

CALLBACK

From NASA's Aviation Safety Reporting System



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ROTORCRAFT ROUNDUP

We've corralled a few helicopter reports since the last "Roundup" and present them here for the benefit of all hands. While helicopters and fixed wing aircraft may differ in form and function, most of the basic principles of safe operation apply to both. So, no matter what sort of rig you're riding, everyone in the outfit should be able to wrangle a lesson or two from this roundup of ASRS helicopter reports.

PUT YOUR BOOTS ON BEFORE YOU SADDLE UP

Distractions, including a lack of boots, caused this MD-500 Pilot to forget a critical item in gettin' the rig ready.

■ *At the beginning of the shift, I performed the pre-flight inspection of the aircraft and noted that the fuel level was down below 300 pounds and was going to need to be topped off. Normally when an aircraft is left down for fuel, the crew leaving it down is supposed to leave a placard on the instrument panel alerting other crews of the fuel situation. In this case there was no placard left on the panel. Due to the hot weather, I performed the pre-flight inspection in my civilian clothes (shorts and T-shirt). Once I pushed the aircraft out of the hangar, I decided it would be better to fuel the aircraft once I had my flight suit and boots on, in case fuel was spilled while fueling. I left the aircraft without a placard on the panel and went inside to change my clothes.*

Once I changed into my flight suit, I was distracted by administrative details inside the office and forgot to go back out and fuel the aircraft. Approximately one hour later, we took off on a mission and I failed to note the reduced fuel state. I believed that I had a full tank of fuel and I was only planning on flying for one hour. A full tank of fuel will normally allow two hours of flight time with a reserve. About an hour into the flight I noticed a yellow caution light briefly flicker. I pressed the "Test" button and realized the light was the "Low Fuel" caution light. It was indicating below 100 pounds of fuel. Realizing that I had forgotten to fuel the aircraft prior to departure, I turned toward the airport and reduced power, but then I decided to make a precautionary landing in a suitable area rather than risk having a flameout trying to make it back.

Upon noting the low fuel state during pre-flight, I should have immediately put fuel in the aircraft so that it was mission ready. To alleviate this situation in the future, I should always pre-flight the aircraft in the proper clothing so if the aircraft needs to be serviced I will be able to take care of the situation immediately. Another option is I could have left a placard on the panel upon noticing the low fuel state which would have reminded me prior to takeoff that the fuel level was low.

CLOUDS ALONG THE TRAIL

Stumblin' into IMC is often cited as a factor in weather related incidents and accidents. Getting a thorough pre-flight weather briefing along with making contingency plans can go a long way toward easin' the effects of weather. This helicopter wrangler learned just how quickly a change in the weather can result in a change of plans.

■ *The weather [was] clear; visibility 10 miles.... Enroute I noted a broken ceiling at 900-1,000 feet. [At] 1,500 feet I noted extensive cloud/fog cover below on the route of flight [and] I was unable to maintain visual contact with the ground. [I] elected to return to the point of departure.*

Deteriorating conditions were encountered about 40 minutes from the departure airport. I checked weather at [a nearby airport] which showed broken at 1,200 feet. Upon arrival, however, conditions were solid overcast and deteriorating. After conversing with the Tower, I elected to declare an emergency due to my fuel state and the need to descend through the clouds. The helicopter is not IFR equipped and I am not instrument rated. I descended through the clouds, breaking out at about 1,000 feet AGL and landed without further incident.

A TRACON Controller gave the ATC perspective on the same incident.

■ *The airport was reporting a marginal VFR ceiling of 1,000 feet overcast. A helicopter called about 25 miles West of the airport inbound with the ATIS. I vectored him for sequence and...then told him to resume his own navigation to the airport. I called him three times, giving him the location of the airport. He did not answer until the third call*

and he said that he couldn't see the airport because there were some clouds between him and the airport. I told him to maintain VFR and contact the Tower. A couple of minutes later, the Tower called me and advised that the aircraft was an emergency with low fuel and unable to get down. I checked with three other aircraft in my airspace looking for a hole in the clouds, but none were found. The crash crew responded and other traffic was broken off of the approach behind him as he maneuvered down through the clouds.

I had worked the helicopter for about 25 miles. He said that he had the ATIS with the reported overcast layer. He accepted traffic calls and said he was looking for traffic. At no point did he indicate any fuel criticality nor did he mention that he might have any issue descending. Only once did he mention clouds between him and the airport. I assumed this was a small scud deck that he expected not to be an issue. The pilot should have mentioned his concern with the weather much earlier. It goes without saying that the pilot should have checked the weather before getting airborne and taken on sufficient fuel.

A WILD RIDE

Two fella's hitched up an R22, wandered into some weather, went for a wild ride and wound up headin' straight for the ground. Luckily they were able to rein in their helo and set 'er down in a pasture.

■ *My student and I departed...on a cross country flight under VFR conditions...after the fog had cleared. The clouds were high and we could see for miles on end. We flew GPS direct... and [then] the clouds got lower, going from 1,000 feet to 600 feet AGL. There was also some fog near the ground that was thinning. We decided to proceed North...around protected airspace...and then head West towards [an] airport which was reporting better weather. We were able to maintain VFR cloud separation at 300 feet AGL until we reached the northern tip of the protected airspace where we hit some low, dense fog.*

Knowing that there was better weather nearby, my student and I continued onward, flying a gradual descent to stay clear of the clouds. We reached a point at about 200 feet AGL where we could no longer fly any lower due to the terrain and tall trees and decided to turn around and abandon our cross country. As we began the turn, we entered the clouds and inadvertently went into IMC. Since we couldn't see any obstructions around us we decided to also climb back up to 400 feet AGL to avoid hitting anything in the turn. We then became disoriented and soon afterwards

we came out of the clouds with the nose pointed straight down. I recovered from the pushover and landed in a field nearby to assess any damage to the helicopter. Upon finding no appreciable damage, we flew the helicopter directly back to [our home field].

In hindsight we should have abandoned the cross country sooner instead of pushing on into the clouds. Had we decided to land at the intermediate airport or turn around to go back home, we wouldn't have entered the clouds and become disoriented.

HOLD ON TO YOUR HAT, PARDNER!

An EMS helicopter wrangler who felt a mysterious shudderin' in his seat bones, offers a mighty good lesson that applies to all pilots wrestlin' with an in-flight problem— *stay focused and fly the aircraft.*

■ *The medical crew had requested a rooftop shutdown for patient offload and the shutdown was uneventful. I secured and physically checked all doors starting on the left side around to the pilot door on the right side and visually inspected all panel latches during the walk-around inspection. I entered the cabin on the right side (behind the pilot seat) to shutoff cabin lights left on by the medical crew and observed both flight helmets, one located on a forward-facing right seat and the other on the aft-facing left seat. The pilot door remained open during normal startup and was closed after the checklist was completed for repositioning. I observed the DOOR annunciator light go out and executed a normal takeoff. Shortly after transition to forward flight, I noted minor abnormal vibrations with excessive rotor noise. I had already initiated a right turn...and noted the vibrations worsened with increased airspeed. I observed no warnings or indications of a problem. I surmised that the vibrations could possibly be a result of a cabin window left open by the aircrew. I opened the pilot door window in an attempt to equalize pressure. The problem persisted and worsened with continued acceleration. I reduced power and airspeed...and made a normal landing.*

The left cabin door had opened and slid full aft and the flight helmet on the left seat was missing.... The helmet was found close to the departure point where I had initiated the right turn.

If something doesn't feel right, despite the absence of any system or annunciator indication, consider what you feel and what your gut instinct tells you. Be prepared for anything and above all stay focused while you FLY THE AIRCRAFT.

ASRS Alerts Issued in January 2013	
Subject of Alert	No. of Alerts
Aircraft or Aircraft Equipment	2
Airport Facility or Procedure	4
ATC Equipment or Procedure	3
Maintenance Procedure	1
TOTAL	10

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January 2013 Report Intake	
Air Carrier/Air Taxi Pilots	3932
General Aviation Pilots	914
Controllers	762
Cabin	285
Mechanics	124
Dispatcher	79
Military/Other	25
TOTAL	6121