

Voluntary Safety Programs Branch

GA FDM, FOQA & SMS

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Federal Aviation
Administration



Voluntary Safety Programs Branch (AFS-230)

1. **ASRS**- Aviation Safety Reporting System
2. **ASAP**- Aviation Safety Action Program
3. **VDRP**- Voluntary Disclosure Reporting Program
4. **IEP**- Internal Evaluation Program
5. **FOQA**- Flight Operations Quality Assurance
6. **AQP**- Advanced Qualification Program
7. **LOSA**- Line Operational Safety Audit
8. **HF RE&D**- Human Factors Research, Engineering & Development Programs



Voluntary Safety Programs

- **Reporting Programs**

- **ASRS/P**- Aviation Safety Reporting System/Program
- **ASAP**- Aviation Safety Action Program
- **FOQA**- Flight Operations Quality Assurance
- **VDRP**- Voluntary Disclosure Reporting Program

- **Auditing Programs**

- **IEP**- Internal Evaluation Program
- **LOSA**- Line Operational Safety Audit

- **Training Program**

- **AQP**- Advanced Qualification Program

Four Generations of VSP Program Implementation

1. No program participation

2. Stand Alone Programs

3. Program Integration under AFS-230

- Shared Vision of Safety Conference

- Beginning in 2004

- June 1-3, 2010, San Diego

4. Program Integration into Safety Management Systems (SMS)

- AC 120-92 SMS (2006)



The Eclipse Vision for SMS

- **Three primary components**
 - **ASAP** (individual event reporting)
 - **FOQA** (aircraft data reporting)
 - **IEP** (proactive search for problems)
- **Managed by the manufacturer**
 - Risk review board gets data through
 - FOQA Manufacturer's review board
 - ASAP Event Review Committee
- **Confidential feedback to participants**

FOQA Tomorrow

- **Like all 7 voluntary programs, FOQA will be a component of SMS.**
- **Like the Advanced Qualification Program (AQP) today, these programs will be voluntary programs used to satisfy mandatory requirements by alternative means.**



Future of the voluntary safety programs

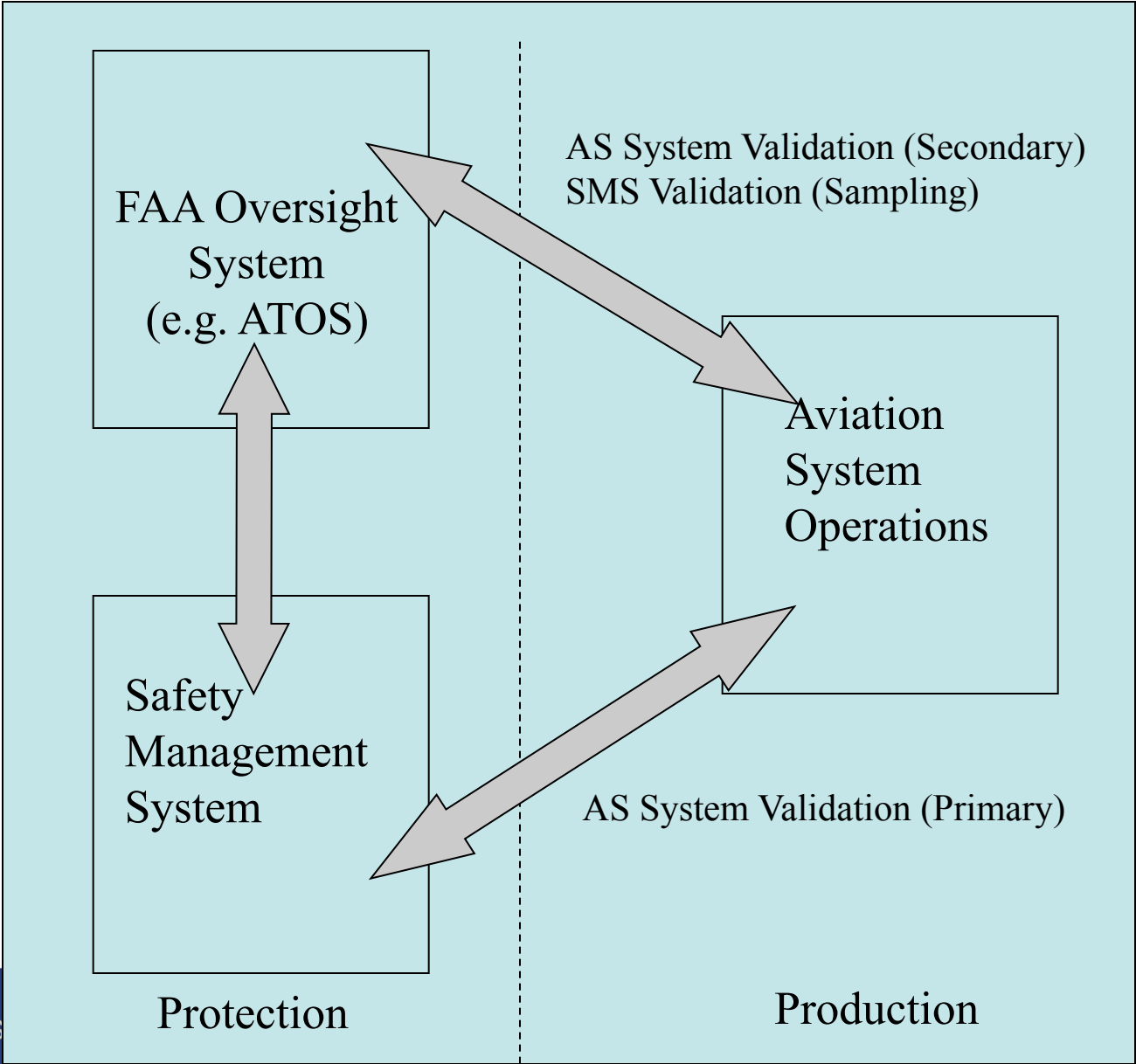
- All programs will continue essentially unchanged.
- Safety Management System (SMS) rules will mandate some of the functions of these programs, but not the programs themselves.
- Data streams from these programs will increasingly be added to ASIAS (Aviation Safety Information Sharing and Analysis System).



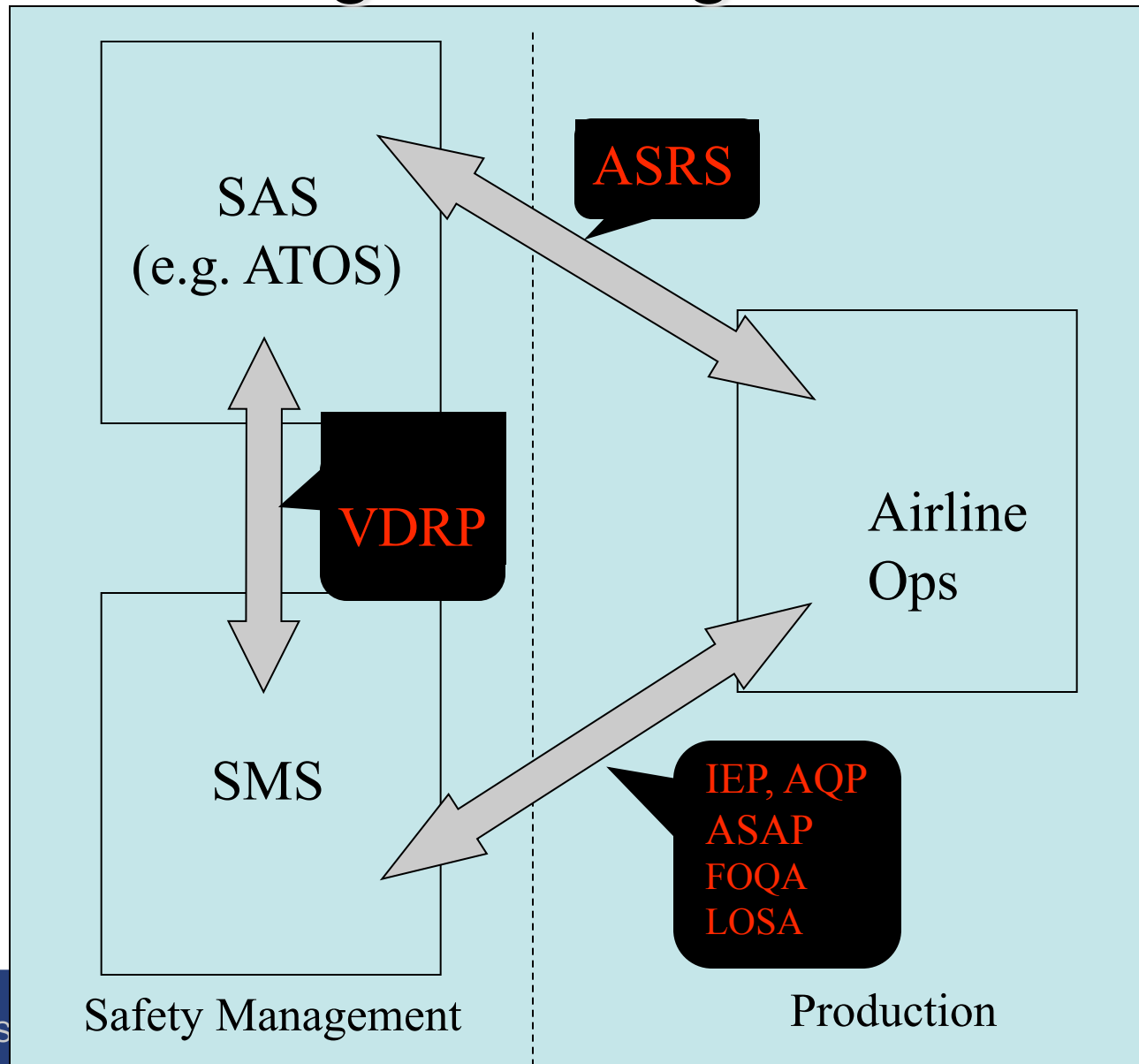
The Safety Management System

- **Safety**
 - Safety assurance using a **risk management approach**
 - Manage risk, not safety; Measure process, not just outcome.
- **Management**
 - Safety assurance using **quality management techniques**
- **System**
 - Safety assurance using a **systems approach**

Production vs. Protection Dilemma



Program Integration



Sample Functions to be mandated under SMS Rule

- **Employee reporting systems**
 - like the Aviation Safety Action Program (ASAP).
- **Company auditing systems**
 - like the Internal Evaluation Program (IEP).
- **Risk measurement programs**
 - like the Flight Operations Quality Assurance (FOQA) program.



Future of the voluntary safety programs

- Individual air carriers will continue to **integrate these data streams** at their own airline's safety management system:
 - Flight Data Analysis Group
 - Safety Roundtable
 - Safety Change management and Training
- Data will be integrated into the FAA's **NextGen** (Next Generation Air Traffic System), in development between now and 2025.



The Four Pillars of SMS

4.0 Policy

5.0 Safety Risk Management (SRM)

**6.0 Safety Assurance (SA) and Internal
Evaluation**

7.0 Safety Promotion



The Four Pillars of SMS

6.3 Information Acquisition

6.3.1 Continuous Monitoring

-ASRS, ASAP, FOQA, VDRP, AQP

6.3.2- 6.3.4 Auditing

-IEP, LOSA

6.3.5 Investigation

FAA (AFS-230) Intentions

- **FAA intends to support FOQA, not FDM**
 - No “FOQA Lite”
- **FAA intends to extend enforcement incentives and data protection to the extent possible.**
- **FAA intends to extend FOQA to as many 14 CFR Parts as is viable.**
 - References to CFR Parts 121 and 135 are guidance, not rule.



Summary

- **While regulatory programs provide the “stick”, voluntary programs provide the “carrot”.**
- **The functionality of the voluntary programs will be integrated into future regulatory oversight systems:**
 - SMS, SAS (next generation ATOS), NextGen, etc.
- **For information about any of the Voluntary Safety Programs contact:**
 - Voluntary Safety Programs Branch (AFS-230)
 - douglas.farrow@faa.gov



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Questions?

