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AS-CEN

Date: June 21, 2024

Subject: Performance Data

Aircraft Weight

The following information was obtained from the pilot by the NTSB staff duty officer who received the initial notification:

Item	Weight (lbs.)
Fuel	30 gals. x 6 lbs. = 180
Pilot	175
Passenger	160
Baggage (approx.)	40
Aircraft Empty Weight	1218
TOTAL	1,773

The maximum gross weight of the airplane is 1,670 pounds. According to the information provided the plane was over its maximum weight limit by 103 pounds.

Density Altitude

Using the METAR for the date and time of the accident the following density altitude was calculated:

Pressure Altitude (ft.) = (29.92 - Altimeter Setting (in/hg)) x 1000 + Field Elevation (ft.)

Pressure Altitude (ft.) = (29.92 - 30.04) x 1000 + 3,991

Pressure Altitude (ft.) = 3,871 ft.

Density Altitude (ft.) = Pressure Altitude (ft.) + 118.8 x (Outside Air Temperature (°C) - Standard (ISA) Temperature (°C))

Density Altitude (ft.) = 3,871 + 118.8 x (29 - 7.1)

Density Altitude (ft.) = 6,473 ft.

Climb Performance

The following climb performance data was obtained from the Pilot's Operating Handbook (p/n: 761.658). Using 29° Celsius for the outside air temperature and a Pressure Altitude of 3,871 feet msl the chart shows an approximate rate of climb of 400 feet per minute for an airplane at 1,670 pounds.

