



2010-June : Newsletter

PILOT INCAPACITATION

I frequently get questions about pilot incapacitation and the need for TFOs to have emergency flight training to be able to land the helicopter. I received a recent inquiry about a pilot that had a heart attack while off duty. It is good that people ask about such events and their impact on safety.

We need to first assess whether this is a problem. Fact - the likelihood of the pilot being incapacitated while flying is extremely low. In more than 30 years in this business, I am not aware of a single occurrence where the pilot was incapacitated from a heart attack, stroke or other malady while flying a helicopter that resulted in an accident. And, unlike airplanes, helicopters can almost always make an emergency landing within a few seconds or minutes.

However, if you decide to install the second controls and train your TFOs to make emergency landings, I recommend that you train them to a level of proficiency so that they are capable of landing the helicopter, and not just some arbitrary number of flight hours. This generally requires 10 to 15 hours of initial flight training and a few hours of ground instruction. Because these are very perishable skills for a TFO, you will need to provide recurrent training a minimum of every three months, depending on the skill of the TFO. My experience has been that many of the organizations that do this training fail to do the recurrent training, negating the purpose of the initial training.

The average cost for the initial training is about \$5,000 in direct operating cost for the aircraft, not including the cost for the flight instructor if you need to contract for this training. If you contract for the CFI, plan on an additional \$5,000. The first year will cost approximately \$7,000, plus the cost for the instructor, and about \$2,500 each year for recurrent training. Ensure that the CFI understands the scope of the training. It should not include other emergency procedures such as engine, hydraulic or tail rotor failures.

Training accidents account for the most frequent category of helicopter accidents. It is far more likely you will have an accident training the TFO than from the pilot becoming incapacitated. It is my opinion that most organizations would be far better served by spending the money to send pilots to factory schools and training crews in decision-making, risk management, and CRM with the pilot and TFO in a simulator. Teach them how to maintain a better lifestyle with diet, exercise, sleep and fatigue management. These issues have a far more significant impact on performance and safety, and they account for the vast majority of causes that actually get pilots and TFOs killed. This training benefits every member of your unit, making it much more cost effective than teaching your TFOs to fly. And, most pilots only fly about one quarter of a 24-hour day, making it more likely that a debilitating event will probably occur while not flying.

The argument for providing flight training for TFOs is not based on any documented data. If pilot incapacitation was a problem, the FAA would have more stringent medical requirements and/or require two pilots in every aircraft. When deciding whether to perform emergency flight training for your TFOs, ask if this a problem, what are the benefits, and can you afford it. There is no right or wrong answer.

I hope this helps. Let me know of any occurrences of pilot incapacitation and whether or not they resulted in any accidents or incidents.

HOW LOW IS TOO LOW?

I recently viewed a video of a vehicle pursuit. The suspect finally stopped. There were multiple police helicopters on scene. One hovered only about 100 feet from the suspect's vehicle. A nearby witness stated that ground officers verbally directed the suspect to exit the vehicle. However, the suspect did not respond. As a result, an officer then approached and broke the driver's window to get the suspect out. The suspect had surrendered, so it's likely he could not hear the officers' directions because the helicopters were so close.

Most of us have probably experienced having ground officers ask us to move higher or further away because we were so close the officers could not hear each other. Additionally, having to approach a suspect's vehicle can pose unnecessary and high risk if the suspect is armed.

I received another email about a suspect who threw a rock that struck the helicopter. As a result, the pilot made a precautionary landing to inspect the helicopter for damage. This has happened several times over the years. And, there can be serious consequences if the rock struck the tail rotor or any control surface resulting in loss of control and potential injury to the crew and any nearby ground officers. When the helicopter is so close to the suspect that it can be struck by a rock, it's too close. In addition, when you are that close, the value of the helicopter is minimized. Furthermore, if there are ground units present, they cannot effectively communicate with other officers, the suspect, or the helicopter crew. This is an unnecessary risk and a dangerous practice that should be avoided. You can no longer effectively direct responding ground units when you are too close to the ground, and in the event of an in-flight emergency, you have minimal options to safely land the aircraft. In this occurrence, the helicopter crew just got lucky.

Feel free to share your experiences or opinions by sending your comments to: safety@alea.org.

Remember – Safety First!

Keith Johnson

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