

# ADVICE FOR AG PILOTS, FROM AG PILOTS

---

SPIRIT OF AG AVIATION

*Educating for safety in  
our industry. Advice from  
2006-2007 PAASS attendees.*



# INSIDE...

|                        |    |
|------------------------|----|
| Forward .....          | 3  |
| <b>PHILOSOPHY OF</b>   |    |
| The Aircraft.....      | 4  |
| Attitude .....         | 4  |
| Caution.....           | 7  |
| Health.....            | 10 |
| Listening.....         | 11 |
| Pilotage.....          | 13 |
| Teaching .....         | 15 |
| <b>PRE-FLIGHT</b>      |    |
| The Cockpit.....       | 16 |
| The Fuel .....         | 16 |
| The Airplane.....      | 17 |
| <b>FLYING</b>          |    |
| Before Take-Off.....   | 19 |
| The Take-Off.....      | 20 |
| The Ferry.....         | 20 |
| The Observation .....  | 21 |
| The Application.....   | 24 |
| The GPS.....           | 30 |
| The Trim Pass .....    | 31 |
| <b>LIMITATIONS</b>     |    |
| Of Your Aircraft ..... | 31 |
| Of Yourself.....       | 32 |
| <b>GENERAL</b>         |    |
| Communications .....   | 32 |
| Dumping.....           | 33 |
| Maintenance .....      | 33 |
| Pilotage.....          | 34 |
| Weather .....          | 35 |
| Closing Remarks.....   | 36 |

# FORWARD...

## ADVICE FOR AG PILOTS, FROM AG PILOTS

I think you're going to enjoy what you find in here! These are the results, as we have them of the forms you filled out during the '06-'07 PAASS program. They have been compiled and are here for your consideration.

This NAAREF project was very interesting! I was not surprised by what I found either. Here are some of my observations:

- The average years of experience in ag flying for those who filled out the forms was 27.22 years. You add 22 to that and arrive at an average age for an ag pilot, 49 years old. That may be pretty close to the true average age of the pilots in our industry.
- There was quite a bit of repetition of ideas among our fellows. My observation; where there is the most repetition - we should take the most heed.
- These are all opinions...subject to your agreement or disagreement. But where there may be disagreement, a subject for discussion is opened up!
- Regardless of one's experience as an ag pilot, one may learn from reading the ideas of his peers here.

As you will see, the comments have been sorted. Not only will you find good advice for ag pilots, you will also find everything from sound philosophy to an opinion of the quality of carbon-monoxide strips. These are all serious, however you will find a dash of humor splashed here and there, or at least something to make you smile. I think my favorite submission was, *"Enjoy what you are doing and you will never work a day of your life."* Good advice!

One other note: Spelling issues may have been from difficulty in reading the writing, but we did our best. Apologies are extended in advance for any errors.

The following contains who wrote it, their hometown, their years of experience as an ag pilot and their advice.

THANKS TO ALL WHO PARTICIPATED!

## **PHILOSOPHY AND THE AIRCRAFT**

---

It's good to respect other folks in ag aviation. But as an ag pilot, life depends on respect for safe operation practices and attention to detail.

—MARK OF TX, 20+ YEARS

A superior pilot is one who uses his superior judgment to keep himself out of situations requiring his superior skill!

—ROGER LINCOLN OF GILDFORD, MT, 50 YEARS

“Live long and prosper.” Spock on Star Trek

—MIKE RAMSEY OF GARWOOD, TX, 43 YEARS

Unless you are hauling ping-pong balls, I can think of no reason to fill the chemical hopper completely full!

—CORNBREAD OF CHILDRESS, TX, 40 YEARS

Take care of your own airplane. Don't let your ground personnel cause an accident that affects you.

—JERRY HUNT OF TAFT, TX, 40 YEARS

Don't trust anyone—no matter how well they are trained. Your plane is your responsibility.

—KEN MCDOWELL OF CORNING, AR, 36 YEARS

## **PHILOSOPHY OF ATTITUDE**

---

Learn from your mistakes.

—REYNOLD HARKSEN OF CAMANCHE, IA

First, be fair and honest with your employees and customers.  
Second, be fair and honest with yourself.

—RICHARD SHERMAN OF MINTURN, SC, 35 YEARS

Set your goal not only to be the best ag pilot,  
but also to be the oldest!

—GORDON SIDERS OF WEST HELENA, AR, 35 YEARS

Refuse to fly “junk”. Aircraft may be old, but must be  
airworthy and in good condition. Most new pilots are  
trained in older airplanes. Don’t assume that the  
airplane is airworthy.

—RANDY MURPHREE OF ROTAN, TX, 34 YEARS

No matter how long you’ve been flying, the customers  
you work for will forget you in a week.

—JEFFERY LEGER OF WINNIE, TX, 34 YEARS

No farmer pays you to walk home – if you still can.

—VAN MOAD OF WESLACO, TX, 34 YEARS

Don’t let yourself get frustrated if things don’t go as  
smoothly as you would like. Examples: low battery,  
late chemical delivery, employee problems. Getting  
anxious will set you up for an accident later in the day.

Take a deep breath. One-hour delay  
won’t matter in the end.

—BERNARD KOCH OF ARRIBA, CO, 27 YEARS

**Be alert!**

—JEROME KOHLHAAS OF HARDY, IA, 27 YEARS

Don’t get too rushed. You’re capable of doing but only a certain  
amount of **QUALITY** work.

—MIKE CLARK OF GREENVILLE, NC, 26 YEARS

**Safety is a habit.**

—TEDDY PRUITT OF WILSON, AR, 25 YEARS

Anytime anyone, be it your boss, dispatcher or farmer makes you angry – DO NOT get into that airplane. Stay on the ground until you calm down. If you do not wait, I can promise you that you will not finish that load without rehashing the anger incident and never see those power lines.

—*GENE LE JEUNE OF CROWLEY, LA, 25 YEARS*

Enjoy what you are doing and you will never work a day of your life.

—*K. MCCONNAUGHAY OF SEARCY, AR, 24 YEARS*

Think ahead when transitioning to bigger, faster aircraft.

—*RAY ROBINSON OF FAIRFIELD, NC, 23 YEARS*

The only thing you have to fear is when you no longer fear. Don't become complacent.

—*ROD YOUNG OF BIRD CITY, KS, 22 YEARS*

Just slow down.

—*CLIFF CROWL OF ALTOONA, IA, 12 YEARS*

Don't get hurt protecting a crop or your competition could finish flying the field during your funeral.

—*CRAIG CRAFT OF HERTFORD, NC, 12 YEARS*

Spray each field as if it were your own.

—*SHANE MANSHER OF CORNING, AR, 12 YEARS*

Poor planning on the farmer's part does not constitute an emergency on my part.

—*JEFFERY PLAFCAN OF CARLISLE, AR, 12 YEARS*

Always have a "Plan B", especially when dealing with any government official.

—*RICHARD M. HALL OF SCOTLAND, SD, 12 YEARS*

Be careful. Take your time. Think things through. It only takes a fraction of a second to change your life forever. Also, remember God is always in charge. So put your faith in Him, not in yourself.

—RODNEY SHELLEY OF FISHER, AR, 12 YEARS

Help your competitors if they ask you for it. You never know when you'll need help yourself.

—CLAY BOLEN OF PARAGOULD, AR, 11 YEARS

If you don't want your business to be treated like a 911 service, don't run it like a volunteer fire department.

—TRACEY STOKES OF MARION, AR, 10 YEARS

Give your life to the Lord Jesus – Be filled with the Holy Spirit and listen to Him! No failures – no crashes in 6,000 hrs.  
It's working for me!

—JAMES ROBERTSON OF OIL TROUGH, AR, 14 YEARS

Patience...

—UNSIGNED

Take your time and do it right and you won't have to go back and re-do it.

—CORY JOHNSON, WEINER, AR

## **PHILOSOPHY OF CAUTION**

---

15 steps or 15 seconds may be too late. Remember: Accidents don't happen – they are made by an accumulation of errors.

—KEN MCDOWELL OF CORNING, AR, 36+ YEARS

If you have a feeling something may be wrong, check it out.  
It usually is something wrong.

—HENRY HADDOCK OF SALTERS, SC, 33 YEARS

Young pilots: Don't fly into a situation where you can't retreat. If you're not sure, don't do it! Older pilots: Force yourself to stay focused. Complacency is deadly.

—EDWARD KRAMER OF KINGSVILLE, TX, 40 YEARS

If in doubt – Don't!

—JERRY HUNT OF TAFT, TX, 40 YEARS

Be careful about, "Watch this!"

—JIM FLOYD OF LIBERAL, KS, 37 YEARS

Don't be dead – Think ahead!

—SARGE HOEM OF JOES, CO, 34 YEARS

Always leave yourself an out.

—MARC MULLIS OF AUSTIN, TX, 33 YEARS

Leave yourself an out.

—ED SHORES OF ROBSTOWN, TX, 33 YEARS

Slow down. Keep your family in mind. It's not just about money.

—TERRY BOSSERMAN OF LAKE CITY, FL, 30 YEARS

Be careful. Learn from your mistakes.

—UNSIGNED, 30 YEARS

Do not get in a hurry. Haste makes waste.

—PAUL ANDERSON OF CANBY, MI, 30 YEARS

Don't let anyone talk you into doing something you are not comfortable doing.

—ERIC MCGEE OF HONDO, TX, 30 YEARS

Don't spray a pass that you'll regret later.

—MARK HARTZ OF ALMYRA, AR, 26 YEARS

Slow down and live on those long hot days.

—CARROLL VAN OF GREENVILLE, NC, 25 YEARS

Stay away from deer pens.

—MATT FITCH OF PEARSALL, TX, 25 YEARS

Never let the farmer pressure you with too much.

—STEVEN TAYLOR OF DES ARC, AR, 24 YEARS

If it feels wrong, it probably is.

—JIM HESS OF WYNNE, AR, 23 YEARS

Never let the operator push you to do something you know is  
not a good idea!

—GREG FOSHEE OF EDINBURG, TX, 18 YEARS

Learn to say, "No." Park the plane and walk away.

—DALE PENCE OF RICHMOND, MO, 16 YEARS

No customer is worth killing yourself for.

—RUSTY JOHNSON OF LAKE VILLAGE, AR, 12 YEARS

Slow down and take your time starting out.

—CHRIS SCROGIN OF CORNING, AR, 12 YEARS

Do not do anything today that would keep you from  
flying tomorrow!

—BILL WARNER OF INDEPENDENCE, KS, 12 YEARS

Do not ride your motorcycle at dusk during the flying season.  
Stick to something safe like ag flying! Be responsible.

—CORD FOSTER OF BIG SPRING, TX, 8 YEARS

Expect the unexpected

—S. HELICOPTER OF BANFORD, FL, 7 YEARS

If you feel that conditions are not right, even if everyone else says they are, get out of the airplane. The job is not worth your life.

—D NORTON OF TEXARKANA, AR, 3 YEARS

Don't let the workload get to you. Don't get in too big of a hurry. Take your time and keep a good head on your shoulders and be safe!

—UNSIGNED

If what you are getting ready to do doesn't seem right, it probably isn't. Learn to trust your gut feeling.

—UNSIGNED

## **PHILOSOPHY OF HEALTH**

---

Fatigue can kill you. Take short breaks if you can't quit.

—ROBERT GRACE OF ST FRANCIS, KS, 38 YEARS

Get plenty of rest. Limit alcohol. Do not get over confident of your flying abilities. Do not take unnecessary chances.

—HAROLD SCIFRES OF TURRELL, AR, 30 YEARS

Get electronic noise canceling headsets (ANR) and save your hearing!

—JERRY HEDL OF PEARSALL, TX, 23 YEARS

Your body is an engine. It won't operate efficiently for long periods of time without fuel and maintenance. You will feel better and be more productive if you eat well and get some exercise, day in and day out.

—DOUG JOHNSON OF COZAD, NE, 10 YEARS

Get and use an electronic carbon-monoxide meter.

The cards are worthless for low level, long-term exposure. Keep your vents open to pressurize the cockpit with fresh air even if you have A.C. If you smell exhaust, chemical or smoke in the cockpit, you are not getting fresh air. All airplanes engines emit carbon monoxide... even turbines. And radial exhaust systems are especially leaky. There appears to be a 2" boundary layer on most radial ag planes. Vents need to be located beyond this level.

—JERRY HEDLOF OF PEARSALL, TX, 23 YEARS

Reassess yourself daily.

—WAYNE SLAUGHTER OF FARMVILLE, NC, 30 YEARS

Get 8 hours of sleep.

—GIL GILBREATH OF FORREST, AR, 33 YEARS

## **PHILOSOPHY OF LISTENING**

---

Listen to advice – Think for yourself. Most bad events are not by accident.

—ROB PUTZ OF HEARNE, TX, 60 YEARS

As hard as it will be, listen to and ask the high-time pilots all the questions you can.

—TED CAMPBELL OF TEXARKANA, AR, 38 YEARS

Attend PAASS programs.

—RICHARD WHATLEY OF LONG MOTT, TX, 40 YEARS

Be still and know the power of God.

—DENNIS WEBB OF COY, AR, 32 YEARS

Watch the movie, “Turn Smart” sponsored by Air Tractor and featuring Wayne Handley.

—RICHARD WHATLEY OF LONG MOTT, TX, 40 YEARS

I’ve been flying for 34 years and I still listen to older pilots when they have something to say. The younger pilots need to take their time and try to make better decisions.

—JEFFERY LEGER OF WINNIE, TX, 34 YEARS

Attend PAASS program! Learn from your and other’s mistakes. The PAASS program brings these mistakes to your attention every year.

—ANDY TAYLOR OF FT BENTON, MT, 25 YEARS

Listen to the voice in your head and the feeling in your gut. They are a great source of advice.

—ROD YOUNG OF BIRD CITY, KS, 22 YEARS

Don’t rush for experience. Keep your ears open for information. Listen to the old-timers.

—RANDY LOWRIE OF SWEETWATER, TX, 21 YEARS

Listen to the advice you get from the older guys. It may save you some grief, or even some recovery time.

—MITCH PROBASCO OF FLOYDADA, TX, 20 YEARS

If you are just getting started flying crops, choose more than one mentor and make your judgments and decisions based on what should be safe, good sense.

—DAIN GUETERSLOH OF LUBBOCK, TX, 16 YEARS

Listen and learn from the older, more experienced pilots. Learn from their mistakes. Don’t let yourself get talked into something you don’t feel comfortable doing.

—DAWN McMILLEN OF ROSWELL, NM, 4 YEARS

Listen to the advice of others and learn from their experiences.

—BRYSON COOPER OF MEMPHIS, TN, 14 YEARS

## **PHILOSOPHY OF PILOTAGE**

---

Thou shalt not screw up. If in doubt; Don't!

—CURT BUMGARNER OF ODELL, OK, TOO MANY YEARS

Make your first flight empty each day (helicopter) to get your mind back in the cockpit.

—RICK FINNEY OF MEMPHIS, TN, LONG TIME

An old pilot told me as a beginner, "If you are over eager and a bit careless trying to do a good job for a farmer and kill yourself, just remember; the farmer may just very well be dating your wife the next week!"

—JIM FLOYD OF LIBERAL, KS, 37 YEARS

If you start it (the plane), don't leave it.

—KEN MCDOWELL OF CORNING, AR, 36 YEARS

Try and do your most complicated fields first.

—STAN FERGUSON OF COTTON PLANT, AR, 32 YEARS

Young pilot – Do only what your capable of. You don't learn over night. Don't try to out-turn or out-carry. Be consistent with your turns as well as your loads. You want to go home every night. Pay attention and learn. We never quit learning.

—MICHAEL WALLEN OF WALNUT RIDGE, AR, 31 YEARS

Fly the airplane first – always!

—LORI LOVE OF WICHITA, KS, 30 YEARS

Turning time goes down as experience goes up.

—ERIC MCGEE OF HONDO, TX, 30 YEARS

Haul less, charge more, make extra trips rather than have  
greater than a comfortable load.

—*RICK SHAW OF OBERLIN, KS, 35 YEARS*

Try to do the best job you can under the circumstances. But,  
sometimes due to wind conditions or obstacles, it is not possible  
to cover the field as well as you would like. If you kill yourself  
trying to do so, the farmer you are trying to do such a good job  
for probably won't even go to your funeral!

—*JAMES JENNINGS OF FRUITLAND, ID, 30 YEARS*

No matter what happens, fly the airplane first.

—*HAL TOM OF COLLEGE STATION, TX, 27 YEARS*

Do not let the grower dictate under what conditions you will fly a  
job. Do not let farmers or Boll Weevil Foundations press you into  
flying too close to dark.

—*DON SIMPSON OF BRYAN, TX, 27 YEARS*

First of the season, carry lighter loads. Watch for other aircraft.  
There are a lot of other aircraft in different areas of the country.

—*RICHARD HOLIMAN OF JONESBORO, AR, 26 YEARS*

Treat the last load like the first load. Keep your mind on work,  
not what comes after!

—*BILL HOFFNER OF LYONS, KS, 26 YEARS*

If you can't see over the mountain, you can't cross it.

—*TRAMPAS JOHNSON OF WEINER, AR, 17*

When in doubt, pull out.

—*HENRY WOOTEN OF LEXA, AR, 20 YEARS*

Maintain thy airspeed lest the earth arise and smite thee.  
(11th commandment)

—*UNSIGNED*

Do every spray job better than the previous one.

—UNSIGNED

## **PHILOSOPHY OF TEACHING**

---

As an operator, I print out the weekly NAAA email and give a copy to each of my pilots.

—JERRY HUNT OF TAFT, TX, 40 YEARS

Support your community, schools, clubs, etc.

—TERRY BOSSERMAN OF LAKE CITY, FL, 30 YEARS

Hopefully the people that have been in the crop dusting business will take the time to teach the beginners. Actually we all learn from others. I still have new things happen after 28 years and still learn a lot from others.

—KEN VOLLMER OF MURDO, SD, 28 YEARS

Try to let your customers know that you are open Monday through Thursday as well as Friday, Saturday and Sunday. Also explain to them that poor management on their part doesn't automatically cause an emergency on your part. Never ever start your phone number with 911.

—GARY MICHAELIS OF GOODWIN, AR, 22 YEARS

Remember how you started as an ag pilot, so you can help the young ones get in and be safe!

—RUSTY LINDEMAN OF HONDO, TX, 20 YEARS

Veteran Pilots: Even though the season is a busy time, take the time to answer the questions of a new pilot (helicopter or airplane) as complete as possible. If you don't and equipment gets wrecked, your season just got busy.

—ROBERT HOOK OF BIG LAKE, MN, 1 YEAR

Share your experiences with all pilots. You never know when it might save someone's life.

—CORY JOHNSON OF WEINER, AR

## **PREFLIGHT - THE COCKPIT**

---

Use a good checklist before takeoff and landing.

—JOHNNY CRIST OF GARDEN CITY, KS, 25 YEARS

Prior to leaving the dock/loading pad: We have placards on our aircraft that say, "Attitude, Hopper Door, Nozzles, Fuel". It only takes a brief moment to check these items prior to taxi. By having them in plain sight it's a quick reminder. If one of these is out of line it can be corrected pre-taxi.

—D. SETH FELIX OF OLATHE, CO, 12 YEARS

## **PREFLIGHT - THE FUEL**

---

Always sump fuels every morning and check fuel nozzle before re-fueling.

—RONNIE FEHMELE OF BAY CITY, TX, 40 YEARS

Visually look in fuel tanks. Don't trust any fuel gauges.

—RICK SHAW OF OBERLIN, KS, 35 YEARS

Two times in my career a potential accident was avoided while fueling by paying attention to the appearance and color of the fuel coming out of the nozzle. The first time involved water from a leaking underground tank. The second was 2-4D that was inadvertently delivered into an avgas storage tank.

—DON NEWTON OF LEWISTON, MT, 35 YEARS

Check oil and drain sumps every day.

—GIL GILBREATH OF FORREST, AR, 33 YEARS

Fuel exhaustion: If you haven't figured if you have enough fuel, you don't.

—ALAN ROGERS OF ALAMOSO, CO, 31 YEARS

Clear fuel tanks before every take-off.

—JIM LAIRD OF MARK TREE, AR, 31 YEARS

Don't get talked into taking off until you are ready. Finish that pre-flight and check the fuel. You might not be full!

—ERIC MCGEE OF HONDO, TX, 30 YEARS

Always use a gallon meter visible to pilot for fueling aircraft.

—RODNEY KILLAM OF CARLINVILLE, IL, 12 YEARS

Assume nothing. Gas gauges lie; farmers omit telling about power lines; check engine oil daily; drain fuel tanks daily.

—UNSIGNED

Calculate fuel usage on every load.

—UNSIGNED

## **THE AIRPLANE**

---

Preflight aircraft before flight.

—RONNIE FEHMELE OF BAY CITY, TX, 40 YEARS

Keep a clean windshield.

—GIL GILBREATH OF FORREST, AR, 33 YEARS

Break down your job into categories: 1. Are you rested and prepared? 2. Is your aircraft ready? Fly the airplane first. Everything else is second. 3. Do you have a plan to execute your task? 4. Review yourself once the job is done... was there a better way?

—JASON HAMMOCK OF WALNUT RIDGE, AR, 14 YEARS

ALWAYS take time to preflight and walk around your airplane before the first flight of the day.

—GLENN HOGG OF LAMESA, TX, 31 YEARS

Don't shortchange yourself on your pre-flight inspection. It can kill you.

—JOHN SEAY OF GLEN ROSE, TX, 27 YEARS

Be very familiar with your cockpit: e.g. Be able to check switches without looking down.

—DENNIE STOKES OF PARKIN, AR, 33 YEARS

Do a proper and thorough pre-flight at the beginning of every day – no matter how busy you are. Airplanes break and wear out. A good pre-flight can save your life!

—TROY VAUGHT OF GRAHAM, TX, 39 YEARS

Been flying all my life – 47 years of age – in ag. You learn to use a preflight checklist when you start flying and don't throw it away because if I had used it this year, I wouldn't have forgot to put my flaps down on takeoff. AT401 off the end of an airstrip...

—DARDON MORGENROTH OF VICTORIA, TX, 26 YEARS

When you close the door, make sure the cockpit is clean (wories, problems, etc.) Fly first, last, and always. You can't fix anything from the pilot's seat.

—RANDY PRICE OF BLYTHVILLE, AR, 26 YEARS

Always preflight the plane.

—JOHNNY CRIST OF GARDEN CITY, KS, 25 YEARS

Take your time pre-flying and checking your load sheets before you give them to your mixer/loader. Do not let farmers tell you how to fly the field.

—ANDY CHRISTAN OF DANBURY, TX, 12 YEARS

## PREFLIGHT!

—MIKE BARTHOLOMEW OF STORM LAKE, IA, 10 YEARS

Preflight! Really look at the aircraft systems and controls.

—UNSIGNED

## CHECKLIST! CHECKLIST! CHECKLIST!

—UNSIGNED

## **BEFORE TAKE-OFF**

---

It's better to spray 3 medium size loads than 2 huge loads. It's easier on my airplane and myself. I feel better toward myself and my old plane.

—RONNIE D. BOOKER OF HEADRICK, OK, 40 YEARS

No flying in the heat of the day...

—RONNIE D. BOOKER OF HEADRICK, OK, 40 YEARS

Always check rudder, elevator, and aileron controls before take-off by moving stick and rudder petals.

—DON MCINTYRE OF ANGLETON, TX, 39 YEARS

Put a picture or two of your family and loved ones somewhere in a safe place in your cockpit where you can easily see them. Whenever you are tempted to do something that is unnecessarily risky, please take a glance at these pictures and re-think your plan.

—GRAY L. MEYERS OF ONIDA, SD, 36 YEARS

(Think) Is this the field/load that I may not return from?

—ANDY DETERLING OF POND CREEK, OK, 24 YEARS

Carry a fire extinguisher

—GERALD SCHULZ OF SNYDER, OK, 22 YEARS

## **FLYING THE TAKE-OFF**

---

The runway you leave behind you cannot be used. Always use the entire runway!

—KENNETH BOENIG OF FLORESVILLE, TX, 42 YEARS

Make all takeoffs with your hand on the dump handle.

—LORI LOVE OF WICHITA, KS, 30 YEARS

Treat “no wind” as a “tail wind” when plane is loaded.

—JIM HOWARD OF MT VIEW, OK, 30 YEARS

Load plane so you will get off in 2/3 to 3/4 the length of the strip so you have a safety margin for the unexpected. The plane will fly better and faster.

—BUDDY POWELL OF GIN CITY, AR, 27 YEARS

Watch density altitude and temp. Don't overload plane!

—JOHNNY CRIST OF GARDEN CITY, KS, 25 YEARS

On a short strip in an aircraft with electric flaps set takeoff flaps prior to rolling in case flaps fail before adequate flaps are fed in during takeoff roll.

—UNSIGNED

Use the entire runway.

—UNSIGNED

## **FLYING THE FERRY**

---

Ferry at safe altitude.

—RONNIE FEHMELE OF BAY CITY, TX, 40 YEARS

Ferry high – above towers.

—BRENT GREGG OF ROPESVILLE, TX, 30 YEARS

When ferrying to the field, fly so you can be seen above the horizon. It's hard to see when you're flying low.

—JIM LAIRD OF MARR TREC, AR, 31 YEARS

Use the UNICOM when approaching the airfield.

—JIM LAIRD OF MARR TREC, AR, 31 YEARS

Always ferry at 500 feet – if you can't get there,  
you're too heavy.

—LORI LOVE OF WICHITA, KS, 30 YEARS

What goes up must come down. If you are watching an aircraft off your right wing, don't forget there might be one working off your left wing also. Two aircraft converging at a 90-degree angle at the same speed appear to be stationary on the horizon. They can, and do hide behind struts and canopy window edges.

—TERRY WILSON OF WALNUT RIDGE, AR, 28 YEARS

Always ferry higher than communication towers in your area.

—JOHN SEAY OF GLEN ROSE, TX, 27 YEARS

Keep your eyes out of the cockpit below 500-AGL... ALWAYS!

—JOE RUSSELL OF EDNA, TX, 20 YEARS

## **FLYING THE OBSERVATION**

---

Study guy lines on towers and give them extra clearance.

—JOE VAUGHN OF TULIA, TX, 49 YEARS

Fly around field before starting job. Look for wires,  
stand-pipes, etc.

—RONNIE FEHMEI OF BAY CITY, TX, 40 YEARS

Always circle field to observe hazards.

—BERT BRUTON OF GARDEN CITY, TX, 36 YEARS

Look for the transformers on the power line poles. There's nearly always another wire going somewhere.

—*JOHN BROOME OF WEST HELENA, AR, 37 YEARS*

Survey the field. If there are buildings, there are wires. If the wires are in your line of sight or below, you can't get under them.

—*LARRY HELM OF HARRISBURG, AR, 45 YEARS*

Get no closer to a tower than the point where the guy wires anchor to the ground. Usually you can see that easily. You are safe vertical of that point.

—*GAYLON STAMPS OF PANHANDLE, TX, 35 YEARS*

Never go into a new field until you've checked it out for wires, poles and people.

—*JIM LAIRD OF MARR TREC, AR, 31 YEARS*

Every highline pole has a guy wire coming from it – unless you **KNOW** it does **NOT**.

—*GARY JOE GIRDLEY OF KEISER, AR, 30 YEARS*

When there are multiple sets of wires – for example; two sets of wires not far apart, (the farther being higher) I have to really concentrate to not look through the closest set and focus on the further set.

—*BRETT WHITTEN OF SNOOK, TX, 29 YEARS*

Fly over field first to look for people and hazards.

—*BRENT COLVIN OF DALHART, TX, 25 YEARS*

No matter how many times you go to a field, always do a "fly around" the perimeter.

—*ANDY DETERLING OF POND CREEK, OK, 24 YEARS*

Circle the field prior to entering to spray; make shallow turns.

—*GERALD SCHULZ OF SNYDER, OK, 22 YEARS*

No matter how many times you fly the same field, always circle the field to know where all obstructions are.

—*RUSTY CARTILLAR OF HICKORY RIDGE, AR, 18 YEARS*

Before starting an application, circle the field (even if it is familiar) to check for obstructions, changes in wires and guy wires, or workers in the field.

—*WAYNE KEAHEY OF STAR CITY, AR, 15 YEARS*

Always check field for wires, hidden objects, etc. before spraying field. This can be done by making a perimeter pass around the field.

—*JOHNNY CRIST OF GARDEN CITY, KS, 25 YEARS*

Do not assume a field you've previously sprayed that had no obstructions does not now have a wind or cell tower in your turning area.

—*DON KOENIG OF LAS ANIMAS, CO, 14 YEARS*

Identify the wires feeding the house adjacent to the field before entry.

—*JIMMY TIDWELL OF LONOKE, AR, 14 YEARS*

Fly around the fields looking for obstacles (wires, trees, etc.) before you begin a job.

—*DAVID GLASSCOCK OF DUMAS, TX, 13 YEARS*

The biggest obstacle in a field is probably not the only one.

—*DON RIPLEY OF UVALDE, TX, 9 YEARS*

Know the wind direction – especially on hot days.

—UNSIGNED

Always look for traps – wires to hidden pole.

—UNSIGNED

A tree in the field blends in with the tress on the border.

Be careful.

—MALSBURGER OF COLUMBIA, AL

Always circle the field before you make your first pass, even if you have sprayed it before. Wires or towers may have been put up since the last application.

—UNSIGNED

## **FLYING THE APPLICATION**

---

Be ye ever mindful of thy airspeed else the earth rise up and smite thee.

—CURT BUMGARNER OF ODELL, OK, TOO MANY YEARS

Always make first and last pass with the sun to your back.

—JOE VAUGHN OF TULIA, TX, 49 YEARS

Never try to look behind aircraft while on swath for any reason.

—JOE VAUGHN OF TULIA, TX, 49 YEARS

Develop ability to clear power lines by observation of poles instead of wires. (There are no wires above the poles.) Study line construction practices for guy wires.

—JOE VAUGHN OF TULIA, TX, 49 YEARS

Keep your eyes out of the cockpit unless necessary.

—LANNY HELM OF HARRISBURG, AR, 45 YEARS

If you have doubts about a pass under a wire, don't do it.

—RICHARD WHATLEY OF LONG MOTT, TX, 40 YEARS

Watch for wind shifts.

—RONNIE FEHMELE OF BAY CITY, TX, 40 YEARS

When in trouble and forced to land, fly the plane until there is  
no more "fly" left in it.

—EDWARD MORROW OF TEKAMAH, NE, 39 YEARS

Make your first pass with the sun to your back if possible.

—GARY JORDAN OF HUGOTON, KS, 39 YEARS

When in your turns, keep the nose pointing slightly down.

—JOCK WARREN OF ROYAL CITY, WA, 38 YEARS

Make the first pass so as to be able to turn into the wind.

—BERT BRUTON OF GARDEN CITY, TX, 36 YEARS

If in doubt about going under a wire – DON'T!

—BERT BRUTON OF GARDEN CITY, TX, 36 YEARS

Remember to PULL UP!

—BERT BRUTON OF GARDEN CITY, TX, 36 YEARS

Fly by turning the surface around you, not around it, flying by  
the feeling of the aircraft.

—JIM WOOD OF MEMPHIS, MO, 36 YEARS

Never fly into the sun.

—GIL GILBREATH OF FORREST, AR, 33 YEARS

Dump enough load IMMEDIATELY when in doubt about safe  
take-off or continued flight.

—BERT BRUTON OF GARDEN CITY, TX, 36 YEARS

Give the first turn of each load a little more time to get the feel of the loaded airplane.

—GAYLON STAMPS OF PANHANDLE, TX, 35 YEARS

Don't put your first pass on the edge of the field. Move into the field on the first pass so you have a chance to spot snags or guy wires on the edge of the field.

—J.R. REABE OF PLOVER, WI, 35 YEARS

If working in light and variable winds, make passes next to the susceptible crops early in the job – when the wind is constant.

—RICK SHAW OF OBERLIN, KS, 35 YEARS

Remember "445". Turning toward the swath, when you see "400" on the feet off swath, you should be at 45 degrees to the swath. Correct accordingly.

—GAYLON STAMPS OF PANHANDLE, TX, 35 YEARS

Slight trim nose up. Feel like you are having to lightly touch the stick with your palm rather than hold it with your fingers.

—GAYLON STAMPS OF PANHANDLE, TX, 35 YEARS

Fly "square with the world" whenever possible. Then you can "visualize" your pass perpendicular to the end of the field.

—GAYLON STAMPS OF PANHANDLE, TX, 35 YEARS

When you go under a wire, watch the ground; over a wire, watch the wire, or better still - the poles.

—GAYLON STAMPS OF PANHANDLE, TX, 35 YEARS

When flying over a pole, standpipe, etc, fly over slightly off-center - outside the gear... never directly over the top. This allows better visibility of the obstacle, and if you should happen to hit it, the odds of survivability are much higher!

—GAYLON STAMPS OF PANHANDLE, TX, 35 YEARS

Know the wind... ALWAYS! You use this knowledge, allowing for it on every turn-on and shut-off.

—GAYLON STAMPS OF PANHANDLE, TX, 35 YEARS

During a pass, use a reference point on the far horizon. This helps you “find the line” on the next, and each pass.

—GAYLON STAMPS OF PANHANDLE, TX, 35 YEARS

Turn spray on after you flare at start of spray run. Turn spray off before pull-up at end of spray run. Trim from poles to shut-off point and to turn-on point.

—ELTON BROWN OF ROBSTOWN, TX, 32 YEARS

Never make first pass down wind toward a wire.

—ELTON BROWN OF ROBSTOWN, TX, 32 YEARS

Trim airplane nose up in case you are distracted. This way the airplane will rise slightly instead of sinking into the crop canopy.

—ELTON BROWN OF ROBSTOWN, TX, 32 YEARS

If possible, make the first pass into the wind.

—JIM LAIRD OF MARKED TREE, AR, 31 YEARS

Try to plan work so you won't be flying into the sun.

—JIM LAIRD OF MARKED TREE, AR, 31 YEARS

Use sight pictures. Picture yourself 1/2 mile ahead of your plane. Picture yourself going over the wire, around the tree, etc. Watch for what is coming on the next few passes.

—GAYLON STAMPS OF PANHANDLE, TX, 35 YEARS

Trim your aircraft a little “up” so if you look off, the airplane will rise instead of sink.

—GARY JOE GIRDLEY OF KEISER, AR, 30 YEARS

Keep the nose low in the turn.

—WAYNE SLAUGHTER OF FARMVILLE, NC, 30 YEARS

Fly with the rhythm of the plane. If the plane is heavy, do not yank and bank. As the plane lightens, the rhythm changes.

—LOREN BUSS OF MONTE VISTA, CO, 28 YEARS

Try to make your first pass into the wind and/or with the sun at your back. This gives you the advantage with a loaded plane and with visibility.

—STAN FERGUSON OF COTTON PLANT, AR, 32 YEARS

Never make first pass along wire into the sun.

—BRENT COLVIN OF DALHART, TX, 25 YEARS

When heavy, never make first turn on downwind side of the field.

—BRENT COLVIN OF DALHART, TX, 25 YEARS

Always try to make the first pass into the wind.

—SCOTT RAINEY OF OBION, TN, 23

Sometimes, it's safer to go under highlines than over them.

—GERALD SCHULZ OF SNYDER, OK, 22

Make your first pass away from obstacles (high line) instead of into them.

—TERRY JORDAN OF HUGOTON, KS, 21 YEARS

In the field "especially", keep your eyes focused out the windows.

—JOE RUSSELL OF EDNA, TX, 20 YEARS

Pull up early and gentle; when pulling up over wires, watch pole closest to you to the 90-degree point.

—UNSIGNED

Be aware of rolling (transverse) G-loading. During a rolling pull up, the upward moving wing will have a higher G-loading than the G-loads indicated within the cockpit. Be especially alert at light load levels, higher airspeeds where higher aerodynamic loads are available and overstress more likely.

—SAM ROGGE OF FOWLER, CO, 12 YEARS

Think about the job at hand. Concentrate on what you are doing. Don't worry or think about the next load until it is being pumped into the airplane. Concentrate on the job your are doing as you do it.

—RICHARD REPPOND OF GRADY, AR, 11 YEARS

Sometimes the second turn is the slowest and can catch you by surprise!

—KENDALL JOHNSON OF WOLF POINT, MT, 7 YEARS

When in a turn, keep your foot off the bottom rudder. Do not tighten up your turn by pushing bottom rudder.

—PAT O'NOLAN OF MURPHY, ID

When approaching a tree line, buildings, wires, etc. at the end of row, do not look at the end of the row but rather the top of the obstruction to avoid a late pull-up.

—UNSIGNED

When making the pass up against power line, take note which way the wind is from so you don't get pushed under the wires and can't get out before the next pole comes. I was in tree-rows and got a gust.

—UNSIGNED

Don't get in habit of, "End of the field pull-up and swath advance." Look up before pull-up. Some lines are diagonal to the end of field.

—UNSIGNED

During spray passes, don't try to dip, duck, or dodge birds flying up out of the fields or ditches. It could cause you to get a wing, gear or spray system in the crop or the ground. Most of the time, if you just keep straight on your pass, you'll miss it anyway.

—*BRIAN BISHOP OF ELAINE, AR, 7 YEARS*

Pull up – then roll.

—*UNSIGNED*

## **FLYING THE GPS**

---

In the turn, if the light-bar “flops” across the line, immediately look up at the point in the field you're lined up with. Look, and fly toward point. Make final alignment with the lights.

—*GAYLON STAMPS OF PANHANDLE, TX, 35 YEARS*

Learn to “Dance with your light-bar”. Let her lead in the turn, you lead on the swath. Soon you'll be dancing in perfect rhythm to the “The Cropduster Two-Step”!

—*GAYLON STAMPS OF PANHANDLE, TX, 35 YEARS*

Set your GPS up on the ground and not on the way to the field.

—*DENNIE STOKES OF PARKIN, AR, 33 YEARS*

Do not become fixated on GPS equipment and lose situation awareness.

—*CHARLES KLEIN OF ST FRANCESVILLE, IL, 10 YEARS*

Train yourself to not stare at the light-bar upon entering edge of field.

—*ROBBIE McMILLAN OF WAYNESBORO, GA, 30 YEARS*

A lot of the new technology requires a pilot to keep his head in the cockpit which is a major distraction problem, especially with a new pilot and when learning the new equipment.

—*JIM POPE OF CLK, WA, 30 YEARS*

Don't let your GPS take your eyes away from your JOB –  
Fly the airplane.

—RANDY LOWRIE OF SWEETWATER, TX, 21 YEARS

## **FLYING THE TRIM-PASSES**

---

Make trim passes (always) with the sun at your back in the morning and evening and when trees are present.

—ROBBIE McMILLAN OF WAYNESBORO, GA, 30 YEARS

If you're trimming along a fencerow, don't fly directly over the fence. Offset the airplane 10-15 feet on either side so you can see taller posts that you wouldn't see if you were centered on the fence.

—RYAN McCOMB OF EL CAMPO, TX, 13 YEARS

## **LIMITATIONS OF YOUR AIRCRAFT**

---

Always know your aircraft and your limitations and performance.

—JIM WOOD OF MEMPHIS, MO, 36 YEARS

Honor maneuvering speed placard in rough air.

—ROBBIE McMILLAN OF WAYNESBORO, GA, 30 YEARS

Know your plane's limitations with changing conditions; e.g. heat and wind.

—TERRY JORDAN OF HUGOTON, KS, 21 YEARS

The aircraft is an extension of the pilot. When you strap it on, know the capabilities of your plane. It will do exactly what you ask until you ask too much.

—WILL GARRETT OF DANBURY, TX, 16 YEARS

## **LIMITATIONS OF YOURSELF**

An airplane has its limits. It doesn't matter if Superman is flying it – the limits are the same. You're not Superman – so stay well within the limits of the aircraft.

—J.D. LEE OF BELLE GLADE, FL, 45 YEARS

Know your limitations.

—NICOLA VACCARI OF WALNUT RIDGE, AR, 47 YEARS

Know your own and your equipment's limitation. Do not push either one.

—LEE TURNQUIST OF LAKE WALES, FL, 38 YEARS

Know your limitations. Mentally prepare yourself in advance for the upcoming day. (Put on your game face.) This is serious business.

—GARY JOE GIRDLEY OF KEISER, AR, 30 YEARS

Be aware of your limits and have the confidence in yourself to not exceed those limits.

—STEPHEN STREETER OF ENGLAND, AR, 30 YEARS

Know your and your aircraft's limitations and stay within them.

—MICHAEL RANSPOT OF CAMERON, TX, 6 YEARS

## **GENERAL – COMMUNICATION**

Produce a communication exchange in high-density ag spraying areas avoiding mid-air.

—UNSIGNED

Document any Worker Protection Standard (WPS) verbal notices regarding Restricted Enter Interval (REI) product Active Ingredients (AI). Date and sign on work reports for spray application.

—DAVID GORDON OF ECKERT, CO

## **GENERAL – DUMPING**

---

Practice dumping water - simultaneously add forward pressure.

—LORI LOVE OF WICHITA, KS, 30 YEARS

Load your airplane full of water and practice landing with a full load. That way you will not be afraid to bring back a full load. If things don't look right when you go out to spray, bring the load back. (Note: Check the landing weight in your POH first.)

—BRIAN BIRD OF NICKERSON, KS, 7 YEARS

Practice dumping clear water occasionally.

—BERT BRUTON OF GARDEN CITY, TX, 36 YEARS

## **GENERAL – MAINTENANCE**

---

Never hand-over-hand a prop through on a radial engine, even if the mags are off. Always pull it through as if it will start. I had an engine start with the mags off and nearly take my left hand off. The engine had not been started in 3 months. It ran for 10 seconds with the mixture in the idle cutoff.

—KENNY CRIDER OF SWIFTON, AR, 18 YEARS

A good way to find damage on your aircraft is to wash/pressure-wash the aircraft yourself instead of having your ground crew do it. They may not know what to look for or recognize a broken or problem-part on your aircraft.

—DAIN GUETERSLOH OF LUBBOCK, TX, 16 YEARS

Replace worn bushings and tie rod ends on rudder boost tab. Ensure plane is in trim. For a few dollars in hardware, it means the difference between a good flying plane and a bad flying plane.

—ALAN EAST OF WICHITA FALLS, TX, 10 YEARS

Aircraft maintenance should be preventive maintenance. Component failure while you're in the spray season costs you money; possibly a customer, or your life. Replace components before failure. Don't allow the "I'll get by another year" attitude to infiltrate your thinking or business practices.

—BRYAN HAUSCHILD OF FERGUS FALLS, MN, 27 YEARS

Keep an extra set of air conditioner belts during the busy season, and the tools needed to change them.

—JUSTIN KAGEBEIN OF STUTTGART, AR, 7 YEARS

Make sure dump system is in good working condition.

—RICK SHAW OF OBERLIN, KS, 35 YEARS

Install an air conditioner

—ROBBIE McMILLAN OF WAYNESBORO, GA

If equipped, make sure tail wheel-lock works.

—BERT BRUTON OF GARDEN CITY, TX, 36 YEARS

## **GENERAL — PILOTAGE**

---

During the "off season", fly an ag airplane every three weeks or so to maintain currency. Do simulated ag operations.

—ROBERT GRACE OF ST FRANCES, KS, 38 YEARS

Always haul a lighter load first off satellite airstrips.

—DENNIE STOKES OF PARKIN, AR, 33 YEARS

When applying chemicals, wear a respirator.

—GIL GILBREATH OF FORREST, AR, 33 YEARS

Wear a helmet and flight suit (nomex)

—GERALD SCHULZ OF SNYDER, OK, 22 YEARS

At the start of each season, take your aircraft up and stall and slow fly each aircraft you fly. Flight characteristics may have for some reason changed since last season.

—*JOHNNY DAVIS OF STUTTGART, AR, 20 YEARS*

Work as a ground-crew member for at least one season before getting in the plane.

—*STEVEN TAYLOR OF DES ARC, AR, 24 YEARS*

## **GENERAL – WEATHER**

---

If the boss says the fog is cleared up enough to take-off and you feel it is not, then say so. If he still insists you go, remind him that he is the boss/chief pilot/leader of the company, therefore he can take off first. If he is successful, then you will take-off. Do not do anything against your best judgment.

—*GENE LE JEUNE OF CROWLEY, LA, 25 YEARS*

Do not press a flight on a foggy day.

—*STEVEN TAYLOR OF DES ARC, AR, 24 YEARS*

Fog is dangerous and can be a killer. Always use good judgment. Pick a standard reference point at a great distance to be used before taking off. Call ahead to the destination point before taking off. This suggestion is from my personal experience.

—*ANTHONY GATES OF TUCKERMAN, AR, 18 YEARS*

Avoid early and late spray applications due to temp inversions. If dust is hanging in the air, don't spray.

—*BRANDON EVERETT OF HOLLY GROVE, AR, 10 YEARS*

## **CLOSING REMARKS**

---

We of NAAREF and PAASS hope these “bits of wisdom” have given you some things to think about. We hope too that you will read this pamphlet from time to time further jogging your thinking and making you more aware, and a safer pilot. We believe this is very beneficial information, especially to a pilot new to the aerial application industry, or one thinking about becoming an ag pilot .

Have a safe and prosperous career! Please contact the NAAA office, a member of NAAREF or a PAASS presenter for additional copies of this pamphlet.

**REMEMBER...**

**UPON THE PERFORMANCE OF EACH  
RESTS THE FATE OF ALL**



## Contact Information

National Agricultural Aviation Association  
1005 E Street, SE  
Washington, DC 20003-2847  
Phone: (202) 546-5722  
Fax: (202) 546-5726  
[information@agaviation.org](mailto:information@agaviation.org)

We would like to extend our appreciation to



for their generous support with the funding to publish this pamphlet.

Created by



Printed October 2007