Role Equipment – Check, Recheck, Practise

An accident earlier this year in Marlborough shows the importance of role equipment being fit for purpose, and for pilots to be completely familiar with it.

n early February, 2015, a Hughes 369D helicopter was helping fight a fire in Marlborough when it crashed into the Wairau River.

The pilot was unable to fill the monsoon bucket through the bottom 'water dump door', as is normal, because a skirt of material suspended from the bucket was floating up and effectively sealing the door off.

So the pilot began to fill the bucket from the top, by laying it in the river.

When that positioning caused the tension to reduce on two of the four Dynex strops slinging the bucket beneath the helicopter, one strop became caught over the left skid.

Although the pilot descended as soon as he was aware of the hooked-up strop, the river current was so strong, it pulled the bucket away from the helicopter, hauling the machine backwards into the water, with catastrophic effect.

The pilot, who was unhurt, says he's gutted by the accident.

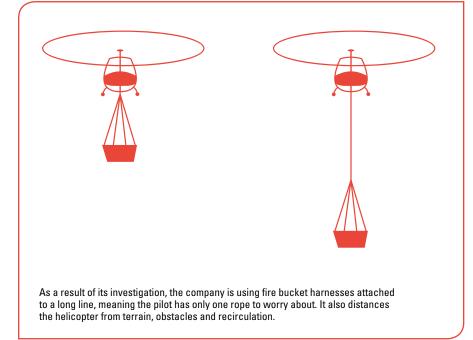
"The problem stands out like a sore toe to me now, because the four-strop rigging was wrong for the job, but I didn't see it."

The company's subsequent investigation found the accident risk would have been reduced if the bucket had been rigged with a single strop (see diagram).

To counter the contribution the bucket skirt made to the accident, the company has fitted a steel hoop to the skirt's hem, preventing it floating into the open door during filling.

CAA Aviation Safety Adviser, Bob Jelley, says there's a wide range of role equipment, and operators should closely consider how they use it.

"Shortcomings discovered during flights and/or maintenance should be discussed



with the manufacturer, and engineering changes made accordingly," he says.

CAA Helicopter Flight Operations Inspector, Mitch Jones, agrees.

"The bottom line is that we need operators to stop, check, and recheck how they use role equipment. This was not a component or systems failure, but an unlucky accident. The outcome could have been very grim indeed."

CAA's Safety Investigation Team Leader, Paul Breuilly, says it's also important pilots keep current in how to use role equipment appropriately.

"For instance, pilots called on to fight a fire may have currency in lifting loads but not in other aspects of a firefighting operation. They need to practise before facing the real thing.

"Operators also need to make sure that training and competency checks reflect the different roles the pilots, machines and equipment fulfil."

Thanks for Sharing

Mitch Jones applauds the operator involved in the firefighting incident for conducting a thorough post-accident investigation, for making necessary changes, and for sharing their story.

"It wasn't intentional. They just got it wrong, they've admitted to getting it wrong, they've made sure it won't happen again, and they've told others.

"The company's openness means the whole industry can identify risks, and benefit. It's not easy to admit to making a mistake. I can't emphasise enough how much the CAA appreciates such candour."

The pilot says he can't run away from the accident, and has to rise above it.

"If I can stop it happening to someone else, then at least I can take comfort from that." ■