



Memorandum For Record

Timothy W. Monville
Sr. Air Safety Investigator
Eastern Region

Date: May 22, 2020
NTSB Accident Number: ERA19LA072

The impact damaged annunciator panel and the Environmental/Deice Switch Panel were removed from the wreckage and shipped to the NTSB Materials Laboratory. The NTSB Chemist indicated by e-mail,

“As stated previously, the switch panel had sustained significant impact damage. The radiograph of the switch panel showed the internal mechanisms within the panel were too damaged to make any determination of switch position prior to impact.

While the annunciator panel was also significantly damaged, many of the light bulbs within the panel were present and relatively intact. The individual bulbs had to be removed to facilitate examination. The individual intact bulbs were x-rayed to determine the condition of the filament inside. A summary of findings is found in the table below. A single bulb was found separated from the panel. The bulb was intact. The filament inside was intact and stretched. The original location of the bulb could not be determined.”

Vacuum No. 1 Inop	Vacuum No. 2 Inop	Oil Press	Hydraulic Pump	Pitot Heat Off/Inop	Fuel Imbalance
Left Bulb MISSING	Left Bulb Bulb broken/filament missing	Left Bulb Bulb broken/filament missing	Left Bulb Bulb broken/filament missing	Left Bulb Filament broken, unstretched	Left Bulb Filament intact, stretched
Right Bulb MISSING	Right Bulb MISSING	Right Bulb MISSING	Right Bulb Bulb broken/filament missing	Right Bulb Filament broken, unstretched	Right Bulb Filament intact, stretched
Alternator No. 1 Inop	Boost Pump	Fuel Press	Low Bus Voltage	Cabin Altitude	Stall Warn Fail
Left Bulb Bulb broken/filament missing	Left Bulb Filament broken, unstretched	Left Bulb Filament broken, unstretched	Left Bulb Filament broken, unstretched	Left Bulb Filament broken, unstretched	Left Bulb Filament broken, stretched
Right Bulb Bulb broken/filament missing	Right Bulb Bulb broken/filament missing	Right Bulb Filament broken, unstretched	Right Bulb Filament broken, unstretched	Right Bulb Filament broken, unstretched	Right Bulb Bulb broken/filament missing
Alternator No. 2 Inop	Gear Warn	Door Ajar	Flaps	Starter Engage	Windshield Heat Fail
Left Bulb MISSING	Left Bulb Bulb broken/filament missing	Left Bulb Bulb broken/filament missing	Left Bulb Bulb broken/filament missing	Left Bulb Filament intact, stretched	Left Bulb Filament broken, stretched
Right Bulb Filament broken, unstretched	Right Bulb Filament broken, unstretched	Right Bulb Filament broken, unstretched	Right Bulb Filament intact, stretched	Right Bulb Filament intact, stretched	Right Bulb Bulb broken/filament missing
Prop De-ice Fail	Oxygen	Stby Att Ind Bat Heat Fail	Annunc Inop	Stby Att Ind Test	Surface De-ice
Left Bulb MISSING	Left Bulb MISSING	Left Bulb MISSING	Left Bulb MISSING	Left Bulb MISSING	Left Bulb MISSING
Right Bulb MISSING	Right Bulb MISSING	Right Bulb MISSING	Right Bulb MISSING	Right Bulb MISSING	Right Bulb MISSING