SAFETY GRAM 4.0

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Air Force Aero Clubs,

Continuing with the theme of the change of seasons from Winter to Spring and Summer hazardous weather specifically thunderstorms should be a topic everyone is refreshing their memory on. Thunderstorms bring with them a lot of different hazards that can be dangerous to both big and small aircraft. Some of the characteristics include hail, down drafts, wind shear, microbursts, heavy rain, icing, lightning, downdrafts, updrafts, and crosswinds. Thunderstorms can also be difficult to predict and pop up in a short amount of time unexpectedly.

The key to mitigating the risk of thunderstorms is thorough preflight planning. First, always getting a good weather brief whether from base weather or NOAA sources for your entire route of flight. If thunderstorms are predicted on your route consider delaying or changing your plans. Second, know your resources available while airborne to receive updates on weather conditions to include ATIS, Base METRO, Flight Service Stations, and ATC. Third, if you unexpectedly encounter severe weather have a plan on how to safely avoid it or divert.

The linked NTSB accident docket (https://data.ntsb.gov/Docket?ProjectID=93938) outlines how a C172 pilot did not plan for or receive adequate weather information before a flight down the Florida coastline. After a request to go below 500ft AGL over the water ATC advised the pilot of thunderstorm and heavy precipitation along its planned route. Additionally, ATC advised the pilot of a recommended vector to avoid the hazardous weather. The last radio contact ATC had with the airplane was the pilots informing them of a course reversal 3 minutes later. The plane most likely experienced heavy rain and downdrafts associated with the storm losing control of the aircraft and causing a fatal accident.

Situations like this can mitigated if you take the necessary steps to formulate a good preflight and inflight weather plan before going to fly especially if hazards associated with thunderstorms are forecast to be present.

Fly Safely,

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