



RECORD OF EMAIL

Samantha Link
Aviation Accident Investigator
Western Pacific Region

Date: June 18, 2018
Person Contacted: Don Eick (NTSB Meteorologist)
NTSB Accident Number: WPR18LA157

Narrative:

Mr. Eick reported the following over email:

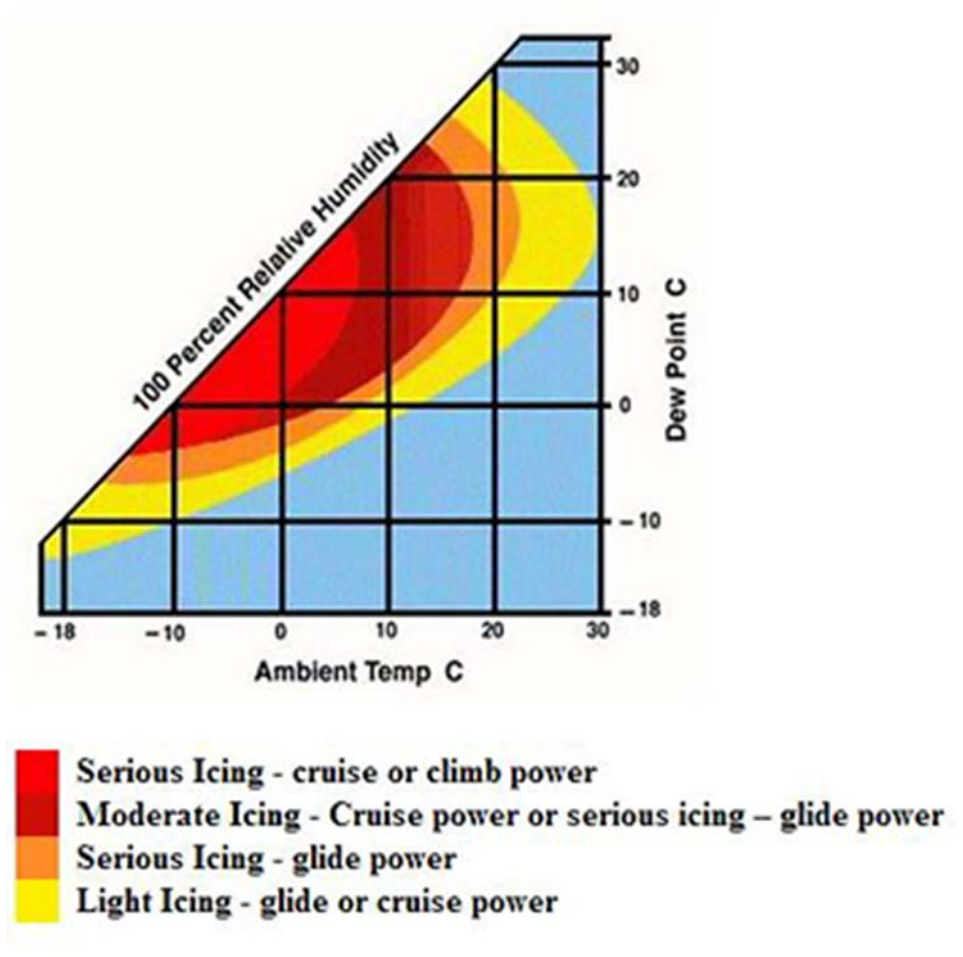
Weather Conditions on May 18, 2018

Model Sounding over the accident site - A High Resolution Rapid Refresh (HRRR) numerical model sounding was obtained from the NOAA Air Resource Laboratory archive data was obtained from the initial data at 0500 PDT (1200Z) with model data valid at 0800 PDT (1500Z) for the accident site coordinates. The data was plotted on skew T log P diagram from the surface to 18,000 feet and is attached below with the threat of carburetor icing on the left side of the diagram. The conditions calculated over the accident site estimated an elevation of 3,327 feet, with a surface temperature of 22° Celsius (C), a dew point of 7.5° C, with a relative humidity of 63% and a density altitude of 4,033 feet. The HRRR model sounding indicated a severe risk of carburetor icing threat from the surface through approximately 8,800 feet msl (5,500 feet agl).

The diagram carburetor icing algorithm is based on the 1970's Fuel and Lubricants Laboratory of the National Research Council of Canada study of carburetor icing and the work of L. Gardner and G. Moon icing probability chart based on data from the D.O.T. Accident Investigation Division. The Rawinsonde Observation Program (RAOB) uses this chart which is a function of ambient temperature versus dew point with height to determine the carburetor icing categories, where:

1. Light icing – glide or cruise power
2. Serious icing – glide power
3. Moderate icing – cruise power, or Serious icing – glide power
4. Serious icing – cruise or climb power.

The Carburetor Icing Chart is also provided.



The chart and HRRR sounding both indicated severe or serious carburetor icing conditions for the accident flight.

Don Eick
NTSB Senior Meteorologist

END.

Submitted by: Samantha Link