

FOUNDATIONS OF SAFETY & SMS IMPLEMENTATION

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SAFETY

- Dictionary – The condition of being safe; freedom from danger, risk, or injury.
- “Safe as a nun in a roomful of eunuchs” — Donald Seaman
- “More defined by its absence than its presence” – James Reason

SAFETY

- Goal of Risk Management within a Safety Program is to Manage Risk to a level, ALARP
- “As Low as Reasonably Practicable”
- No matter how good you are
- No matter how skilled your team
- You cannot guarantee complete safety

SAFETY

- Must be a Core Value of the Organization
- Management Commitment from the Accountable Executive
 - ✓ Accountability Cannot be Delegated
 - ✓ Must be Accompanied by Financial Commitment

SAFETY

Foundations

Wright Brothers

Glenn Curtiss

Past – Forensic Investigation of Accidents

GLENN CURTISS



FIRST FIXED WING FATALITY



SMS FUNDAMENTALS

Policy & Procedures

Risk Management

Safety Assurance

Safety Promotion

SMS FUNDAMENTALS

Policy & Procedures

- ✓ Management Commitment & Responsibility
- ✓ Safety Accountabilities
- ✓ Appointment of Key Safety Personnel
- ✓ An Effective ERP
- ✓ SMS Documentation

SMS FUNDAMENTALS

Management Commitment & Responsibility

- Build Safety Culture based on Systems
- What is Written is Fully Supported
- Management must “Walk the Talk”
- Safety Culture must be Inclusive
- Employees Empowered to Participate

SAFETY

Where is Your Safety Culture Today?

- Safety Culture – Proactive & Predictive
- How to Measure SMS Impact

Resilient Matrix (SMS Snapshot)

- Management Framework
- Cultural Drivers

MANAGEMENT FRAMEWORK

- Philosophy
 - Industry Norms, Company Norms
- Policies
 - Action Principles
- Procedures
 - Established Methods
- Practice
 - Application & Performance

CULTURAL DRIVERS

- Commitment
 - Dedication & Loyalty
- Cognizance
 - Knowledge & Awareness
- Competence
 - Proficiency & Ability

MANAGEMENT FRAMEWORK & CULTURAL DRIVERS

Cultural Indicators Management Framework	Commitment	Cognizance	Competence
Philosophy (Principals)	1	2	3
Policies	4	5	6
Procedures	7	8	9
Practices	10	11	12

(1) PHILOSOPHY & COMMITMENT

Company – Dedication & Loyalty

- Everyone is Responsible for Safety (*Trained, Understand and Apply SMS SARPS*)
- Formal Safety Letter of Commitment (*Not Just Signed but Actively Supported by the Accountable Executive*)
- Safety Mission Statement (*One Developed by Both Employees and Management*)

(1) PHILOSOPHY & COMMITMENT

Company – Dedication & Loyalty

- Management Commitment to Just Culture
(Does the Manger Seek Employee Opinions; An Open Door Safety Policy?)
- Scheduled Safety Meetings *(Must be a Free Exchange of Relevant Hazard and Mitigation Data Among Employees on a Regular Basis)*

(2) PHILOSOPHY & COGNIZANCE

Company – Knowledge & Awareness

- Risk Mitigation Becomes Part of Policy Change (*Is Every Operational Event Subjected to a Risk Analysis?*) (*Do People Speak in Terms of Safety or Risk?*)
- Identify Failed System Defenses vs. Individual Blame (Ask the Employees if This is Working)

(2) PHILOSOPHY & COGNIZANCE

Company – Knowledge & Awareness

- Risk Management Founded on Collection, Analysis, & Dissemination
- *(Hazard Reports Actively Solicited?)*
- *(Analysis is a Joint Activity; Org. Levels)*
- *(Are Results Published Promptly?)*
- *(Is Mitigation Follow-Up Always Completed?)*

(3) PHILOSOPHY & COMPETENCE

Company – Proficiency & Ability

- Senior Management Commitment to Proactive Measures (*Safety Budget Must Accommodate Mitigation*)
- More Proactive and Predictive (*Change Management is Actively Pursued; Data Management is Purposeful and a Trend Analysis Process in Place*)

(3) PHILOSOPHY & COMPETENCE

Company – Proficiency & Ability

- Active Internal Reviews (*This is Essential; Is the Organization Really Doing What it Says it Will Do?*)
- Focus Upon Latent Factors (*Proactive, Insightful, and Continuous*)

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(4) POLICIES & COMMITMENT

Action Principles – Dedication & Loyalty

- Safety Related Information – Direct Access to Senior Management (*Regular Meetings; Dept. Mgr. Has Open-Door, No-Fault Safety Policy*)
- Safety Management Fast Tracked (*No Delays in Processing Hazards & Internal Audit Reports*)

(4) POLICIES & COMMITMENT

Action Principles – Dedication & Loyalty

- Safety Committee Consists of Variety of Disciplines (*Committee Makeup Consists of High Performance Personnel From Operations, Maintenance. and Administration; Use an Agenda; Expect Results; Conduct Frequent Meetings*)

(5) POLICIES & COGNIZANCE

Action Principles – Knowledge & Awareness

- Priority of Managerial Focus on Safety
(*Demonstrated Commitment to Flight Department Members*)
- Priority of Resources Allocated to Safety
(*Allocation of Financial Resources to Safety*)
- Ensure Senior Aviation Staff is Available (*Allow Safety Meetings and Process to Become Part of the Schedule*)

(6) POLICIES & COMPETENCE

Action Principles – Proficiency & Ability

➤ Reporting System

Qualified Indemnity Against Sanctions

(Reporting System is Understood by All; Proof that it is Practiced Every Time)

De-Identification & Confidentiality *(Everyone Understands the Process and are Assured of its Integrity)*

(6) POLICIES & COMPETENCE

Action Principles – Proficiency & Ability

➤ Disciplinary System

Distinction Between Acceptable and Unacceptable (*Examples of a Just Culture are Critical to the Overall Understanding*)

Peer Group Involvement in Discipline Process (*Never Place a Peer in the Final Decision Making Process but Ensure that Peer Opinions are Heard for Validation of Fairness*)

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(7) PROCEDURES & COMMITMENT

Established Methods – Dedication & Loyalty

- Safety Training of Junior Staff Exceeds Expected Norm (*SMS Training for All Hands is Not a One Hour Exercise; More Substantial*)
- Safety Training of Senior Staff Includes Development and Mentoring (*Involve Senior Staff in Training to Demonstrate Shared Commitment*)

(8) PROCEDURES & COGNIZANCE

Established Methods – Knowledge & Awareness

- Advanced Training in Hazard Identification & Risk Assessment

(Send Key Personnel to Formal Courses)

(Attend Online Courses)

(Discuss Results with Trainee to Learn from the Individuals Experience)

(8) PROCEDURES & COGNIZANCE

Established Methods – Knowledge & Awareness

- Feedback Mechanisms for Risk Mitigation Process (*Everyone in the Organization is Made Aware of Actions Taken and the Effectiveness of the Action*)
- Advanced Training of Entire Staff in New Policy Development (*Utilize Managers to Describe the Process with Examples and Exercises*)

(9) PROCEDURES & COMPETENCE

Established Methods – Proficiency & Ability

- Effective Safety Assurance – Internal Audit Process

(Essential Source of Comprehensive Feedback and Correction)

(Regular Intervals – Partial Audits at Least Quarterly)

(9) PROCEDURES & COMPETENCE

Established Methods – Proficiency & Ability

- Cross Training of Internal Auditors (*A Learning Experience that Forces All to Explain their Standards and Procedures Involvement*)
- Knowledge of Interdisciplinary SARPS (*Flight Operations, Maintenance Technicians, and Scheduling Personnel Participate in Joint Risk Analysis Process*)

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(10) PRACTICES & COMMITMENT

Performance – Dedication & Loyalty

- Safety Issues are Openly Discussed (*Safety is Directed by Management in All Meetings*)
- On the Spot Corrections of Hazards are Reported (*Personnel will Learn from Experience; Opportunity to Change Weak Procedures*)
- Personnel are Rewarded and Encouraged to Report Hazards (*Praise and Recognition*)

(11) PRACTICES & COGNIZANCE

Performance – Knowledge & Awareness

- Everyone is Empowered to Halt Operations when High Risk is Recognized (*If Unsure, Yell Stop; Praise Those Who Do!*)
- Operations Halt when Inadequate Training is Recognized (*CRM is a Key Factor*)

(12) PRACTICES & COMPETENCE

Performance – Proficiency & Ability

- Rapid Feedback Mechanisms – Lessons Learned (*Email, Websites, Group Meetings, Newsletters, All Reinforce the SMS Doctrine*)
- Bottom up Information Holds Identical Priority (*Learn to Read Between the Lines for Risk-Related Items*)

(12) PRACTICES & COMPETENCE

Performance – Proficiency & Ability

- Open Communication (*Everyone Knows Something Valuable that You Don't. Learn to Ask the Right Questions*)
- Rapid Recognition of Fault – Regardless of Responsibility (*Hazards and Faults are Often Concealed by Other Factors; Learn to Look Beyond the Obvious*)

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IS-BAO PROCESS

Three Stages of SMS Maturity

Stage 1 – Policies & Risk Management

Resilient Snapshot Matrix Levels

1 – 2 – 4 – 5

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IS-BAO PROCESS

Three Stages of SMS Maturity

Stage 2 – Safety Assurance & Safety Promotion

Resilient Snapshot Matrix Levels

3 – 6 – 7 – 10

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IS-BAO PROCESS

Three Stages of SMS Maturity

Stage 3 – SMS Immersion and Cultural
Acceptance

Resilient Snapshot Matrix Levels

8 – 9 – 11 – 12

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HOW MATURE IS YOUR SMS?

- Review the Factors Associated with the Matrix
- Ask your Safety Committee to Review
- Pinpoint any Missing Essentials
- Work Towards SMS Maturity

THANK YOU

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