

**RESPONSES RECEIVED ON DRAFT REPORT 'STALLED DURING TAKE-OFF, HILVERSUM AERODROME 15 DECEMBER 2018'**

Number	Party	Paragraph	Text to be corrected (first ... last word)	Argumentation for response	Adopted	Dutch Safety Board response
1	AAIB	1.5	Assembling	Better word would be installing or fitting	Yes	
2	AAIB	1.5	Wings which	Possibly add '...wings, as described in the Owner's Manual Section 9, which...	No	As the information is not absolutely necessary for clarification, the Dutch Safety Board prefers a shorter sentence.
3	AAIB	1.5	...the front face of the engine cowling...	PH-BGV although a Classic airframe, appears to have the later XS engine installation and cowling which moves the engine forward several inches and extends the cowling forward. This is a fairly common update. Because of this longer cowling, the datum was redefined as being 29.25" (743mm) forward of the rear edge of the cowling joggle in the fuselage, to avoid any confusion between the two cowling arrangements. This datum is in the same position as the forward face of the engine cowling with the original 'Classic' cowling. With this in mind, suggest changing note to: 'The datum for this aircraft was 29.25" (743mm) forward of the joggle in the fuselage at the rear of the cowlings'	Yes	The correction has no consequences for the mass and balance. The note has been updated.
4	AAIB	1.5	... to taxi...	Suggest changing to '...to fast taxi...'	Yes	
5	AAIB	2.1	...eyes...	Suggest changing to '...eye...'	Yes	
6	AAIB	2.4	... that that...	Suggest deleting repeated word '...that...'	Yes	
7	AAIB	2.4	Stall speed	A representative, now Light Aircraft Association (who are responsible for this type of aircraft in UK) design engineer, but former Europa employee where he conducted lots of test flying in type. He notes; the stall speed with full power will be considerably lower than this and would require up to full right rudder to maintain balance (slip ball in the middle)	Yes	This stall speed information has been added to both the Factual Information (now paragraph 2.5.5 in Final report) and the analysis (3.4.2 in Final Report) as referred to here by AAIB.
8	Mechanic	1.3	N/A	The lines on the picture do not accurately indicate where engine startup took place	Yes	Adjusted lines on picture in figure 2..
9	ILT	1.7	The goal (...) as was the case with the accident flight.	Suggest to add the weather and wind condition of the test flight.	Yes	The Dutch Safety Board added calm weather conditions in the report.
10	ILT	1.7	It was possible to maintain a 53 kts climb speed, which was 5 knots above the stall speed of the test aircraft.	Suggest to explain the difference in stall speed in section 1.5 and 1.7	Yes	The Dutch Safety Board changed the wording for clarification (now paragraph 2.7 of the final report).
11	ILT	2.2	Final reserve fuel of 30 minutes was officially required	Do VFR local flights have to take contingency and/or alternate fuel?	No	As the fuel quantity held no relation to the cause, the required fuel is no longer addressed.

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12	ILT	2.3	He would have set the trim more AND than for a 41 normal take-off to anticipate pitch up effects at higher airspeeds	Trim nose up for nose up pitch moment?	No	To balance the nose up tendency one would trim nose down and vice versa.
13	ILT	2.3	Failing to set trim	Expand on Human Performance and CRM	No	The Dutch Safety Board agrees with ILT that human performance could have been a factor, but it was impossible to determine.
14	ILT	2.4	The pilot must have applied an uncommonly high stick force	Expand on Human Performance and CRM	No	This is a conclusion based on investigation facts, resulting from an incorrect set trim.
15	ILT	2.4	Gust instantly increases the lift produced by the wings.	Explain the difference between positive and negative gust	Yes	The text has been reworded for clarification.
16	ILT	2.5	This might be the intuitive response of a pilot when being close to the ground.(+) voetnoot Skybrary (..) at low altitudes)	The intuitive reaction is too farfetched. Suggest to not use skybrary in footnote	No	As explained in the analysis, when the (imminent) stall occurred, the full AND position of the trim system would have facilitated the stall recovery.  The reason to refer to the intuitive (re)action is because the elevator (tailplane) was found in the full ANU position at impact, which contradicts to what is required for recovery.
17	Co-owner			It is possible that the canopy opened during the flight and the pilot therefore distracted?	Yes	DSB was aware that the co-owner previously experienced the left canopy to open, since he provided this information 2 days after the accident to the Dutch Safety Board. This has been addressed in the report.  Because there are no indications of the canopy having opened during the flight, this scenario is not likely. See the note in paragraph 2.5.2 and the analysis 3.2.2 of the final report.
18	Co-owner			Given the strength and experience of the pilot, why would over-rotation be likely?	N/A	The pilot's experience is recognized as he likely managed to avoid a ground strike of the propeller during the ground roll phase.  Based upon the analysis (see 3.4.2), the Dutch Safety Board concludes that it is likely that over-rotation occurred.
19	Co-owner			Why would the ground roll be abnormal?	N/A	Given mass and wind conditions, the Dutch Safety Board agrees that the ground roll was not abnormal in terms of performance.  The AND trim setting made this ground roll abnormal due to the nose down tendency requiring unusual flight control inputs.
20	Co-owner			What is the reason to mention the routes the pilot normally flies?	N/A	The Dutch Safety Board agrees there is no direct relation to the stall event, however it provides perspective regarding the fuel quantity and UDP relationship, as well as context for the goal of the flight.
21	Co-owner			The passenger safety belt is commonly used as a control lock and this could have affected controllability during the flight.	Yes	This topic of the co-owner is addressed in the report in paragraphs 2.6.2 and 3.2.2.  The passenger safety belt was recovered unbuckled-and-found not to have played a role during the accident flight.

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22	Co-owner			Could the engine frame have come loose and force the airplane in an unusual attitude?	N/A	With reference to such a case, the co-owner brought this to the attention of the Dutch Safety Board.  The engine frame was extensively examined and determined to have been intact during flight,. See 3.2.2.
23	Co-owner		Offset	Clarify the use of offset throughout the report	Yes	Reworded for clarification
24	Co-owner		AND	Why was the aircraft in the AND trim position?	N/A	The Dutch Safety Board acknowledges this as a valid question.  Based upon the chosen depth of investigation, a technical anomaly of the trim indicator was considered possible, see conclusions.  As for a possible procedure slip (human factor), it was impossible to determine with certainty the reasons for this trim position, see conclusions.
25	Co-owner		Trim switch position	It is possible for the trim switch to get stuck in an active trimming position?	N/A	The Dutch Safety Board checked this scenario, but no indications were found this had occurred, see Factual 2.6.4 and Analysis 3.3.1 of the Final report.
26	Co-owner		Stall strips	Could the positive effect of installing stall strips have been negated by not fitting them precisely?	Yes	The Dutch Safety Board considered this to be a relevant question.  The stall margin with these stall strips installed correctly, would improve stall speed. However, this likely had very little effect on the flight.  The Dutch Safety Board verified the fitting of the stall strips, but a more detailed examination was not meaningful to explain the high pitch during take-off resulting in the stall.