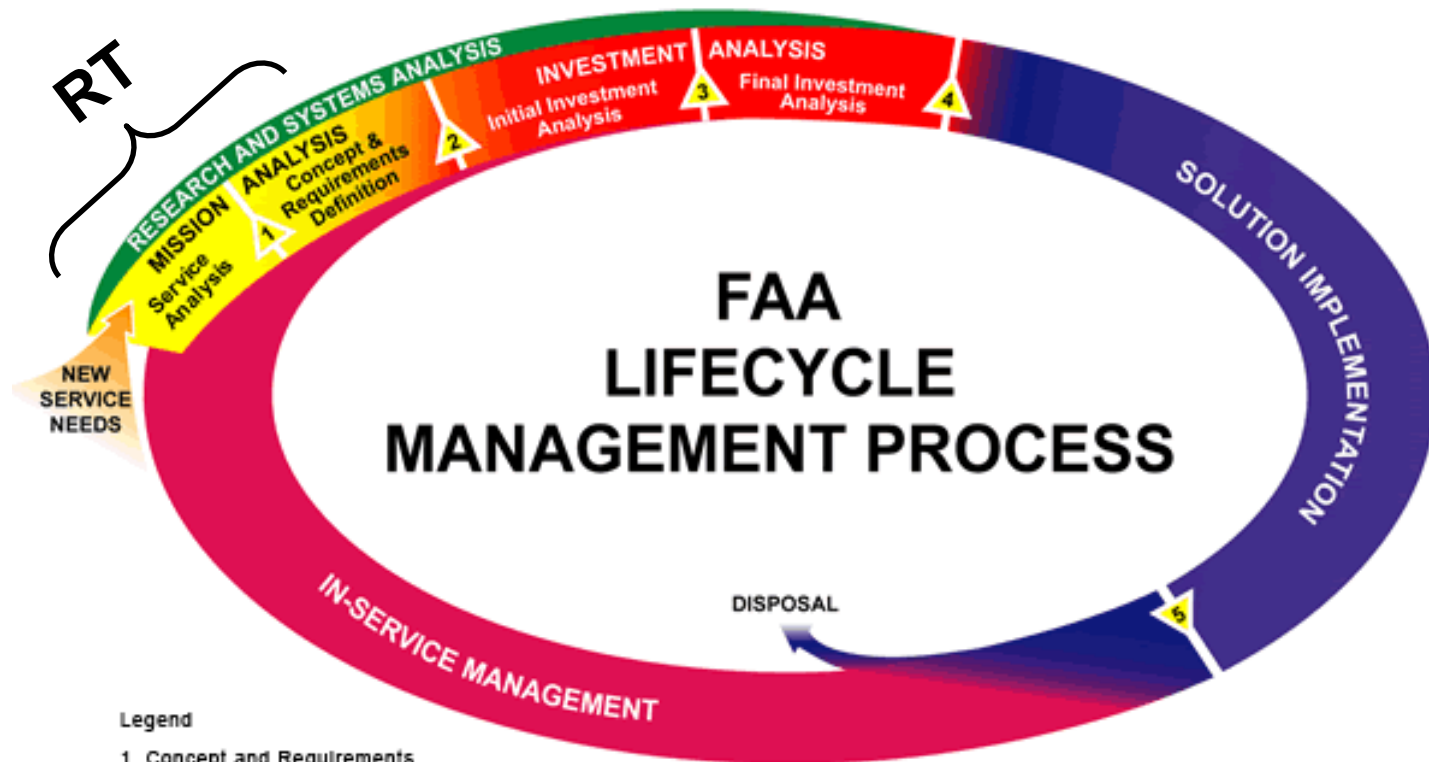
# RT Accomplishments in FY10 (cont)

- **Strengthened the FAA-NWS partnership through formation of "joint" Capability Transition Teams (CTTs )**

  - Conducts and documents project planning

  - Guides capability through CMTD and Service Analysis to CRD

  - Ensures completion of CMTD demonstrations, evaluations, programmatic artifacts, & decision briefs

  - Facilitates partnering with producers and users of aviation weather services

# RT Alignment with AMS



Legend
1. Concept and Requirements Definition Readiness Decision
2. Investment Analysis Readiness Decision
3. Initial Investment Decision
4. Final Investment Decision
5. In-Service Decision

# Research for Service Analysis (RSA) Goals

- **Mature operational concepts**

- **Reduce programmatic risk**

- **Define requirements and develops NAS Enterprise Architecture products for follow-on AMS activities**

- **Manage research as a portfolio of related initiatives as they mature and move through the AMS lifecycle**

# RSA Activities

- **Research Engineering & Development (RE&D)**

- **Concept Maturity Technology Development (CMTD)**

# RE&D Goals

- **Gain knowledge and understanding of concepts, products, or procedures that could potentially benefit the aviation community**

- **Inform the NAS enterprise architecture and follow-on CMTD activities**

# RE&D Artifacts

- **Project Plans**

- **Scientific/technical evaluation reports**
  - Demonstrate that a research concept is scientifically appropriate for transition

- **CMTD Plan**
  - Contains RE&D artifacts sufficient to support an agency decision to move an RE&D concept into CMTD

# CMTD Goals

- **Creation of potentially useful materials, devices, systems, and methods**

- **Advance the maturity of research concepts in order to:**

  – Reduce risk

  – Define/demonstrate requirements

  – Inform follow-on AMS activities including investment decision-making and product lifecycle management

# Typical CMTD Activities

- **Concept feasibility studies**

- **Technical analyses**

- **Prototype demonstrations**

- **Operational assessments**

# CMTD Artifacts

- **Technical Data Package (TDP)**
  - ConOps
  - Application/software description
  - Assessment reports
  - Documented source code IAW with published coding practices
  - Installation guide and troubleshooting instructions
  - Test procedures and results
  - Description of internal modules and interfaces
  - S/W inventory, including any 3d party libraries/tools
  - Description of H/W needed to run application
  - Parameter and adaptation guides

# QUESTIONS?