RISK MANAGEMENT 101

What does taking a shower have in common with operating aircraft? Simple: it requires decisions about risk! Don’t believe it? Consider this common situation: it is 4AM, you stumble to the bathroom, fumble for the light, reach into the stall and turn the water valves on. After a moment, you test the water temperature and discover it is two degrees cooler than steam, so:

a. you avoid getting burned by deciding not to shower today, or
b. you mitigate the risk by reducing the temperature, or
c. you may decide to let someone else shower first (!), and see if they get burned, or
d. you decide that you will get in the shower anyway, accepting the risk of getting burned.

All of the elements of handling a known risk are present in this example and you did them without thinking very much about risk or the handling of it. There are four such elements:

1. avoidance
2. mitigation
3. transfer
4. retention

Each of these elements is an integral part of dealing with any risk. Notice that there are two preliminary tasks that appear in many SMS or similar programs but are ignored here: recognition and assessment. For purposes of this paper, it is assumed that the risk is understood and the likelihood/severity matrix analysis has been done. Those tasks are obviously critical, but they are more in the operational realm. Depending on when and how you learned to fly, this “risk management” function might have had more or less significance or substance. What remains is to decide how to address those known hazards.

Let’s walk though what each element means, and apply them to the real world of aviation operations.
AVOIDANCE

We avoid risk by not doing something. In the aviation context, that means “don’t fly”. In the insurance world, it means “don’t issue a policy”. Underwriters practice avoidance all the time by being selective in the people and businesses they will agree to insure.

Briefly, operators may avoid certain risks by adhering to a few rules.

First, don’t sign a document that you don’t understand. That sounds obvious, but the experience is that it happens all too often. We are confronted every day with a pile of paper, many pieces of which demand our signature. Show of hands of who has read the “agreement” that pops up on your computer when you try to use any interactive site (like your bank’s “pay by internet” account or any software purchase.) Chances are, you didn’t read it and just clicked on “accept terms”. Me too. Most of the time, it works out OK. There is some safety in this because for the most part, you have no choice about agreeing or not, because to want/need to use the site.

However, when the document is a purchase agreement, maintenance agreement, hangar agreement or insurance policy dealing with your $30 million jet, a read is pretty important.

If you read it and still don't understand it- what steps do you take to "avoid" problems:

Hire someone with expertise in the area to read it for you:
Lawyer
Insurance Advisor/Consultant/Broker
Maintenance Expert

Understand as well, what the document says as well as what it excludes:
Insurance policies are contracts. The parties agree that some things are insured and some things are not. Understanding what is excluded is almost as important as understanding what is covered.

Equally important is to demand to see other documents referred to in the one you are asked to sign.

The language is usually something like this:

“This Agreement is subject to the terms and conditions set forth in Regulation 615 of the Boomtown Airport Authority and those terms are incorporated as if set forth in full herein.” (Not unusual with hangar agreements)

"The purchase of this engine is subject to the limitations of liability and disclaimers set forth in Article ___ of our Master Agreement"

"All third party warranties for the component parts are set forth in the warranty agreement from OEM and subject to the terms and conditions thereof."

Agreements dealing with insurance coverage are fertile ground for disaster in this connection.

Don’t sign a document that requires another person to do something unless you are sure that person has the authority to do what is required and make sure employees know what they can sign and what they can't.

A classic example is a thief who sells an airplane to an innocent third party.

Another is when an FBO agrees to make your company an additional insured on the FBO policy. How do you know that the underwriter agrees? No underwriter agreement (known as an endorsement)- no coverage, despite what Friendly FBO says!
A Hangar provider asks your pilot to execute a contract holding it harmless from any loss and indemnifying him;

You might not even have the authority to do something you are asked to sign

For example, a waiver of subrogation on behalf of your insurers in a maintenance agreement -- you may not want to sue the maintenance provider, but your insurer might after it has paid a claim.

MITIGATION

Mitigation means that we will reduce the harm that will occur as a result of an event that we cannot avoid. In aviation, this is seen in the old adage that if one has to come to earth off-airport, find something soft and cheap to land on. In our insurance/risk management context it means to make whatever bad happens cost less.

Operators mitigate their risks by similar methods. Let’s say that your airplane is “maintenance-AOG” and there is a hurricane approaching. You can call your broker and increase the hull value. (Just kidding!) The airplane might be hangared, assuming the hangar is sturdy, or you might move it away from light buildings or light airplanes that are more likely to break loose and become projectiles. You might move to a higher part of the airport to avoid flooding. Securing gust locks and strong tie downs can also reduce the potential damage. All of these steps are intended to reduce the amount of damage suffered by the trapped bird.

In the insurance world, mitigation usually takes the form of limits of liability or valuation of a hull. While underwriters really can’t price their way out of a bad risk, they may be able to keep relatively low limits on what they perceive to be a riskier proposition. To some extent, exclusions and conditions are other techniques available to underwriters in the attempt to reduce or eliminate the loss to them.
From the operator’s standpoint, managing deductibles is a mitigation technique. Lower deductibles reduce the risk of loss to the operator as a result of an accident, but these will obviously raise the premium. In this case, the underwriter sits on the opposite side of the “mitigation” balance. He mitigates his company’s loss with a higher deductible, while you mitigate your company’s loss with a lower one.

Restricting who flies on your airplane is another mitigation method. If the only passengers are employees of the same company that owns the airplane and employs the crew, the risk of lawsuits is usually reduced by Workers’ Compensation laws.

Contract provisions containing limits of liability for any loss are frequently seen, as well. Hangar agreements often contain such limitations, limiting either dollar amounts or whole categories of damages.

**TRANSFER**

When the risk cannot be avoided and the mitigation techniques are deemed inadequate, the next question is whether the risk can be transferred to someone else. There are two principle ways to do this: indemnity agreements or insurance.

Indemnity agreements are tricky. What you are doing is trying to get someone else to assume the risk of injuries or damage that occurs during the performance of the business arrangement you have with them. This requires you to predict what might happen and how the wordings used will be interpreted after it happens. The latter is subject to variations in state law and if the indemnity is viewed by a court as overbroad or oppressive, the court will work quite hard to circumvent it. Such “exculpatory” agreements, that seek to transfer the risk of one’s own negligence to another, are difficult to enforce in most places, and may be flat unenforceable in others.

Drafting and enforcing an indemnity agreement requires legal training, experience, careful research, and a bit of luck.

Insurance can be thought of as related to indemnity agreements but the risk is transferred to the insurance company rather than the other contracting
party. One large difference is that insurance policies are subject to many special rules as to their wordings, construction and interpretation. Furthermore, the policy usually can be tailored (to some extent) to fit the known risks faced by the operator.

Insurers are vitally interested in safety, but not all insurers approach the issue the same way. The tools for doing this are in pilot experience and training requirements, geographic restrictions, incentive programs and support of industry functions and events. Insurers also may either employ or retain safety specialists to provide ISBAO qualifications and the like. In the case of LBAs, such concerns may take the form of specific checkouts and signoffs from CFIs after xx number of hours of training.

Understanding the policy is another subject that has filled many books. As with indemnity agreements, training and experience are vital.

**RETENTION**

Last but not least in the matrix, retention is perhaps the most difficult. It is not necessarily the last resort, but it should be approached warily.

The first step is a realistic evaluation. Most operators will want to address the both financial and reputational aspects of the risk. After all, paying for the loss may not put you out of business, but the fallout from regulators and customers who have lost confidence in you just might.

Retention is related to Mitigation. You might retain only part of the risk via the other tools mentioned above, or retain it all. Retaining 100% may be more difficult because of statutory or regulatory requirements for insurance, but it is theoretically possible. The question in that instance is whether your organization could withstand the largest loss that could be sustained. As a practical matter, few companies will tolerate this: imagine a midair with an Airbus 380 full of vacationing doctors.
Assuming the financial issue is behind you, next consider the damage to your business reputation. Aviation is unique in that it is a very small community and “word” travels fast. Furthermore, one bad mistake will wipe out years of good behavior because the consequences can be so severe.

An operator that has numerous small losses will raise an underwriter’s eyebrows because it may indicate some deficiencies that can eventually lead to one of those major losses. In many cases, the underwriter’s only response is to decline to write the policy altogether. That may leave an operator with little choice other than to retain the risk and go uninsured or only marginally insured.

Retention then is a tool best thought of in connection with small “attrition-type” losses: hangar rash below a certain dollar value, minor theft claims, etc. where the financial risk is manageable and the potential reputational risk is small.

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