

CALLBACK

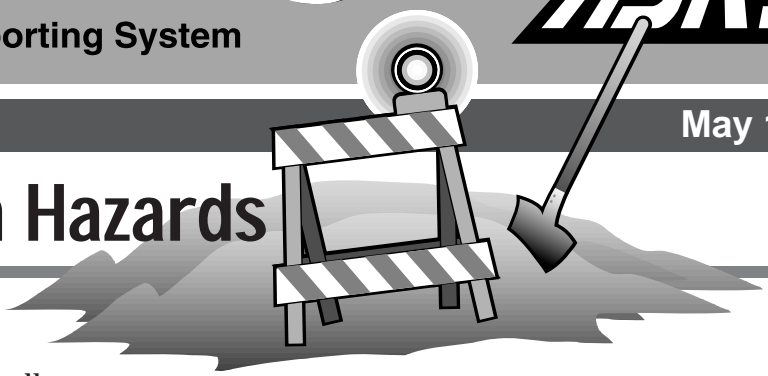
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Airport Construction Hazards



Construction activities at an airport are sure to complicate normal procedures. To maintain safe operations, local controllers must sustain an unusually high degree of vigilance, particularly when dealing with construction equipment in their midst. Some controller reports explain:

■ *ATC currently operates a portable tower due to obstructed views of runways 1/19 caused by the construction. A construction crane was recently erected in front of the portable tower, again causing obstructed views of runways 1/19 and also 14/32. Of primary concern, the view of the intersection of these runways is obstructed. This has caused numerous "close calls," because controllers in this portable tower cannot see aircraft in or near this intersection.*

Construction-related vehicle traffic in aircraft movement areas can also be a major cause of workload, as another controller reports:

■ *Air carrier X was cleared for takeoff. I observed a van, used to shuttle tower personnel in and out, cross the hold-short line at taxiway A. I instructed X to abort his takeoff. Due to the amount of construction, we are forced to [get vehicles across] active runways hundreds of times daily.*

Another problem that surfaces near airport work areas is the temporary signs directing pilots to alternate taxi routes.

■ *Due to extensive construction on the airport, some signs and markings are non-standard. A corporate aircraft passed his turn and crossed the departure end of runway 28. Air carrier Y was not rolling, but had been cleared to do so. I cancelled Y's clearance just prior to its beginning its departure roll.*

On Your Mark... Stop!

Pilots also report problems with airport construction area signage and surface markings. Temporary or painted-over markings may be difficult to see, particularly at night or in wet weather. Or, as in the next report, extraneous objects may be mistaken for markings.

■ *Captain landed 300 feet short of displaced threshold. ATIS out and Tower reported first 1,200 feet displaced due to construction. No displaced threshold markings on runway except light posts and three orange barrels on side of runway to indicate where actual landing zone started. Captain confused an arresting wire and marking across runway as the actual threshold.*

Fortunately, this crew's aircraft incurred no damage. Others did not fare as well with their "short field"

landings: one pilot damaged a flap and the fuel tank on a barricade across the runway.

Another crew apparently was on "mental autopilot" during takeoff, and forgot that the airport construction had caused a change in their usual departure routine.

■ *The published procedure is quite clear: "...turn to a 205° heading within 1 DME of the airport." We blew it and were flying runway heading when Tower had to remind us to make the turn. The reason we failed to execute the maneuver properly was due to the use of runway 25 when we normally operate from runway 21, which was closed for construction. The departure from runway 21 is basically runway heading, and that is what we had in our minds. Rather than having an unusual operation trigger extra study, we pressed on and blew the turn. Another lesson: take more care when operations are different than normal.*

Our reporter's advice applies to everyone operating near an airport construction area—flight crews, controllers, ground crews, and construction crews. ▲

Spring Sprucing Tip

Spring is the time of year when airplane owners think of getting that aircraft spruced up after a long, cold winter in the hangar or out on the ramp. But let the "sprucer" beware:

■ *On final, I attempted to put down the landing gear. The gear appeared to operate normally, but the right main gear light was not illuminated. However, all other indicators that the gear was locked down were functioning normally. I recycled the gear, and also tested the gear-locked horns for proper operation. I advised the Tower of the situation, executed a fly-by, and was advised the gear was down. I made the approach again and set the aircraft down when the right main gear collapsed. Minor damage resulted.*

When the mechanics lifted the aircraft, the gear came right down, but the downlock hook didn't function properly. I had just picked up the aircraft from the paint shop, where they apparently got too much overspray on the gear, resulting in the hook binding.

The reporter suggested that the paint shop be requested to jack up the aircraft and exercise the landing gear several times before releasing the aircraft to the owner. ▲

ASRS Recently Issued Alerts On...

Erroneous stall warning horn on a BE-1900D
DC9-10 cockpit fire caused by an electrical cross-tie relay
MVA terrain clearance issue on an Alaska approach course
Hazardous cleaning agent left in a cabin by a cleaning crew
A broken spring causing a SF340 gear unsafe indicator light

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March 1997 Report Intake

Air Carrier Pilots	1884
General Aviation Pilots	779
Controllers	69
Cabin/Mechanics/Military/Other	42
TOTAL	2774

Low-Level Flight A Growing GA Hazard

Editor's Note: The following article was researched and prepared for CALLBACK by Betty Hicks, an ASRS Consultant and retired head of the Foothill College Aviation Department in Los Altos Hills, California.

Weather-related fatal accidents once topped the light aircraft accident list. However, according to the 1996 Nall report, an annual safety report published by the Aircraft Owners and Pilots Association Flight Safety Foundation, low-level maneuvering has jumped to number one as the cause of fatalities in single-engine fixed-gear aircraft, with 36.1% of fatal accidents. More than half of all maneuvering fatalities occurred during buzzing or other unauthorized aircraft operations.

As every student of Aerodynamics 101 knows, low and slow is one of the most hazardous aerodynamic conditions—the “slow” bringing the aircraft close to stall, and the “low” putting the aircraft and its pilot in an area where recovery is altitudinally limited. In recognition of the low-and-slow flight hazard, FAR 91.119 prohibits operation of an aircraft at an altitude which, in the event of a power failure, does not allow a safe landing without hazard to persons or property on the surface.

Reports submitted to ASRS by general aviation pilots illustrate a broad range of low-level flying incidents, many of them resulting from impromptu, unplanned flights.

Sparsely-Populated Areas

Sectional charts and the *Airport/Facility Directory* depict many, but not all, the hazards associated with low level flight. For example, “sparsely populated” areas may suddenly become populated, as they did for this reporter.

■ *Flying over uninhabited terrain, I suddenly came upon a golf course, with houses and golfers on the course. Before I was able to analyze the situation, I passed low overhead some golfers, maybe within 500 feet. Increased familiarity with locale would have prevented this particular event.*

Recreation Areas

The next reporter was planning ahead—to the next weekend's activities.

■ *I was on my way home from a hunting trip and was expecting friends in a week or so who were bringing their boat. I decided to take a look at the lake as I had never been there. I made two passes over the lake to look at it. I saw one boat on the lake and I was to its side by at least 500 feet. I was not buzzing anyone on the lake.*

Unfortunately for the reporter, a park ranger issued a citation requiring an appearance in U.S. District Court. An ASRS analyst notes that it is important to stay high over recreational areas to avoid restrictions that may be in excess of the FAR minimum requirements. ▲

Favors for Friends

One moral of the next report is always check the PQ (Popularity Quotient) of your passengers before you fly.

■ *My passenger was buying some farm land in the area. We were circling the area at 600-700 feet AGL. She then wanted to fly over her condominium complex. I climbed to maintain at least 500 feet AGL. We circled the complex 7 or 8 times, never flying directly overhead the building.*

Apparently the neighbors knew this woman was flying over the complex; she was not well-liked by her neighbors. They called the police and complained that we were “buzzing” the complex. The area was an uncongested area with corn fields and farm land surrounding the complex.

Our reporter made an arbitrary decision that the corn fields on either side of the condo complex constituted an “uncongested” area. They did not.

Ground Distractions

Distraction by objects or activity on the ground is a common problem in low-altitude flying. The next reporter set the scene for an incident by sight-seeing at only 500 feet AGL, then got caught up in the fun on the ground.

■ *I came upon a softball game taking place. Some of the players were friends of mine, so I reduced power to get closer to see if I could pick them out. I became too focused on the players and failed to realize how low and close to the field I was. Suddenly there was a row of trees ahead of me. I tried to climb...but due to low airspeed, I struck one of the trees. I proceeded directly back to the airstrip...with reduced elevator control.*

This reporter was very lucky. The softball teams were also most fortunate that they didn't have to scrape the airplane off the outfield.

Low Level Missions (Coyote-1; Humans-0)

In our final report, a wily coyote won the day, as the pilot of a predator control aircraft pursued. The co-pilot marksman was having an off day:

■ *We spotted a coyote...made the first pass at it and missed the shot. We circled again to make a second pass. The coyote ran to a wash and down it. This wash had a hill beside it, which hid a tree...*

Any empathetic reader can fill in the balance of the scenario. The airplane struck the tree and damaged its wing, as the unscathed coyote trotted down the dry creek bed. In this case, maintaining obstacle clearance should have been the pilot's highest priority, since the aircraft was operating so close to the ground. ▲