2023 Fly Safe Messages

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MAINTAIN ACCIDENT AWARENESS Don't become a statistic!

NTSB has reported 3 ag accidents so far this year. There has been 1 fatal accident not yet reported by NTSB.

DO NOT FORGET ABOUT WIRES

As we enter April, there are reports that ag aviation operations in the southern part of the country and California are already very busy. No matter where you are and whether your season is well underway or about to pick up, make sure you have a plan in place to prevent wire strike accidents. Controlled flight into terrain (CFIT) was the leading cause of accidents in 2022, accounting for 31% of the total accidents and 22% of the fatal accidents. The most common object struck was wires, accounting for 63% of all the CFIT accidents and half of the fatal CFIT accidents.

Remember the lessons from the 2022-2023 PAASS Program. Do not count on seeing wires. Your vision can fail you when it comes to seeing them so you must treat them as an invisible hazard. Instead, read the structures and hardware to determine the location of all wires in and around a field. Conduct a thorough reconnaissance of the application site and surrounding area to locate all wires and other obstructions and hazards. It's highly recommended you make two complete flights around the area in opposite directions instead of just a single loop. The second flight in the opposite direction will give you a different point a view and a better chance of seeing all the potential hazards.

One critical point is to not forget about the wires you've identified during your reconnaissance flight. Audience polling during the 2022-2023 PAASS season revealed that 68% of attendees who had struck a wire in their career hit wires they were already aware of. Your mind works against you regarding wires. Your brain can only hold about 5 things in short term memory at once, and the next thing that enters your mind forces out the oldest item in short term memory. Since you scout for wires at the beginning of the application, at some point they will be the item that gets dumped from your short-term memory as other application tasks occupy your thoughts. <a href="https://link.nih.gov/link

Check Temporary Flight Restrictions (TFRs)

Always check TFR NOTAMs before flying! Make sure you have proof of a preflight TFR briefing from sources such as FSS or https://www.1800wxbrief.com.

Make a "Fly Safe" Resolution Now!



MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 5 ag accidents including 1 fatal accident so far this year.

DON'T LET DEMANDING CUSTOMERS TAKE YOUR FOCUS OFF SAFETY

This spring has been a wet one so far and that looks to continue as increasing temperatures begin to melt snow in the northern and western parts of the country. The wet ground and delayed start to planting result in a compressed season for growers who must scramble to accomplish their work in less time. This situation can often result in an increased demand for aerial applications. This demand, and the frequently short time frame in which growers want the work completed, quickly leads to stress on ag aviation operations at a time when pilots may not have fully acclimated to the season being back into full gear. All this can be a distraction that can cause you to take your mind off safety.

The pressure can also cause you to take risks you might normally not take. It is critical you stick to your personal minimums. Do not let a customer talk you into taking off in weather you're not comfortable flying in. When it comes to fog, the only truly safe option is avoidance — wait until the weather improves before leaving. Make sure you're completely familiar with all of the crops and sensitive areas surrounding a target field. If you're not sure what an adjacent crop is, verify before you make the application. A drift claim won't hurt a pushy customer, but it will hurt you. Don't compromise on wire and obstacle reconnaissance procedures just because you're in a hurry. This is especially critical if you are asked to spray fields you normally don't treat and are unfamiliar with.

The only load you should be thinking about is the one currently in your hopper. Concentrate on that load and don't worry about work to be done the rest of the day or the week. If job stress from a pressuring customer is distracting you, remember that it's alright to lose work from demanding and difficult customers. Disregarding safety in an attempt to keep that type of customer happy can result in wrecked aircraft, loss of life, and expensive drift claims.

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MAINTAIN ACCIDENT AWARENESS Don't become a statistic!

NTSB has reported 5 ag accidents including 1 fatal accident so far this year.

AVOID ENGINE FUEL SYSTEM CONTAMINATION

NTSB has seen several ag aircraft fuel contamination issues recently. Ag aircraft are subject to numerous situations that could result in contamination to the engine fuel system such as unclean fuel storage facilities, aircraft washing, loading, refueling, and maintenance; and/or operating/storing the aircraft outside in condensation/rain. Contamination could be from a variety of sources such as chemicals, debris from the aircraft and maintenance work, or dirt, dust, microbial growth, rust, sand, and water. Contamination of an engine fuel system could result in either a partial or a complete loss of engine power.

Turbine engine components that could be adversely affected by contamination include the fuel control unit and the fuel nozzles. According to FAA AC 20-43, turbine engine fuel controls and pumps are more sensitive than piston engine fuel systems. Their fuel feed and pumping systems must work harder, tolerances are closer and fuel pressures are higher. Fine contaminates may block fuel supply systems and erode critical parts of engine and fuel control systems. Due to the nature of aerial application work, operators should consider increasing the inspection frequency of turbine engine fuel system components. Always follow the maintenance manual when performing your work. Consult with the airframe, the engine, and the engine accessory manufacturers on any additional service documents regarding the topic of fuel contamination.

Here are additional resources on fuel contamination:

- Air Tractor, Service Letter #148, Fuel Contamination
- Thrush Aircraft, Service Letter SL-AG-127, Aircraft Servicing and Fuel System Best Practices
- Federal Aviation Administration, Advisory 20-43C Aircraft Fuel Control
- Federal Aviation Administration, Advisory 20-125 Water in Aviation Fuels
- National Transportation Safety Board, Safety Alert SA-079 Fuel Providers: Prevent Diesel Exhaust Fluid Jet Fuel Contamination

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Make a "Fly Safe" Resolution Now!



MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 6 ag accidents including 1 fatal accident so far this year.

NEGLECTING MAINTENANCE CAN RESULT IN LOSS OF LIFE THAT IS PREVENTABLE

A review of NTSB accident reports highlights the dangers of neglecting required inspections and maintenance. When inspections are not conducted at all, or if they are not conducted in a timely and proper manner, problems can go undetected. You obviously can't fix a problem if you aren't even aware it exists. Over the last 10 years, mechanical accidents on average account for 29% of all ag accidents and 7% of fatal accidents. Power loss is the most common type of mechanical accident, followed by airframe mechanical. There are mechanical ag accidents that could have been prevented had the inspections and maintenance been timely conducted as recommended.

Make sure you are staying up to date on all service bulletins, service information letters, and airworthiness directives. While manufacturers' service bulletins and information letters are not mandatory for many ag aircraft, these documents are based on known maintenance items with the aircraft and/or its engine and should be followed for the pilot's safety. The manufacturers' service information frequently has TBO and inspection intervals to follow and the timeline to conduct those may be shortened for aircraft used in the ag environment.

After an aircraft or component has had maintenance or overhaul you should be especially vigilant on preflight inspections and run-ups to find any problems. Beware of the dangers of normalization of deviance. Just because you've gotten away with pushing maintenance intervals or ignoring a problem in the past doesn't mean you'll continue to get away with it. The likelihood of a part failing doesn't get reduced just because it didn't fail the last time you flew. Careful maintenance, timely and thorough inspections and following best industry practices can help ensure safety.

Check Temporary Flight Restrictions (TFRs)

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Make a "Fly Safe" Resolution Now!



MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 6 ag accidents including 1 fatal accident so far this year.

EXPECT INCREASED UAV ACTIVITY THIS SEASON – INFORM UAV OPERATORS IN YOUR AREA TO SAFELY OPERATE NEAR AG AIRCRAFT

There were several close encounters with UAV during the 2022 season and there has been a near miss already this season. Expect an increase in UAV activity for agricultural purposes including remote sensing and applications. While manned aircraft continue to have the right-of-way over UAV in all situations, you can't rely on all their operators to be aware of the rules and safety protocols. In an encounter in Arkansas this year, the UAV operator incorrectly assumed the UAV had right-of-way over the ag aircraft because the airplane wasn't equipped with ADS-B.

Reach out to UAV operators in your area and inform them about your ag operations and instruct them on what they need to do in order to avoid colliding with an ag aircraft. While UAVs 55 pounds or less flying under FAR Part 107 are not required to file NOTAMs, you can still encourage their operators to do so. NOTAMs are required under previously granted 333 (now 44807) exemptions. Check NOTAMs to see if UAV will be working in areas where you will be applying. A number of UAVs are equipped with ADS-B In technology so consider installing ADS-B Out so those UAV and ADS-B In-equipped aircraft can detect your aircraft. See NAAA's UAV Safety Campaign for more information you can pass on to UAV operators in your working area.

If you do have an encounter with a drone, follow <u>NAAA's UAV encounter checklist</u>. Step 1, informing local law enforcement, was done in the Arkansas encounter earlier this season. Local police showed up and interviewed both the customer and the drone operator. Having a police report can be beneficial for steps 2 through 4 as it provides an official record of the event from other authorities which lends credibility to reports to FAA. Avoiding a collision with manned aircraft is the responsibility of UAV operators, but you can take an active role in educating them about safety around ag aircraft.

Check Temporary Flight Restrictions (TFRs)

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Make a "Fly Safe" Resolution Now!



MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 8 ag accidents including 1 fatal accident so far this year.

2023 SEASON HELICOPTER AG ACCIDENTS CONTINUE TO BE HIGH

At this point in the 2023 season a high percentage of the ag accidents reported by NTSB involved a helicopter. Recent FAA survey data suggests helicopters represent around 23% of the fleet and account for 20% of the ag hours flown. These fleet percentages are far below the 38% of ag accidents that involved a helicopter so far in 2023. FAA survey data and NTSB accident reports show that from 2012 to 2021, helicopters accounted for 16.8% of the total ag hours flown but 28.4% of the total ag accidents. Helicopter and fixed wing operators should all be cognizant of the dangers involved in ag aviation and keep the focus on safety.

Helicopters can be especially useful when working around wind turbine farms, small fields, and confined areas with numerous obstructions. However, that does not make them immune from these obstructions. In 2022, 55% of the wire strike accidents involved helicopters. No matter what aircraft type you're flying, you must conduct a thorough reconnaissance of the application site and keep those hazards in your mind during the entire application. Don't allow distractions to take your focus off wires and other hazards, and don't let your confidence in the safety of your application platform lull you into a false sense of security.

Helicopters require more maintenance than fixed-wing aircraft and it should not be postponed. When training new ag helicopter pilots, it's imperative to consider the pilot's experience and background. Ensure the pilot is well trained on all situations they may encounter. Gradually increase the difficulty of the fields they are assigned. An inexperienced and poorly trained helicopter pilot is not safe in a wired-up field just because they're in a helicopter. For both helicopter and fixed-wing pilots, there is no substitute for competent mentorship on how to safely make aerial applications.

Check Temporary Flight Restrictions (TFRs)

Always check TFR NOTAMs before flying! Make sure you have proof of a preflight TFR briefing from sources such as FSS or https://www.1800wxbrief.com.



MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 12 ag accidents including 1 fatal accident so far this year.

AVOID MID-AIR COLLISIONS AND AIR STRIP ACCIDENTS – COMMUNICATE, FERRY ABOVE FIVE AND INSTALL ADS-B IN YOUR AG AIRCRAFT

Recently two aircraft collided on a runway when one aircraft was taking off and the other was landing. No matter how busy you are, take the time to do everything necessary to avoid having a mid-air collision or runway incursion. Collision avoidance begins with communication. When working with other operations at a public airport, with your own fleet of aircraft on a private strip, or in a heavily congested area, communicating your intensions to other pilots is essential to avoiding an accident. And remember that no communication is complete without hearing confirmation back that your message was received and acknowledged. If you don't have radios, establish a plan on how to handle traffic at your air strip and stick to it.

It is critical to ferry at a minimum altitude of 500 feet above ground level. This provides a level of clearance between your aircraft and aircraft working in fields below where you are ferrying. It also allows you better visibility to see other aircraft working in the area. Besides the runway incursion, there has been a near miss where an ag aircraft pulled up at the end of the field and almost collided with another ag aircraft ferrying just above tree tops. The only excuse for not being at 500 feet is that the target field is so close to the air strip that you don't have time to get there.

ADS-B In can reduce the likelihood of a mid-air collision by letting other ADS-B In equipped aircraft know where you are at, and letting you know the same. In the near miss described above, the aircraft pulling up was ADS-B In equipped but the one ferrying too low was not equipped with any ADS-B, so neither pilot had advance warning the other was in the area. ADS-B In does not have to be monitored – it can be set to provide an audible warning when another aircraft enters a user defined airspace. ADS-B can notify UAV equipped with ADS-B that you are in the area too.

Check Temporary Flight Restrictions (TFRs)

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Make a "Fly Safe" Resolution Now!



MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 13 ag accidents including 1 fatal accident so far this year.

ENSURE THE CORRECT PRODUCTS FOR THE JOB ARE GOING IN YOUR AIRCRAFT'S HOPPER

Pesticide containers, packaging, and labels frequently look very similar to each other, especially those from the same manufacturer. Colors, emblems, and overall packaging design can look identical except for the names. The differences in names may only be a few letters, but those letters often indicate a pre-mix with another active ingredient. It can be easy to accidentally grab the wrong product when mixing a load. The risk of this occurring is heightened during the busy season when everyone is tired and distracted. This is also when product deliveries are at their highest, and sometimes products arrive in unexpected container types and sizes. A single mixing error on a high value crop has the potential to put an operation out of business.

If possible, separate your application products based on major categories: insecticides, fungicides, herbicides, fertilizers, and adjuvants. If you have a product for a special job or one that you're particularly concerned about, consider storing it in a completely separate building. You can also develop your own color-based marking system. Use a specific color for each type of product, such as red for herbicides. You can mark the products with permanent markers, tape, paint, or stickers. Make sure bulk storage containers are well marked with labels always visible.

Mix-ups can also happen to manufacturers or distributors. Verify each container contains the correct product as you move them into your pesticide storage area. All operation employees should be trained on the type of products applied at the business so everyone can be vigilant for potential mix-ups. No matter how busy you are, double check all pesticides on work orders as you mix them to ensure you're loading the correct products. To be even more safe, have both the pilot and loader double-check and agree on the products from the work order as they are mixed.

Check Temporary Flight Restrictions (TFRs)

Always check TFR NOTAMs before flying! Make sure you have proof of a preflight TFR briefing from sources such as FSS or https://www.1800wxbrief.com.



MAINTAIN ACCIDENT AWARENESS Don't become a statistic!

NTSB has reported 14 ag accidents including 1 fatal accident so far this year.

DON'T RUSH YOUR RECONNAISSANCE – AVOID SITUATIONAL BLINDNESS BY CONDUCTING MULTIPLE SURVEILLANCE FLIGHTS

Agricultural aviators have a daunting list of things they must remain cognizant of during an application. Most critical for safety are the numerous obstructions in and around the target field. Nearby people, vehicular traffic, wind direction, adjacent crops, and nearby sensitive areas all require attention as well. These various concerns can become distractions to each other causing situational blindness – your focus on one thing can cause you to miss or forget something else. Short term memory limitations can further complicate the matter – a newly noticed obstruction or approaching pedestrian may cause you to forget a wire or other hazard you noted earlier.

To combat situational blindness, you need to consciously separate your recon tasks when surveilling the field. This may require making multiple surveillance flights, especially in complex fields with numerous obstructions and adjacent sensitive areas. PAASS recommends a minimum of two recon flights around the field. Make your recon flights in different directions. This allows you to get a different perspective on the site and provides differing light conditions, both of which increase your chances of noticing hidden obstructions.

Additional recon flights may be necessary. If you've left a field for any reason, conduct another survey upon your return. Even a short ferry to and back from the airstrip with an additional load can leave plenty of opportunities for distractions to push the obstructions from your short-term memory, so the additional survey is necessary to refresh it. You should also make an additional survey flight anytime you change the direction of your swath or prior to trimming up a field to verify you haven't forgotten about an obstruction that wasn't a concern with your original swath directions.

Check Temporary Flight Restrictions (TFRs)

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MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 18 ag accidents including 1 fatal accident so far this year. There has been 1 fatal accident not yet reported by NTSB bringing the total to 2 fatal accidents.

SPECIAL JULY 1ST FLY SAFE: JULY IS AG AVIATION'S BUSIEST MONTH FOR HOURS AND ACCIDENTS, BRUSH UP ON YOUR FLY SAFE MESSAGES

July is the month with the greatest pest pressure and hence the busiest time of the year for Agriculture's Air Force to protect U.S. cropland. Unfortunately, it is also the month that accumulates the highest number of ag aviation accidents, including fatal ones. Sadly, earlier this week, with the year's seventh month approaching, we lost our second ag pilot of 2023 when Adam Parnow was fatally injured in an accident in Minnesota.

This July doesn't have to be like all the others. NAAA has a plethora of information to keep safety at the forefront, and it is proven that our continuing education resources reduce ag aviation accidents, in addition to enhancing our environmental professionalism. So tap into our huge inventory of Fly Safe messages that address accident prevention and digest them daily to keep safety at the forefront of your mind and make July an accident-free month.

Check Temporary Flight Restrictions (TFRs)

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Make a "Fly Safe" Resolution Now!



MAINTAIN ACCIDENT AWARENESS Don't become a statistic!

NTSB has reported 18 ag accidents including 1 fatal accident so far this year. There has been 1 fatal accident not yet reported by NTSB bringing the total to 2 fatal accidents.

HAVE YOU FORGOTTEN ABOUT A WIRE?

As we enter July it's important to remember to keep your focus on safety, and particularly avoiding wire strikes. Collisions with wires are a leading cause of ag aviation accidents. Wire strikes are not inevitable though – all accidents are preventable. You must remain vigilant throughout the flight for wires and other obstructions. Wires cannot be seen much of the time and thus must be treated as an invisible hazard. Instead of looking for the wires, you must read structures, hardware, and insulators to forecast a wires location.

Working against you is your short-term memory. As you learned in the 2022-2023 PAASS Program and have read in prior Fly Safes (we're repeating in case you forgot), the human brain can only hold about 5 to 9 thoughts in short-term memory at once. Once a new thought enters your brain, the oldest thought in your short-term memory gets pushed out to make room for the new thought. You recon your field before you begin the application which means the wires are at the front of your short-term memory. As you treat the field, other tasks and concerns enter your short-term memory. When you notice a car approaching on the road adjacent to your target field after you've made multiple passes, it's very possible that car can replace a wire in your short-term memory.

You may be reading this and scoffing at the idea that you could ever forget about a wire. But the statistics prove it happens and that experience offers no immunity. Of the 2022-2023 PAASS attendees who had a wire strike during their career, 68% indicated they were aware of the wire they hit. Of those who hit a wire, 12% did so with more than 10 years of experience; 41% had between 3 and 10 years of experience. Your life depends on you not forgetting about a wire. Sing a wire song, come up with a catchy phrase, or just mutter "wires" to yourself the whole time you are making an application. Whatever you do, don't forget about a wire.

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MAINTAIN ACCIDENT AWARENESS Don't become a statistic!

NTSB has reported 20 ag accidents including 2 fatal accidents so far this year.

BEWARE OF SMALL-SCALE WEATHER EVENTS SUCH AS DUST DEVILS OR RAPIDLY DEVELOPING THUNDERSTORMS

The NTSB recently investigated an accident where a turbine-powered Grumman G-164B Ag Cat flew through a dust devil (also called a whirlwind) shortly after takeoff from a remote airstrip. The airplane lost lift, impacted terrain, and came to rest inverted in a field. The pilot was not injured, but the airplane sustained substantial damage.

The National Weather Service defines a dust devil as "a small but vigorous atmospheric circulation, created when highly unstable, superheated, dry air near the ground breaks through the boundary layer and shoots upward." Dust devils have a typical lifetime of a few minutes, they can be several yards in diameter, and they can be several hundred feet in height. Sometimes dust devils are visible, as they might contain dirt and debris from the ground. They typically form on hot and sunny afternoons when it's dry.

Rapidly developing scattered and isolated thunderstorms can also threaten ag aviators. These smaller scale storms can appear suddenly and catch unsuspecting ag aviators by surprise. As with any type of thunderstorm, they can produce heavy rain and high winds, both of which threaten aerial applicators caught in them. The rain can be sporadic, brief, and very heavy, causing a sudden and dramatic reduction in visibility. Always check the weather before you fly and throughout the day for any potential adverse weather that could affect your work. Keep in mind that the closest weather reporting station could be a good distance away from the remote area that you are working in.

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MAINTAIN ACCIDENT AWARENESS Don't become a statistic!

NTSB has reported 21 ag accidents including 2 fatal accidents so far this year.

NAP TIME < ACCIDENT DOWN TIME

As the season progresses, fatigue becomes a growing issue. Long days strung together with no time off and no break in sight combined with the stress of demanding customers and being behind on acres results in fatigued pilots and other crew members. Fatigue causes a loss of concentration, slower reactionary times, and poor decision making, all of which increase the likelihood of an accident. The NTSB has identified fatigue as a contributing factor in numerous ag accidents. Factors that contribute to fatigue include length and quality of your last rest period, time on duty, disruption of your circadian rhythm, workload, stress, and your overall health.

Luckily there is an easy solution for fatigue – sleep. In fact, sleep is the only thing that can reverse fatigue. Sufficient sleep is critical for proper brain functioning – your brain completes a series of necessary functions while you sleep. Stimulants such as caffeine only provide temporary relief from fatigue, but they don't reverse a sleep deficit. See NAAA's Combatting Fatigue in Ag Aviation brochure for more information on signs of fatigue and how to avoid it. The hard part is finding time for sleep and convincing yourself that it's alright to get some rest despite how busy you are.

If you're fighting the urge to take a break for sleep because of how busy you are, consider this example. A 30-minute nap during the day in your busy season will cost you approximately 100 acres of spraying. But let's say you fight the urge to sleep and decide to push through the rest of your day. You struggle to focus while spraying a difficult field and fail to avoid a power line, flying right through it and striking the prop. As a result, you need to have the engine inspected for damage, which requires your aircraft to be out of commission for 5 days, resulting in an estimated loss of about 10,000 acres. If your engine or prop requires significant repair or replacement, you might likely be looking at that aircraft being out of commission for the rest of the season. So, ask yourself if you'd rather miss 100 acres or 10,000 acres. If you can't decide, it's time for a nap.

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Make a "Fly Safe" Resolution Now!



MAINTAIN ACCIDENT AWARENESS Don't become a statistic!

NTSB has reported 24 ag accidents including 2 fatal accidents so far this year.

FOG OR FIRES – AVOID INADVERTENT INSTRUMENT METEOROLOGICAL CONDITIONS NO MATTER THE CAUSE

Pressure to get work done can lead pilots to make decisions that compromise their personal minimums and reduce safety margins. Taking off for a job before foggy weather has fully cleared up is unfortunately a common example of this behavior. Smoke from Canadian wildfires has also become a serious visibility concern this season as large-scale weather patterns move the smoke from Canada down to the Midwest, southeast, and east coast in the U.S. Whether it's fog or smoke, flying into a situation where you lose visibility is called inadvertent instrument meteorological conditions (IIMC) and should be completely avoided by waiting until conditions for flying have improved.

Use every forecasting tool available to you to determine if it's safe for you to fly. The Helicopter Emergency Medical Services (HEMS) Weather Tool is designed to provide weather information specifically for short distance and low-altitude flights. Fire and smoke information can be found on the AirNow Fire and Smoke Map. Set your personal minimums and don't ever deviate from them, no matter how much pressure is placed on you to fly. For the helicopter air ambulance (HAA) industry, the weather minimums for dispatch are 2 miles of visibility and an 800-foot ceiling. Keep in mind these minimums are for instrument rated pilots flying an aircraft with the proper instruments.

Also important are en route decision triggers – a predetermined set of flight conditions to prevent you from continuing a flight into IMC. If you go IIMC without the correct instruments, most critical being an attitude indicator, and proficiency with them, you will not be able to maintain control of your aircraft. Once you lose visibility, visual and vestibular illusions quickly cause spatial disorientation. Studies have put the time before you have an accident at between 56 and 178 seconds. For ag aviation, IIMC accidents are fatal 92% of the time.

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Make a "Fly Safe" Resolution Now!



MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 27 ag accidents including 2 fatal accidents so far this year. NTSB hasn't reported on 1 recent fatality, making the total 3 fatal accidents.

IF YOU BELIEVE RECKLESS ENDANGERMENT OF YOURSELF AND THE PUBLIC IS PART OF AG AVIATION, DON'T TAKE THE INDUSTRY DOWN WITH YOU-FIND A NEW CAREER!

Last week video surfaced on social media of an ag aircraft flying dangerously close to a semi-truck on an interstate. The video shows reckless flying and willful endangerment of the public. The original video, posted on a **public page**, has been shared over 16,000 times and has over 3,000 comments. These comments are not from fellow ag aviators – they are from the public at large, many of whom express outrage over the pilot's behavior. Specific comments include a suggestion that drones take over crop dusting to improve safety and numerous ones stating that the pilot should be turned into the FAA. The video made the news on six TV stations and thirteen radio stations. Media has confirmed the FAA is investigating the incident.

The incident should also serve as a reminder to all ag aviators that the public is watching and recording. If you fly like the pilot in this video, sooner or later someone is going to record you and make you infamous. Last season, after a string of fatal accidents in July, the FAA Administrator's office began asking questions in earnest about the safety culture of ag aviation. NAAA had to divert from advocating to the EPA for registering pesticides' availability for aerial use and divert advocating to the FAA for drone and tower safety assurances for manned aircraft to explain to them that the public and ag pilots' flight safety is of paramount importance to our industry.

The video of the truck buzzing tells the FAA and the public the exact opposite – it's a demonstration of a complete lack of concern for the safety of the public and the pilot. Behavior like this results in investigations, more regulations, and a potential dismissal of our safety concerns. How can we be taken seriously on matters of safety if regulators and policy makers think this video demonstrates common behavior? If you think such flying behavior captured on this video or similar antics is just a fun part of ag flying, please cease this behavior immediately or find another occupation outside of agricultural aviation. Such risk to the public threatens the existence of the ag aviation industry and the farmers, foresters and others that rely on us.

Check Temporary Flight Restrictions (TFRs)

Always check TFR NOTAMs before flying! Make sure you have proof of a preflight TFR briefing from sources such as FSS or https://www.1800wxbrief.com.

Make a "Fly Safe" Resolution Now!



MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 30 ag accidents including 3 fatal accidents so far this year. There have been 2 fatal accidents not yet reported by NTSB bringing the total to 5 fatal accidents.

NUMEROUS WIRE STRIKE AND HELICOPTER ACCIDENTS INCLUDING TWO FATALITIES IN JULY

While NTSB has not finished investigating all 2023 accidents, July once again saw an uptick in ag accidents. Initial reports suggest that 70% of the July accidents reported by NTSB were likely wire strike accidents. Furthermore, 80% of the July accidents involved helicopters. Recent FAA survey data suggests helicopters represent around 23% of the fleet and account for 20% of the ag hours flown. Of the seven wire strike accidents in July, six involved helicopters. Two recent helicopter accidents were fatal. At least one of those fatalities was a wire strike, and at this point it appears the other was as well. In at least one of those accidents, it appears the pilot struck a wire they were aware of, having flown over it several times before the accident. There was also a fatal wire strike accident involving a fixed-wing aircraft in July.

No matter how busy you are, take the time to properly scout every field thoroughly for wires and other obstructions. Most importantly, do not allow yourself to become distracted and forget about wires. If you're an operator, pay close attention to the experience, number of distractions, and fatigue level of your pilots. Do not push them to treat fields with numerous obstructions they're not ready for and try to limit the distractions they are exposed to while they are flying.

For helicopter pilots, remember that just because you can get close to wires and other obstructions doesn't always mean you should. If a customer asks you to spray a field that you aren't comfortable with because of wires, other obstructions, or even an adjacent sensitive sight that would demand a great deal of your attention during an application, say no or consider incorporating a drone into your operation to do tight work. No job or customer is worth your life. If you survive, you will still be out of an aircraft until you can repair or replace the one damaged in the accident. Which will be more costly – turning down one field or losing an aircraft for the rest of the season? Look for and remember wires every flight, no matter how busy you are.

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MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 35 ag accidents including 5 fatal accidents so far this year. There have been 2 fatal accidents not yet reported by NTSB bringing the total to 7 fatal accidents.

THE PUBLIC IS WATCHING YOU - OPERATE IN A PROFESSIONAL MANNER AT ALL TIMES

An aerial application made the news in July when accusations were made that an ag aircraft dropped a fungicide near a camp. The reporting on the incident was confusing; the initial report said the aircraft exploded, then that 72 people were exposed to pesticides, and finally an official said they found no exposures to anyone of the pesticide the aerial applicator was applying. It's likely the application was done professionally and was 100% on-target, but a single person started a chain reaction of bad publicity by calling a routine aerial application an emergency. It's a reminder the public is always watching – while you can't prevent someone from overreacting, you can ensure all your applications are made in a professional manner.

As mentioned in last week's <u>Fly Safe</u>, there has been a recent surge in helicopter ag accidents, the majority being wire strikes. This dramatic increase in helicopter accidents has caught the attention of both national aviation associations and the FAA, who noted that 52% of the helicopter accidents in July and were due to ag helicopter accidents. These ag helicopter accidents exceed those of the past 5 years. Remember – do not get into tight areas you can't safely get out of – both for your safety and the reputation of the industry. Accident numbers like these can lead to more regulations.

There have been safety and environmental concerns raised this season from public airports with agricultural aircraft wanting to work off them as well as county sheriffs questioning the legality of helicopter load trucks blocking county roads while treating a nearby field. Be sure to check all local rules and regulations before operating on any public place, be it airport or road. Keep areas clean and do everything possible to ensure the safety of the general public. The public is constantly watching, they all have video cameras, and they know how to contact local, state and federal regulators, and the media. Remember, play the long game. Always be professional. Don't just think about business in the moment, but for years and generations to come.

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MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 40 ag accidents including 6 fatal accidents so far this year. There has been 1 fatal accident not yet reported by NTSB bringing the total to 7 fatal accidents.

COVER CROPS PRESENT A POSITIVE IMAGE FOR THE AG AVIATION INDUSTRY – ENSURE ACCURATE APPLICATIONS TO MAXIMIZE BENEFIT TO ALL

There are already reports of ag aircraft seeding cover crops in some parts of the country. Aerial cover crop seeding is a great opportunity to present a positive image of ag aviation to the public by highlighting how the industry plays a positive role in protecting the environment. The cover crops seeded by aerial applicators sequester 1.9 million metric tons of CO₂ equivalent annually, which would be the equivalent of removing approximately 412,000 cars with carbon-combustion engines from the roads each year. Cover crops also reduce soil erosion, hold valuable nutrients in place for next season's crop, and help suppress weeds.

The public can easily understand and appreciate the environmental benefits of cover crops, and while cover crops can be seeded by ground, it's obviously a task best suited for aircraft. This creates a great opportunity for the ag aviation industry to show the public a side of the industry they can support and that counters negative portrayals in the media. There are several recent examples of how cover crop seeding is improving our industry's reputation. An Illinois Farm Bureau <u>article</u> touts the benefits of aerially seeded cover crops, and a <u>podcast</u> provides a growers perspective on the best management practices for seeding cover crops by air.

To maximize the benefits of cover crops for the grower, the public, and our industry, make sure your cover crop seeding is done accurately and uniformly. A cover crop stand that is poorly formed can lead to a disgruntled customer and a negative example for other growers who might be considering aerial seeding. If farmers turn away from aerial cover crop seeding because of poor results, we can't take credit for work we're not doing. For information on applying cover crops accurately, you can view the <u>cover crops presentation</u> from the 2017 NAAA Ag Aviation Expo.

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MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 45 ag accidents including 7 fatal accidents so far this year.

COMPLACENCY AND HIGH TEMPERATURES CAN END YOUR SEASON WITH AN ACCIDENT

If you allow yourself to become complacent because the end of the year is in sight, you can quickly find yourself in an accident. It's not just the end of the season that can lead to complacency either. There are numerous times in your ag career when the risk of becoming complacent increases. Once you have a certain number of ag hours or seasons under your belt, you may feel like you're now experienced enough to relax. Even the end of a long day can cause you to let your guard down when you're on your last load.

Complacency is influenced by things that one would normally think would reduce the risk of an accident, not increase it. These include experience, knowledge, and training. While these normally increase your skills and reduce your risk of making a mistake, they can lead to complacency if you allow them to provide a false sense of security and safety. No matter what your experience level is or how busy you are, you must stay vigilant, avoid complacency, stick to your personal safety minimums, and focus on the task at hand.

This summer has seen several heat waves bringing dangerously hot weather to many parts of the country. These high temperatures can result in heat exhaustion. If you're already fatigued, the results can be disastrous. The risk of heat exhaustion increases with high humidity levels and when you're involved in strenuous activities. The heat also impacts how your aircraft flies – an increase in temperatures causes an increase in density altitude. This increases the distance needed to takeoff safely with a load and the performance of the aircraft in flight. Know how to calculate density altitude and make sure you track it throughout the course of the day as temperature increases. Stay cool, rested, and maintain a high level of alertness all the way to the end of your season.

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Make a "Fly Safe" Resolution Now!



MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 53 ag accidents including 10 fatal accidents so far this year. NTSB hasn't reported on 1 recent fatality, making the total 11 fatal accidents.

MAKE SURE YOUR OPERATION IS SECURE – FBI-DHS ANNOUNCES HAMAS-ISRAEL WAR HAS INCREASED THREAT OF TERRORIST ATTACKS ON U.S. SOIL

Last week the Department of Homeland Security (DHS) and Federal Bureau of Investigation (FBI) released a public service announcement to highlight potential terrorist threats in the United States in response to the war in the Middle East. While the level of skill required to operate an agricultural aircraft makes it unlikely that it would be used by terrorists, the aerial application industry must nevertheless remain alert to any and all potential threats. Hostile actors may be interested in large quantities of fuel or chemicals instead of aircraft.

There are numerous ways to increase the security at your operation. A common and effective solution used by many operators is a video camera system. You can customize the number and location of the cameras, monitor them via the internet, and record footage. Many have the ability to alert you should they detect movement. Don't forget the simple things either, such as locking all building and vehicle doors and securing your chemicals and fuel. See NAAA's Ag Aviation Security webpage for more information, including the Airfield Watch Brochure and an article on hidden cutoff switches.

Don't be complacent with security procedures at your ag operation. After years of no terrorist attacks on U.S. soil and if you've never had someone commit theft or vandalism at your operation, it's easy to let your guard down. Don't! You may think that because your operation is in a very rural area that there's no possible way someone would consider your site. But maybe that's exactly why they might chose your operation. Remain vigilant at all times.

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