

Michael Hodges

From: Hirsch, Jonathon [REDACTED]
Sent: Thursday, September 7, 2023 08:32
To: Hodges Michael
Cc: Davis, Thomas J (FAA); Childers, James
Subject: Re: CEN23FA304 (N8225N, Piper PA-28-140 @ Osage Beach, MO) - Weight and Balance Update

Follow Up Flag: Follow up
Flag Status: Completed

[CAUTION] This email originated from outside of the organization. Do not click any links or open attachments unless you recognize the sender and know the content is safe.

Mike,

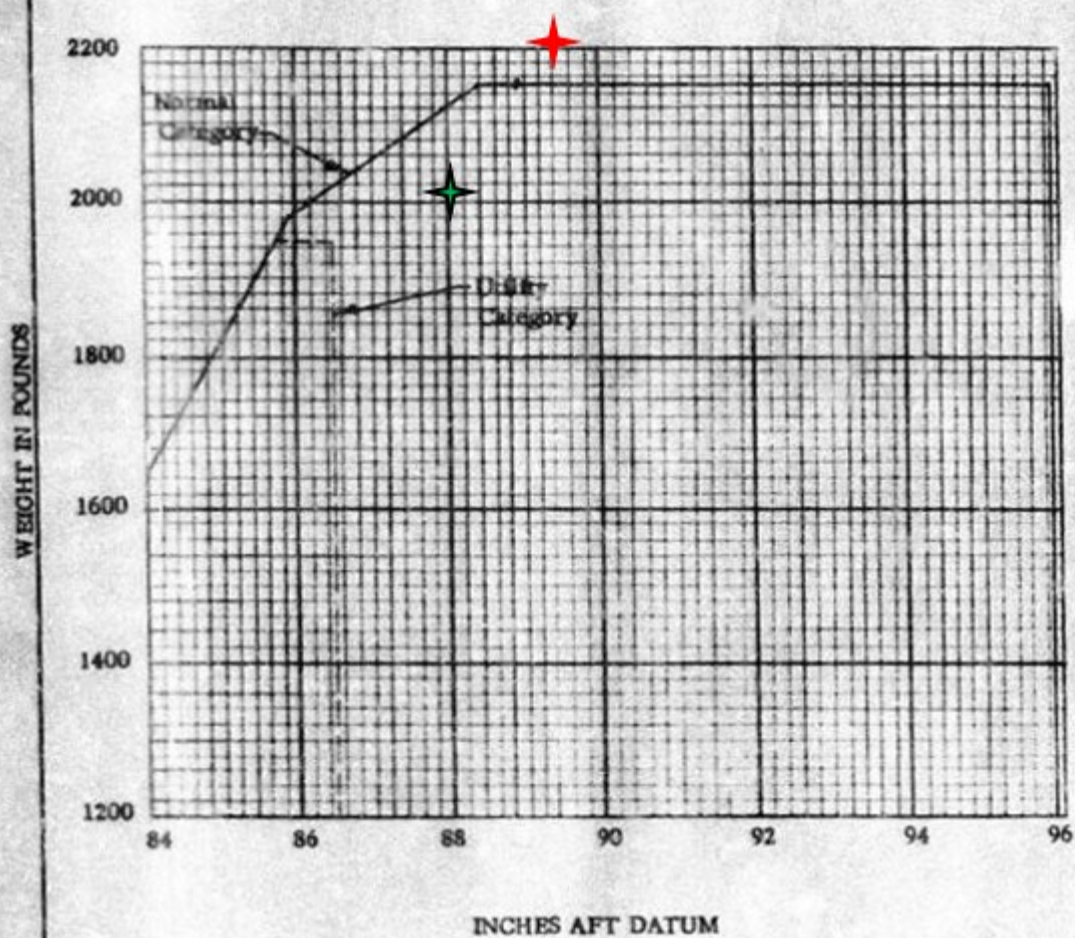
Here is what the W&B information looks like with the values you provided and the basic empty weight taken from the W&B form found in the wreckage.

PREPARED	PIPER AIRCRAFT CORP. DEVELOPMENT CENTER, VERO BEACH, FLA.	Weight and Balance Data
EXTENDED		Model PA-28-140
APPROVED		REPORT VB-162 PAGE 4 Section 1

✦ C.G. with 20 gallons of fuel

✦ C.G. with 50 gallons of fuel

C. G. RANGE AND WEIGHTS



GENERAL WEIGHT AND BALANCE CHART

For Reference see the aircraft AFM

ITEM	WT. (LBS.)	ARM (IN.)	MOMENT (IN. LBS.)
BASIC AIRPLANE	1313.5	85.47	112271
PILOT'S SEAT	206.0	85.50	17613
COPILOT'S SEAT	245.0	85.50	20947
SEAT NO. 3	160.0	117.00	18720
SEAT NO. 4	N/A	N/A	0
FUEL (20 GAL)	120.0	95.00	11400
BAGGAGE (AFT SEAT)	10.0	117.00	1170
TOTAL WEIGHT	2054.5	CG 88.64	MOMENT 182122

ITEM	WT. (LBS.)	ARM (IN.)	MOMENT (IN. LBS.)
BASIC AIRPLANE	1313.5	85.47	112271
PILOT'S SEAT	206.0	85.50	17613
COPILOT'S SEAT	245.0	85.50	20947
SEAT NO. 3	160.0	117.00	18720
SEAT NO. 4	N/A	N/A	0
FULL FUEL (50 GAL)	300.0	95.00	28500
BAGGAGE (AFT SEAT)	10.0	117.00	1170
TOTAL WEIGHT	2234.5	CG 89.16	MOMENT 199222

Let me know if you need anything else.

Best regards,
Jon



Jonathon Hirsch |
Air Safety
Investigator
| www.piper.com
Piper Aircraft, Inc.,
Beach, FL 32960

This email is intended only for the use of the individual or entity to which it is addressed. It may contain information that is attorney client privileged, confidential, and/or proprietary. If you have received this email in error, please (1) do not use this information in any way; (2) notify the sender by reply e-mail; (3) and immediately delete this message and any of its attachments.

From: Hodges Michael
Sent: Wednesday, September 6, 2023 3:51:29 PM
To: Hirsch, Jonathon
Cc: Davis, Thomas J (FAA); Childers, James
Subject: CEN23FA304 (N8225N, Piper PA-28-140 @ Osage Beach, MO) - Weight and Balance Update

Hi Jon,

I have an update, regarding the weight and balance. Attached is an email that Jeff Adams (the airplane owner) just sent me.

From the medical examiner:

Hayden Ritchhart (pilot): 201 lbs. Looks like he was in the front left seat, per the airport video footage.

Evan Vandiver (passenger): 155 lbs. Looks he was in the rear left seat, per the airport video footage.

From Jeff Adams:

Gary Vandiver (passenger): 240 lbs. Look like he was in the front right seat, per the airport video footage.

Jeff is estimating about 20 gallons of fuel onboard during the takeoff for the accident flight.

I figured we can perhaps add 5 pounds to each occupant for clothing and add in 10 pounds of miscellaneous items in the airplane.

Could you please do a weight and balance sheet for those numbers? Could you also do one with full fuel also?

Thank you again.

Mike

Mike J. Hodges, MS
Aviation Accident Investigator, Central Region
National Transportation Safety Board

14291 East 4th Avenue, Suite 7-300
Aurora, Colorado 80011

Cellular: [REDACTED]

Facsimile: [REDACTED]

Website: www.nts.gov

Response Operations Center (24/7): 1-844-373-9922

Work Hours: Monday-Friday, 0900-1730 Central Time

"Don't let yesterday use up too much of today." – Will Rogers

CONFIDENTIALITY NOTICE - THIS E-MAIL TRANSMISSION MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL, PROPRIETARY, SUBJECT TO COPYRIGHT, AND/OR EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IT IS FOR THE USE OF INTENDED RECIPIENTS ONLY. If you are not an intended recipient of this message, please notify the original sender immediately by forwarding what you received and then delete all copies of the correspondence and attachments from your computer system. Any use, distribution, or disclosure of this message by unintended recipients is not authorized and may be unlawful.