

**National Transportation Safety Board
Office of Aviation Safety
Western Pacific Region
Seattle, Washington**

June 21, 2011

A. ACCIDENT

Location: Butte, MT

Date: March 22, 2009

Time: 1432 MDT

Airplane: Pilatus PC-12/45

NTSB Accident Number: WPR09MA159

Comments from Swiss Accredited Representative and Technical Advisors, 4 pages total.



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Büro für Flugunfalluntersuchungen BFU
Bureau d'enquête sur les accidents d'aviation BEAA
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Uffizi d'inquisiziun per accidents d'aviatica UIAA
Aircraft accident investigation bureau AAIB

AAIB, syo, CH-1530 Payerne

National Transportation Safety Board
Western Pacific Region
Mr. Dennis Hogenson
Senior ASI
505 South 336th Street
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Federal Way, WA 98003

Payerne, Switzerland, 16 June 2011

**COMMENTS REGARDING THE NTSB DRAFT FINAL REPORT, ACCIDENT PC-12/45 MSN 403,
BUTTE, 22ND MARCH 2009**

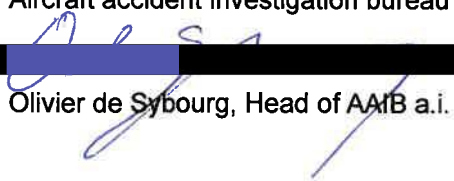
Dear Mr. Hogenson

I would like to thank you for the thorough investigation report and for the good cooperation. Since we had the opportunity to discuss the draft report during your stay in Stans, the AAIB Switzerland has no comments concerning the report.

We send you attached the comments of Pilatus for your consideration.

Yours sincerely,

Aircraft accident investigation bureau


Olivier de Sybourg, Head of AAIB a.i.

PILATUS COMMENTS TO NTSB DRAFT FINAL REPORT, ACCIDENT PC-12/45 MSN 403, BUTTE, 22ND MARCH 2009

1 INTRODUCTION

On March 22nd 2009, PC-12/45, MSN 403 crashed near the Bert Mooney airport in Butte, Montana.



NTSB invited Pilatus to comment their draft final report, dated 4/15/2011. Most of the comments listed below were discussed with the NTSB and BFU during an in-house meeting on the 25th May 2011 and are included herein irrespective of whether consensus was already achieved or not.

NTSB informed Pilatus and BFU during the meeting that certain paragraphs had been altered between the issue date of the draft report and the meeting. So some comments may not be applicable anymore.

2 PILATUS COMMENTS

2.1 COMMENTS TO DRFAT FINAL REPORT

Chapter	Page / Line	Nr.	Pilatus Comments
1.1	10 / 4	1	Pilatus understands that the NTSB is not in a position to classify an aircraft as destroyed and therefore must use the term "substantially damaged". Pilatus however considers the accident aircraft as destroyed. Compatibility with 1.3 shall be checked .
1.1	13 / 11	2	Suggest "were cycling" to "started cycling".
1.5	23	3	Pilatus asked whether NTSB knows what kind of mechanical problems he had in mind? NTSB answered that they do not know and that they consider this comment a generic statement.
1.6	20 / 11	4	The quoted AFM revision status is post-accident. Should be corrected to the pre-accident revision standard.
1.6	20 / 13	5	Suggest to change engine designation to PT6A-67B.
1.6	21 / 15	6	The pitch trim system is a stabilizer trim system, not elevator trim.
1.6.1	22 / 6	7	The airframe fuel filter has also a drain.
1.6.1	22 / 15	8	engines = engine
1.6.1	23 / 4	9	The transfer jet pumps transfer fuel from the rear part of the

TO	BFU					
CC	EC, ER					
Department	ERI	E				
Approvals	Author	Approved				
Name/Sign.						
Date	08-Jun-11	8.6.11				

Chapter	Page / Line	Nr.	Pilatus Comments
			main tanks to the collector tank.
1.6.1	23 / 18	10	Whenever the fuel (typo).
1.6.1	24 / 6	11	AFM says: Secure indicator flush. It is Pilatus' position that this implies that the pilot shall not take off and call maintenance to check for the reasons the indicator is not flush.
1.6.1	25 Footnote	12	The fuel balancing function on MSN 403 is integral to the EIS. Only on very early serial numbers (101 to 111), it was provided by a separate device.
1.6.4	37 / 13-16	13	Consider rewording paragraph for easier reading.
1.12	49 / 12	14	Suggest rewording to include stabilizer trim.
1.16.1	53 / 12-14	15	Not easily understandable, consider rewording.
1.16.2	56 / Table 4	16	Suggest deleting 1:17:59 R FUEL PUMP On-continuous.
1.16.2.1	58 / 5	17	Suggest adding some explanation towards the CAWS logics, e.g. Event ACTIVATED / Event CLEARED.
1.16.2.1	59 / 4	18	air or a ground = air/ground.
1.16.2.1	59 / 5	19	Suggest to add that also no pusher caution was logged at any time.
1.18.1.1	63 / Footnote	20	Suggest adding a footnote referencing the Pilatus POH limitations section 2 " maximum passenger seating limits ".
2.2.2.1	85 / 4	21	Pilatus considers the choice of words misleading. Both pumps were cycling in 10 sec intervals until one remained on whereas the other one stayed off (at the same time). See also comment 16.
2.2.2.2	94 / 19	22	Suggest: 40° of available total aileron deflection (Left plus right).
2.2.2.2	95 / 19	23	Suggest changing "might have been" to "was". The aircraft made it to the airport so it is Pilatus' position that, so it was controllable, at least in un-accelerated flight and with small bank angles.
2.2.3	98 / 14	24	Suggest the following rewording: In 2010, Pilatus adopted uniform emergency procedures for fuel emergencies (as far as possible) for all models.
2.2.5	103 / 13	25	For two of the three flight legs. REI-VCB was within limits.
2.5	112 / 2	26	With the pilot's reported extensive knowledge of the PC-12, he should have known that he was overweight even without any calculation.

Chapter	Page / Line	Nr.	Pilatus Comments
2.5	113 / 11	27	<p>Pilatus believes that the number of passengers on board can be considered a contributing factor to the accident because of the following reasons:</p> <ol style="list-style-type: none"> 1. The violation of the AFM in terms of permissible passengers could have influenced the choice of alternate airport. Landing in Boise, at the airport of one of the largest PC-12 service centers, may have highlighted this violation. 2. The logistics of organizing the overnight stay for so many people (The selected alternate was the only one not requiring overnight arrangements). 3. Potential distraction due to the amount of small children on board.
2.6	116 / 9	28	CVFDR SB is applicable to 47E models only.
3.1	117 / 16	29	<p>Suggest minor rewording to:</p> <p>...., the pilot only decided to divert to Butte, Montana, once he recognized.....</p>
3.1	118 / 3	30	The airplane was controllable in static flight..... (see also comment 25)
3.1	119 / 13	31	See also comment to 27.

2.2 COMMENTS TO "CHAPTER 2.5 CRASH PROTECTION FOR AIRPLANE OCCUPANTS"

As previously communicated to the NTSB, Pilatus fully supports Safety Recommendations A-10-121 and A-10-122.

Pilatus considers the FAA interpretation of §91.107 inconsistent with the stringent certification requirements of §'s 23.561 and 23.562.

§23.562 states:

a) Each seat/restraint system for use in a normal, utility, or acrobatic category airplane must be designed to protect each occupant during an emergency landing when—

*(1) **Proper use** is made of seats, safety belts, and shoulder harnesses provided for in the design; and....*

Pilatus is of the opinion that the above requirement is no longer fulfilled with multiple occupation of a seat.