

SAFETY GRAM 4.0

January 2022



Air Force Aero Clubs,

I hope everyone had an enjoyable Holiday and a Happy New Year! Last month's Safety Gram focused on some common errors that could induce engine failures. This month we expand on that concept at a macro level. As mentioned in December a majority of accidents and incidents are not caused by mechanical or equipment failure, but instead some type of human error that contributes to failures. The understanding of human abilities to interact with tools, machines, tasks, systems, and environments is Human Factors. Human factors in aviation is typically associated with Cockpit or Crew Resource Management (CRM) and the marriage of human interaction with the systems that make up an aircraft. While CRM and interaction with technology is important in aviation Human Factors can be applied with a much broader view to assist in determining why incidents may happen and to mitigate their risk. For example, a pilots physical or mental state, an aviation mechanics complacency, or ATC training, could all contribute to an incident and they all involve some type of Human Factor.

I encourage each Club to look at a recent accident, mishap, or incident during your next safety meeting and determine what some of the human factors are that contributed to it happening and ways it could have been mitigated. Having a better understanding of the human part of aviation will improve everyone's ability to mitigate risk. I also encourage if available to reach out to your medical group and see if they have a Human Factors specialist that would be willing to provide a more in-depth brief to Club members.

Resources:

[HFACS 7.0](#)

[AMT handbook Human Factors](#)

[FAA Human Factors Series Videos](#)

[FAA Human Factors Division](#)

Fly Safely,



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