A Safety Management System:

ONE STEP TO BETTER MANAGING RISK

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As early as two years ago a Safety Management System (SMS) was more or less an unknown entity for most U.S. based helicopter operators. Since that time, the industry has come a long way. In the past two years, the FAA has published an Advisory Circular, AC 120-92 on the subject and several 121 and 135 operators are in SMS development trials with the FAA. Additionally, the International Helicopter Safety Team (IHST) has published an SMS tool kit for small operators.

All of this activity is good news to an industry that is under increasing scrutiny from regulators, the media, and the public. The systems approach to safety isn't something to be feared or thought of as an additional burden. At first blush, it can seem overwhelming.

Fortunately, it isn't.

As a participant in the IHST Joint Helicopter Safety Analysis Team (JHSAT), it was eye-opening to see how often civil aviation helicopter accidents could have been prevented by better assessment and management of risk. The JHSAT, consistent with those findings, has advanced a variety of recommendations intended to encourage operators to better manage risk through use of safety management systems (SMS). An SMS plan is the first step and is useful for large and small operators alike. The plan should address safety management commitment, establishment of safety as a core value (safety culture), goal setting, hazard identification, safety event reporting, internal evaluation programs (audits), accident and incident investigation, emergency planning, and safety training.

Senior Management Commitment

Regardless of the size and complexity of an organization, senior management will have a significant role in developing and sustaining a company's safety culture. Without the sincere, unconditional commitment of all levels of management any attempt at an effective safety program will be unsuccessful. Safety management requires the time, financial resources, and consideration that only the senior management can provide.

Some examples of management commitment and support may be:

- ★ Statement of safety commitment from the top accountable executive
- ★ Discussing safety matters as the first priority of staff and board meetings
- ★ Participating in safety committees and reviews
- ★ Allocating the necessary resources such as time and money to safety matters
- ★ Setting a personal example.

However it is manifested, the importance of support from management cannot be underestimated.

Safety Policy

Commitment must lead to action. This policy should define responsibilities and hold individuals accountable for safety performance.

Safety policy should include at a minimum:

- ★ Clear declaration of commitment and objectives
- ★ Method of setting safety goals and measuring performance
- ★ Safety component to all job descriptions
- ★ Means of ensuring compliance with regulations and company policy
- ★ Means of ensuring the responsible individuals have sufficient safety management knowledge and skills
- ★ Means to integrate safety management with other critical management systems.

Safety Information

Gathering information and data is critical to an organization's ability to track, trend, and mitigate hazards. The use of data is important for the accurate measure of safety performance and proper decision-making. A system to collect and analyze data, including, safety goals, a record of accidents and incident findings, corrective actions with loop closure, employee safety concerns, and corrective action should be developed.

Safety as a Core Value

Safety in an organization is not accomplished by any single individual. It is everyone's responsibility. A positive safety culture can influence

correct behavior. One of the most effective methods to establish safety as a core value is to make safety an integral part of the organization's management plan. Just as the financial aspects of organizational management require the ability to set goals and assign accountability, so to does the management of a safety system. Such goals need to be tangible, measurable, and achievable. Meeting safety goals should have the same importance as meeting other organizational goals. Requiring that safety be a part of every management decision ensures that safety is a normal part of conducting everyday business.

Setting Safety Goals

Safety goal-setting is more than reducing the number of accidents and incidents over a period of time. There are methods of setting safety goals other than focusing on the outcome. Though the ultimate goal is zero accidents, safety goals measure risk reduction as a means of measuring safety improvement.

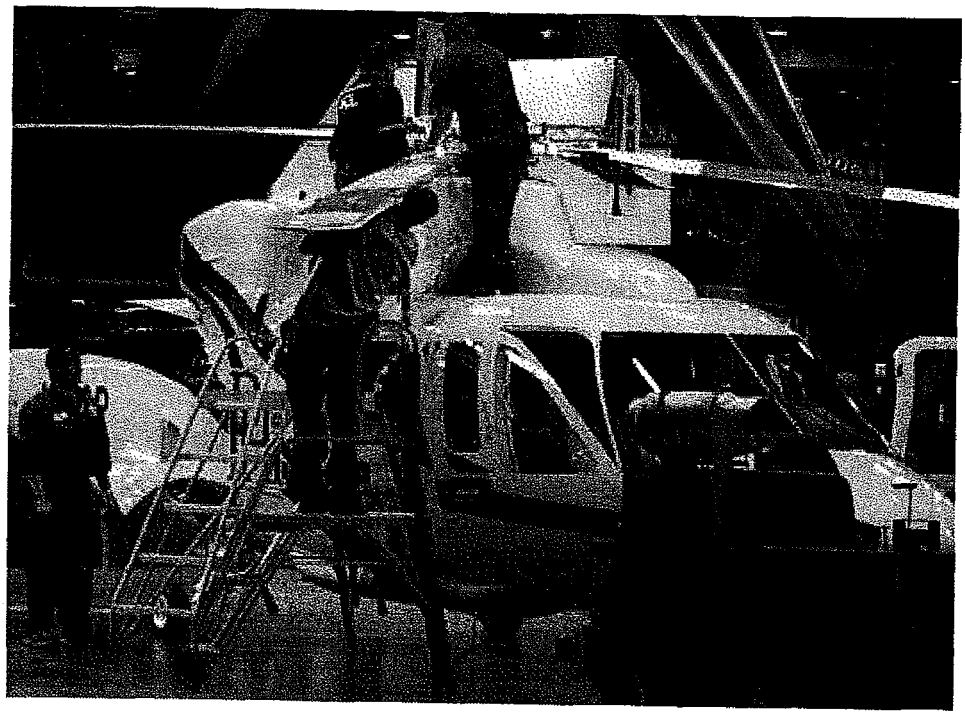
Organizational influences such as management practices, policy and procedures, hiring practices and fiscal practice can all affect the decision-making process of the individual. Risk management procedures can help managers decide where the greatest risk is and help set priorities for risk reduction, while safety goal-setting concentrates on identifying systemic weaknesses and either eliminating or mitigating them.

Hazard Identification and Risk Management

A hazard is a condition with the potential for causing injury to personnel, damage to property or equipment, or a reduction in the organizations ability to deliver a product.

Risk is the possibility of something happening that would negatively impact on the organization's ability to meet their objectives.

The fundamental purpose of risk management is the early identification of potential problems. The risk management system enhances the manner in which safety decisions are made.



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An Internal Evaluation Program includes inspections, audits, and evaluations

Safety Reporting System

A safety reporting system is one of the primary methods of providing management with information on changing conditions within the company. Safety reporting and the correction of potential hazards needs to involve all employees and is fundamental to a SMS. All safety reports need to be reviewed and analyzed to determine if any corrective action needs to take place. A non-punitive environment encourages employee participation and trust in the system.

Not all safety information will come through established safety reporting systems. Maintenance interruption reports, crew/mission briefing and debriefing forms, flight and maintenance logs, employee interviews and surveys are all valid information sources. Any unexpected change in environment, task, or procedure should generate a report.

Accountability in the system is maintained when the appropriate action is taken and communicated to all employees through a formal feedback system.

Internal Evaluation Program

An Internal Evaluation Program (IEP) is based on the premise that an organization is responsible for ensuring that its operations are safe, and in compliance with regulations, and its own policies and procedures.

An ongoing process should be established which includes inspections, audits, and evaluations. Discrepancies discovered during this process should be documented, reported to the appropriate department and followed up to ensure that appropriate corrective measures have been taken.

The IEP should be mandated by senior management. Participants in the IEP should operate independently of the various disciplines within the company. All companies need to have a method of determining if policy and procedures are being followed. As with any process for collecting data to identify compliance trends, a method for tracking and storing data is essential.

Accident/Incident Reporting and Investigation

The methods used for investigating accidents and incidents are basically identical. The difference lies in the scope and severity of the occurrence. Basically, the process is to identify

the root cause or causes. There are different methods to accomplish this with one not being significantly better than another.

All incidents should be investigated. In the past many accidents and incidents have been classified as human error. An SMS looks to identify the organizational errors, as well as the human factor issues that may have contributed to an incident.

Accident and incident investigation is a reactive method of safety management but every accident/incident is an opportunity to learn valuable lessons and make changes that could help prevent future occurrences.

All companies should have an individual or individuals that are technically competent and have had some training on how to gather information and to ensure that facts and events are interpreted accurately. All accident/incident reports need to go to the appropriate manager who has the authority and responsibility to act on the findings.

Safety Training

New employees should be trained in how safety is managed, and encouraged to adopt the safety philosophy, policy, and practices of the company. The commitment to provide relevant orientation training and ongoing refresher/recurrent training for all staff is an essential element of any safety program.

Often, specific safety training is overlooked or not given the emphasis that is required to operate safely in today's world. Safety training topics should include, but are not limited to:

- ★ What is an SMS
- ★ Each employee's personal responsibilities within a safe system
- ★ Manager's responsibilities

Emergency Response

Unfortunately, though rare, accidents do occur. Sometimes a good safety record can lull a company into complacency. If something catastrophic does happen, the organization may not be prepared to deal with it. Every aviation organization should have an emergency response plan or a Post Accident/Incident Plan (PAIP).

A PAIP outlines in writing the steps that need to be taken in order of priority in the event of an accident or incident. In addition to the contact numbers of the appropriate government agencies, the contact information for the relevant management staff should be current and available.

Identifying Risks — Warning Sign on Helicopter tail

In today's environment some thought needs to be given as to how to handle the press and the publicity that can result from a major incident or accident. One option to consider is having a public relations agency on-call for such circumstances. At least some member of the organization should be appointed as the sole point of contact for the media and that person should have training in crisis management.

A copy of the plan should be readily available, pre-briefed, and exercised at regular intervals. Any deficiencies discovered during the exercise and review of the PAIP should be corrected as soon as possible.

Documentation

An SMS must have a formalized method of documenting safety department recommendations, findings, directives, and instructions.

Examples of records that should be kept include, activities related to identification of hazards, risk assessment, follow-up and corrective actions, results of all investigations and internal audit and assessment findings.

The ability to track, trend and mitigate safety issues and concerns depends on the ability to collect and manage data. The organizations ability to generate reports and create a corrective action response depends on it.

Conclusion

There are many assets for gathering SMS information, as mentioned, but it certainly is not all-inclusive. FlightSafety International sponsors a yearly safety summit at no cost to the attendee except for travel and expenses. HAI offers pre–HELI-EXPO safety and human factors classes for both operations and maintenance personnel. The DOT Transportation Safety Institute offers the same safety classes taught to FAA and NTSB personnel.

The important thing is not where companies get the information, but that they start down the SMS road sooner rather than later. No matter the size and complexity of an organization, a systems approach to safety and risk management makes sense. R

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