ADFP

Idea In Short

ADFP (Aircraft, Destination, Fuel, People) is a decision-making framework used by pilots to systematically approach complex problems in aviation. This model guides pilots through four key considerations: evaluating the aircraft's status and any issues affecting it, assessing the appropriateness of the current destination, checking fuel sufficiency, and considering the needs of people involved (passengers, air traffic control, company, etc.). ADFP serves as a checklist to ensure all relevant factors are considered when facing challenging circumstances. By methodically working through these elements, pilots can make more informed decisions, prioritizing safety and operational efficiency. While originally developed for aviation, the principles of ADFP can be adapted to other fields where structured decision-making is crucial.

In the high-stakes world of aviation, effective decision-making can mean the difference between life and death. To navigate complex situations and make critical choices under pressure, pilots rely on structured decision-making models. One such framework that has gained prominence is ADFP, an acronym that stands for Aircraft, Destination, Fuel, and People. This systematic approach helps pilots methodically work through challenges, ensuring they consider all relevant factors before taking action.

Aircraft

The first step in the ADFP model focuses on the aircraft itself. Pilots must consider the problem that has occurred and its impact on the aircraft's systems and performance. This involves assessing which systems have been compromised, what downstream effects might occur, and whether abnormal or emergency actions are required. In a multi-crew environment, this assessment often leads to a discussion about the best course of action. Key questions pilots consider in this stage include:

- What systems have been affected by the problem?

- How will this impact our ability to fly safely?
- Are there any immediate actions we need to take to stabilize the situation?
- What are the potential long-term consequences of this issue?

Destination

Once the aircraft's status has been assessed, pilots must evaluate their destination options. This involves determining whether the current destination remains the most appropriate place to land or if an alternative should be considered. Factors to consider include the urgency of the situation, the availability of emergency services, and the suitability of facilities for passengers and crew. Pilots must ask themselves:

- Is our current destination still viable given the situation?
- Do we need to land as soon as possible?
- What emergency services are available at potential landing sites?
- Are there suitable facilities for passengers and crew at alternative destinations?
- How will our choice of destination impact the airline's operations?

Fuel

The third element of the ADFP framework is a critical consideration of fuel status. Pilots must ensure they have sufficient fuel to reach their chosen destination, accounting for potential holding patterns or diversions. They must also consider whether the aircraft is overweight for landing and if fuel needs to be burned off. Key fuel-related questions include:

- Do we have enough fuel to reach our intended destination safely?
- How much extra fuel do we have for potential holding or diversion?
- Are we overweight for landing, and if so, how should we address this?
- Do we need to jettison or burn off fuel before landing?

People

The final component of ADFP focuses on communication and consideration of all stakeholders involved. Pilots must ensure they have informed and consulted with all necessary parties, including passengers, air traffic control, and company representatives.

The timing and extent of these communications depend on the urgency and nature of the situation. Pilots must consider:

- Who needs to be informed about our situation and decisions?
- When is the appropriate time to communicate with each stakeholder?
- What information should we prioritize in our communications?
- How can we best manage passenger expectations and concerns?

ADFP in Practice: Aviation Example

To illustrate the application of ADFP, consider a scenario where pilots encounter an unexpected hydraulic system failure shortly after takeoff:

- **Aircraft:** The pilots identify a loss of hydraulic pressure affecting flight controls. They determine that while the aircraft remains controllable, certain systems are compromised, and landing gear extension may require manual intervention
- **Destination:** Given the nature of the problem, the pilots decide that returning to the departure airport is the safest option. They confirm that the airport has appropriate emergency services and facilities to handle their situation
- **Fuel:** The pilots calculate that they have more than sufficient fuel to return to the departure airport, including enough for potential holding patterns. They determine that no fuel jettison is necessary
- **People:** The flight crew informs air traffic control of their situation and intention to return. They also alert the cabin crew to prepare for a potential emergency landing. The pilots decide to make a brief announcement to passengers, providing essential information without causing undue alarm

Summary

The ADFP decision-making framework, born from the high-stakes world of aviation, offers a structured and effective approach to problem-solving that can be invaluable in corporate settings. By systematically working through each element - Aircraft (or Product), Destination (or Strategy), Fuel (or Resources), and People - business leaders can make informed decisions that balance technical, strategic, resource, and stakeholder considerations. As

with any tool, the effectiveness of ADFP in corporate settings will depend on proper training, consistent application, and a commitment to continuous improvement and evaluation.