

**RESPONSES RECEIVED ON DRAFT REPORT 'CRASHED AFTER BANNER PICK UP PIPER PA-25-235 PAWNEE'**

No.	Organization	Chapter/ paragraph	Text to be corrected	Responses	Adopted	Dutch Safety Board response
1	CNE air	Summary, page 5	As the aeroplane was flying slow and the engine did not have enough power to produce sufficient rpm.	<p>On page 5 it is stated that the aeroplane did not have sufficient power and that it did not have the correct rpm. How is this established? The report only references to the comment from one pilot about lower rpm. There are no remarks from other pilots.</p> <p>The maximum rpm voor the Piper Pawnee has a minimum and maximum value. This propeller/ engine combination could still have produced enough rpm and thus enough power.</p>	Partly	Footnote added on page 26 to clarify the source for the thrust required information.
2	CNE air	Summery, page 5	In this environment it was possible that: 1) an improper propeller was fitted on the aeroplane;	It is stated that an improper propeller was installed. This propeller is being identified by ILT a propeller for the Piper Pawnee. The CAMO Vliegwerk Holland, confirmed that this propeller could be installed on SE-KHF.	No	Text and excerpt from SE-KHF flight manual added to Paragraph 2.4.7, adding clarity to the allowance of the propeller.
3	CNE air	Summery, page 5		It is stated that maintenance was neglected and flying operations. On what is this based? An explanation about maintenance and safety seems appropriate.	No	See Paragraph 3.2 for argumentation.
4	CNE air	General comment		<p>Maintenance had been delegated to a Part 145 organization. This company accomplished and kept oversight on the technical administration. It also performed the maintenance and ARC inspections.</p> <p>On their request, due to non-availability, in 2018 another mechanic was looked for. This mechanic received the work order from Vliegwerk Holland and he accomplished only these tasks. The technical administration was then finalized by Vliegwerk Holland.</p>	No	See Paragraph 3.2.5 for argumentation.
5	CNE air	General comment		<p>It is known that when flying with banner tows and towing of glider a higher risk is involved. Also, flying with a tailwheel causes more risks.</p> <p>SE-KHF was equipped with an extra tank what possibly increased hazards for the pilot during a crash. Though the installed tank was modified with a rubber inner liner. Further, only very experienced pilots are being used for these operations; they appreciate flying with these aircraft.</p>	No	See Paragraph 3.2.4 for argumentation.

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6	CNE air	General comment		<p>CNE has taken the following measures to increase safety.</p> <p>The last years less different types of aeroplanes have been utilized to enable pilots to gain more flying hours and to get more proficient with a specific type. It was also determined that before banner pick up, pilots always fly a full circuit.</p> <p>Since recently, the tow hook is being mounted underneath the aeroplane's belly, instead of it being thrown out by the pilot.</p>	No	See Paragraph 3.2.5 for argumentation on safety management.
7	CNE air	General comment		<p>It is stated that the limitations are not available for use of the aeroplane, and that these are not known to the operator and the pilots.</p> <p>Before a towing flight, pilots are informed about where to go and for how long.</p> <p>The pilot is responsible for fuelling, the amount of fuel and the W&amp;B calculation. The aeroplane documents of SE-KHF contained the restrictions for towing of gliders. These were also utilized for towing of banners. In the cockpit, there were several warning labels mentioning the critical W&amp;B and usage of the fuel tanks.</p> <p>For a flight of 4 hours the aeroplane needed 188 litres of gasoline. The aeroplane weight, possibly, would not have been exceeded.</p>	No	See Paragraph 3.2.2 for argumentation on the applicability of aeroplane restrictions.
8	CNE air	General comment		<p>ILT would not have held oversight. Maybe not direct, but for sure indirect. All aeroplanes have a valid ARC and have been issued with a new certificate of airworthiness.</p> <p>Aeroplanes fulfil all requirements as established by the manufacturer, ILT and EASA.</p> <p>Also during the occurrences with aeroplanes from CNE no remarks have been made concerning the use of the aeroplanes.</p>	No	See Paragraph 3.3.2 for argumentation on oversight.
9	CNE air	Page 12	The aeroplane had its flaps in the up position during the pick-up manoeuvre. This is the normal flap setting for the pick-up manoeuvre and climb out.	<p>It is stated that during the pick-up of the banner, the flaps are in the up position. This is not according to procedure. It is known to pilots and agreed amongst pilots from CNE that the banner pick up should be performed with the flaps in position 1.</p> <p>Information from ILT shows that for best climb performance the flaps should be placed in setting 1. This possible would have prevented the accident.</p>	No	Text added to Paragraph 2.9.4. to clarify the use of flaps during the banner towing operations.

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10	CNE air	General comment		<p>In the report, the past incidents with CNE-Air aeroplanes are mentioned. These incidents need to be explained further to provide for a good resemblance.</p> <p>The two instances in the vicinity of Breda in which the aeroplanes did not have enough fuel were caused by pilot error.</p> <p>The accident at Midden-Zeeland with the PH-SER was caused by a bad running engine. The pilot decided to continue flying with this engine, he should have discontinued the flight.</p> <p>The accident with the PH-PHX was caused because it was hit from behind by another aeroplane. The fault lies with the other party.</p> <p>All these accident are not caused by a lack of maintenance or by not taking safety into account by CNE.</p>	Partly	The mentioned accident with PH-PHX is deleted from the text.
11	CNE air	General comment		The reason for installing the 4-blade propeller was due to required overhaul. Vliegwerk Holland had control over the aeroplane administration and was functioning as the CAMO, the question was asked whether this propeller could be installed. This was affirmed and the propeller was installed. The maintenance declaration for the installation was then sent to the CAMO.	No	The text of Paragraph 3.2.1 is changed to more accurately reflect the arguments for the choice for the Hoffmann propeller and paragraph 3.2.5 for CAMO related responsibilities.
12	CNE air	General comment		A mechanic is Part 66 qualified and thus permitted to work on these aeroplanes. There is no requirement for an approved maintenance organization for maintenance of CNE aeroplanes.	No	See Paragraph 3.2.5 for explanation on the requirement to perform maintenance for a commercial SPO organization.
13	CNE air	General comment		In the report it is stated that, after the pick-up, the nose attitude of the aeroplane was high. It appears that the aeroplane at that moment was stalled. The weight of the small sized tow low and the square surface was small.	No	See Paragraph 3.1 for explanation for the argumentation for the stall speed after the pick-up of the banner and the influence of the banner.

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14	CNE air	General comment		<p>It is being stated that the aeroplane was not certified for banner towing.</p> <p>The aeroplane was equipped with a tow hook according a European approved design for the PA-25 and with towing which towing is approved. The Piper Pawnee is used all over the world as a tow airplane for towing of gliders.</p> <p>According the Dutch Law a tow aeroplane is an aeroplane, configured for taking up into the air of a banner and the towing of a banner.</p> <p>According Dutch Law, a banner is a, by means of an aeroplane and cable towed banner or fabric, with the purpose for aim and firing exercises, or a glider or sailplane.</p> <p>The Swedish aeroplane documents for the tow installation and the use of the installation were present in the aeroplane. For Dutch registered aeroplane there were also instructions published by ILT. This information, the so called RLD Flight Manual, had to be removed from the aeroplanes. These were legally not allowed anymore and had to be removed after instructions received from ILT. Especially these manuals contained important information about towing. Important and necessary information.</p>	No	See Paragraph 2.4.2 for the Swedish type certificates that were part of aeroplane's documentation and Paragraph 3.2.2 for argumentation on certification requirements.
15	CNE air	General comment		<p>It is surprising that there is such a difference in the flight test results of the Piper Pawnee and the Hoffmann propeller. Some results of these tests are critical, other more positive about the performance. Feedback from flying clubs from the Netherlands as well as from abroad indicates that these flying clubs solely fly with the 4-blade propeller, because of its good performance. An aeroplane would not receive a STC, if the modification would perform inadequate.</p>	No	See Appendix C for an explanation on propeller flight tests.
16	CNE air	General comment		<p>The conclusions and assumptions from the report should be adjusted and only facts should be mentioned.</p>	No	The Dutch Safety Board based the conclusions on the investigation.
17	Vliegwerk Holland	Par. 2.8.3, line 26	The two companies did not formalize the airworthiness management with a written CAMO-contract.	<p>Change sentence to: The operator did not sub-contract/contract out/outsource is airworthiness maintenance to a CAMO.</p>	No	The Dutch Safety Board points out that the operator and airworthiness maintenance organization both need to clarify their responsibilities in a CAMO contract.
18	Vliegwerk Holland	Par. 3.2.1, line 8-12	Firstly, because of an EASA Form-1 was used as a reference document for the installation. This document stated that the propeller was allowed to be used on various aircraft. However, an EASA form-1 document only authorizes release of a component after fabrication or repair for use on aeroplanes in general. It may not be used as an certification document. (...)	<p>The text does not accurately reflect how the advice for and choice of the propeller was provided.</p> <p>At the time, advice for the propeller choice was given via telephone conversation. No representatives from our company were present at the operators hangar.</p> <p>It was advised to install a propeller for which an EASA form-1 was available.</p>	Yes	The text of Paragraph 3.2.1 was changed to more accurately reflect the choice for the Hoffmann propeller.

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19	EASA	Par 3.2.2, line 10-35		<p>Current paragraph 3.2.3 insinuates that the Hoffmann 4-blade propeller modification approval was no longer valid because of installation of a fuselage fuel tank in accordance with an EASA approved minor change. This conclusion is being made based on missing evidences for a "safety assessment to determine the airworthiness of the aeroplane" for the combination of the 2 changes.</p> <p>The conclusion drawn in the current paragraph isn't correct. The complete paragraph should be rewritten.</p>	Yes	The text of Paragraph 3.2.3 is rewritten to more accurately reflect the requirements for an operational assessment.
20	EASA	Par. 3.2.4, line 6-7	(...) However, this configuration change did not lead to an airworthiness risk assessment or a pilot's survivability assessment in case of a crash and post-crash fire. (...)	Change "an airworthiness risk assessment" to "an operational risk assessment."	Yes	Text Paragraph 3.2.4 is changed.
21	ILT	Summary, page 5, line 16	First, the aeroplane stalled and crashed because it was equipped with an improper propeller for banner towing operations.	Change into: "improper propeller, especially improper for banner towing operations." Even if the aeroplane was not used for glider and banner towing, than this propeller was not allowed to be used on this type of aeroplane (see par. 2.4.7, par 1 and 3).	No	Text and image added to Paragraph 2.4.7 to more accurately reflect the authorization of the Hoffmann propeller.
22	ILT	Par. 2.8.1, page 20, par. 2, line 18	Regeling slepen en reclameslepen	The correct name of the regulation is: "Regeling slepen en reclamesleepvliegen."	Yes	Text Paragraph 2.8.1 changed.
23	ILT	Par. 2.8.3, page 21, par. 5, line 44	The contents of the entire Operating Manual did not satisfy the requirements.	The ILT audit report stated: "The contents of the Operating Manual did not fully comply with the requirements."	Yes	Text Paragraph 2.8.3 changed.
24	ILT	Par. 3.2.1, page 30, par. 1, line 7	Between the operator and the maintenance organization.	In Par. 2.8.3, page 21, par 3 line 23-24 and 3.2.5. par. 4, 29-30 an 'on demand hired certified maintenance technician' is mentioned. Is this the same person as the 'maintenance organization' from the first paragraph on page 30.	No	Text Paragraph 3.2.1 and 3.2.5 changed for clarification.
25	ILT	Par. 3.2.3, page 31, par. 1, line 14-15	The S 3/79 Rev 4 supplemental type certificate of the glider towing installation and the M 4/79 Rev 2 supplemental type certificate of the Hoffmann propeller constitute such earlier design changes	<p>The aeroplane was issued the Swedish STC S3/79 Rev 4 (tow hook for glider towing), and added to the flight manual supplement No S 3/79 (see paragraph 2.4.2, page 25 from the report).</p> <p>As a result of the installation, in 2016, of the extra fuselage tank as per EASA Minor Change Approval an airworthiness assessment of the effect of the installation on the other STC's should have been performed. (see 2.4.1 of the draft report) From the draft report it cannot be determined if such an airworthiness assessment has been made.</p> <p>From the report it cannot be determined if the EASA Minor Change Approval for the installation of the fuselage tank was accomplished by the certified maintenance organization, which performed the maintenance, or by the independent maintenance technician. Apparently, at that time, not all work was accomplished by a certified maintenance organization (see par. 2.8.3, par 3, page 21, line 27 "services provided on ad-hoc basis").</p>	<p>Yes</p> <p>Yes</p>	<p>Text Paragraph 3.2.3 rewritten for clarity.</p> <p>Text added to Paragraph 2.4.9 for clarification.</p>

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26	ILT	Page 34, par. 2, line 22	ILT's intention was, after the desk audit was held, to administer an on-site audit late 2019. However, ILT indicated that this audit was cancelled due to the aftermath of the accident with SE-KHF.	Late 2019, the on-site audit at CNE was postponed due to private circumstances of the accountable manager. For ILT, no other considerations were applicable relating to the aftermath of the accident with SE-KHF.	Yes	Text Paragraph 3.3.2 changed.
27	ILT	Page 34, par. 3, line 26	No further appointments were planned.	In 2020, several attempts for a meeting were sought, however this seemed not possible due to private circumstances of the accountable manager. This led to the issuance of a warning letter Level 1, which stated that no commercial specialized operations may be performed.	Yes	Text Paragraph 3.3.2 changed.
28	ILT	Page 34, par. 2, line 33	ILT had indicated to the DSB that at the time preceding the accident and thereafter, their oversight capacity was not matching the oversight responsibilities as set forth by EASA regulations.	The oversight on this company was part of the 4-year oversight planning cycle that ILT developed for SPO operators. For this company and the SPO declaring organizations, in general, capacity was and is available. The paragraph in the report suggests different and it is advised to leave it out to prevent misinterpretation.	Yes	Text Paragraph 3.3.2 changed. The Dutch Safety Board did not investigate the oversight capacity of ILT for the general aviation sector. The statement was based on information received during a discussion with ILT.
29	ILT	Page 34, line 37	ILT did not perform active oversight on the operator since the operator's founding in 2008; the absence of oversight on the operator contributed to the persistence of safety deficiencies and safety risks. In case such safety performance, revealed by incidents, an active role from the Inspectorate towards operators is warranted.	Following the effectuation of EU regulations for such operations in 2017, the obligation to 'declare' such operations by the operator to the competent authority, in this case ILT. A desk audit was held by the ILT in March 2018. Partly on the basis of these results, it was decided to conduct an on-site audit at the end of 2019. Due to personal circumstances of the operator and later the corona situation, this did not take place. However, given the observed non-compliance, a level 1 warning was eventually issued in December 2020 according to the ILT's enforcement policy (the intervention ladder). This meant that the operator was no longer allowed to conduct his operations. According to the ILT, it is therefore not the case that there was or is no oversight.	Partly	Text added to Paragraph 3.3.2.