



# The National Aviation Operations Monitoring Service

## The NAOMS Field Trial and Current Data Collection

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- **CPHRE**
- **More than 20 years conducting surveys**
- **Currently conduct 100+ projects a year**
- **Clients include CDC, NCI, EPA, other federal agencies and research foundations**

# Sample Design



- **NAOMS data are representative; a workable random sampling method was devised; observed biases are corrected**
- **A large sample is drawn to increase the accuracy of results and to improve NAOMS ability to discern trends**
- **Sample Source**
  - Airmen Certification Directory
  - Available online at FAA Oklahoma City
- **Samples are drawn among U.S.-based pilots**
  - Air carrier (n ~ 55,000) currently available
- **Sample drawn on quarterly basis**
  - Sampling without replacement for 12 rolling months

# Locating Pilots



- **Addresses updated, telephone numbers obtained**
  - National Change of Address
  - Telematch
  - Other sources, such as Directory Assistance, Web sites
  
- **Location results**
  - 80% of air carrier pilots
  
- **Respondent burden is minimized; survey length kept to 30 minutes or less; respondents only asked to participate once per year or less**

# Interviewing Process

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- **Sending Advance Letter**
- **Screening for Eligibility**
- **Conducting the Interview**

# Sending Advance Letter

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- **Sent to pilots about a week before calling**
- **On NASA letterhead/envelopes**
- **Explains:**
  - Purpose of study
  - What participation means
  - Confidentiality
  - Who will call
  - Other details

# Screening for Eligibility

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- **Attempt to screen all pilots by telephone**
- **Air Carrier screener**
  - Determines pilot has flown in last 60 days as air carrier pilot

# Current Interview Process

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- **Conduct screening and interviewing using computer-assisted telephone interviewing (CATI)**
- **Interviewer administers questionnaire from telephone center**
- **Questionnaire pre-programmed into computer so data are entered immediately--no additional data entry**
- **CATI has most error checks built into the programs--requires little editing**
- **10% of each interviewer's work is validated**



# Current Interview Process: Continued

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- **NAOMS exerts rigorous quality control at all stages of data collection and analysis**
- **Respondent inputs are validated for reasonableness and scrubbed of extreme outliers**
- **NAOMS generates confidence intervals for its statistics (not just point estimates)**

# Air Carrier Interviewing Effort

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- **Yearly interviewing effort**

  - Sample size (N = 14,300)

  - Screening (N = 10,700)

  - Interview (N = 8,000)

  - Interview length averages 18 minutes

- **Non-completes**

  - No locates (N = 18%)

  - Not eligible (N = 19%)

- **Progress to date (2.5 years)**

  - 18,000 completed interviews

# Air Carrier Response Rates

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- **NAOMS is obtaining a 70% response rate**
  - For eligible pilots
  - Whose addresses and phone numbers were correctly determined

**This is regarded as an outstanding response from both practical and theoretical perspectives**