

PREFLIGHT BRIEFING & POST-FLIGHT DEBRIEFING GUIDANCE

(REVISION 2, MARCH 12, 2025)

Building Foundational Situational Awareness and Enabling a Pathway to Mastery

“Ok, let’s kick the tires, and light the fires. Join up and shut up. I only want to hear if there is a bandit on my six or if I’m on fire. Got it?”

In the days of old, a military brief may have sounded like this. Over the decades, and following a myriad of accidents, it became obvious that ineffective briefings were a contributor to many of these avoidable mishaps. Accident data clearly and repeatedly pointed at the five (5) main flaws in flight preparation:

1. Lack of understanding of prevailing and expected conditions
2. Loss of horizontal or vertical situational awareness
3. Poor crew coordination
4. Poor decision-making by the PIC
5. Lack of assertiveness by the SIC

Further, it was discovered that effective debriefing yielded significant benefits in safety lessons, technique/wisdom sharing and overall improved skills. Specifically, briefings and debriefings facilitate an increase in benefits which help both the pilot flying (PF) and the pilot monitoring (PM) perform more effectively real-time during the flight, but also to gain valuable experience through reflection and analysis of what went well, and what needs to be done differently next time.

Did you know that the Blue Angels – the US Navy’s elite flight demonstration team, allows select guests to attend their briefings? These briefings are very standardized, disciplined, and concise. It brings everyone to *“center-point”* with a laser focus on the nuances associated with the show site. On the other hand, the debrief is off limits to anyone outside of the team and is a detailed review of not only everything that went well, but especially what needs to be improved. Egos are *“checked at the door.”* They are hard on one another as you would expect of professionals. After each pilot shares their thoughts on their own performance and where they will re-focus, they say, *“Glad to Be Here.”* Why? Because they know that the intensity must be preserved for each demonstration and excellence pursued as a TEAM. They also recognize that many other exceptional pilots wanted to be in their position.

So, how does this apply to pilots and other aviation professionals? Each of us has an enormous responsibility for the lives of those who fly with us. We are not suggesting that you must brief and debrief like a Blue Angel, but there are some “*pearls of wisdom*” we can leverage to be more effective in the way we convey humility and establish trust through procedural compliance, professional discipline, and mutual respect.

Pro tip: Brief every flight in a structured way and leverage the power of an effective debrief!

BRIEFINGS become ever more important when either it is the first time a crew has flown together, or on that upcoming flight where there are significant/changing operational challenges such as weather, routing, runway closures and system outages. It should go without saying, if the crew does not “*connect*” at the pre-flight briefing when workloads are low and the ground speed is zero, it will NOT occur during flight when it matters the most. Procedural standardization is highly advantageous and can significantly reduce the volume of items that need to be briefed. Further, it establishes baseline expectations and enables predictability.

DEBRIEFINGS on the other hand, offer the opportunity to conduct forensics on portions of the flight to identify the exceptional; both good and “*could do better.*” Debriefings are where, in reflection, the real awareness-enhancing learning takes place, again, back at “*zero-ground speed.*” Further, debriefing can also capture “*ah-ha*” moments, and in total, help fill your experience bucket on the never-ending journey to mastery.

CAUTION: If briefings are not performed in a logical and standard way, critical items could be overlooked or deferred inappropriately. It can be tempting to forego or short-shrift the brief if crews routinely fly together and perhaps over a familiar route. Assumptions, complacency, and unchecked biases (including outcome and confirmation) have resulted in many close-calls and serious incidents. Therefore, WYVERN provides the following guidance to aid operators in standardizing briefing and debriefing methods to improve the effectiveness and safety of operations.

tone setting techniques:

- We are in this together, we are a team, let’s build on it.
- Everyone is expected to voice any doubts, concerns, or questions.
- Errors & mistakes are expected – let’s identify and deal with them at our first opportunity.
- Let’s do what’s right and not worry about “who’s right”

PRE-FLIGHT BRIEFING

Pro tip: tailor the checklist to your specific needs.

Besides the completeness and thoroughness of the brief, it is advantageous to incorporate standardization. This allows a more efficient flow (with familiarization/practice) and a common “*rhythm*” for the team. It is also worth noting that the brief might include participants other than the pilots, such as maintenance professionals for maintenance check flights, cabin crew, loadmasters, etc. As an example, weather, NOTAMS and aircraft status might be assigned to the PM. Passenger manifest and logistics might be better delegated to the cabin crew. The other advantage of this method besides “*divide and conquer*” is to cultivate more team cohesion. The following expand on these concepts:

1. Format: Optimally, you would prefer to conduct a crew brief in a dedicated space with everyone present. Realistically, this may not happen but regardless, getting everyone together for a briefing planeside (flightdeck/cabin) or in a quiet space allows an opportunity to set a tone of professionalism for the flight while building situational awareness for all. Underscoring TEAM with a tone of cooperation, trust and respect will yield higher performance overall.
2. Style: A briefing tone that is welcoming and encourages “*active (participatory) safety voice*” will reduce potential for communication breakdown and ensures everyone feels compelled to express uncertainty on any mission factors and potential safety hazards. Crew familiarity and experience will necessarily need to be accommodated in terms of briefing depth. Nothing being recommended in this guidance is to suggest that the PIC should relinquish command authority and accountability for a safe flight outcome.
3. Content: Certainly, we need to cover the essentials as part of 14 CFR 91.103 (“*Each pilot in command shall, before beginning a flight, become familiar with all available information concerning that flight.*”) in our preflight preparations. However, the briefing should also be sufficiently brief to not over-saturate attention and thus, critical items fail to be captured. This is where use of tailored briefing checklist (i.e. FAA PAVE model) can pay dividends, allowing the briefer to emphasize the important items. If something is to be conducted per established SOP, there is no need to elaborate on that specific SOP. Instead, focus on unique aspects of the flight and consider highlighting potential hazards that could elevate overall risk. Using a “*threat analysis*” technique, the crew anticipates future hazards, risks, and mitigation strategies.
4. An effectively designed Flight Risk Assessment Tool (FRAT) is a proactive risk mitigation tool that can be integrated into the briefing to increase the situational awareness.

5. The PF should administer the briefing. If the PIC always conducts the briefing, it restricts leadership development of the SICs and misses an opportunity to advance the safety culture.

Note: Effective briefings require the crew to be well-prepared and knowledgeable of current weather and forecast, NOTAMS, mission requirements, aircraft status, technical requirements, passenger requirements, and cargo.

6. The following is a suggested structure for the briefing on the day of departure:
 - a. Human Factors: IMSAFE
https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_91-92.pdf
 - b. PAVE checklist: https://www.faa.gov/sites/faa.gov/files/2022-11/PAVE_0.pdf
 - c. Currency and Proficiency
 - d. Weather (Departure, Enroute, Destination, Alternates. Hazardous weather alerts/PIREPS)
 - e. NOTAMS (SUA and TFRs. Pay particular attention to runway and taxiway closures as well as modification to approach minima)
 - f. Aircraft Status (post-maintenance action(s), fuel, pax and cargo loading. Weight and balance verification)
 - g. Arrival, approach, landing, and post flight logistical “big picture” expectations should be identified and if necessary, discussed during the initial pre-flight briefing. However, it is recommended that any specific details of what “actually” might occur be deferred until more current information is available and briefed at low workload opportunistic times.

DEBRIEFING

The debrief is truly where real learning takes place. Do it even when you are tired, want to get the airplane bed-down, and want to get home or to the hotel.

Why the 5-minute debrief? When does it happen? What are we accomplishing by having one?

Let's set the stage: You bid your passengers farewell and now are ensuring aircraft tucked away, the "brakes off" sign is in the window. Now is the time to set aside a few minutes to run through the 5-Minute Debrief questions – the answers which will help cement the recent events and efficiently transfer them from short-term memory to working and long-term memory.

Studies show that when timely recollection of important recent events is interrupted by additional tasks or thoughts, there is an increased potential for errors in recall. Performing this 5-Minute Debrief as soon as practical after the flight will increase the quality of the debrief, thereby boosting the learning potential through accurate correlation and enhancing team synergy.

Consider de-briefing in a quiet room with a white board, and maybe even a computer with which to review downloadable digital data, exploiting a playback tool.

A PIC that shows humility and inquisitiveness will more effectively draw critical feedback and lessons learned. Avoid "*who*" and generalize to "*we could have done this differently.*" Try to end on a positive good note, even if the flight did not go as planned.

Although a typical de-brief takes only 5 minutes, some events may require a more in-depth de-brief, such as an event that leads to an ASAP report or aircraft technical issue. During these de-briefings, the team should analyze effectively to obtain all relevant information and answer the following questions:

- a. What Happened?
- b. When did it happen?
- c. Where did it happen?
- d. What factors contributed to the event? (Human factors, teamwork factors, environmental factors, technical factors, organizational factors)
- e. What can we do differently next time?

The 5-Minute Debrief Lanyard Card

Front



Back

