# **Pilot Safety Meeting Kit**



## WHAT'S AT STAKE

Before you enter the cockpit, you should have already taken strides toward safe stewardship in the air. You aren't ready to fly until you have reviewed three conditions — that of your **aircraft**, **the weather**, **and yourself**.

### WHAT'S THE DANGER

#### **AVIATION HAZARDS**

Hazard identification is the first step in the safety management process. Examples of significant and typical aviation related hazards include:

Weather. Weather can be unpredictable.

**Volcanic Ash.** Volcanic Ash is potentially deadly to aircraft and passengers. The most critical effect is caused by ash melting in the engine, and then fusing into a glass-like coating on components, causing engine failure.

**Low Light.** You can work out the beginning or end of daylight using the graphs on visual flight.

**Visual Night Flying.** There are higher safety risks and additional requirements for visual flight rules operations (VFR) at night.

**Wildlife.** Aviation safety statistics show that wildlife is a significant safety hazard. Most wildlife strikes happen around the time of take-off or landing.

**Turbulence.** In-flight turbulence is the leading cause of injuries to passengers and crew without warning.

**Wire Strike.** Power and telephone wires are an insidious hazard for any pilot who must fly low for a living.

**Fatigue.** Fatigue is a general lack of alertness and degradation in mental and physical performance, and can affect pilot alertness, performance, and judgment during flight. Possible causes of fatigue include sleep loss, extended time awake, circadian phase irregularities and workload.

### HOW TO PROTECT YOURSELF

HAZARDOUS ATTITUDES COMPROMIZE PILOT SAFETY

Anti-Authority, "Don't Tell Me". Pilots with an anti-authority attitude tend to believe that rules, regulations, and safety procedures don't apply to them. For example, an anti-authority pilot may neglect their checklists or refuse to take advice from instructors or ATC. Having an anti-authority attitude is different from simply questioning authority. Pilots have the prerogative to speak up to authority if they believe a mistake has been made.

**Impulsivity: "Do Something Quickly!".** Instead of taking a moment to think things through or select the best alternative, a pilot with an impulsive attitude does the first thing that comes to mind. Reacting too quickly can lead to irrational decisions, such as skipping a pre-flight or rushing to get home despite inclement weather.

**Invulnerability: "It Won't Happen to Me!".** Fall into a pattern of thinking that accidents only happen to others, but never to them. This attitude of invulnerability is a safety concern when pilots fail to consider the risks of their actions.

Macho: "I Can Do It!". Pilots with a macho attitude are always trying to impress others and prove themselves by taking unnecessary risks. Both men and women are susceptible to a macho attitude, which leads to dangerous behavior. It's important to avoid becoming overconfident and adopting a macho attitude.

**Resignation: "What's The Use?".** Pilots with an attitude of resignation lack the confidence and conviction to believe they can make a difference in what happens to them. These pilots tend to give up easily when faced with challenges and don't take criticism well. This attitude is particularly dangerous for pilots in an emergency because they may believe they are helpless and resign to their fate instead of acting.

#### A GUIDE TO PILOT OPERATIONAL SAFETY

Maintenance / Pre-Flight Checks. The need for maintenance and pre-flight checks is critical to the safety of the aircraft and its occupants. Pilot should always check over your aircraft prior to every takeoff. Use a comprehensive checklist to examine the leading edge, fuel tank, flight controls, instruments, tire inflation, and other critical systems. Be prepared for an emergency in the air by carrying fire extinguishers, a small tool kit, and a first aid kit.

**Equipment Operational.** A pilot should not leave the ground until all the aircraft equipment is in place and working properly. Even in emergency situations, you can't afford to skip this crucial step unless you're prepared to become part of the problem yourself. Ensure that baggage and cargo are stowed and secured properly. Never carry more than the aircraft is rated or fueled to load.

Flight Plan/Weather. Flight plans and weather are mutually inclusive. Once the aircraft has checked out, begin to plan your flight. Work with flight dispatchers and aviation weather forecasters to determine the weather conditions at your point of origin, while en route, and at your destination. Based on the weather information, choose a route, altitude, and speed that will provide you and your aircraft the safest and smoothest flight. Know the altitude and topography of the airports that you will access.

Take-Off / Landing Preparations. Make sure you're equally prepared for either a takeoff or a landing. Before taking off, fasten your seatbelt. Make sure that there are enough belts for everyone on the aircraft. During takeoffs and landings, concentrate on the runway, your speed, and the wind direction. Plan to use your instruments in bad weather. Make sure that you're rated to fly by instrument. Be aware of the hazards of visual illusions such as spatial disorientation, false horizons, flicker vertigo, fascination with a fixed object, ground light confusion, and others that can occur at dawn, dusk, during bad weather, and in low contrast situations such as flying over water or desert

#### **BASIC PILOT SAFETY TIPS**

- Always Use Your Checklist and Avoid completing the checklist by memory or skip a step to save time.
- Keep Up with Preventative Maintenance and you have the proper maintenance manuals available.
- Avoid Distractions in The Cockpit Like pilots and passengers remain from conversation and using distracting gadgets during critical stages of flight.
- Don't Rely on GPS Alone and use GPS as a crutch.
- Stay Proficient and Maintain proficiency by going above and beyond the legal requirements of currency.
- Don't Feel Pressured to Fly due to questionable weather or if you just have a gut feeling that it's a bad idea
- Practice Emergency Procedures and review the procedures for common flight emergencies every six months.

### FINAL WORD

The job of a pilot can be long and rewarding provided pilots pay careful attention to the hazards, prepare well and keep safety in mind before leaving the ground.