2022 Fly Safe Messages

4 April 2022	PLAN FOR SAFETY AND SUCCESS
18 April 2022	START SAFE AND AVOID WIRES
2 May 2022	PILOTS: CHOOSE AN OPERATOR WHO VALUES SAFETY, LISTEN TO THEM, AND LIVE
16 May 2022	HIGH NUMBER OF HELICOPTER ACCIDENTS IN 2022, DON'T GET INTO A TIGHT SPOT IN ANY AIRCRAFT!
30 May 2022	BE AWARE OF TURBINE ENGINE POWER LAG WHEN OPERATING TURBINE POWERED AG AIRCRAFT
6 June 2022	BE A PROFESSIONAL AERIAL APPLICATOR
13 June 2022	WEARING A HELMET CAN SAVE YOUR LIFE AND REDUCE THE SEVERITY OF A CONCUSSION
20 June 2022	DO NOT RISK YOUR LIFE, AIRCRAFT, CAREER, AND THE INDUSTRY JUST TO BUZZ SOMEONE
27 June 2022	THE COWS DON'T CARE HOW FAST YOU CAN TURN YOUR AIRCRAFT
4 July 2022	WIRE YOUR BRAIN FOR WIRES!
11 July 2022	KEEP SAFETY AND ACCURACY IN MIND DURING CORN APPLICATION SEASON
18 July 2022	STAY HEALTHY AND RESTED TO AVOID FATIGUE AND OPTIMIZE YOUR PERFORMANCE
25 July 2022	DON'T GET DISTRACTED FROM SAFETY
1 August 2022	AFTER YOU'VE HAD AN ACCIDENT
8 August 2022	AVOIDING MID-AIR COLLISIONS
15 August 2022	HIGH NUMBER OF FATAL AG ACCIDENTS HAS GAINED THE ATTENTION OF FAA AND THE PRESS
22 August 2022	KEEP YOUR HEAD IN THE GAME FOR THE HOMESTRETCH. IT'S NOT OVER UNTIL IT'S OVER.
29 August 2022	FINISH SEASON SAFE AND MAKE ACCURATE APPLICATIONS OF COVER CROPS

April 4, 2022

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 2 ag accidents including 1 fatal accident so far this year.

PLAN FOR SAFETY AND SUCCESS

As the season picks up, planning needs to be completed now before the busy part arrives. Customer pressure, getting behind on your workload, and weather setbacks may lead to decisions that focus on just getting the job done rather than safety. Work with your customers now to finalize plans for their application needs. With commodity prices high, aerial applications are expected to be in great demand, but the ongoing supply chain crisis may make it difficult to acquire products. Stress to your customers that you need to know now how many acres they intend to treat to ensure you have sufficient product and enough aircraft and pilots. Organize bringing in help now if it looks like you will have an uptick in work this season. Conversely, if your area is suffering from drought, check now to see if out-of-area operators may need your assistance. Use the NAAA membership directory to find operators in other regions who need or can send pilots or aircraft. Taking care of this now will eliminate stress in the thick of the season when you need all your focus.

Set your personal minimums now and cement them into your flying procedures. As discussed in PAASS this winter, the key to preventing many accidents is avoidance, and setting personal minimums is the key to avoidance. If you become tempted later to alter your minimums because of work pressure, consider how productive an injured pilot and damaged aircraft aren't.

Also talk to your customers about spray additives they expect to use. While adjuvants and foliar fertilizers can increase efficacy and productivity of an application, they can also create situations that need to be considered when planning. Some oils can hang in the air and coat the windshield in subsequent passes. Others can cause foaming and other tank mixing issues. Fertilizers are denser than water, so a load with fertilizer as a partial carrier weighs more than the same load with only water. This must be accounted for when determining a safe take-off weight. Planning increases safety because stress and last-minute business decisions are reduced. Plan now and plan for safety.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

April 18, 2022

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 4 ag accidents including 1 fatal accident so far this year.

START SAFE AND AVOID WIRES

Ag flying operations will soon be increasing in many areas throughout the country. As your application season gears up, be aware that early in the season you are reacquainting yourself with your aircraft and flying environment. No matter how many hours you have flying ag aircraft, time off during the winter, even if it's a short time, means you might be a bit rusty with certain skills and procedures. New aircraft or technology updates in the cockpit, such as a new GPS unit, can further confound your ability to get back to your peak performance. Over the prior 10 seasons, 29% of the total accidents and 33% of the fatal accidents have occurred in the months of January through May. Use caution and think safety as your flying increases.

Always be on alert for obstacles. Last year, there were 20 controlled flight into terrain (CFIT) accidents, accounting for 36% of all ag accidents. Of those 20 CFIT accidents, 14 were wire strikes. Seven of the 12 fatal accidents in 2021 were wire strikes. For each application mission, it is imperative you devote sufficient effort to scouting for wires and other obstructions. You must maintain your awareness of wires throughout all phases of your flight including reconnaissance, entry into the field, applying in the field, and departing the field. Given the limitations of short-term memory and the numerous things requiring your attention during aerial applications, it can be easy to forget about wires in a field. In fact, a preliminary analysis of wire strike accidents from 2017 to 2021 suggests roughly half of pilots involved in wire strikes were aware of the wires they struck. Always keep wires in your thoughts.

To assist you with keeping the wires and other obstructions at the forefront in your mind, make every other thought that goes through your head about the wires. It is best to speak your reminder about the wires or other obstructions out loud to yourself. While this may seem silly, science has shown that speaking something out loud forces your brain to slow down, thus allowing you to spend more time focused on that thought. You may not see the wire anymore but saying "Wire!" will help you remember it's there.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

May 2, 2022

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

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

PILOTS: CHOOSE AN OPERATOR WHO VALUES SAFETY, LISTEN TO THEM, AND LIVE

When you find an operator who is focused on bringing you into the industry safety, **LISTEN TO THEM!** If they tell you you're done for the day, then you're done for the day. It doesn't matter if it's only noon and there's work left. If they keep you in a smaller and slower aircraft when you think you can handle something larger and faster, remember they have a good reason to not move you up – your life. PAASS realizes this season is expected to be busy and pilots are in short supply. This is no excuse to circumvent safety.

Operators, the future of our industry, and your business, is entirely dependent on bringing in new pilots safely and professionally. Monitor all of your pilots, but especially the new ones, for fatigue. Give them easier fields to begin with as they learn to fly ag. Point out known safety hazards when you assign them the work. Never assume they know something, even if you think it's obvious. If they have concerns about weather, don't push them. Work with them on developing personal minimums that will keep them safe. Work them into larger and faster aircraft at a pace they can handle. This might not be the same pace your operation needs to meet customer demands, but a bent aircraft and injured pilot can't get any work done. In a busy season it's easy to focus on getting work done, but seasons are a long-term game so play it safely to stay in it for the long term. Our industry, along with agriculture in general has a good economic outlook—if we stay healthy, safe and wise.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

May 16, 2022

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 7 ag accidents including 1 fatal accident so far this year.

HIGH NUMBER OF HELICOPTER ACCIDENTS IN 2022, DON'T GET INTO A TIGHT SPOT IN ANY AIRCRAFT!

Of the seven ag accidents reported by the NTSB for 2022, six involve helicopters. The single fatal accident for 2022 was a helicopter. That's 86% of the total ag accidents and 100% of the fatal ag accidents. The 2019 NAAA survey shows helicopters make up 16% of the ag fleet in the U.S. while the 2020 FAA GA survey shows helicopters are 22% of the fleet. No matter what type of aircraft you fly, please heed this and all other Fly Safes as we must always re-commit ourselves to safety.

All the NTSB reports on these accidents are preliminary with very few details and which could change. Two appear to be from hard landings, one involving autorotation. Two are completely unknown at this point; one of those was fatal. One was loss of control in a turn, and another a power line strike. In 2021 there were 22 total helicopter accidents (39% of the total ag accidents) and 4 fatal helicopter accidents (33% of fatal ag accidents). Of the 22 helicopter accidents, 10 were wire strikes. All four of the fatal helicopter accidents were wire strikes. No matter what you're flying, thoroughly scout your fields for wires and other obstructions and don't forget about them once you start your application. While the performance of a helicopter may tempt you to get close to obstacles to treat every part of a customer's field, do not let this temptation lead you into an accident. Maintain a safe distance from all obstacles.

Helicopters require additional routine maintenance – do not put repairs off no matter how busy you are. Proper mentoring is also critical for safety. If you're a helicopter pilot new to the aerial application industry, make sure you find an operator who will mentor you properly and bring you safely into the industry. Start with light loads on open, easy fields and gradually increase the difficulty of working around obstructions. Helicopter pilots must maintain a safe speed in a turn and not do pedal turns. Ag helicopter pilots must also understand the "height velocity curve" to survive an engine failure. There is little to no ferry time and helicopters need to be flown every second, so fatigue can be an issue. Make sure someone is monitoring how tired you are and try to stay well rested, hydrated, and nourished.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

May 30, 2022

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 9 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.

BE AWARE OF TURBINE ENGINE POWER LAG WHEN OPERATING TURBINE POWERED AG AIRCRAFT

As reported by the NTSB, a contributing factor to a 2020 ag accident was the pilot not recognizing the power lag associated with his turbine engine would fail to provide him with immediate power when he called for it. The airplane had touched down when the pilot saw what he thought was going to be a runway incursion. The pilot applied full power but due to the power lag from his turbine engine, he realized he would not have time to perform a go-around. He then reduced power but was unsuccessful at stopping the airplane before he struck the perimeter fence.

The power output of a free (sometimes called split-shaft) turbine engine lags for several seconds after the pilot moves the power from flight idle to a higher power setting. A free turbine engine has two separate counter-rotating turbines; one drives the compressor and the other drives the propeller. The lag occurs because the compressor and power turbine shafts are not connected and turn independently of each other. An increase in rpm of the compressor shaft will not immediately cause an increase in the power turbine shaft. The majority of turbine engines used in ag aircraft are free turbine engines.

When conducting aerial applications, keep this power lag in mind. Do not put yourself in a situation where you will be required to depend on the immediate availability of additional power. This is especially a concern for pilots who are transitioning from a piston ag aircraft to a turbine, as they will be accustomed to an immediate response when they increase power. Ag pilots flying free turbine powered aircraft need to anticipate and lead power changes and remember that the last 30% of the engine's rpm represents the majority of the thrust from the engine. Below that last 30%, application of power does not have much effect. Do not allow yourself to get behind the power curve.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

June 6, 2022

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 10 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.

BE A PROFESSIONAL AERIAL APPLICATOR

Making accurate and safe applications benefits your customers, you, and the aerial application industry. Your customers have hired you to provide pest control for their crops, and they rightfully expect a quality job. Adjacent growers and neighbors expect your application to stay on target. With UAS becoming commonplace, it is now easy for famers to collect remotely sensed images to examine their crops for potential issues, including streaking from applications.

There were reports of streaking last season, particularly from fungicide applications on corn to treat tar spot. There are numerous reasons an application can streak. Pattern test your aircraft at an Operation S.A.F.E. fly-in to verify you have a uniform pattern and to identify your optimum swath width. Height is also critical - if you fly at a height of 15 feet at the fly-in, you cannot expect to achieve the same swath width in a field if you're flying with wheels in the tassels. Flying higher gives the pattern more room to spread out, so flying too low can shorten it compared to what it was at a fly-in. Test your pattern at the same height you spray at. Spraying during very calm conditions also has the potential to narrow your swath slightly, so use caution if you must spray when there's little wind.

The EPA and state regulatory agencies are always monitoring our industry. Agricultural aircraft are highly visible, and the N-number makes it easy for the public to identify the operator. In today's world of heightened fear of pesticides and other modern agricultural practices, it's very possible to have a complaint filed against you even if you did everything correctly. Keep good records and be up front with inspectors, no matter how frustrated you get. Even if they can't violate you on the original complaint, they can go through your records and statements to find some other infraction they can use to justify filing a complaint. Maintain membership in NAAA and state associations and document participation in PAASS and S.A.F.E. Spray safe and fly safe.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

June 13, 2022

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 13 ag accidents including 2 fatal accidents so far this year.

WEARING A HELMET CAN SAVE YOUR LIFE AND REDUCE THE SEVERITY OF A CONCUSSION

Reports are once again coming in that many ag aviators are not wearing helmets. While no safety device can completely guarantee your survival in an accident, wearing a helmet increases your chances. The trend of not wearing a helmet while working has even been seen with experienced ag pilots. The demand for bringing new pilots into the industry means it's even more imperative for experienced pilots to be setting good safety standards.

While a helmet cannot always prevent a concussion, it does reduce the severity of a concussion and can prevent more traumatic brain injuries. Your brain "floats" within fluid inside your skull. When your head hits something, it decelerates more rapidly than your brain floating within it. This causes your brain to smash into your skull, injuring it. A helmet works by reducing your head's deceleration rate, thus lowering the force of impact when your brain collides with your skull. A study of 97 fatal aviation accidents that occurred in Alaska from 2004 to 2009 concluded that 33 lives could have been saved by the use of a helmet. A study of U.S. Army helicopter accidents from 1972 to 1988 found that not wearing a helmet increased the risk of sustaining a fatal head injury in a crash by 6.3 times.

Reasons cited by ag aviators as to why they don't like to wear helmets include the additional weight, not comfortable, and reduced head movement. Modern aviation helmets virtually eliminate these arguments. They are light weight and comfortable while still providing maximum effectiveness. Please take every precaution you can to prevent an accident. In addition, take advantage of every safety device available to protect you in the event you are involved in an accident. This includes wearing a helmet and ensuring that the chin strap is properly affixed; wearing a fire-resistant flight suit; and strapping in with both a seat belt and shoulder harness. You may have reasons why you don't want to wear a helmet, but how does your family feel about you not doing everything you can to protect yourself? Fly safe and put your helmet on.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

June 20, 2022

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 13 ag accidents including 2 fatal accidents so far this year.

DO NOT RISK YOUR LIFE, AIRCRAFT, CAREER, AND THE INDUSTRY JUST TO BUZZ SOMEONE

In 2019, an ag aviator ferrying back after completing his application mission decided to buzz his friend, who was working on a wind turbine near his return flight path. He incorrectly identified someone else as his friend and buzzed this technician, who happened to be holding a rope to stabilize a blade during maintenance. The aircraft's right wing struck the rope, throwing the technician through the air and breaking his leg and back.

The fallout from this incident led the American Clean Power Association (ACPA) to contact NAAA to complain about the accident and look for ways to prevent it from happening again. They notified NAAA that they were considering pursuing regulatory action aimed at preventing all aerial applications within and nearby wind farms. NAAA explained that this was one errant pilot who was not acting safely, professionally, or within industry guidelines and that we would continue to remind ag aviators about safety concerns related to flying in and around wind farms. The incident was a stark reminder of the PAASS motto: "Upon the Performance of Each Rests the Fate of All." One reckless act by a single pilot almost resulted in new regulations for the entire ag aviation industry.

There is absolutely no reason to buzz anyone or anything. Every aerial application is a focused mission – deliver the product uniformly and safely on the target crop, forest, or pest. Every action you take in the cockpit should undeterredly hone in on that mission. Buzzing or any other type of reckless flying not required for the mission can only result in negative consequences – a wrecked aircraft, injuries or death for yourself or a bystander, and complaints that can lead to additional regulations. Your mission is focused on controlling the targeted pest. Fly smart, fly safe, fly the application mission.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

June 27, 2022

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 15 ag accidents including 2 fatal accidents so far this year.

THE COWS DON'T CARE HOW FAST YOU CAN TURN YOUR AIRCRAFT

Turning an ag aircraft safely, whether it is a fixed wing or helicopter, is one of the most important things you can do to return home safely every day. Some ag pilots think that how fast they turn an aircraft is a testament to how skilled a pilot they are and that they need to show this off to the world even if no one is watching. A pilot can be especially tempted, however, to turn the aircraft a little faster when they notice someone is watching. To a casual observer though, ag flying looks very impressive without putting any extra effort into turning hard – there's no reason to put on a special show. Your customers are paying for a safe, quality, on-target application, so you can prove flying skills by delivering just that.

For the prior 10 ag seasons, stalls have accounted for an average of 5% of the total accidents and an average of 17% of all fatal accidents. Experience is not a predictor of or protector from having a stall accident – of the four fatal stall accidents in 2020, one of the pilots only had 315 hours total time, but another had 17,500 hours total time and 9,474 hours in the type of aircraft involved in the accident. Many stall spin accidents occur when the aircraft has most of the load off, not when it's fully loaded as you might expect. Pilots might get complacent with a lighter aircraft, or they may be tempted to push the turns harder because the aircraft feels nimbler when it's lighter at the end of a load. DON'T BE TEMPTED!

Pull up gently out of the field so you don't lose too much inertia. Stay coordinated while turning and remember to "step on the ball" to correctly use the rudder to prevent a spin caused by an uncoordinated turn. Turning aggressively can make it more difficult to get lined up for your next pass, causing you to over-maneuver the aircraft as you enter the field instead of being already lined up and flying smoothly. This can result in a distorted pattern, resulting in reduced efficacy and an increased risk of drift. For more information on safe turning watch NAAREF's Stall Spin Avoidance video.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 17 ag accidents including 2 fatal accidents so far this year. There have been 2 fatal accidents not yet reported by NTSB bringing the total to 4 fatal accidents.

WIRE YOUR BRAIN FOR WIRES!

There are already four wire strike accidents in 2022, one of them fatal. Scout your fields thoroughly before you begin the application to determine the location of all wires, structures, and other obstructions in and near the field. Do not count on seeing wires to determine their presence. While wires can sometimes be visible, they are often not visible to you for a multitude of reasons. You must treat wires as being invisible and read the insulators and other hardware on poles and towers to determine the location of all wires in the field.

Your short-term memory can hold between 5 to 9 thoughts at once. When your short-term memory is full and something else important comes along you need to remember in the short term, something must go. Often the first thing that entered your memory is the first thing out. When you scout the field, the wires and obstacles are first and foremost in your mind. As you make your application passes though, other things begin to require your attention and take up short term memory space. Once your short-term memory hits full capacity, you can inadvertently forget about the wires. This is revealed in accident statistics – over the 5-year period from 2017 to 2021, in 61% of the wire strike accidents the pilot was of aware of the wire they struck, but they had forgotten about it, leading to the accident. "Wire, wire, pants on fire" is a phrase said out loud by one of our PAASS presenters to himself to prevent the wires in his fields from leaving his short-term memory.

If you get a gut feeling that something is wrong in a pass, listen to your gut. A gut feeling is actually a physiological response initiated by your subconscious, which frequently notices dangers, such as wires, before you become cognitively aware of them. The feeling in your gut is your brain shutting down your digestive system to conserve energy for a fight or flight response. Divert your aircraft up and out of the field and away from all dangers. Survey the situation from a safe altitude to determine what wire or other danger your subconscious noticed. Then decide if and how you will resume the application before reentering the field.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 16 ag accidents including 2 fatal accidents so far this year. There have been 2 fatal accidents not yet reported by NTSB bringing the total to 4 fatal accidents.

KEEP SAFETY AND ACCURACY IN MIND DURING CORN APPLICATION SEASON

July is here which means the ag aviation industry is now in its busiest month. Among other crops being treated by aerial application in July, fungicide will be applied to tens of millions of acres of corn. The demand for these applications is expected to be incredibly high this year, which puts pressure on operators and pilots to get all the work completed on time. This intense pressure can lead to unsafe behaviors including pushing back maintenance, flying in foggy conditions, flying when it's too windy, taking safety shortcuts, and pushing inexperienced pilots into larger and faster aircraft and fields in which they are not yet ready. It can also lead to poor applications by treating too high above the canopy, causing drift, or too low, causing streaking.

There's a rumor of a pilot who recently received his tailwheel endorsement and will now be flying a large turbine airplane to make corn fungicide applications in the Midwest. If true, the operator could be putting the pilot in an unsafe situation and is unfair to the customers who might receive an inaccurate application. Pilots, recognize that if you're in a similar situation, your safety is not being considered. No matter how busy the operation is, safety must be a top priority. There have also been reports of pilots pulling the breaker or using duct tape to disable stall warning indicators. This kind of behavior is dangerous for ag pilots of any skill level, but particularly for inexperienced pilots or pilots flying an aircraft new to them.

Application accuracy is also critical for corn fungicide applications. A recent field study looking to identify potential causes for the streaking seen in corn fungicide applications from the 2021 season found that flying much too low, with the wheels almost in the canopy, caused a gap with reduced spray deposition in the zone of overlap between two passes. When flown at an appropriate height, no gap in deposition was seen between passes. Finally, an aircraft's swath width does not magically change when you switch from herbicide to fungicide – do not stretch your swath width just to get more work done.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 19 ag accidents including 3 fatal accidents so far this year. There has been 1 fatal accident not yet reported by NTSB bringing the total to 4 fatal accidents.

STAY HEALTHY AND RESTED TO AVOID FATIGUE AND OPTIMIZE YOUR PERFORMANCE

Keeping your aircraft in good working order is obviously a critical part of ensuring maximum productivity and safety. Do not neglect your own body though when it comes to maintenance – keeping yourself well fed, hydrated, and rested will help you work through your busiest times of the season and avoid fatigue. Sleep disruption caused by Obstructive Sleep Apnea (OSA) is a major cause of fatigue. For this and any other medical conditions affecting you, heed 2013 NAAA President Dana Ness's advice and see a doctor – putting your health concerns off is no safer than putting your aircraft maintenance off.

The food you choose to eat plays a role in how well you feel and how much energy you have. It can also impact your rest periods if items in your diet cause digestive issues or other problems that prohibit you from sleeping properly. Avoid foods with simple carbohydrates such as white bread, candy, and sugary beverages. They are easy for your body to digest and thus provide an instant burst of energy, but when your body is through with them you can experience an equally instant reduction in energy. Foods with complex carbohydrates such as unrefined whole grains, legumes, and starches take longer for your body to digest and thus provide a steadier supply of energy throughout your day.

Drink plenty of fluids to stay hydrated, as being dehydrated increases the risk of fatigue. Use caffeine to provide temporary alertness and performance but avoid its use close to your resting period so it doesn't prevent you from sleeping. Avoid alcohol as a means of relaxing and falling asleep. While it can help you get to sleep more rapidly, it can also interfere with your sleep cycle. For those of you that live in states that have legalized marijuana use, be aware that this drug is still illegal at the federal level in addition to having negative health effects. A positive drug test for marijuana will result in your being unqualified to hold an FAA-issued medical certificate. Federal law also prohibits marijuana from being carried in an aircraft. See NAAA's Combatting Fatigue in Ag Aviation brochure for more information on signs of fatigue and how to avoid it.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 21 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.

DON'T GET DISTRACTED FROM SAFETY

There are many items that require a pilot's attention during aerial application missions. These include tasks related to flying the aircraft, scouting for and avoiding obstacles, ensuring the application stays on target, and keeping track of all the work orders to be sprayed for the day. It can be very easy for a single item among these numerous tasks to begin to take an inordinate amount of your focus, causing you to forget about the other critical tasks that still require your attention. This can be further exasperated by other distractions not related to your mission, such as messages and calls on a cell phone, trying to take a photo or video for social media, or buzzing someone you know.

A real-life, distracting experience happened to an ag pilot that started a chain reaction of thoughts not directly related to the mission. While making an application, another pilot from his operation working nearby called on the radio to ask if he thought it was getting too windy to spray. This caused the pilot to start worrying more about the wind. This then switched to worrying about if they would need to shut down for the rest of the day, which then changed into worrying about how they were going to get all the current work orders done. He ceased worrying about those things when he flew into a power pole and wires (that he was aware of) while making a clean-up pass. When your mind is distracted, you sometimes forget about what's right in front of you.

Distractions can be especially plentiful during the busiest part of the season. An already full schedule, combined with additional work coming in at the last minute and concerns from customers as to when their crops will be treated can begin to overload a pilot's capacity to deal with the task at hand. To the best of the operation's ability, try to minimize exposure to these distractions to personnel who don't have a critical role in dealing with them directly. An operation may be thousands of acres behind, but a pilot can only spray so many acres in one day. Don't distract them with a problem they can't solve – help them focus on spraying one field at a time safely and avoid forgetting something critical.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

August 1, 2022

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 22 ag accidents including 3 fatal accidents so far this year. There have been 4 fatal accidents not yet reported by NTSB bringing the total to 7 fatal accidents.

AFTER YOU'VE HAD AN ACCIDENT

When you have an accident, once the initial emergency has been dealt with, you need to report it to the NTSB. When you have a minor incident, however, are you required to report it? According to 49 CFR Part 830, an accident occurs when "any person suffers death or serious injury, or in which the aircraft receives substantial damage." An incident is defined as "an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations." A serious injury includes hospitalization, any fractures of bone, severe tissue damage, involving an internal organ, or second- or third-degree burns. Substantial damage is that which adversely affects the structural strength, performance, or flight characteristics of the aircraft.

49 CFR Part 830 also outlines accident reporting requirements. The operator of any civil or public (except military) aircraft must immediately notify the NTSB when an accident occurs. 49 CFR Part 830 has a list of specific types of events that would constitute an incident that would be required to be reported to the NTSB. The decision on classifying an event as either an accident or incident is ultimately made by the NTSB with input from the FAA. 49 CFR Part 830 also denotes information to be given to the NTSB when you notify them.

Regardless, in terms of aviation safety, it is critical that you thoroughly inspect your aircraft after an accident and/or an incident to determine the true damage. An ag aircraft recently suffered what appeared to be minor damage caused by flying debris during a severe storm. Some of the strikes occurred on the leading edge of the wing, but the damage found during a post-storm inspection didn't appear to look any worse than that caused by a bird strike. It was decided the aircraft was safe to fly and the pilot flew several loads with it. Then a fuel leak was noticed, so the aircraft was immediately taken to a maintenance facility where they discovered the right rear spar fitting had been sheared away from the fuselage from the debris strike. Whenever you have a strike on the wing, it may cause severe damage to the fitting that may not be evident from an exterior inspection.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

Fly Safe Campaign

PAASS
PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 24 ag accidents including 4 fatal accidents so far this year. There have been 4 fatal accidents not yet reported by NTSB bringing the total to 8 fatal accidents.

AVOIDING MID-AIR COLLISIONS

Over the 10-year period from 2012 to 2021 there have been a total of four mid-air collisions involving ag aircraft. These four accidents resulted in the loss of four lives – one accident resulted in both pilots being fatally injured, two accidents resulted in just one of the pilots involved being killed, and in the remaining mid-air neither pilot was injured. In two of these mid-airs, at least one of the aircraft involved was descending to land. In another two of the mid-airs, both aircraft were ferrying between a field and landing strip. One of the aircraft in two of the mid-air collisions were surveying the field at the time of the accident. None of the aircraft in all four mid-air collisions were equipped with ADS-B.

Always remember the PAASS slogan "Ferry above five (hundred) and stay alive." When there are multiple aircraft working in the same area, ferrying above 500 AGL (above ground level) greatly increases your chances of avoiding a collision with another ag aircraft making an application. It also provides clearance from unmarked towers and transmission power lines. Remain vigilant during your ferry – resist the urge to let your guard down and don't become too distracted with other tasks, especially those not related to your mission.

ADS-B (Automatic Dependent Surveillance-Broadcast) is technology that can dramatically reduce the likelihood of having a mid-air collision. In addition to broadcasting an aircraft's position to air traffic control, ADS-B also provides position data to any aircraft with ADS-B In. ADS-B Out only broadcasts your position – it cannot see other aircraft. While there is concern among some ag pilots that ADS-B In would add another distraction to an already technology inundated cockpit, ADS-B In does not have to be constantly monitored. It will provide an audible signal to alert you to nearby traffic, and it will also alert you to towers that are in the FAA's tower database. Those aerial applicators who have added ADS-B In to their aircraft have found the systems to be very beneficial, especially when there are multiple ag aircraft working off the same airport.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 29 ag accidents including 4 fatal accidents so far this year. There have been 4 fatal accidents not yet reported by NTSB bringing the total to 8 fatal accidents.

HIGH NUMBER OF FATAL AG ACCIDENTS HAS GAINED THE ATTENTION OF FAA AND THE PRESS

In the eleven-day period from July 23 to August 2 there were four fatal ag accidents. These four fatal accidents doubled the number of fatal accidents for the 2022 season from four, as of July 2, to eight. NAAA received direct communications from senior level managers at the FAA last week inquiring, on behalf of the FAA Administrator, about the recent spate of fatal ag aviation accidents and asking how the FAA can help. NAAA also fielded calls about the recent accidents from its general aviation coalition partners and from local and national aviation press outlets— from Aero News Network to Aviation Week—that highlighted in their news reports the recent number of fatal accidents.

While we don't have final reports with causes from the NTSB for any of these accidents, we do know that each of these fatal accidents caused tremendous grief and loss for eight families. Please take a moment before each flight and think about your loved ones. Your customer may be demanding you need to treat their field, but they don't need you as much as your loved ones do. If you aren't comfortable flying in the current weather conditions or are worried about how many wires are in and around a field, postpone or turn the job down.

Fly safe for the remainder of the season and your career. Scout all your fields thoroughly for obstructions and keep those obstructions in your short-term memory so you don't inadvertently forget about them. Remember that you cannot count on seeing wires – you must read the hardware to determine their location. Ferry above 500 feet, use radios to communicate with other ag pilots when working off busy strips, and install ADS-B In during your off season. Minimize distractions while conducting operations, especially during the application passes and turns. Turn your aircraft safely, not aggressively. Focus on only those activities required for your mission and do not deviate from your mission to buzz someone. Wear a helmet, fire resistant flight suit, and your seat belt and safety harness. Please do not become fatality number nine.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June. July and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

August 22, 2022

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 36 ag accidents including 6 fatal accidents so far this year. There have been 3 fatal accidents not yet reported by NTSB bringing the total to 9 fatal accidents.

KEEP YOUR HEAD IN THE GAME FOR THE HOMESTRETCH. IT'S NOT OVER UNTIL IT'S OVER.

By all accounts, it has been a busy season for ag aviators across much of the U.S. While the season might be winding down in some regions, applications continue in other regions, and safety remains paramount. Fatigue and complacency are two dangers to be aware of year-round, but especially on the downhill side of a busy season.

Fatigue can be both physical and mental and causes a decrease in attentiveness and the ability to perform simple tasks with your normal efficiency. 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. Make sure you stay well rested by taking every opportunity possible to sleep. Eating healthy and staying hydrated can also help battle fatigue.

A reduction in your workload can lead to a relief of pressure and stress, which is good, but it can also lead to complacency and cause you to let your guard down. Complacency is dangerous because it affects even experienced pilots. Complacency can occur when you are very familiar with your work, especially work that involves repetitive tasks that have been performed all season long. There are obviously numerous repetitive tasks involved in ag flying, and those tasks can begin to feel routine and mundane, which causes a feeling of safety and security because of your familiarity with the tasks. This type of complacency most often occurs after a period of intense workload. If you've been spraying wired up fields all day, your brain can get a little numb as to where the wires are in a particular field. Scouting for obstructions a second time when you get ready to spray your trim passes is a good idea all the time, but especially important when you find yourself becoming complacent. Pay attention! Don't get complacent!

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June, July, and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.

Fly Safe Campaign

PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

MAINTAIN ACCIDENT AWARENESS

Don't become a statistic!

NTSB has reported 38 ag accidents including 7 fatal accidents so far this year. There have been 2 fatal accidents not yet reported by NTSB bringing the total to 9 fatal accidents.

FINISH SEASON SAFE AND MAKE ACCURATE APPLICATIONS OF COVER CROPS

As your season winds down continue to keep safety as a top priority. Over the five-year period of 2017 to 2021, an average of 12 percent of total ag accidents and an average of 15 percent of fatal ag accidents occurred in the months of September through December. A decreasing workload can make it easy to start thinking and worrying about other things not directly related to the mission of safely making an accurate application. It is still critical that you keep your mind focused on flying safe. An accident can happen at any time, not just during the busy part of your season. Keep your mind focused on flying safe, every flight, no matter if it's the only one you have that day.

Many aerial applicators are beginning to make the transition to cover crop applications. Cover crop seeding is best done by an agricultural aircraft, but poor spreader setup and application procedures can result in a streaky application. While this can occur with any type of application, cover crops are especially visible to the grower and public. Poor quality work can result in a damaged reputation to both the applicator who did the job and the entire aerial application industry.

Make sure you set your aircraft up properly and pattern test it to ensure your application is uniform for each type of cover crop you intend to apply. The type of seed can impact the effective swath width. Ensure seed mixtures are properly blended and are not allowed to segregate during transport and loading. Make sure the spreader is mounted correctly, with no obstructions to smooth airflow. It is critical the gate is set to open evenly across its entire width. Also make sure the air inlet into the spreader provides clean airflow. Cover or remove obstructions in front of the spreader to smooth intake airflow and install vanes on and ahead of the hopper gate to straighten airflow as it enters the spreader.

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!

Watch your fax or e-mail every other Monday in April and May and every Monday in June, July, and August for scheduled issues. Supplemental messages may be sent when additional safety awareness is warranted. To be removed from the "Fly Safe" fax list, please call 202-546-5722 or e-mail information@agaviation.org. Let us know if you wish to be removed only from these Fly Safe messages or all faxes or e-mails from the NAAA.