

OWNER & PILOT

Advantage

A Magazine for Owners and Pilots from *Skytech* Publications



WINTER IS COMING

ARE YOU PREPARED?

IN THIS ISSUE:

Tax Facts: Bonus Depreciation in 2013 & 2014 Pre-orders • 3

Winter is Coming.....Are you Prepared? • 4

Extended Warranty Plans • 8

Angle of Attack • 6



THE ULTIMATE IN PREPARATION

In this issue we talk about the details of preparing for winter flying. As always, paying close attention to all the available information prior to a flight is critically important. What you don't want to miss however, is the first and biggest detail. Do I have the correct airplane and equipment to do my missions?

As I write this, the aviation news is all abuzz about a Boeing 747 Dreamlifter that was headed for McConnell Air Force Base in Wichita and ended up at Jabara Airport 8 nautical miles to the north. The big question is "How could this happen"? Even when they got on the ground, it took the crew several minutes of reading GPS coordinates to the controller to make a final determination of their location. It all ended when Unicom confirmed what airport they were at! The next article is from a general aviation writer extolling the virtues of his G-1000 and insisting that this situation could never happen to him. What is lost in these stories is that the newer general aviation airplanes commonly have equipment that, from a situational awareness perspective, is far superior to much larger airliners. We have the ability, and the desire in most cases, to see and avoid most of the worst weather, and pinpoint our location at all times.

The point here is if you really want to be prepared, let the newest technology work for you. Current technology allows us to continually monitor all types of changing conditions during the flight. Speaking as someone who used to place calls to flight service on one frequency and listen to them over a VOR, this is a big deal.

If you think maybe you need a "total" equipment change, give us a call. We've been around for a long time and would love to talk to you about your airplane.

Skytech, Inc., publisher of this magazine is an aircraft sales and service company with FBOs in Westminster, MD (DMW), Rock Hill, SC (UZA – Charlotte Metro Area) and Administrative Headquarters in Baltimore, MD (MTN).

Your thoughts, suggestions, comments and criticism are important to us and we will always welcome reader feedback.

Please respond to:
Mike Fitzgerald
Executive Vice-President
mfitzgerald@skytechinc.com

Vref

THE RIGHT STUFF?

Fantasization accompanied by stagnation followed by capitulation – those words, substantially retranslated from one of the greatest aviation movies of all time, *The Right Stuff*, best describe the pre-owned market in the latter half of 2013. While this process might not always achieve the best results, it has been with us since the end of 2008, and is working well enough.

And, this is how it works: Even after all these years, some owners continue to fantasize about the value of their airplane. It is painful to watch as low, but perfectly realistic offers get turned down. Waiting for the market to turn-around has cost many owners many millions as they ride the roller coaster down.

Clinging to a too-high asking price leads to stagnation – activity virtually stops. Fortunately for the marketplace, this is a temporary problem almost always followed by capitulation. When prices come down, activity starts up again.

The recurring question we get at Vref is, "When will this roller coaster go up? And, when it does, which airplane(s) will be the first to turn-around?" We usually answer by saying "We can't predict the future," or "Forecasting is guessing." All of that is true, but we are seeing some broad trends that might lead us to venture a new guess.

For this edition of Market Leader, we studied twenty-four jets. In most cases there are fewer for sale now than a year

ago. However, in most cases, more than 10% of each prospective fleet is for sale. While the number for sale can change daily, up or down, availability is changing at a glacial pace. The 10% rule delineating a buyers' market from a sellers' is really more of a guideline for a normal marketplace. And, the past few years have been anything but normal.

On the bright side, more than half (13 of the twenty-four) have reached the magic 10% mark or are moving in that direction.

We do see the proverbial light at the end of the tunnel, but that light could be a year or more away for some aircraft. Let's hope aviation can mirror the real estate market, where in spite of an abundance of inventory and stricter lending standards home prices are surging. ■

*Summarized from Vref's Market Leader.
Available in full format at www.vrefonline.com*



WE KNOW THE VALUE OF A GOOD AIRPLANE!

Vref Aircraft Price Guides Only \$195 Per Year
800-773-VREF (8733) www.vrefpub.com



2013 BUSINESS AVIATION TAX UPDATE

Looking Ahead to 2014

For current aircraft owners, the fourth quarter is a good time to perform an annual inspection of your tax records. The following is a checklist of items that may apply to your business aircraft:

FLIGHT LOG – This is the single most important document to support the business usage and deductions of your aircraft. A detailed and timely kept flight log is required to provide support and justification for your aircraft deductions. When one reviews tax court aircraft cases, lack of supporting documentation is one of the most common errors committed by taxpayers. Meeting notes or agendas, expense receipts and other explanations of each business flight should be kept and organized.

BUSINESS AND PERSONAL USE COMPUTATION – The IRS finalized regulations governing the personal entertainment use of business aircraft, affecting tax returns starting in 2013. Every passenger on every flight should be classified as business or personal passenger and allocation of all aircraft expenses, including depreciation and interest expense, is required based on the computed business use percentage. These regulations are complicated and should be reviewed with your tax advisor.

RELATED PARTY RENTAL RULES – In recent years, the IRS has stepped up its audit activities of business aircraft owners. One of the strategies to

“slow down” the amount of depreciation available to aircraft owners is to invoke a rule regarding leasing of an aircraft to a related company. Since leasing an aircraft to an operating business is a common structure for many aircraft owners, you may review these rules with your tax advisor. This rule may require the adoption of straight line depreciation method and the re-computation of depreciation deductions for prior years.



STATE SALES AND USE TAX COMPLIANCE – If your aircraft is claiming rental or charter use exemption or interstate commerce exemption, computing and meeting minimum rental, charter or business hours by year end and filing the necessary sales tax return with state taxing authority will be critical. ■

See page 9 for an example of a 2013 aircraft purchase with bonus depreciation.

Aviation Tax Consultants (ATC) assists aircraft purchaser in acquiring aircraft in a tax efficient manner. Our services include the elimination or reduction of sales tax at the time of purchase, maximizing income tax savings, controlling the cost of personal use of the aircraft, avoiding passive activity loss rules and complying with Federal Aviation Regulations. Cooperation with client's current tax and legal advisors is welcome and encouraged.

Daniel Cheung
CPA, Member

Disclosure Under IRS Circular 230: To ensure compliance with requirements recently imposed by the IRS, we inform you that any tax advice contained in this communication, including any attachments, was not intended or written to be used, and cannot be used, for the purpose of avoiding federal tax related penalties or promoting, marketing or recommending to another party any tax related matters addressed herein.



FALL/WINTER 2013

PUBLISHER
Mike Fitzgerald

EXECUTIVE EDITOR AND
WRITER
Justin Lazzeri

COLUMNIST
Dave Conover

GRAPHIC ARTIST
Jennifer Longo

THE ADVANTAGE
MAGAZINE STAFF
REQUESTS YOUR
FEEDBACK!

We would greatly appreciate hearing from you! Please tell us what you think of *Advantage* magazine and offer any thoughts you have for improving this publication. Our goal is to provide helpful, interesting information that you enjoy reading.

Your opinions, suggestions and ideas for new articles and content are important for continuing improvement and growth that will serve all our readers.

Email us at:
Advantage@Skytechinc.com
800-394-1334

Thank you!

The Pilot-In-Command is solely responsible for the safe and proper operation of his/her aircraft and it is the responsibility of the pilot-in-command to operate that aircraft in compliance with that aircraft's Pilot's Operating Handbook and other official manuals and directives.

www.skytechinc.com





Winter is Coming.....

ARE YOU PREPARED?

It's that time of the year again. Time to turn on the heat, tune up the snow blower and break out the thick coats. Yes – winter is coming and with it we must be prepared to deal with unique, challenging and often times ever-changing conditions that test both pilots, dispatch and ground support staff alike. As with most things aviation, the devil is in the details and a little planning can go a long way to a successful outcome. Take the time now to brush up on your winter aviation acumen and enjoy the season for all it has to offer.

WHAT DO YOU MEAN "ARE YOU EQUIPPED?"

"N1234 be advised there are reports of light icing at your altitude approaching the outer marker. A 737 shot the approach ahead of you and reported continuous light to moderate chop on the descent. Winds at the surface are variable between 350 and 270 at 18 knots gusting 35 and braking condition is deteriorating. Fly heading 340 and descend to 2000 feet, you are cleared for the approach...." Oh boy!

Now not all winter weather is spent dealing with conditions like this. Winter can bring clear skies for miles, and cooler temperatures can boost both airplane and engine performance. But when it's bad in winter it can be really bad. Among other things, winter weather means dealing with strong gusty winds, low-level turbulence and freezing precipitation both in the air and on the ground. As is necessary for all flights, it's not only prudent, but required to ensure that both the airplane and pilot are capable of handling the anticipated conditions. As we move into the change of season ask yourself some of these questions to gauge you or your crew's readiness.

- Shorter days lead to an increased chance of night flight. Are you current on your night procedures, and how comfortable are you at night in certain conditions?
- Strong and gusty winds are coming. Make sure you are ready with proper crosswind technique, and review both you and your airplane's limits.
- Flight Into Known Icing (FIKI) equipment is an absolute must for safe operation through winter

weather systems, but even the most equipped aircraft has its limits. A thorough review of both operational procedures and limitations is a must.

- Be honest with yourself. Every situation is unique. Whether you are a fledgling pilot just learning the ropes or a seasoned aviator, there are going to be times when the conditions are just more than you bargained for.
- Winter weather means an increase in seasonal colds for many people. Review what medications are okay for flight and which are not.

TIME TO PUT THE SNOW TIRES ON...

Now maybe snow tires are a bit of an exaggeration, but it is true that certain aircraft require specific maintenance as it relates to colder temperatures. Consult your trusted shop and make sure you are on top of what's needed – if anything - for your make and model. Some general areas of concern that should be monitored are those systems that may have been dormant since last winter. De-ice boots, TKS panels, probe heat and cabin heat may or may not have been used for some time. Check their operation ahead of time so your shop can take care of any discrepancies.

THE BEST INFORMATION IS FIRST-HAND INFORMATION (WITH A WORD OF CAUTION)

Many of the weather phenomenons in winter are hard to measure using traditional reporting systems. For example, icing can be a very centralized occurrence when all of the maps would suggest otherwise, but other times widespread when you wouldn't expect it. In many cases, we rely more on PIREPS in winter than we do at other times of the year. Pay close attention to the time and type of aircraft making a report. For example, it's likely that the conditions reported by a large airliner would be much worse in a lighter General Aviation aircraft. Refer to the Aeronautical Information Manual (AIM) 7-1-20 and the subsequent sub-sections for more information on PIREPS. Here is a breakdown of the different icing reports. It wouldn't be hard to imagine Light icing to a 737 is Moderate or even Severe to a smaller General Aviation aircraft.

1. Trace: Ice becomes perceptible. Rate of accumulation slightly greater than sublimation. De-icing/anti-icing equipment is not utilized unless encountered for an extended period of time (over 1 hour).

2. Light: The rate of accumulation may create a problem if flight is prolonged in this environment (over 1 hour). Occasional use of de-icing/anti-icing equipment removes/prevents accumulation. It does not present a problem if the de-icing/anti-icing equipment is used.

3. Moderate: The rate of accumulation is such that even short encounters become potentially hazardous and use of de-icing/anti-icing equipment or flight diversion is necessary.

4. Severe: The rate of accumulation is such that de-icing/anti-icing equipment fails to reduce or control the hazard. Immediate flight diversion is necessary.

“NO....BUT WE DO HAVE HOT COFFEE IN THE CORNER”

This is a big one. You have to prepare ahead of time to ensure the destination airport and FBO has the facility and equipment necessary to protect your asset and assist you in accomplishing your mission. The last place you want to be is under a blanket of fresh snow on an airport without plows and no hangar space to thaw you out. You may be sitting for a while. The best plan in winter is to err on the side of caution and utilize those airports that are equipped to handle your needs. That doesn't mean you only need to stick to large airline-served hubs. What it means is you should place a priority on a ground power unit, tug, transient hangar space large enough to store your aircraft if needed or engine pre-heating equipment. If they have de-icing equipment that's even better.

Speaking of de-icing fluids, there are four types that are typically used in aviation. Care should be taken to choose the correct one for your aircraft and also to time the application so that your surfaces are the cleanest for takeoff. Type I fluids are a low viscosity version that are designed for short term protection only because they quickly flow off surfaces after application. This type is commonly used to clear areas of snow, ice and frost, and is usually dyed orange. Type II fluids are thicker which slow the flow off of surfaces. This type of application is designed to shed when the aircraft reaches approximately 100 knots on takeoff, which means only larger and faster aircraft should use them. Type II is usually yellow. Type III fluids are similar to Type II but are intended for slower aircraft that takeoff below 100 knots. Type III (as with Type II) is usually dyed yellow. Type IV is similar to Type II but provides an even longer hold time on surfaces. This fluid is designed to hold until around 115 knots and is generally dyed green.

“IT WAS AS IF IT HAD A MIND OF ITS OWN.”

Even if you do everything correctly prior to arriving, there's still a point where the rubber meets the road.... err runway. Losing control of an airplane on the runway (or ramp) isn't only a costly experience, but potentially a very dangerous one. There are reporting measures in place designed to alert approaching aircraft to the surface conditions, but in the real world these can be very subjective and one portion of the runway may be different than another. Only after reviewing all available information should you make a decision on whether a certain runway will work or not. If you elect to continue, a large margin for error should be added. For example, light rain may require adding 15% to a specific aircraft's stopping distance, but that same aircraft may require 100% more room on frozen precipitation. Consult your POH for more information.



There are two types of reports commonly used to issue Notices To Airmen (NOTAMS). Braking Action Reports can be gathered by landing aircraft or a vehicle driver. They are reported in increasing increments of slickness but care must be taken, as with all reports, to take the type of reporting aircraft into consideration. A piston will behave differently than a turboprop with fully-reversing propellers just as a jet with thrust reversers will behave differently than one without. In addition to the Braking Action Reports, a Friction Report can be done if proper equipment is on hand. These readings, commonly referred to as “Mu meter” readings, are taken from a vehicle showing the slippage of a tire against the surface. 100 is full friction and 0 is none. Typically a reading around 40 merits concern and possible action.

PLAN B

As with everything in flying, plan every detail ahead of time to set yourself up for the greatest chance of success. Part of that planning is knowing when enough is enough. If the conditions are beyond the airplane, the pilot, the airport or all of the above, sometimes a plan B is the best approach. Enjoy the winter flying season for what it is, and before you know it we'll be talking about thunderstorms and density altitude instead of braking reports and de-icing fluid. ■



Sound Fundamentals: *The Importance of Angle of Attack*

Turn on any of the sports networks after NFL Sunday and listen to the coaches speak about their team's performance. Whether it's on the winning or losing side, you'll hear a lot of the chatter focused on the same point... the "Fundamentals". Even at the highest level of the sport, ensuring that you have the basic concepts running in sync can be the difference between a happy Monday or a week's worth of talk radio material. The same is true in flying. No matter how advanced your equipment or how aged the license in your pocket, paying attention to the fundamentals of flying is **STILL** the most proven way to ensure a safe and successful outcome.

In today's technologically advanced aircraft, we pilots have the luxury of modern aerodynamic design, cutting edge flight displays that often times include a synthetic depiction of the outside world, a fully-integrated autopilot that for all intents and purposes does everything but take-off and land and even iPad apps designed to assist us with everything from flight planning to emergency back-ups. We're one step away from light sabers and Starfighters folks! It's true that these advances (among others) have increased the capability of the General Aviation airplane as well as boosted the situational awareness of the pilot(s). Both lead to safer skies. However, the foundation of what makes an airplane fly - or

cease to do so - is still the same; and Angle of Attack (AOA) is one of the most important fundamentals in the concept. So why then is it at times a seemingly brushed over concept in this generation of aviators?

AERODYNAMIC THEORY

It certainly wasn't brushed over by the Wright Brothers. Their only instrument on the first airplane was a simple Angle of Attack gauge that consisted of a stick protruding forward of the wing's leading edge with a piece of yarn attached to it. They would then take note of the angle the yarn made in relation to the stick to determine their AOA. Angle of Attack is defined as the angle between the chord line of the wing and the relative wind. Relative Wind is a vector that equals the aircraft's flight path. An aircraft's wing can effectively fly at various points in relation to the relative wind from 0° to 90° but unless you're flying an aerobatic or military airplane you likely won't sustain anything beyond 15° to 20° for very long. The common belief is that there is an airspeed below which you stop flying and above all is well. This simply isn't true. An airplane can stall at ANY airspeed in ANY attitude with ANY power setting. However, the wing **ALWAYS** stalls at the same Angle of Attack.

The stall information published in your aircraft's flight

manual is based on stable flight (1 G load factor), coordinated controls (ball centered) and usually at maximum gross weight. In reality, your stall speed will vary based on all these factors. Every airplane has a Critical AOA in which the coefficient of lift (C_L) is at its maximum. Beyond this Critical AOA, air starts to separate on the aircraft's wing and a stall is encountered. So, given that premise wouldn't it help to know where you were in relation to the Critical AOA?

ANGLE OF ATTACK INDICATORS

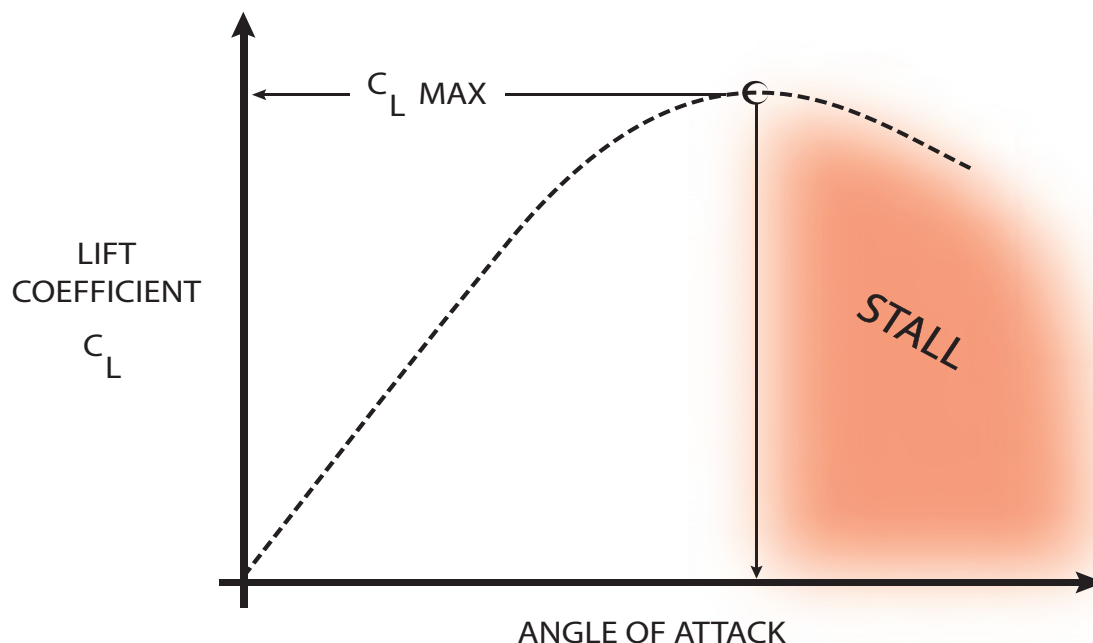
If you were to seek out the single most hair-raising task in aviation, you'd be hard pressed to find anything more challenging than nailing the landing on a moving aircraft carrier at sea. Navy pilots routinely do this with unbelievable precision. Their secret? A combination of reliance on an instrument in the airplane called the Angle of Attack Indicator for proper airspeed control and using a Mirror Landing System or Landing Signal Officer (LSO) to stay on the proper flight path. Navy pilots must perform takeoffs and landings of minimum distance and at speeds that minimize arresting loads, which means they are as slow as possible. When an airplane is at higher angles of attack, airspeed readings can become unreliable due to position errors of equipment. Also, the proper airspeed for given conditions can vary. Using the AOA Indicator to keep on the required AOA for the approach will ensure that the airplane is at the proper speed, and the AOA Indicator is not directly affected by gross weight, bank angle, load factor, velocity or density altitude. If it's invaluable for Navy pilots who tackle pitching decks at night in driving rain, then there just may be some useful application for the rest of us.

In a lot of ways, knowing the AOA of your airplane means knowing your margin for error. Whether it be on a short field takeoff while pitching for the proper speed to clear a row of

trees, or a delayed base to final turn while in sequence with slower traffic, or in icing conditions during an approach to landing; there are a multitude of real-world uses for knowing where you stand in relation to your Critical AOA.

That said, not many aircraft (modern through the classics) have been equipped with this valuable piece of equipment. AOA awareness is gaining steam and avionics companies are taking note. One airplane that has such equipment is the Pilatus PC-12. Designed in the Swiss Alps and just as home on a short field in the middle of a mountain valley as it is at a busy terminal airport, the Pilatus PC-12 is designed for maximum performance with minimum pilot workload. Pre-NG model PC-12's use a Fast/Slow type of AOA that is designed to show when you are nearing or crossing the Critical AOA. Not coincidentally, activation of the Stick Shaker & Pusher system will occur in conjunction with crossing that threshold. On PC-12 NG's the Fast/Slow instrument has been replaced with a Dynamic Speed Bug on the PFDs that is displayed as a green $<$ on the airspeed tape. The Dynamic Speed Bug is dampened to limit jumping around and shows a true $1.3 V_{SO}$ speed at any configuration. In addition, it automatically adjusts for icing conditions when the equipment is selected. This single point of representation of your optimal airspeed is an unbelievably handy resource and increases the safety of an already safe airplane.

Regardless of whether your aircraft has an AOA indicator or not, understanding and respecting the fundamentals of Angle of Attack is a wise way to fly. As Wolfgang Langewiesche declared in 1944 through his famous book, *Stick and Rudder: An Explanation of the Art of Flying*, "the invisible secret of all heavier-than-air flight is Angle of Attack." That statement may have been written a long time ago but the message rings as true today as ever. ■



EXTENDED AVIONICS WARRANTY PLANS:

PAYING FOR PEACE OF MIND

Let's paint the picture: You bought a brand new aircraft several years ago and have since enjoyed all that entails. Full warranty and new equipment have made for a pretty seamless ownership experience. Now you're nearing the end of that warranty period and there are three paths you can take. 1. Do nothing. Your current aircraft has been a joy to own and thus it only seems reasonable to expect the same now that you are out of warranty. 2. Buy a new airplane and reset your warranty clock. This could potentially be a viable option if it works for your situation. Not only would you regain the warranty status that accompanies a new aircraft, but you may be moving into even newer and more capable equipment. Also, a reset of your depreciation schedule if you use your aircraft for business purposes. 3. Keep your current airplane and buy into an extended warranty program to continue providing a level of assurance for the unexpected.

Each owner's needs are unique and determining which path is best is not a matter of simply falling into one of the three categories. Let's assume however, that buying a new airplane isn't an option, so your choices are either to do nothing or buy into an extended warranty plan. What do you do? For the purpose of this article, let's focus on the avionics extended warranty plans.

Compared to the scattered instrument layout of days past, today's panels are a thing of electronic beauty. In older aircraft it's likely to find many manufacturers throughout the panel. From the instruments to the GPS to the transponder, they can, and usually are, a combination of many names. However, today, when it says "equipped with XYZ avionics",

they mean it. With the exception of some back-up or support equipment, most modern panels are a product of one company. There are a multitude of advantages to this set-up. Not the least of which is that it makes the technician's job of troubleshooting a problem a lot easier. In many cases it's a matter of downloading information and referring to the manual for the next step. Another advantage is the level of communication that exists between one component and the other. Autopilots for example are seamlessly connected to Primary Flight Displays and the GPS source. Navigation can be tied to environmental systems. All of these systems are infinitely more reliable than their predecessors. However, like all mechanical and electrical equipment, a failure can happen. Due to all of this connectivity, when a failure does happen, the troubleshooting oftentimes calls for the replacement of a part that serves many functions – or in some cases the entire unit itself. This makes the replacement process easy but can leave a hefty dent in your wallet.

It's for this reason that taking advantage of extended warranty plans for modern avionics is very compelling. However, not all plans are created equally. It's advisable to consult your trusted shop for opinions on what may best suit your individual needs. They see firsthand what these plans do and don't cover and also may be able to provide some advice on potential pitfalls before you sign on the



dotted line. Plans exist for most all of the major avionics providers. Two of the more popular plans are the Garmin FlightLevel and Honeywell Avionics Protection Plan (HAPP). One beneficial aspect of these plans is their transferability at the time of sale. This can become a sizable nugget for any potential buyers.

If you own an airplane that is nearing the end of warranty, or are already out, do yourself a favor and start the conversation with your trusted shop. A little proactivity now can mean a lot less stress and expense when you least expect it. ■

BONUS DEPRECIATION EXAMPLE (PIPER MIRAGE 2013 PURCHASE)

Depreciation Deductions	2013	2014	2015	2016	2017	2018	Total
Section 179 Expensing	500,000						500,000
50% BONUS DEPRECIATION	289,438						289,438
MACRS Depreciation Expense	14,472	109,986	65,992	39,653	31,549	27,786	289,438
Total Depreciation Deduction	803,909	109,986	65,992	39,653	31,549	27,786	1,078,875
Percentage of Purchase Price Depreciated	75%	10%	6%	4%	3%	3%	
Potential Income Tax Savings	361,759	49,494	29,696	17,844	14,197	12,504	485,494

As an example of Bonus Depreciation, if you are in the market for a new Piper Mirage and your dealer has a plane available in inventory, purchasing and placing the aircraft in service before December 31, 2013 will generate significant income tax deductions.

The timing of delivery in the fourth quarter is significant as there will be only a few weeks or days left in the tax year and you can take full advantage of 50% bonus depreciation by maintaining 100% business use on the aircraft.

Above is the depreciation schedule for a new Piper Mirage at \$1,078,875, placed in service in the fourth quarter, with 100% business use, and combined federal and state income tax rates of 45%.

LOOKING AHEAD TO 2014

50% bonus depreciation is scheduled to end on December 31, 2013. There is a planning opportunity for prospective aircraft buyers to preserve the option of taking 50% bonus depreciation for delivery in 2014:

- Signing a binding contract by December 31, 2013 to purchase an aircraft in 2014
- Making a non-refundable deposit, the lesser of:
 - 10 percent of the cost, or
 - \$100,000
- The aircraft should have an estimated production period exceeding 4 months
- Taking delivery and placing the aircraft in service for Part 91 operation by December 31, 2014
- 50% bonus depreciation can be taken on your 2014 income tax return

If completing a purchase in 2013 is not possible, this is an excellent opportunity to take advantage of bonus depreciation in 2014.



PIPER M-CLASS:

Let us show you a better way to fly

MERIDIAN – MIRAGE – MATRIX



Authorized Piper Dealer
PA, MD, DE, DC, VA, WV, NC, SC

www.skytechinc.com
PiperSales@skytechinc.com








With colder temperatures and forecasts that include the terms “wintery mix” and “accumulations of...”, now is a great time to plan a trip to warmer climates. It just so happens that General Aviation is an excellent get-to-a-better-latitude vehicle and often times the best destinations take us beyond our domestic borders. Whether your flight plan includes the Bahamas, one the many Caribbean nations, or Mexico, there are several factors that need to be considered ahead of time to ensure a smooth trip down and back. Of the necessary precautions, you can effectively sort them into three categories: people, plane and paperwork. Below are some of the main topics you’ll have to address. For more information, visit Federal Aviation Administration’s website at www.faa.gov and enjoy your warm weather get-a-way machine!

PREPARE YOURSELF AND YOUR PASSENGERS

- As you should for any travel abroad, check every destination and country you will be passing through for any alarming conditions. The U.S. Department of State (DOS) posts such warnings and travel alerts that range from terrorist activity and political unrest to currency and health concerns.
- A U.S. Passport is required for U.S. citizens to enter most foreign countries and then re-enter the United States. If required, your passport must contain any necessary Visas. Note: A U.S. Passport Card can’t be used for international air travel. A tip offered by the FAA is to come prepared with multiple copies of all required documents to expedite processing upon arrival in foreign countries.
- It may be necessary to produce pilot licenses and medical certificates.
- Although credit cards are accepted at most destinations, it’s always a good idea to have some cash on hand as well. Also, notify your credit card company prior to travel as many times an unforeseen international charge will result in a temporary hold on your card until its validity can be determined.
- All passengers must check to determine if any vaccinations are required prior to travel in certain countries.

AIRCRAFT

- Just as with people, your aircraft is required to carry all necessary documentation for entry into a foreign country. These may include aircraft registration, airworthiness certificate, Federal Communications Commission (FCC)

aircraft radio license, FCC restricted radiotelephone operator permit and proof of insurance. Some countries may require aircraft weight and balance data as well.

- Survival and flotation gear is a requirement depending on your destination and route of flight. Make sure that your equipment isn’t just the proper type for your application, but also that it has been tested and is approved for use.
- 12 inch registration numbers for your aircraft are required by the FAA.
- The International Civil Aviation Organization (ICAO) has mandated that a 406 MHz ELT is required for international flight. The ELT must be registered with the National Oceanic and Atmospheric Administration (NOAA) and re-registered every two years.
- Depending on your destination, pre-arranging security for your aircraft may be prudent. Local knowledge and using the resources at organizations such as AOPA can be helpful in determining what is necessary for your situation.
- It’s advisable to bring some common tools, parts and even tie down equipment with you. Sometimes the best destinations have the least on-airport amenities. Although you may not be able to prepare for a major issue, now is not the time to be running low on oil or other common items that are easy to prepare for. Also, make sure your destination has fuel or plan enough in the tanks to get to somewhere that does.

DOCUMENTATION AND FLIGHT PLAN

- All countries require some form of advance notification of arrival. It may be in the form of a flightplan or it may be a written notice that must be received a certain number of days prior to entry.
- If permits are required, use the services of a commercial agent to obtain and handle all necessary information.
- Check the office schedule of all required personnel prior to travel. You don’t want to arrive only to find that everything is closed for a holiday.
- International flight requires filing an ICAO international flight plan. This rule applies to both IFR and VFR flights.
- If required to provide a position report, remember the order and type of information required: 1. Identification 2. Position 3. Time 4. Altitude of flight level 5. Name and time estimate of next reporting point 6. Name only of the next succeeding reporting point. ■

cure terminal ailments.



Say goodbye to the drudgeries of airline travel. Long lines and intrusive screening. Missed connections. Lost luggage. And cramped seating. Buy a PC-12 NG and fly where you want to go, and when. Even to remote airports with short or unimproved strips. In executive-class comfort for six. At speeds of up to 322 miles per hour. This may not seem like the right time to buy, but you can own a PC-12 NG for less than the cost of a quarter share of most fractional jets. And less than half the operating costs. We'll even manage your airplane for you. So if you're sick of airline travel, we have a very potent remedy.

PILATUS

Skytech, inc.

888-386-3596

PilatusSales@skytechinc.com
www.skytechinc.com

PA, MD, DC, VA, WV, NC, SC, KY, TN, OH



Experience the Skytech Advantage

200 Airport Drive

Westminster, Maryland 21157

FIRST-CLASS
PRESORT
U.S. POSTAGE
PAID
LUTHERVILLE, MD
PERMIT NO. 171



a word to the wise

STABILIZED APPROACHES

BY DAVE CONOVER

Many of us still have the voice of our primary flight instructor echoing around in our subconscious – “watch your speed, watch your altitude, pick your touchdown point” as well as “a good landing is the result of a good approach”. However, each year 500+ aircraft of all makes and models end up off the end or side of the runway. While not all excursions are on landing, the highest percentages of incidents occur during this phase of flight due to the sheer number of variables that are involved. Fortunately, in most cases, the injury to passengers and crew are limited. But, the damage to an aircraft involved in a runway excursion can be extensive.

Depending on the particular class of aircraft, the factors contributing to a runway “overshoot” or “excursion” vary. But at the core of the issue are several common threads (or errors) that show up individually or in some combination, regardless of the aircraft type: 1. A lack of a stabilized approach – improper speed, glide path and/or configuration. 2. Excessive Flare (float) causing delayed touchdown. 3. Improper calculation of current runway conditions. The airlines and corporate operators mitigate these variables and risks by utilizing Standardized Operation Procedures (SOP’s) to provide flight crews with a clear set of specific guidelines to follow. Additionally, manufacturers such as Airbus and Boeing have designed automated systems to alert crews of approach abnormalities in advance of touchdown to provide time for a crew to initiate a go-around. For those of us flying general aviation aircraft, the guidelines and equipment are

not quite as elaborate. Generally, we review the operating parameters of our aircraft during annual training along with the aircraft POH, and we familiarize ourselves with normal approach speeds, configurations and what the expected runway performance is for our specific aircraft. What is commonly left out is a standard set of SOP’s that we can utilize to accurately determine or alert us if we are deviating in any manner that could lead to a runway excursion or overshoot. Additionally, how many of us have compared the (Unfactored) landing distance listed in our POH and calculated it for an extra few knots, couple extra seconds of flare time and even a small amount of runway slope? It is interesting to review the data and discover that even small deviations can have a very large impact to the landing distance required for an aircraft.

Groups such as the AOPA Safety Foundation and NBAA have published materials to help prevent runway incidents. Additionally, the FAA has placed an increased emphasis on reducing these events. FAA Advisory Circular AC 91-79, Runway Overrun Prevention provides an extensive review of the factors and methods to aid operators and individual pilots in developing a mind set to minimize runway incidents. This publication highlights how small deviations in operating parameters can have a significant effect on the final outcome of a flight, and provides a clear definition of exactly why “a good landing is the result of a good approach”. Taking some time to review this information and developing some personal SOP’s to reference on every approach and landing will go a long way toward eliminating any landing “surprises”. ■