

**Naval Aviation Safety Program
for
DoD Task Force on the
Prevention of Suicide by
Members of the Armed Forces**

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Naval Aviation Safety

- **Key is prevention**
- **Standardization of aviation programs**
 - **Operations: OPNAVINST 3710.7, NATOPS GENERAL FLIGHT OPERATING INSTRUCTIONS**
 - **Maintenance: CNAFINST 4790.2, NAVAL AVIATION MAINTENANCE PROGRAM**
 - **Safety: OPNAVINST 3750.6, NAVAL AVIATION SAFETY PROGRAM**
 - **ORM: OPNAVINST 3500.39, Operational Risk Management**
- **Other Safety Programs**
 - **OPNAVINST 5102.1D/MCO P5102.1B, NAVY AND MARINE CORPS MISHAP AND SAFETY INVESTIGATION REPORTING AND RECORD KEEPING MANUAL**

Naval Aviation Safety

- **Operational Risk Management**
 - **Commander, Naval Safety Center is the Model Manager**
 - **Institutionalizing across the USN**
 - **Extends risk management across on duty and off duty**
 - **Training focus on time critical risk management**
 - **Developing methods for assessing ORM readiness at the unit level**

Aviation Safety Programs Directorate

- **Promote, monitor, & evaluate Naval aviation safety programs**
- **Perform analysis of mishap trends, causal factors, & track proposed corrective actions**
- **Conduct Naval Aviation Safety Surveys**
- **Support/Conduct Culture Workshop Program and online survey climate assessments**
- **Support fleet training (risk management, maintenance malpractice, fatigue, etc.)**
- **Conduct & assist mishap investigations**

Aviation Unit Safety Surveys

- **USN & USMC squadrons and AIMDs**
- **One day long; provides snap-shot and corrective training of unit with comprehensive debrief to CO**
- **Approx 90 surveys a year**
- **Team size: 12-14 military personnel**
 - **O-5 team leader plus operations/training**
 - **O-3 - O-4 safety/NATOPS**
 - **O-4 - O-6 flight surgeon**
 - **W-2 - O-5 maintenance team leader**
 - **9 X E-7 - E-9**
- **Includes ops, safety, NATOPS, aeromedical, and all Naval Aviation Maintenance (4790) programs**

Facilities Safety Surveys

- **USN and USMC air stations**
- **One week long; provides in-depth survey and corrective training to air station personnel with comprehensive debrief to CO**
- **12-14 air stations per year**
- **Team size: 3 military personnel**
 - **O-3 team leader**
 - **ACC**
 - **ABECM**
- **Includes ATC, lighting, CFR, arresting gear, passenger handling, fuels, BASH, HAZMAT**

Aviation Culture Workshops

- **USN & USMC squadrons**
- **2 days long; provides CO with the goods, bads and uglies of his organizational culture including communications, trust, integrity**
- **Approximately 50 units per year**
- **Team size: 3 military personnel**
 - **O-5 or O-6 Facilitator**
 - **1 JO & 1 Maintenance Chief loaned from community**
- **Seminars with E-4 and below, E-5 & E-6, CPOs, junior officers**

On-line Command Climate Surveys

- **Determine the extent to which members of a command share positive (or negative) views about their organization in terms of:**

- effectiveness of leadership**
- management of resources**
- quality of work environment**
- system of rewards**
- treatment of personnel**

and the influence these views have shaping patterns of “life” within the command.

Naval Aircraft Mishap Investigation

References and Definitions

- DoDI 6055.7, Accident Investigation, Reporting and Record Keeping
- OPNAVINST 3750.6 R, Naval Aviation Safety Program
- Defined DoD/Defined Naval Aircraft/UAV
- Class A = \$2M Damage, A/C Destroyed, Fatality, Permanent Total Disability
- Class B = \$500K Damage, Partial Disability, 3 X personnel hospitalized
- Class C = \$50K Damage, lost work day

Naval Aircraft Mishap Investigation

Definitions Continued

- Flight Mishaps (FM)
 - Intent for flight for aircraft or UAV existed
 - At least \$50,000 damage to aircraft or UAV
- Flight-Related Mishaps (FRM)
 - Less than \$50,000 damage to aircraft or UAV
 - Intent for flight existed
 - At least \$50,000 or more total DOD and non-DOD damage or a reportable injury or death occurred.
- Aviation Ground Mishap (AGM).
 - Intent for flight did not exist
 - At least \$50,000 damage to aircraft or UAV

Naval Aircraft Mishap Investigation

Mishap Notification

- Phone call to Safety Center within 60 minutes
- Follow up message
 - 4 hours for Class A and B and
 - 1st Amended message in 24 hours (if required)
 - Class C message in 24 hours
- Investigator can launch in 4 hours
- Always less than 24

Naval Aircraft Mishap Investigation

Aircraft Mishap Board (AMB) Convenes

- **Standing Board at unit (squadron) level**
- **Senior Member: O-5 or above external to unit -Class A's**
- **Aviation Safety Officer: Trained at School of Aviation Safety**
- **Flight Surgeon: Trained at Naval Aerospace Medical Institute**
- **Operations: Expert on operating the aircraft**
- **Maintenance: Expert on maintenance procedures**
- **Other Specialties: As required**

Naval Aircraft Mishap Investigation

AMB Uses Concept of Privilege

- Derived from
 - Witness statements offered under a promise of confidentiality
 - Deliberative process
- Includes endorsements
- Protected by military and civilian courts
- Privileged Information is used for safety purposes only
- Not used for legal or administrative purposes

Naval Aircraft Mishap Investigation

Safety Center Investigator Assigned to AMB

- Assigned to Class A mishaps (some others)
- Representative of CNO
- Controls Wreckage and all Real Evidence
- Coordinates Engineering Investigation
- Not a board member but has full access

Naval Aircraft Mishap Investigation Process

The Safety Investigation Report (SIR) Process

- Senior Member independently releases SIR
- General Service message traffic
- Up Endorsing chain (usually operational CoC)
- Collective Addresses (CADS) used to inform the aircraft community
- Class As through NAVAIR for aircraft issues
- Safety Center closes out Class A mishaps
- Lower endorsers close out Class Bs and Cs

Naval Aircraft Mishap Investigation Process

SIR Contents

- SIRS contain
 - Narrative
 - Evidence
 - Causal Factors
 - Recommendations

Naval Aircraft Mishap Investigation Process

SIR Contents

- Causal Factors

- Human Factors

- Human Factors Analysis Classification System

- Material

- COMPONENT/MODE/AGENT

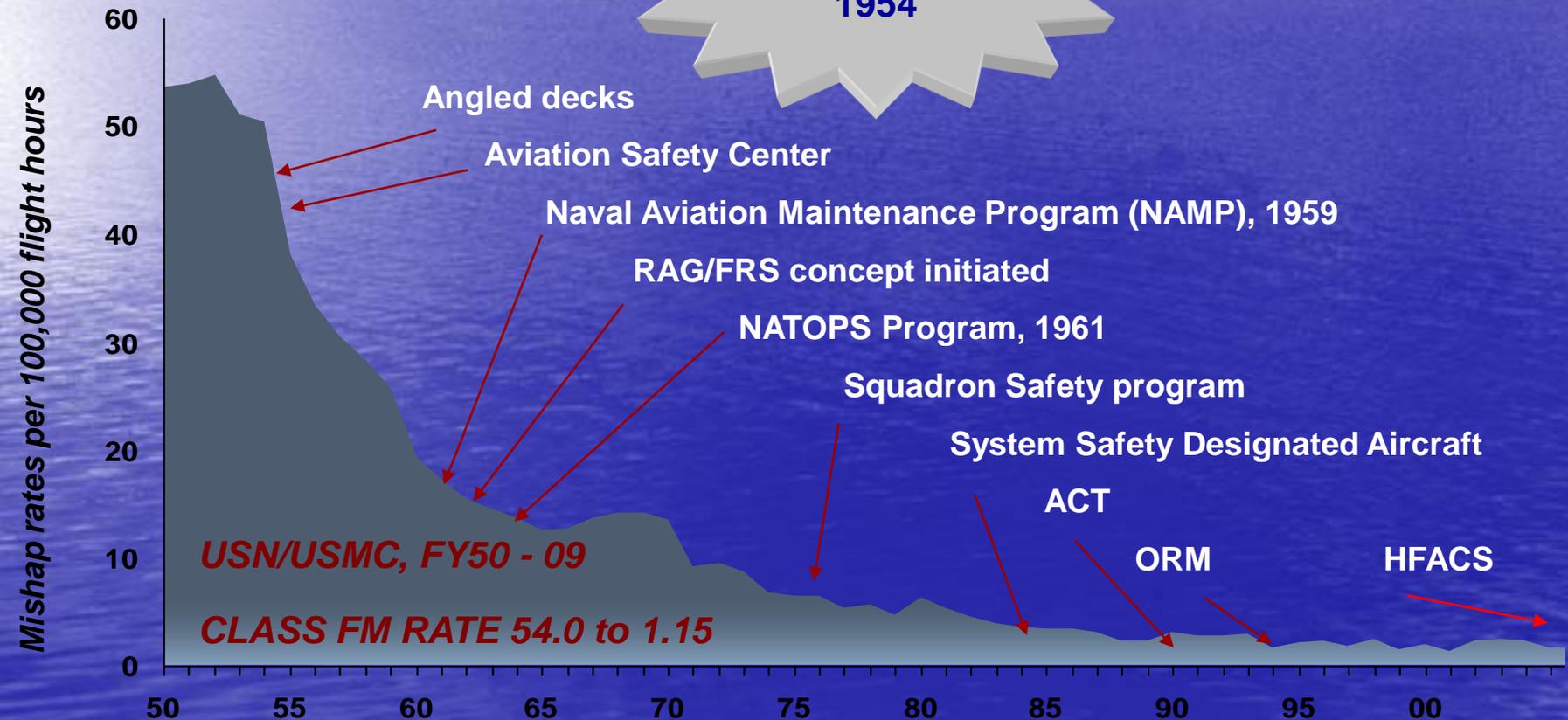
Naval Aircraft Mishap Investigation Process

Recommendations for Mishap Prevention

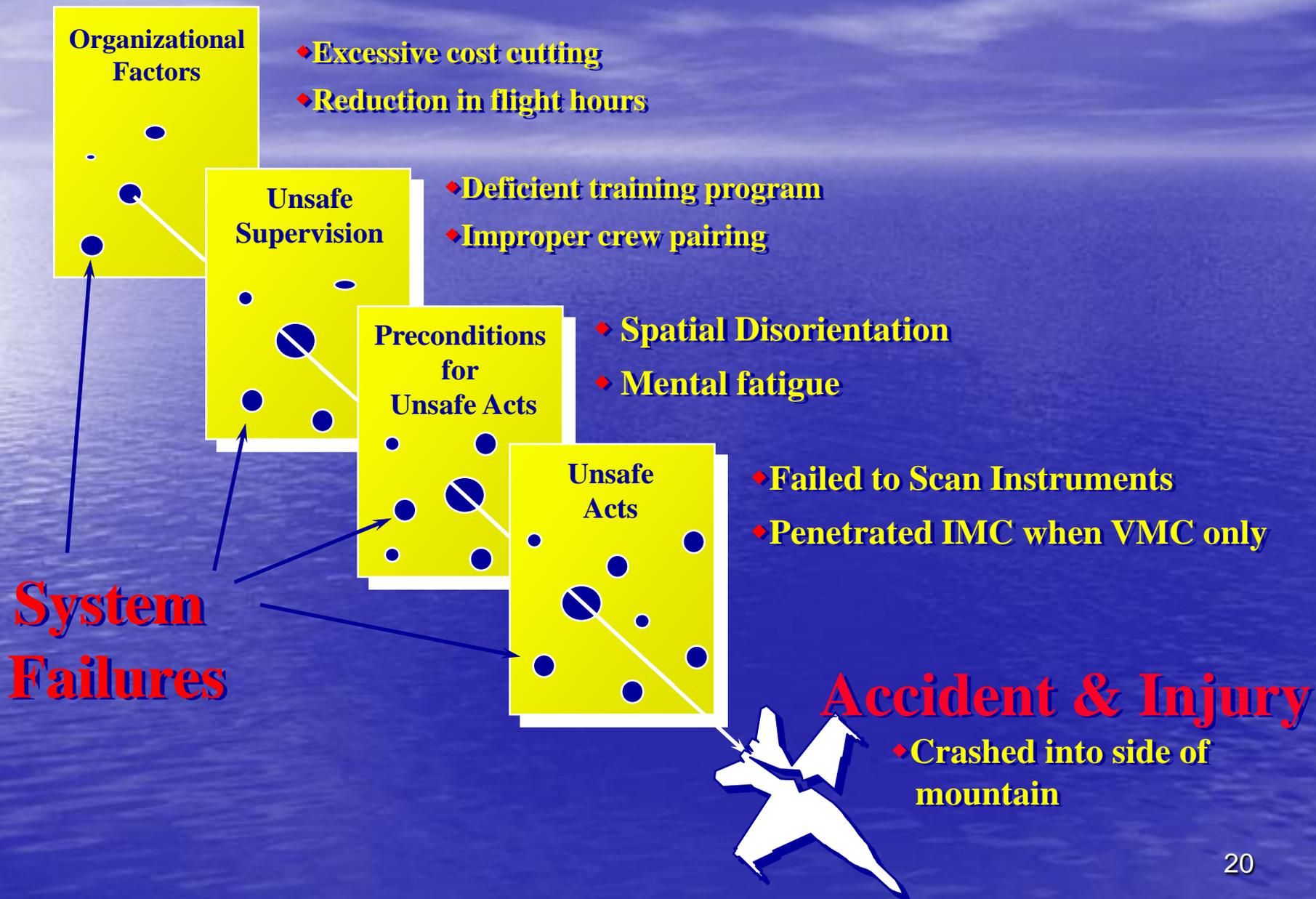
- **Recommendations**
 - **Each causal factor has at least one**
 - **Intended to prevent recurrence**
 - **Assigned to specific agencies**
 - **Specific in nature**
 - **Final solutions**

Naval Aviation Safety

776 aircraft
destroyed in
1954



"Swiss Cheese" Model of Accident Causation





QUESTIONS?