



NATA Safety 1st eToolkit

Welcome to the 34th issue of the NATA Safety 1st eToolkit, our monthly online safety newsletter, supporting the NATA Safety 1st Management System (SMS) for Ground Operations.

The NATA Safety 1st Management System (SMS) for Ground Operations is underway and many of the tools discussed in this and other eToolkits will be provided to SMS and PLST participants.



This monthly newsletter highlights known and emerging trends, environmental and geographical matters, as well as advances in operational efficiency and safety. Flight and ground safety have been enhanced and many accidents prevented because of shared experiences.

COMMUNICATION AS A DEFENSE

Organizations can suffer serious accidents or incidents as a result of failed defenses. While events range from snapped tow bars to missed daily inspections, they reveal a trend that suggests internal communication within companies is less than desirable or expected.

In NATA’s Safety 1st Management System WebCast training sessions, we discuss poor communication practices, such as the “Silo Effect” experienced by many companies within the industry. What this suggests is that individuals working within specific departments are not sharing information among their peers, with supervisors, or with other shifts and departments. This “Silo Effect” is a common condition that often happens within an organization, but the good news is it can be solved and eliminated (**Exhibit 1**).

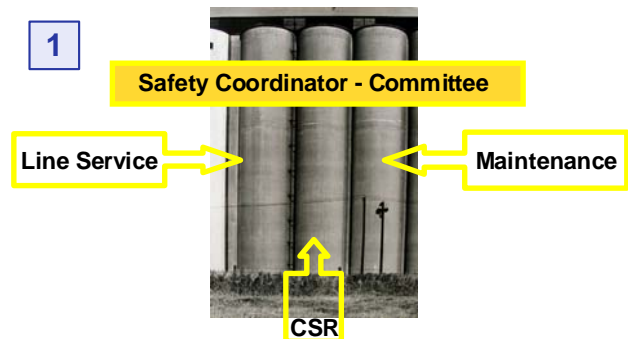
In Exhibit 1, each silo represents an operating department or shifts within the same department. These departments, shifts or work teams may fail to share common or critical information. This information will impact the success of the operation and may result in an accident so it is beneficial to understand and work to prevent the “Silo Effect”.

Smart managers and safety professionals know that encouraging effective communication is the most cost effective means to improve safety performance. By adding

common risk management techniques such as Hazard Identification, Job Hazard Analysis, Safety Meetings, Shift Briefings and Supervisor Briefings, your chances of identifying a potential failure (failed or weak defense) increase dramatically. For those enrolled in the NATA Safety 1st Management System, all of the risk management techniques mentioned are part of our program. Techniques and training are included in our guide as well as our interactive training sessions or Webcasts.

Communication is a core attribute within the framework of the safety management system and is considered a defense. As such, it is a defense that can experience failure. Just like other defenses depicted in **Figure 2** that include recruitment, training, operations standards, supervision and oversight, defenses can and do fail. Defenses can develop holes or fail if conditions are right or are really wrong! When these holes develop, the defense is weakened to the extent that if other defenses also show signs of weakness, the potential for an accident is greatly increased.

Figure 1 shows a failure that developed in recruitment and training but was blocked because of operations standards. In this situation, an accident was averted because of the strength or robustness of additional defenses. Operating Standards prevented the event due to a weakness in job recruitment as well as training.



In This Issue:

- ▶ Communication as a Defense 1
- ▶ Reader Corner 3
- ▶ Dessicant Dryers 3
- ▶ Insurance Corner 3
- ▶ Unplanned Absences Hurt Company's Bottom Line 5
- ▶ Bits & Bytes 5
- ▶ Incident Roundup 7
- ▶ Facet Bulletin 8
- ▶ Continuing Education 9

Let's focus on a real world example such as towing an aircraft with an appropriately rated tug. XYZ Company recruits a new employee with no previous knowledge of aircraft ground handling and no knowledge of tugs, aircraft weights, draw bar pull ratings, weather / slope factors and so on. Next, XYZ offers training that fails to address common hazards associated with towing. XYZ does have an operating procedure that specifies one tug to tow all aircraft at the FBO. Because of the Operating Standard (Defense) that identifies the appropriate tug, the employee successfully tows the aircraft.

In **Figure 2**, had there been no operating standard and the supervisor failed to recognize the condition, it resulted in an accident because all of the defenses were breached. In this case, all the defenses failed or the holes aligned and an accident occurred. (Reason's Model of Accident Causes or Swiss cheese analogy.) Obviously, building appropriate defenses into your company's activities increases your chances of preventing an accident.

In our industry, we must remain vigilant to changing conditions, environments, equipment and customer demands. The best course of action is to communicate and examine these changing conditions to assure your current risk controls (defenses) prevent incidents and accidents. Continue to build in controls and defenses to minimize the risk and monitor the effectiveness of these controls and defenses. The next time an incident, accident or near miss occurs, take a close look at the defenses in place and assess their effectiveness.

This entire process is based on effective communication.

Things That May Help

Coordination between departments: Consider having a process so the Aircraft Maintenance Department provides a list of aircraft that need towed out of the hangar and positioned for customer delivery. A window or block of time should be offered to allow the Line Service Department to plan its workday around known internal and external customer requests.

Coordination between shifts: Establish a Shift Log Book so each shift can report, in writing, what occurred on their shift, schedule duties to be accomplished (fuel truck daily inspections) and document any deferred activities. A procedure should be established requiring overlap between specified shift personnel to discuss shift notes and pass along important information.

Coordination between employees: Encourage a "Buddy System" or "Watch My Back" (WMB) program that rewards employees who alert another employee of a potential hazard or risk.

Coordination with customers: Encourage your personnel, who routinely interact with customers, to get the full story of customers' needs. Don't assume your customer knows how many aircraft you have to move out of the hangar on the first shift. Ask specific questions such as, "when are your passengers arriving" and "what catering, fueling and special needs may be needed?" It just may be, instead of rushing to pull all six aircraft out of the hangar at once, you can stagger movements between other duties and still meet your customers' expectations.

Remember: Rushing is evidence of poor communication and planning. When defenses are pushed to the limit, accidents are more likely to occur.

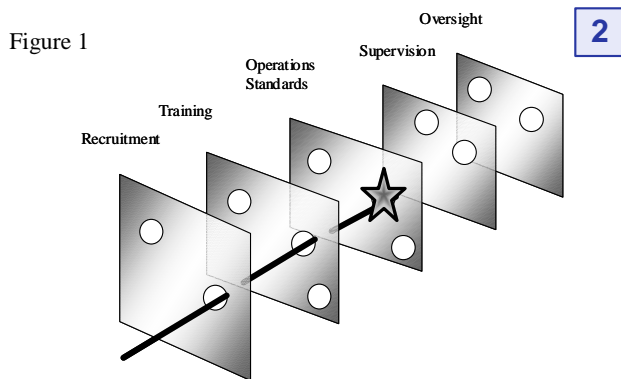
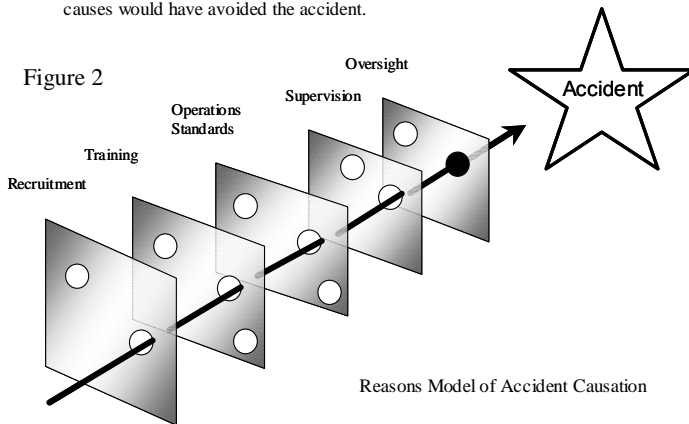


Figure 1
An accident results from several causes. The elimination of one of these causes would have avoided the accident.



Reasons Model of Accident Causation

READER CORNER

Q. I was wondering if you could assist us on verifying a rumor we are hearing in regards to desiccant filters on the Prist reservoir. We have heard a practice in the FBO industry where they are drying the desiccant filters by means of convection or microwave ovens and reusing the filters. If this is true, I have a few questions; is this an approved method of recycling the filters? Does the filter element turn back to blue once it is dry? Do you know how widespread this practice is through out the FBO community?

A. This is NOT an advisable practice and should not be done by any FBO. We have provided in-depth information on desiccant dryers and hope that such rumors of this practice are just that -- rumors. We encourage all our readers and FBOs to educate their line personnel about proper desiccant filter practices.

The material in Desiccant Dryers is a Silica Gel and is NOT compatible with human consumption.

Moisture may be removed from desiccator materials but it will reduce the materials ability to remove water. The more this practice is done, the shorter the life span of the material. Please read Walter Chartrand's article on desiccant dryers for in-depth information to share and educate your line personnel.

We welcome your questions and open this corner up to responses from our readers. If you have any additional input, please send your responses to Safety1st@nata.aero or by FAX: (703) 845-0396. Your input will be anonymously shared in an upcoming issue of NATA's eToolkit. Thank you for taking the time to share your questions and concerns with others.

DESICCANT DRYERS

By Walter Chartrand
Training and Programs Manager
Air BP Aviation Services

The component used to remove moisture from vented air that comes in contact with Prist® Fuel System Icing Inhibitor is Silica Gel. This Silica Gel is packaged using many small cubes to increase the surface area allowing it to adsorb

moisture more readily, making it useful as a desiccant (drying agent).

A Desiccant Dryer is used to ensure that the air drawn in via a vent, which will come into contact with the Anti-icing fuel additive Prist®, which is hygroscopic (meaning it attracts water molecules), will not have high levels of moisture which could cause the product to partially decompose.



Generally speaking, most Silica Gels are not toxic and some types of Silica Gel are even used to prevent spoilage of foods by removing moisture which can encourage the growth of mold while others are packaged with medical prescriptions and vitamins to lengthen their shelf-life.

However, the desiccant material used in aviation fuel additive applications has been “doped” with a moisture indicator like Cobalt (II) Chloride, which is toxic and may be considered a carcinogen. This is the reason the desiccant material should be considered dangerous or poisonous and not ingested.

Furthermore, Desiccant Dryer material should not be reheated in an oven or microwave where people are going to cook their meals.

The Cobalt Chloride allows the Silica Gel to be **BLUE** in color when dry and permits the gel to turn **PINK** in color when moist.

INSURANCE CORNER

Insuring Your Hangar in 2007 - A Market Update©

By Jim Gardner
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With hurricane season just around the corner, I thought it might be a good time to bring our readers up to date on some current changes in the hangar insurance marketplace.

Insuring a hangar is a bit different than insuring an aircraft. There are fewer insurance companies willing to insure aviation property. Those that do have different restrictions in the type of risk they will underwrite and the geographic



NATA Safety 1st eToolkit

territory in which they choose to write. Four or five major companies are currently writing the majority of aviation related, non aircraft, property risks (hangars, business personal property, tools and equipment, mobile equipment, etc.) There are a smattering and inconsistent number of other companies around the country that will insure a hangar or other airport property on a case by case basis. It is a hit or miss proposition that depends almost entirely on geographic location and what other ancillary business might accompany it.

Most aviation insurance brokers specialize in aviation and do not have a large enough book of commercial property business to qualify for direct appointment with a broad range of property insurance companies. Instead they use property insurance wholesalers that have developed a large volume of business in hangar and aviation related property. These wholesalers usually have an exclusive contract with a single carrier giving them special underwriting privileges for only aviation related risks. There are a couple of wholesalers who contract with several carriers because one single carrier will not insure all the needs of a fixed based operator, or will exclude certain areas or states.

To compound things, while the marketplace is very limited to begin with, it has been severely impacted by recent natural disasters, especially along the gulf coast. Losses in the last several years have been in the billions. The hurricanes of the last few years have wreaked havoc along the coast not to mention spawning millions of dollars in damages from wind, hail, and tornado's as far inland as 250 miles. This has made all property insurance companies (not just hangar insurers) rethink their business appetite for property in these high impact areas. Ask anyone who lives in Florida, along the eastern seaboard, or the gulf coast know how expensive insurance has become, if they can get it at all!

If that is not bad enough, foreign competition for steel and concrete has driven the price of construction up as much as 30% in the past 12 months. I am advising all my clients to refigure their replacement costs and consider increasing the insured value of their buildings. The aftermath of a hurricane or tornado is not the time to learn the hefty penalties of co-insurance requirements that come from being under-insured.

In an effort to spread their exposure to a wider area, all insurance carriers are using High Hazard Catastrophe Modeling techniques to identify and select areas in which they are overexposed to natural disasters. On renewal you may hear the terms "Tier One" and "Tier Two" counties. Tier One counties are those counties with a direct shoreline or waterway along the coast. Tier Two counties are one county removed from the coastline.

Thus, one company who might be overexposed in Florida and the Gulf regions is reducing their exposure if not pulling out of Florida altogether. This could leave the door open for other companies to write business in the safer Tier Two counties and even selected locations in Tier One counties. As a general rule, all companies are raising deductibles to as much as 5% and/or excluding wind and hail damage, forcing hangar owners to rely on state sponsored insurance programs or wind and hail funds.

The largest hangar insurer in the country has put severe restrictions on coastal areas from Virginia to Brownsville, TX. No new business in Tier One or Tier Two counties. They are being very selective about renewing current customers in these areas. Generally speaking, they are not writing new business within 100 miles of the coastline. No business in Florida. No new business in Long Island, Nantucket, Cape Cod or Cape May. Many of their current clients in all coastal areas are receiving non-renewal letters.

While there remains a good competitive environment in the hangar insurance industry, all of the participating companies have varying degrees of underwriting restrictions in the coastal areas. To recoup losses and assure a good premium base against expected future losses, all of the companies are implementing rate increases to varying degrees in coastal areas as well as those areas not traditionally affected by hurricanes. The story is the same... in the insurance industry when one suffers; we all suffer to a certain degree.

Currently there are four aviation property wholesaler/underwriters. Three are established companies that have a primary contract with a single carrier. A new entrant is writing insurance through several companies. There may be an additional new wholesaler entering the marketplace in the not too distant future. All of the carriers that the wholesale/underwriters represent are solid companies with sound financials. Each offers slightly different policy terms with different coverage limits, limitations, deductibles, and pricing. Your shopping experience will not always be a clear cut, "apples to apples" comparison. You should be prepared to make value judgments according to your needs and circumstances. A well schooled and educated broker or agent will be able to help you sort through these choices. It is not rocket science, but the right choice will not necessarily be the cheapest choice. If you live on the coast, compared to previous years, expect your choices to be limited and more expensive.

About the author - Jim Gardner is a retired U. S. Air Force officer, a professional pilot, and an aviation insurance broker with Insuramerica Aviation, one of the largest independent aviation insurance agencies in the Southeast.



UNPLANNED ABSENCES HURT COMPANY'S BOTTOM LINE

A survey of American workers by Nationwide Better Health(SM) found that unplanned absences increase employees' workload and stress, negatively impact companies' bottom lines and are normally due to health conditions. Absences cost employers an upwards of \$74 billion annually, according to the Wharton School of the University of Pennsylvania. By monitoring employee attendance and addressing reasons why employees call off from work, a company can minimize the impact unplanned absences have on both productivity and profit. Key findings include:

- ❑ **Absence of Health:** 85 percent of respondents report that unplanned absences are normally due to a health condition, whether their own or of a family member.
- ❑ **Chronic Youth:** When calling off due to a health-related reason, 57 percent of Gen Y (ages 18-27) attributes their sick day to the same recurring condition. Only 41 percent of Baby Boomers (ages 45-60) claim the same.
- ❑ **Unplanned Absence / Unwanted Work:** 53 percent of workers surveyed agree that their colleagues' unplanned absences leave them with more work to do, and Gen X (ages 28-44) felt the most burdened at 57 percent. 50 percent of both Generation Y and Baby Boomers felt the same.
- ❑ **Return to work:** More than half of workers, from Gen Y to Baby Boomers, report feeling additional stress after returning from an unplanned absence. 58 percent of female employees tend to have more stress after calling off, as compared to 48 percent of males employees.
- ❑ **Hands-off Management:** 71 percent of respondents state that their managers do not question them after they call off from work. This number varies significantly between generations - 80 percent of Baby Boomers report not being questioned whereas only 57 percent of Gen-Y claims the same.
- ❑ **Paycheck Power:** 84 percent of those with an income of \$75,000 or more are not questioned by management after calling off. 57 percent of respondents with a household income of \$25,000-\$35,000 claim the same. At the same time, only 34 percent of those earning \$75,000 or more think that unplanned absences have a negative impact on career development whereas 52 percent of respondents with a household income of \$25,000-\$35,000 feel the same.

BITS & BYTES

EPA Prepares To Implement Clean Air Nonroad Diesel Rule

NATA has produced a Regulatory Report to make its members aware of the U.S. Environmental Protection Agency (EPA) Clean Air Nonroad Diesel Rule. The rule states that beginning June 1, 2007, all nonroad vehicles, including those in service at airports, must begin a two-step transition process to using ultra-low sulfur diesel (ULSD) fuel.

The timelines for the two phases are specified in the rule as follows:

Step 1: LSD (500 ppm) Transition Deadlines

- ❑ Beginning June 1, 2007, refiners and importers must begin producing 500 parts per million (ppm) sulfur diesel fuel for nonroad engines and vehicles.
- ❑ On August 1, 2007, terminals inside the NE/MA area must begin transitioning nonroad equipment and vehicles to 500 ppm LSD.
- ❑ October 1, 2007, retail and wholesale purchaser-consumers must begin transitioning nonroad equipment and vehicles to 500 ppm LSD.
- ❑ On December 1, 2007, end user/in use must begin transitioning nonroad equipment and vehicles to 500 ppm LSD.



NATA Safety 1st eToolkit

- ❑ June 1, 2010, small refiners for nonroad equipment and vehicles (Not in NE/MA and with approval in Alaska) must begin producing 500 ppm LSD.

Step 2: ULSD (15 ppm) Transition Deadlines

- ❑ Beginning June 1, 2010, ULSD, 15 ppm, for nonroad engines and vehicles must be produced by large refiners and importers.
- ❑ Small refiners (except those in NE/MA and with approval in Alaska) must begin producing nonroad ULSD by June 1, 2014.

The regulatory report also clarifies some of the language used in the rule. NATA suggests that all airport businesses read the Regulatory Report and makes sure they are in compliance with the rule. Regulation violations are very costly and can be prevented by using the correct type of fuel in nonroad vehicles. The association also warns aeronautical service providers to review and modify pump labels. Incorrectly fueling a vehicle due to poor labeling is easily preventable and will mitigate maintenance problems in the long run.

[View NATA regulatory report.](#)

EPA Prepares to Publish SPCC Compliance Extension

The Environmental Protection Agency (EPA) released a press release on May 10, 2007, announcing the agency's intent to publish a final rule extending Spill Prevention, Control, and Countermeasure (SPCC) compliance dates in the *Federal Register*.

The compliance extension rule allows airport owners and operators a sufficient amount of time to comply with the final SPCC rule, which was published in December 2006. The new SPCC regulation compliance dates are as follows:

- ❑ A facility that began operations on or before August 16, 2002, must maintain its existing SPCC plan and amend the SPCC plan or implement an SPCC plan no later than July 1, 2009.
- ❑ Any facility that began operations after August 16, 2002, and/or plans to open operations through July 1, 2009 must prepare and implement an SPCC plan by July 1, 2009.
- ❑ After July 1, 2009, a facility beginning operations must prepare and implement an SPCC plan prior to beginning operations.

The EPA expects to revise the compliance requirements in 2007; however, NATA is encouraging its members to use the extended compliance dates to create, amend and implement a SPCC plan as soon as possible.

The new rule also addresses the 28 comment submissions that discuss owner's and operators' positions on the proposed compliance extension rule, which was published on Dec. 26, 2006. Most of the comments were in favor of the extension date, but a few were wary of the EPA's possible premature issuance of a compliance date while still having intentions of revising the compliance requirements. The EPA addresses these concerns in the new rule, stating, "At this time, based on the information at hand, the agency believes that extending the compliance dates until July 1, 2009, will allow owners and operators an adequate interval to comply with the SPCC rule."

NATA Members: [Click here to view the unpublished SPCC compliance extension final rule.](#)



INCIDENT ROUNDUP

- ❑ A Boeing 757, while being pushed back from the gate, the right wing struck another Boeing 757 at its elevator. No injuries reported and damage is reported as minor to both aircraft.
- ❑ A cargo worker died after he was struck by a 750-pound piece of equipment used to stabilize the rear section of a plane during loading and unloading.

An employee was towing a tailstand for a Boeing 747 when the 16.5-foot-tall structure fell over and struck him in the head and upper torso. The incident happened just after midnight outside the terminal where planes are positioned when they are loading and unloading.

- ❑ Boeing 757, while being pushed back, the nose wheel crushed a mechanics foot.
- ❑ NTSB Identification: NYC07LA121
Scheduled 14 CFR Part 121: Air Carrier
operation of NORTHWEST AIRLINES INC

Accident occurred Friday, May 18, 2007
in Syracuse, NY

Aircraft: Douglas DC-9-31, registration: N1799U

Injuries: 99 Uninjured.

This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed.

On May 18, 2007, at 1300 eastern daylight time, a Douglas DC-9-31, N1799U, operated by Northwest Airlines as flight 1411, experienced a cabin decompression during climb from Syracuse Hancock International Airport (SYR), Syracuse, New York. The 2 certificated pilots, 2 flight attendants and 95 passengers were not injured. Day visual meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan was filed for the flight destined for Detroit Metropolitan Wayne County Airport, Detroit Michigan. The scheduled passenger flight was conducted under 14 CFR 121.

According to the operator the airplane was climbing through 19,000 feet msl after departure from SYR, when the flight crew heard a "loud pop" and the cabin depressurized. The flight crew donned their oxygen masks and initiated an emergency descent to 10,000 feet. During the descent, the passenger oxygen masks in the cabin deployed automatically as the aircraft lost pressurization. Once the aircraft reached 10,000 feet, the flight crew diverted towards Buffalo Niagara International Airport

(BUF), Buffalo, New York. After landing, the airplane was inspected by emergency personnel and taxied to the gate.

The postflight inspection revealed a 12-inch by 5-inch fuselage skin tear, approximately 6 feet forward of the forward cargo door. Further inspection revealed that a crease in the skin of the fuselage existed forward of the tear, consistent with the skin being damaged by a foreign object.

According to Northwest Airlines personnel, the height of the damage on the airplane was approximately the same height as the top of the cab of a baggage cart tug used by contract personnel to load passenger luggage onto the airplane.

The airplane was manufactured in 1969. The airplane's most recent continuous airworthiness inspection was completed on May 17, 2007, and at the time of the inspection, it had accumulated 83,091 total hours of operation.

The captain held an airline transport pilot certificate with multiple ratings including airplane multi-engine land, and a type rating for the Douglas DC-9. According to records provided by Northwest Airlines, he reported a total flight time of 10,509 hours, with 8,750 hours in the Douglas DC-9. His last FAA first-class medical certificate was issued on April 6, 2007.

The first officer held an airline transport pilot certificate with multiple ratings including airplane multi-engine land, and a type rating for the Douglas DC-9. According to records provided by Northwest Airlines, he reported a total flight time of 1,852 hours, with 531 hours in the Douglas DC-9. His last FAA first-class medical certificate was issued on June 13, 2007.

The reported weather at SYR, at 1254, included: wind 280 degrees at 5 knots, visibility 10 miles, broken clouds at 4,200 feet, temperature 54 degrees Fahrenheit, dew point 37 degrees Fahrenheit, and an altimeter setting of 30.23 inches of mercury.



May 23, 2007

To: Facet International Aviation Customers
From: Facet Engineering
Subject: 2" Monitor Elements

As Facet has mentioned in previous bulletins all aviation filter manufacturers have been working together with the API/IP Aviation Fuel Filtration Committee on testing 2" fuel monitor elements. One of the tests includes a method for isolating and identifying super absorbent polymer (SAP) found downstream of monitor elements.

As reported in our Tech Bulletin dated April 17, 2007 Facet has introduced several new steps to the manufacturing process of the 2" monitor elements. We recently presented test results from elements manufactured with the new processes to the API/IP committee. We are pleased to report that the tests indicated a 75% reduction in the amount of SAP migration observed from the Facet 2" monitor elements produced with the additional manufacturing steps.

The API/IP filtration committee has asked Facet to issue the following statement:

Super absorbent polymer migration does occur with monitor elements. However, SAP migration has been significantly reduced with the introduction of improved manufacturing processes.

In conjunction with the additional manufacturing steps Facet will continue to test production elements on a regular basis to insure migration of any kind is kept to a minimum.

Facet has been providing aviation fuel absorptive monitors that have met or exceeded International Petroleum specifications for over 20 years. It should be noted that industry studies have shown that we are dealing with low levels of SAP contaminates. The International Air Transport Association (IATA) Fuel Monitor Task Force recently completed a study on SAP migration in commercial aviation fuel. In the report they stated that they found only trace quantities of SAP in on-board fuel filters compared with other contaminants.

While we are pleased that IATA found only trace quantities of contaminants downstream and that our test results show significant improvement since their report was published we are by no means content with our current position. We will continue to work on developing innovative media, new media combinations and improved manufacturing techniques.

As always Facet encourages operators to diligently follow all recommended quality control procedures.



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CONTINUING EDUCATION

NATA Air Charter Summit

June 27th –29th, 2007

at the Landsdowne Resort in Leesburg, VA

Additional Details & Registration Online:

[http://www.nata.aero/events/event_detail.jsp?](http://www.nata.aero/events/event_detail.jsp?EVENT_ID=1281)

[EVENT_ID=1281](http://www.nata.aero/events/event_detail.jsp?EVENT_ID=1281)

General Education Offerings

NATA Safety 1st Management System (SMS)

Workshop

June 26, 2007 in Dulles, VA

(Sponsored by Landmark Aviation)

http://www.nata.aero/events/event_detail.jsp?EVENT_ID=1241

NATA Safety 1st Management System (SMS)

Workshop

June 10, 2007 in Northbrook, IL

(Sponsored by Priester Aviation)

http://www.nata.aero/events/event_detail.jsp?EVENT_ID=1421

Advanced Line Service Supervisor Training (ALSST) Seminar

October 1 & 2, 2007 in Windsor Locks, CT

Additional Details & Registration Online:

http://www.nata.aero/events/event_detail.jsp?EVENT_ID=1122

Line Service Supervisor Training Seminar

September 19 & 20, 2007 in Palwaukee, IL (Sponsored by

Western Petroleum)

http://www.nata.aero/events/event_detail.jsp?EVENT_ID=1104

2007 Schedules: Aviation Safety and Security Offerings

Embry-Riddle Aeronautical University's Center for Aerospace Safety/Security Education (CASE)

Website: http://www.avsaf.org/case/programs_events.html

Southern California Safety Institute

Website: <http://www.scsi-inc.com/>

The GW Aviation Institute

Aviation Safety and Security Certificate Program

Website: http://www2.gwu.edu/~aviation/safetyandsecurity/ss_courses.html

Transportation Safety Institute

Website: <http://www.tsi.dot.gov/divisions/Aviation/aviation.htm>

University of Southern California

Aviation Safety and Security Program

Website: <http://viterbi.usc.edu/aviation/>

SH&E

The NATA Safety 1st *eToolkit* is brought to you by NATA Safety 1st SMS and SH&E. SH&E is the leading expert in safety and operational integrity evaluations and safety management consulting. SH&E has developed a proprietary evaluation methodology, called Safety Architecture, which is unique within the industry as it focuses on systemic surveillance and process evaluation. This is a systems and controls look at how an operator manages those technical functions that support aviation operations.

Subscribe to NATA Safety 1st *eToolkit*. If you are not currently a subscriber to NATA Safety 1st *eToolkit* and would like to receive it on a regular basis, please [click here](#). The NATA Safety 1st *eToolkit* is distributed free of charge to NATA member companies and TA Safety 1st participants.

Order Form

NATA Safety 1st® Management System (SMS) for Ground



4226 King Street
Alexandria, VA 22302
(703) 845-9000
Fax: (703) 845-0396

Yes, we want to sign up for the NATA SMS for Ground! We understand the following will be included in the price of our participation in the SMS:

- ▶ SMS Guide
- ▶ SMS Webcast Tutorials
- ▶ SMS Consultation by Telephone or email
- ▶ SMS Secure, Online Event Reporting Form
- ▶ SMS Monthly Online Newsletter
- ▶ SMS Root Cause Analysis

Contact Information (please print legibly)

CEO/Owner _____ Email _____

Safety Coordinator _____ Email _____

Company _____

Street Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____ Email _____

Pricing

The prices below reflect the total number of employees at your facility. This number should include all you FBO locations. Please note that we will correspond with one Safety Coordinator per company and will require additional company information once established in the program. Please check appropriate box below.

- \$600 for NATA Safety 1st participants / NATA Members with 0-50 employees
- \$1,200 for NATA Safety 1st participants / NATA Members with 51-150 employees
- \$1,800 for NATA Safety 1st participants / NATA Members with more than 150 employees

Payment

Check enclosed (Please make payable to Aviation Training Institute, LLC.)

Please charge my MasterCard Visa American Express

Credit card number _____ Expiration _____

Signature _____ Name on card _____

Fax to (703) 845-8176 or mail to NATA Safety 1st® SMS, 4226 King Street, Alexandria, VA 22302

Agreement

I understand as CEO/Manager of this facility, Safety is our #1 priority. As such, the authority and responsibility to implement this program is placed with me. I will provide the resources necessary to ensure the safety of our customers, their equipment, our employees and the environment in our daily operations

Signed this date _____ CEO/Owner Signature _____