

## Article by Aerossurance, LinkedIn May 26, 2024, Andy Evans

Commentary by Enrico Ragoni, ACM and Head of Development at AirWork & Heliseilerei GmbH (A&H), member of the ESPN-R network. The comments reflect the author's opinion.

The accident began when a pilot obviously got out alone, without a flight assistant on site and/or a trained third person who could have attached and checked the load, and attached the load himself.

>> No control over the load.

The accident took place in the 21st century, correct? I'm horrified! The comment that an "inappropriate" hook caused the accident is pure whitewashing. In the end, he was just the famous straw that broke the camel's back.

The accident began when a pilot obviously got out alone, without a flight assistant on site and/or a trained third person who could have attached and checked the load, and attached the load himself.

>> No control over the load.

He attaches another rope to his LongLine. It is not clear whether it belongs to him or the client. However, several features indicate that the net with straps and the short steel cable could have come from the customer.

>> No control over the condition of the network and the load.

Then he flies off. The fact that the snap hook got caught on the railing proves that the pilot had no control of the load and no control of his flight. He initiated the forward movement before the load hovered over the platform with its obstacles.

>> no control over the flight

He wasn't wearing a helmet because it was broken?

>> No control by the company regarding employee protection.

Then to the flight operations material. The LongLine was equipped with a safety hook, which is also supposed to be a swivel catcher. This is not a swivel (abuse)! Apart from the fact that the hook was attached to the LongLine with a shackle that had to be secured with a cable tie (the state of the art would be a Connex connector): why didn't he attach the blue safety hook directly into the eyelet on the net? The wire rope with the snap hook is unacceptable. There is also an unsecured and slightly open shackle on it.

>> The material does not meet the requirements for safe helicopter operations. High security risks.

As a result, the company's security measures are missing 3 crucial points:

> never alone on a mission

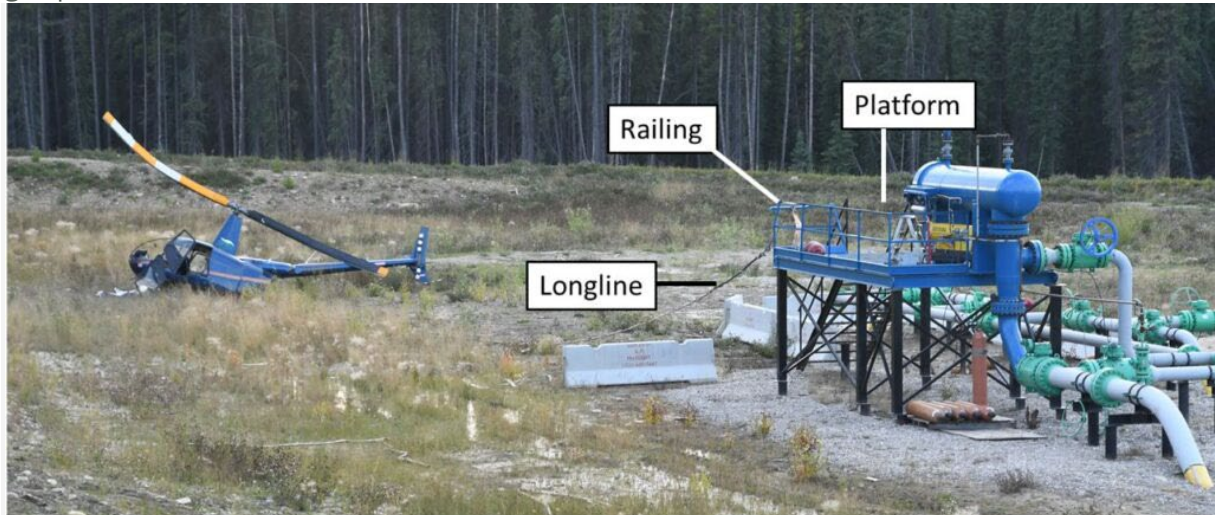
> Clarify the freedom from load before entering forward flight

> procure LongLine equipment that meets the state of the art and the requirements for safe helicopter operations.

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## HESLO R44 Snagged by its Own Longline (Synergy Aviation C-CGEC Oil & Gas Accident Alberta)

On 25 August 2023 [Robinson R44 C-GNEC](#) of [Synergy Aviation](#) crashed during a Helicopter External Sling Load Operation (HESLO) due to the longline being becoming entangled with gas production infrastructure.



Wreckage of Robinson R44 C-GNEC of Synergy Aviation at Gas Production Site (Credit: TSB)

The Transportation Board of Canada ([TSB](#)) published their brief [safety investigation report](#) on 4 March 2024.

### The Accident Flight

The helicopter had landed at 'multi-gas well battery' east of Grande Cache, Alberta to pick up an empty cargo net to retrieve pipeline integrity gauges from another site.

The TSB reported that the pilot (4926 hours total, 4796 on type)...

*...landed near a work platform but did not shut down the helicopter. He then exited the helicopter and connected the 100-foot longline and cargo net, which was on the platform, to the cargo hook of the helicopter. The pilot got back in the running helicopter and lifted off into a hover.*

*The pilot initiated a vertical climb, observing the longline and cargo net through the window in the pilot's door. Once the helicopter had cleared the work platform, the pilot turned his attention from the load under the helicopter to the front of the helicopter and began forward flight toward the next site.*

*During the transition to forward flight, the helicopter did not respond to the pilot's flight control inputs. Unknown to the pilot, the longline had snagged a railing on the work platform.*

*As the pilot attempted to maintain control of the helicopter, the main rotor rpm began to decay. Given the likelihood of a crash, the pilot steered the helicopter away from the piping and tanks, subsequently colliding with terrain at 0931.*

The pilot, who was not wearing a helmet because it was being repaired, suffered serious injuries.

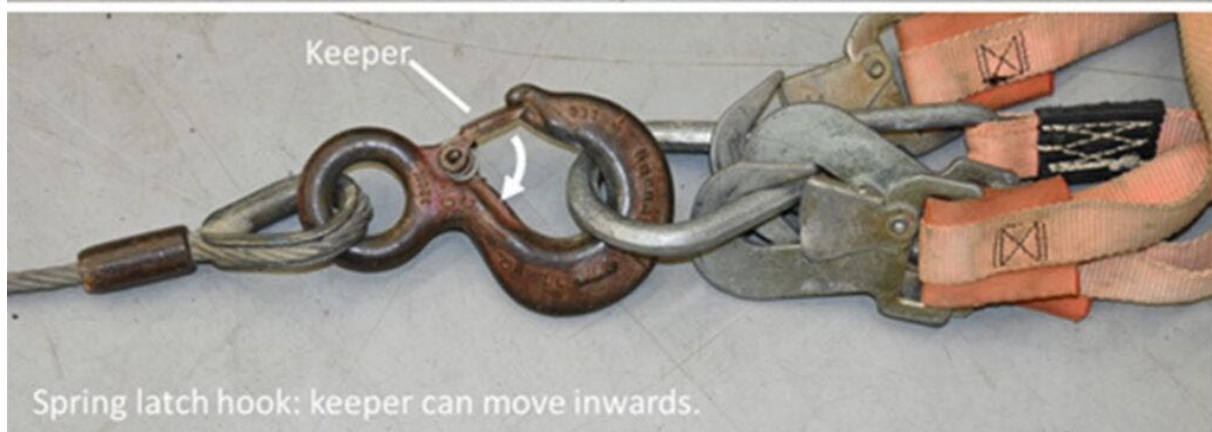
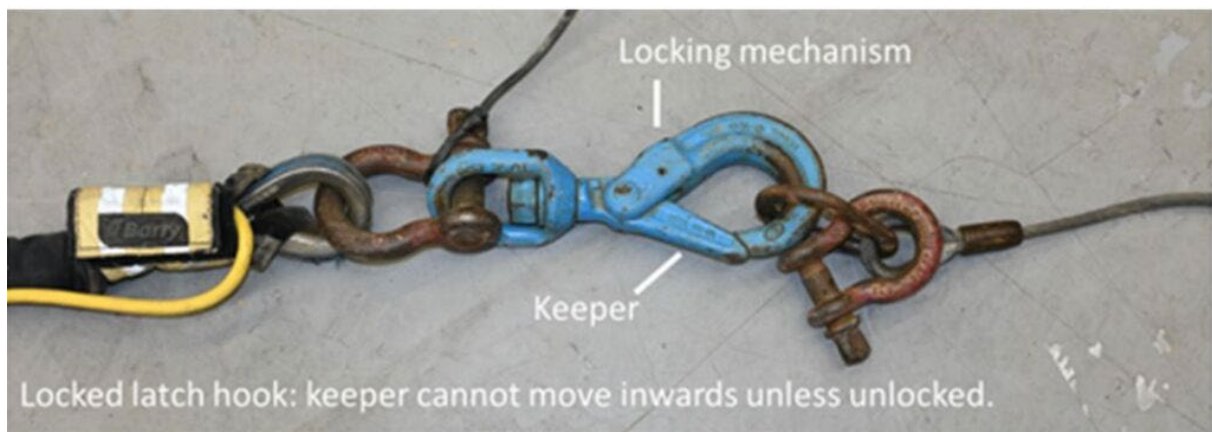
The Emergency Locator Transmitter ([ELT](#)) did not activate, [not uncommon in helicopter accidents](#). Satellite flight following did alert the company to the accident.

### **The TSB Safety Investigation**

*When investigators arrived at the accident site, the lanyard that had snagged on the railing of the work platform was still attached.*



*The longline was equipped with a locked latch hook. This type of hook has a locking mechanism that prevents the hook's keeper from opening, which can mitigate the risk of snagging (top image).*



*The end of the steel lanyard that was attached to the locked latch hook had a spring latch hook installed (bottom image).*

*This type of hook does not have a mechanism to prevent the hook's keeper from opening, and this is the hook that became snagged on the platform's railing.*

## **Safety Actions**

After the accident, Synergy Aviation issued an internal memo with the following actions:

- *All loads are to be set and removed from the ground adjacent but clear of the platforms.*
- *All lanyards with the spring latch systems are to be removed from service and replaced with a locked latch style hook with a manual release.*
- *All longline operations require the pilot to remove the aircraft door to ensure the best visibility of the external load and/or end of the longline.*
- *A review of all operations associated with the pilot operating contracts as well as site hazard identification.*

TSB do not discuss the procedures and risk assessments in place prior to the accident. TSB make no recommendations.