



FLIGHT SAFETY FOUNDATION

Airport Operations

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Going It Alone

Whereas a one-man band may be able to make satisfactory music for some, there's no way that anyone with responsibility for airport operational safety can get the job done strictly on his own. The task is just too broad and involves too many activities to be done properly without the willing assistance of others. We are reprinting the following remarks published previously by the former editor of this bulletin because the need is still with airport management to recognize the efficacy of joint actions, which are best accomplished by committees, specifically airport safety committees.

—
by

A.W. "Tony" Brunetti

In this bulletin we will review some of the ways airports can be made safer, more efficient, and of better service to the user and the community. The bulk of the discussion will be centered around airport safety committees. We'll look at committees on small general aviation airports and on large air carrier airports. We'll talk about successes and failures of existing committees, because that's the way it is in the real world. If you're interested in a better way of doing business, regardless of the level of activity at your airport, this discussion should be of interest to you.

Purpose, Formation, and Functions of an Airport Safety Committee

Purpose: "An airport grows. And the users — aircrew and passengers alike — look for signs of growth every time they fly in or out of your airport. On the positive side: Signs of good maintenance and service, including prompt and courteous UNICOM or tower service, clear approaches, runways properly marked and in good repair, taxiway signs, parking areas easily identifiable by signs and tie-downs, courteous and competent ramp attendants, clean restrooms, etc. On the negative side: Indifferent maintenance and service from approach to departure, unmarked obstructions on the approach, inadequate runway markings, aircraft making a pre-takeoff

check on the runway, rotted tie-down ropes, dirty grease prints around fuel and oil access points after a one-half hour wait for service." — U.S. FAA

Committees turn some people off. Let's face it, committee actions don't always hit the mark. But there's no substitute for a good committee. It can accomplish jointly what individual action cannot hope to attain. No better way has been found for airport managers and tenants to identify common problem areas and work out solutions.

Formation: "Why a Safety Committee? Take a closer look at the better airports in your area. Somebody has obviously been at work to invite business, whether or not a formal safety committee is behind the effort. The job just doesn't get done by waiting for growth to happen. Remember the airports you don't return to? No signs of initiative, responsibility, and pride. Everybody is 'waiting for George to do it!' An airport safety committee is simply a means of running an airport with foresight instead of watching it deteriorate with hindsight." — FAA.

How big or how small must a committee be to be effective? It depends on the size of the airport, the level of operational activities, the external factors that impact these activities, the environment ... and many other considerations.

Many outstanding small airports are one-owner/operator businesses, and a committee of one or two does very nicely. Larger, high-activity airports often have 20- or 30-member committees. Participants in these committees represent every resident element on the airport and every operator function that regulates and controls operations. Everyone who has something to gain or lose has both the right and responsibility to support the committee.

Safety Committees for the major airports that serve population centers like London, Tokyo, or Chicago should enlist participation from the following groups:

- All tenant airlines;
- Caterers, cabin services, etc.;
- Maintenance servicing groups;
- Military units using the airport;
- Airport fire/crash/rescue units;
- Airport safety and security departments;
- Airfield facilities/properties;
- Airport operations (ground and flight); and,
- Ground traffic control.

Now that we know who we want on the committee, how do we get it off to a good start? First we have to point out the need for a committee, so that we can attract enthusiastic, voluntary support. One ploy used successfully is to compile a list of correctable conditions or unwanted situations that plague operations. (Frequently, a costly accident serves as the impetus to get things moving. However, we'd prefer not to wait for that kind of motivation.) Whatever tactic is used, make it obvious that all will benefit from getting together and facing up to the problem.

The invitation to participants should come from the highest level of airport management. A suggested agenda — not too lengthy or aggressive for the initial meeting — should be included. The airport manager should attend the first meeting, to demonstrate his interest and support.

A chairman should be elected, preferably from among the tenants. This will normally tend to get better involvement from the group that can contribute much to the success of the endeavor.

It is important to avoid anything that could be interpreted as an unnecessary airport management control or restriction. Speaking of negative factors, a committee “stacked” against a particular group can stifle growth and inhibit meaningful participation.

One excellent safety committee gradually became ineffective through increasing involvement of regulatory agencies. After several years of impressive results, as a courtesy, the committee began inviting representatives of government safety organizations. The understanding was that these people, all recognized for their expertise in some kind of loss control,

were to be observers only. They were to take part in committee discussions only when asked. Eventually, though, these inspectors and compliance officials became more and more assertive, often monopolizing the meeting. Attendance at the meetings began to fall off, and those who did attend no longer freely discussed their problems. The committee was finally disbanded.

Functions: Depending upon several factors, an airport manager may or may not have written, well-defined job functions. Normally, if his duties and responsibilities are defined by law they will be contained in an airport manual. It is very important for all members of the safety committee to be knowledgeable as to the ground rules under which the manager operates.

An airport safety committee, serving at the invitation of the airport manager, should develop its own functional plan, consistent with the operational needs of the airport. At low-activity airports, the rules, procedures, and policies may be few. They should nevertheless be clearly understood by committee members. Obviously, the plan would have to consider these operating parameters.

A typical low-activity airport would have a committee of three, composed of the airport manager, a maintenance supervisor, and one other official representing the major activity on the airport. For instance, on a general aviation airport, a school or repair/overhaul shop manager would be appropriate.

The committee should meet regularly, at a planned time and in a convenient location. It is important for members to know that for one hour, say on the third Tuesday of each month, they will meet in the airport manager's office.

Whether the meeting is formal or informal is not important. The important thing is that the committee is looking at likely problem areas and deciding on solutions before the situation gets out of hand. The committee is acting before the fact by recommending preventive measures rather than offering excuses after it's too late.

In addition to the meetings, committee members should take part in frequent safety surveys. The committee is not the entire safety program for the airport, and its activity is not intended to replace the daily inspections made by the various airport users. But oftentimes a fresh look by an unbiased group is helpful.

Here are some major hazard areas that bear close scrutiny. The list is by no means all-inclusive, but it does provide a basis for developing detailed inspection guides.

A. Ramp/Apron — Parking Areas

- Condition of paved areas, shoulders, drainage, and vegetation;
- Adequacy of parking and tie-down facilities;

- Ramp vehicle parking, transit lanes;
- Fire protection, warning signs;
- Taxi lines;
- Lighting, power outlets, grounding; and,
- Foreign object damage (FOD) control.

B. Taxiways

- Condition of paved areas, shoulders, etc.;
- Vegetation, other obstructions;
- Guidelines, hold lines, markings; and,
- Directional signs.

C. Runways

- Lighting and markers;
- Threshold lighting, markers;
- Runway numbering;
- Overruns, shoulders;
- Paved areas;
- Approaches clear of obstructions, etc.; and,
- Disabled aircraft removal procedures.

D. Fueling Facilities

- Area clearly defined, isolated from parking area;
- Pumps placarded, octane and fuel;
- Grounding;
- Fire protection, warning signs, fire extinguishers;
- Fuel equipment, hoses, filter, etc.; and,
- Oil storage.

E. Building Areas (Hangars. Shops, etc.)

- Housekeeping;
- Fire protection;

- Tools, equipment condition;
- Restricted areas posted, signs, etc.; and,
- Security of restricted areas.

F. General (Other Airport Buildings)

- Offices, lounges;
- Airport diagram, traffic patterns; and,
- Emergency response plan.

This list of “close scrutiny” items is only a basis for building your own inspection guide. Your local conditions will determine the applicability of the various items. You may want to eliminate some of these, and you surely will want to expand others.

For example, under “Building Areas” we’ve only suggested hangars and shops. Obviously, at a major airport some attention would have to be given to terminal buildings, passenger hold areas, gates, jetways, etc. And just as obvious would be the need to include cargo warehouses, airport operations buildings, traffic control, and fire watch tower buildings, etc.

On a small, low activity airport, the entire committee can “make the tour” as part of their meeting. The survey can be done before or after, but observations and recommendations must be recorded. On larger airports it is usually convenient to divide the airport into sectors, to be examined by teams appointed from among committee members. Naturally, these inspections should be coordinated with organizations using the areas/facilities.

The important thing is to not wait until the “perfect committee” is established — get something going **now**, and refine it as you go along. Be patient, give it a chance to develop as an effective management tool, and you will not regret it.♦

Airport Birds: An Auditory Problem?

Hearing loss due to airport noise exposure may reduce a bird’s awareness of an approaching aircraft and increase the chances of being struck.

Do birds who reside on or near busy airports develop hearing problems that make them more likely to become bird-strike victims?

A Harvard University professor says there is evidence of this. Here is a summary of his findings, published originally in the *American Airlines AA Maintenance Newsletter*:

Birds are noted for their good eyesight, prompting many to

wonder why so many aircraft receive bird strikes. According to Allen Counter, a professor of neuroscience at Harvard, the roar of the jets overwhelms the birds’ brains and makes them hard of hearing.

There are about 1,500 bird strikes reported each year, with the U.S. Federal Aviation Administration (FAA) estimating that birds cause between \$20-40 million in damage. In one incident, a goose went through the windshield of an air carrier

aircraft approaching an airport, seriously injuring the captain.

Counter said his interest was prompted by watching a bird strike an airplane.

“The basic explanation is that they don’t get out of the way in time, but there is clearly more than that,” he said. “Our preliminary evidence suggests that many of those birds show a pattern of hearing loss that is due to noise exposure.”

Counter believes that the birds fail to notice a plane coming because they cannot hear it. However, he said that the roar does more than damage their hearing.

“It scrambles their brains,” he claimed.

His conclusions were based in part on a comparison of hearing of birds. He noted that most bird strikes occur near airports. Presumably, these are birds that have listened to jets all their lives.

Counter wired seagulls with electrodes that measured electrical impulses produced in birds’ brains when they hear something. Then he turned on some simulated jet noise.

Almost all the activity stopped inside the part of the birds’ brains responsible for hearing, falling by 90%. ♦

42th Annual International Air Safety Seminar

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