During a recent training operation, an ATP rated CFI was giving instruction to a commercially rated student. They were practicing toe-in and one-skid landings in an MD-369F and used conex boxes to simulate landing on a ship.

The CFI was flying and orbited the conex boxes to make sure the area was clear of obstructions. As they were about to touchdown, the student leaned forward and saw that the skid was under the top rail of the conex. As he was about to tell the instructor of the condition, the helicopter flipped upside down fatally injuring the instructor.

This was not a law enforcement operation; however, many law enforcement aviation units perform similar training. Only a few years ago a law enforcement unit had an almost identical accident doing the same training in the same make and model aircraft. Both accidents involved the toes of the skids being stuck under the top of the structure resulting in dynamic rollover.

There are several hazards associated with such operations:

The structure for such operations should be free of anything that the skids can become entangled with.

There should be a second person (pilot or TFO) onboard to ensure the skids are sufficiently clear of the structure. Just bumping either or both skids into the side of the structure can result in dynamic rollover.

The second person onboard should be briefed on how to monitor the distance of the skid to the landing surface in order to avoid inadvertent contact.

There should be a ground safety officer to ensure there is adequate clearance from the structure. And, the ground safety officer should be equipped with a radio to communicate with the pilot in the event of an unsafe condition.

The FAA inspector concluded that there were no pre-impact failures or malfunctions of the airframe or engine that would have prevented normal operation.

If you conduct similar training, make sure that you have safety counter-measures in place to manage the hazards associated with such operations.

Please send any comments or questions to safety@alea.org and I will include them in the next newsletter.

Remember – Safety First!

Keith Johnson
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