



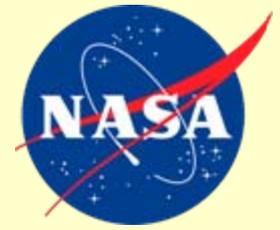
NAOMS Workshop



March 1, 2000

WELCOME AND NAOMS INTRODUCTION

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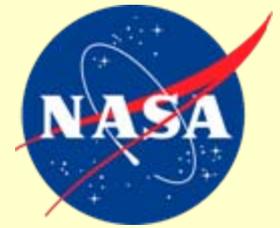
Background



Development Team

Under Battelle Support Service Contract to NASA

- Robert Dodd, Sc.D. Principal Investigator
- Loren Rosenthal AOMS Program Manager
- Jon Krosnick Ph.D. Survey Methodologist
- Joan Cwi Ph.D. Survey Application
- R. Iachan Ph.D. Statistician
- Mike Silver M.S. Survey Methodologist
- Mike Jobanek M.S. Aviation Safety Analyst
- Elisa Ingebretson Research Scientist



NAOMS Goals

Create a new capability that will:

- 1) Track aviation safety trends
- 2) Monitor the impacts of technological and procedural changes to the aviation system



NAOMS: Filling Important Data Gaps

- **NAOMS will not replace or duplicate current data collection efforts**
- **Designed to supplement current and future aviation safety data collection and analysis programs**
- **Will obtain accurate information from operational personnel**
 - Includes groups who traditionally have not been active sources of safety information



NAOMS Approach

- **Regularly survey pilots, controllers, mechanics, flight attendants and others who operate the national aviation system (NAS)**
 - View the national aviation system through their eyes
 - Includes all types of operations (air carrier, regional, corporate, general aviation, military)
- **Achieve scientific integrity by using well crafted survey instruments and carefully designed statistical sampling methods**



NAOMS Will Generate . . .

**Statistically valid estimates of the
actual rates of safety events and
related experiences occurring
in the NAS**



NAOMS Data Use

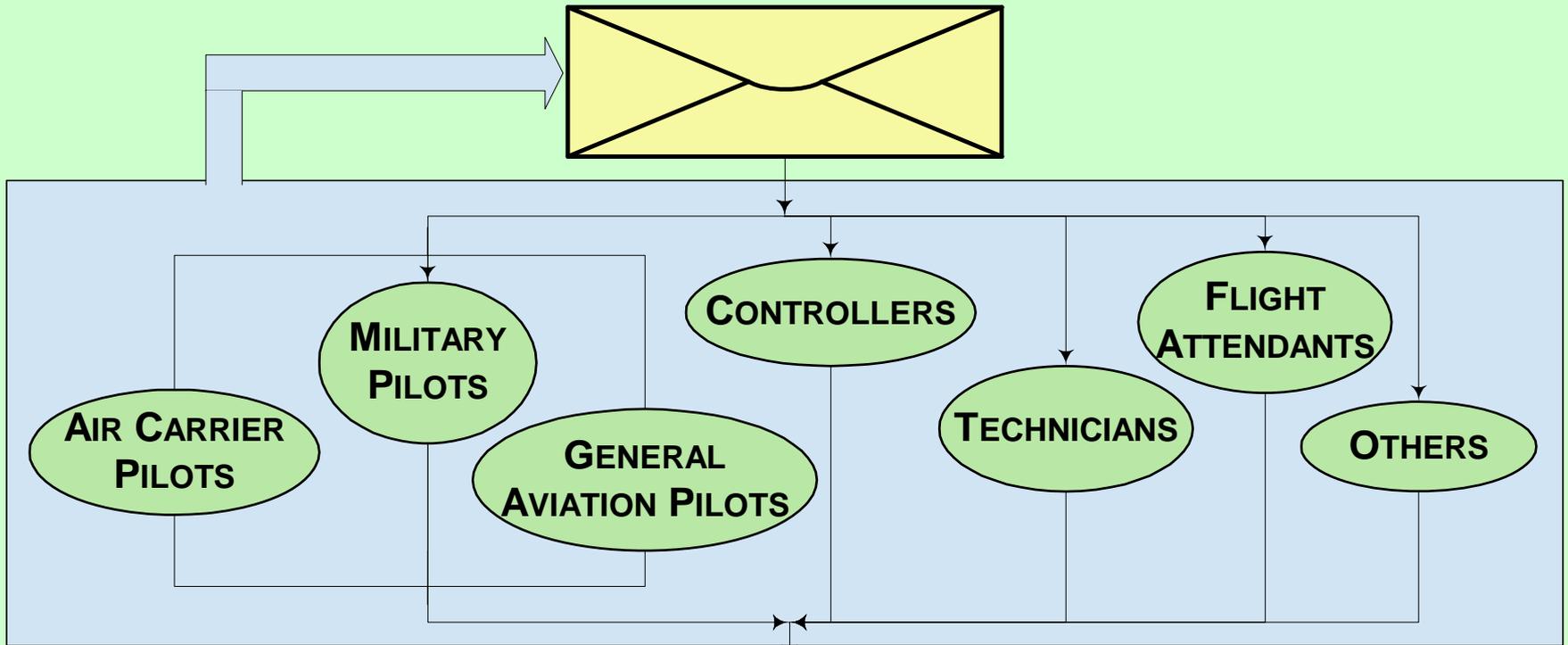
- **Used to track event trends**
 - Will identify incident trends
 - May not fully explain trends or causal factors
 - Additional investigation may be needed
 - NAOMS will complement, not replace existing data resources
- **Can provide detailed insight into topics of special interest**
 - Added to the questionnaire as needed
 - Can be accomplished relatively quickly



Why NAOMS Chose the Survey Method

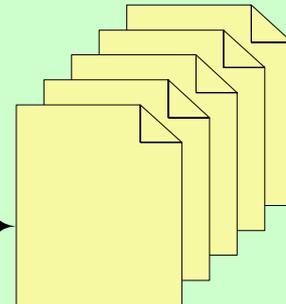
- **Proven in other venues**
 - Public health
 - Public policy
 - Market research
- **Scientific and representative**
- **Capable of addressing human performance issues**
- **Timely data collection**
- **Well-developed methodologies**

SURVEY FORM, PHONE CALL, OR FACE-TO-FACE INTERVIEW QUESTIONS
DEVELOPED BY NASA IN CONSULTATION WITH AVIATION COMMUNITY



NASA / NAOMS

DEIDENTIFIED
SURVEY DATA



RESEARCH PRODUCTS

**NAOMS
PROCESS**



Participant Confidentiality is Assured

- We will have no means of tracing a survey response to the individual who provided it
- All tracking information is kept separate and destroyed after use
- No information is collected on operator name or airport name
- Reports and data sets will have no information that can be used to identify reporters



NAOMS Will Collect Data on

Participant Experiences involving . . .

★ **Aviation Operations (exposure)**

- Flight hours / legs
- Time on control position
- Other pertinent measures

🕒 **Safety Events**

- A standard set of benchmark incidents

🕒 **New Technologies and Procedures**

- First-hand experiences
- Continuously refocused in response to changing needs



NAOMS Products

■ EXPECTED OUTPUTS

- Summarized aviation operational experience data
- Statistically reliable estimates of incident rates
- Near real-time feedback on impacts of new technology and procedures

■ PRODUCT CONSUMERS

- Decision makers (government and industry)
- Safety professionals and research organizations