

innovative technology offers the pilot so much more information than ever available before. Whatever you decide to do, enjoy your flight experience and the new knowledge you are acquiring. And, by the way, **Welcome Back!**

Hours:

Monday through Thursday 8:30 a.m. - 8 p.m. or Sundown

Friday and Saturday 8:30 a.m. - 6 p.m.

Sunday 11 a.m. - 8 p.m. or Sundown



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The Path Back into Flying

How to restore your old flying skills after years of inactivity



What you need to consider in order to start flying again after a time away.

- New changes and trends
- Medical Examiner and your health
- Finding the right flight instructor
- Which type of Airplane to use
- Need new flight equipment
- What study materials to acquire
- Flight maneuvers and flight review

1. Welcome Back

If the aviation bug is biting, you have picked up the best information brochure to help you make the correct decisions on coming back. Depending on how long you were away, what you need to think about may be relatively small or considerable. This brochure will give you much food for thought and will help guide your decisions to an appropriate conclusion.



In one way, flying is like riding a bicycle – some things you just don't forget. However, unlike riding a bike, flying incorporates a much more complex set of skills that need to be sharp-

ened. Also, there are changes in the present FARs and in the flying environment that you must know and understand.

Take your time, hire a competent flight instructor, and practice. Don't be disappointed if your progress is a little slow – that's normal when a skill has been put on hold for a time.

2. New Stuff

What's new since you left flying? As we stated above, it all depends on how long you were away. There have been a few significant changes since the 1990s. At the risk of losing your interest by listing off FAR after FAR, let's consider some of the major changes of importance. To further your study, purchase a copy of the *FAR/AIM* manual.

There are two, new, entry level pilot certificates a person could acquire to break into general aviation – Sport and Recreational. The Sport Pilot certificate was created in 2004 by the Experimental Aviation Association (EAA). The intent of the new rule was to lower the barriers of entry into aviation and make flying more affordable and accessible. The sport pilot certificate offers limited privileges and is mainly for recreational use. The recreational pilot certificate, introduced by the FAA in 1989, requires less training and offers fewer privileges than the private certificate. It was originally created for flying small single-engine airplanes. Its main advantage has been that it permits cheaper training between the student and private pilot certificates. For more detailed information on these two certificates, check out FARs 61 and 141.

If you have seen a new Sectional chart recently, you have undoubtedly

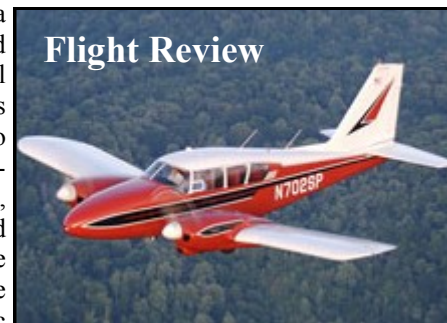
ing at minimum speeds, such as slow flight, and stalls. Also work on your steep turns. These maneuvers will help you develop your overall feel and control of the airplane.

Pattern work is essential. Go over normal, crosswind, short and soft field takeoffs and landings. Pay special attention to achieving precise airspeed control.

If you plan to use your airplane for travel, go over the basics of good cross-country techniques. With the advent of GPS receivers, a whole new world is opened up for you. Take advantage of this technology if possible. Check out a glass cockpit equipped airplane – these new systems provide a wealth of information for the traveling pilot.

To get back into the world of the instrument rated pilot, you will have to practice and perfect those skills. Things like flying on the gauges, flight planning, reviewing any of the newer FARs and the like. Your instructor is your guide here.

Whatever your status, remember you are also preparing for a flight review. This will consist of a minimum of a one hour ground discussion and a one hour dual flight experience. During this review your instructor may go over the rules for carrying passengers, night flight, airspace, and TFRs. Know how to read weather reports and of course be prepared to demonstrate your skill in performing basic flight maneuvers.



10. Conclusion

By now you are probably ready to get back into flying. Maybe the most important advice is to relax, be prepared to spend time practicing, and above all, be patient with yourself. Your former level of competence will return – it just takes time.

As we discussed, there are many entry levels to get back into flying. You may be interested in flying mostly as a Sport Pilot. You may be planning to return at the level you had in the past, or possibly obtaining an advanced certificate or rating. There are so many new and interesting additions to the aviation game to investigate. As previously mentioned, you might want to try out a new glass cockpit equipped aircraft. This

Some other items you might want to consider: a new log book, an electronic E6B, proper sunglasses, a fuel tester device, or charts and approach plates – check out ***Sporty's Pilot Shop*** catalog for more items and ideas.

8. Study Items

How can you prepare for your comeback? Certainly one of the best ways to accomplish this is to purchase some books and videos to help you get up-to-date. A copy of the FAR and AIM might be your first acquisition. After that, check out ***Sporty's Pilot Shop*** catalog. It's a real treasure trove of aviation related topics, in book or video form. Areas include; flight training, navigation and communication, weather, seaplanes, helicopters, gliders, multi engine aircraft, maintenance and travel— literally, hundreds of titles authored by some of the best in the business. Whatever you are getting back to, Sporty's has what you need.



A great way to keep up to date is to subscribe to a good aviation periodical or two. There are quite a few on the market. Check out your local book seller.

If you are computer literate, the internet is a great source of aviation information in every area imaginable. A good way to cement your concepts is to go online at *Sporty's.com* and take *Sporty's FAA Practice Knowledge Tests* or *Sporty's Study Buddy™*. This is a great way to review the material and both are free.

9. Flight Maneuvers and Flight Review

To become comfortable in the airplane again you will need to review a number of flight maneuvers. Just what to review depends on the type of certificate you hold. Your flight instructor will guide you here.

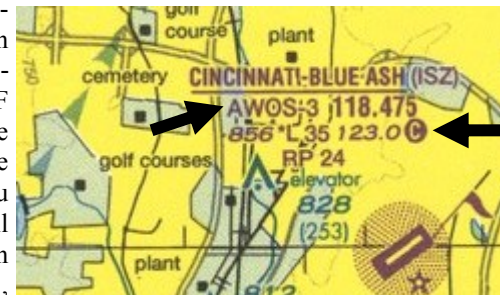
Whatever your certificate level, you will want to go over the basics, such as takeoff and landings, communication, and selected performance maneuvers. Possibly, you might need to review and practice some cross-country work. If you are instrument rated you will have to work on your approaches and other instrument basics.

To get the feel of the airplane and regain your old level of performance, go out into the practice area with your flight instructor and work on fly-

noticed some extensive changes in airspace terminology. In 1993, the aviation community adopted the International Civil Aviation Organization's airspace classifications. There are no more ARSAS or TRSAS, for example. The airspace is now designated from Class A through Class G, but eliminating Class F. These changes are not hard to understand but they do need to be memorized. A good reference text is the FAA's *Aeronautical Information Manual* which can be downloaded, for free, off the web. Check out chapter 3, Airspace.

If you look at a non-towered airport information block on a Sectional chart, you will find some additions to what was presented in the past.

For one thing, you will see a frequency, like 123.0 or 122.9, followed by a red circle with a “C” in it. Now-a-days, this is called a CTAF (common traffic advisory frequency) instead of the old, familiar UNICOM frequency. You use this frequency the same as you would a UNICOM. At non-towered airports, the CTAF will normally be the designated UNICOM frequency. However, at an airport that has a part-time tower, the CTAF will normally become the tower frequency after the tower closes. When you use the CTAF you will start your communication with, for example, “Clermont County TRAFFIC...” and so on rather than “Clermont County UNICOM...”.



Also on the Sectional note that some non-towered airports now have an ASOS or AWOS frequency listed. These are automated weather stations and will give you the basic weather information at a twenty minute or an hourly interval. These systems even give you the present barometric pressure so you can set your altimeter. These facilities are a great way to determine the actual weather conditions at a specific location.

In 1996, the FAA discarded the way they depicted terminal and sequence reports and adopted the International Civil Aviation Organization's format. The Aviation Routine Weather Reports, otherwise known as METARS, and Terminal Aerodrome Forecasts – TAFS – should be reviewed. This information can be found in the FAA's *Aviation Weather Services* advisory circular AC 00-45. It's a free download. Just do a search for 'Aviation Weather Services'. Many websites will also give

you the option of enjoying a translated version of both METAR and TAF.

Recently, in the 2000s, more changes have appeared.

In 2002, for example, the FAA introduced the need of possessing a Photo ID. FAR 61.3 states that you must have, on your person, an acceptable photo ID when you fly as PIC. It could be in the form of a valid driver's license, a government ID card, or an official passport. The section ends with the statement, "[or any] Other form of identification that the Administrator finds acceptable."

One of the most significant and useful developments has occurred in the field of GPS technology. A GPS receiver calculates its position by carefully timing the signals sent by a number of GPS satellites in orbit high above the Earth. This operation enables your GPS receiver to determine its location, speed, direction, and time. In the last few years, we have seen a real advancement in its accuracy and usability with the advent of WAAS (Wide Area Augmentation System) and the continued improvement of the technical sophistication of GPS hardware and software.



After the 9/11 Terrorist Attacks, the US government increased our level of security. Along with this tightening came the development of areas called Temporary Flight Restrictions (TFRs). A TFR is a type of NOTAM. It defines an area restricted to air travel due to a hazardous condition, a special event, special security, or a general warning for the entire FAA airspace. You

can find them, and an explanation of each, on the FAA's website – just search 'TFR'.

Another area to know about is called LAHSO (Land and Hold Short Operations). If you intend to fly into tower controlled airports, and the *Airport/Facility Directory* states that your airport conducts LASHO operations, plan on receiving that type of a clearance. The AIM states, "These operations include landing and holding short of an intersecting runway, an intersecting taxiway, or some other designated point on a runway...". You can find a complete discussion of LAHSO principles in Chapter 4, Section 3 of the AIM.

A similar screen, called the Multi Function Display - MFD for short, is positioned on the right. It shows much of the GPS information, Map Pages, and other information.

Garmin's G1000 system is in all the new Cessnas. You owe it to yourself to check it out. It may or may not be for you, but you can't know unless you investigate it.

7. Need New Flight Equipment?

There have been some great advancements made in pilot equipment over the past 20 years. There are all sorts of helps and flight aids available depending on what type of flying you intend to do. Certainly the advent of electronic wonders has given the pilot much more information, especially in the area of position awareness. Now you can have real-time weather and traffic at the touch of a button. Even your charts can be digitally presented.

There are many portable GPS receivers on the market, some quite inexpensive. If your airplane isn't so equipped, it's to your advantage to purchase one of these wonderful devices. These handy instruments can even display a flight panel comprised of the basic flight instruments which are driven by GPS data. Depending on cost, you can have terrain alerts, taxiway diagrams, and Datalink weather at your disposal.



Another possible item for your flight bag is a portable handheld aviation transceiver. These compact devices are wonders in themselves. They can be used as a backup for your airplane's radios or as a primary communication tool. Some of these transceivers have navigation functions and even localizer reception – a must for the IFR pilot.

Recently, there have been some innovative flight bag developments. These new flight bags offer high quality construction and are designed for your needs. They have space for every important item you want to carry, yet they are light weight and durable.

A good headset is a must to improve communication and preserve your hearing. These new headsets will give you good noise reduction with a comfortable fit.

fore you hire him for your comeback. References help, but it is most important that you sit down with the person and discuss your needs beforehand – the way you are treated and the way your questions are answered says a lot about how the flight training will go.

Sporty's has a great brochure on just this topic – *A guide to Choosing a Flight Instructor*. You can download this brochure, for free, from Sporty's.com.

6. What aircraft will you use?

Probably the best approach to becoming comfortable again with flying is to train in the airplane you were familiar with when you stopped. Of course it all depends on what your new goals are. Maybe you prefer an older two seat trainer, like the Cessna 150. Is the Piper Cherokee calling you, or maybe a new Cirrus SR20? There are a bunch of LSAs to choose from. Would you prefer glass over traditional steam gauges?

Whatever the choice, make sure you get hold of the airplane's POH and a proper checklist. Study them both before you start your training. This will give you the advantage of familiarity and shorten your instruction time. Also, try to spend a little time sitting in the cockpit and recommitting to memory the various instruments and switches. Do a dry run of the checklist a few times as well – this will help acquaint you with everything.

Glass, like the G1000 on a Cessna 172, takes on a new dimension and comes with the need for a higher level of study and practice. It's a completely new computer based, integrated system and it presents the flight instruments in a digital format rather than the customary steam gauges. Certainly, there is a level of similarity, the airplane flies the same as before but the presentation and volume of information is noticeably

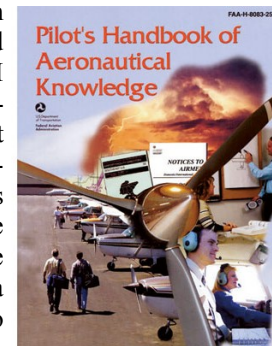


different. The old steam gauges - three still remain – are replaced by vertical instrument tapes, a very large Attitude Indicator, and an HSI displayed on a liquid crystal 12x10 screen called the Primary Flight Display - PFD for short. The PFD is the screen on the left.

In the past, you could walk into your local Flight Service Station (FSS) and acquire a weather report and talk directly to the briefer. That's not the case now-a-days. They still exist, but they are fewer than before. In 2005, the FAA selected Lockheed Martin to operate 58 Flight Service Stations. In 2007 Lockheed Martin consolidated the 58 FSS facilities into 3 large off-airport hub facilities and 15 remaining legacy facilities that work as an extension of the hubs. The proper way to get a weather briefing now is to call 1-800-WX-BRIEF if you are on the ground or Flight Watch on 122.0 if you are in the air.

DUATS is an FAA approved online website that provides you with a complete weather briefing and a flight planning service. You can also file your flight plan with ATC through their site. This is a free service.

Recently, there has been much emphasis on Aeronautical Decision Making (ADM) and Crew Resource Management (CRM). ADM provides a systematic approach to risk assessment and stress management in aviation. It illustrates how personal attitudes can influence decision making and how those attitudes can be modified to enhance safety in the cockpit. It shows the pilot how to determine the best course of action in response to a given set of circumstances. CRM, also known as cockpit resource management, stresses the team approach to piloting in order to make effective use of all available resources, including human, hardware, and informational resources. Discussions of these two topics can be found in the FAA's *Pilot's Handbook of Aeronautical Knowledge*. This text can be downloaded from the web, free – just query its title.



As a separate note, there are many fine aviation websites on the Internet available to you. It's well worth your while to investigate them – a great way to update your aviation knowledge. The internet is a remarkable place in a lot of ways. As a GA pilot, do you know that you can get copies of any current instrument approach plate on the internet, free? Also, you can copy any portion of a current Sectional chart as well, and for free.

Some other areas of interest:

- You must now log PIC time – Far 61.51

- Since 9/11, there are new Airport Security regulations in place established by Homeland Security. See FAR 1500 – 1562 for more on this.
- English Proficiency Requirement. If you fly internationally you'll need a new pilot certificate with the words "English Proficient" on it. This is in addition to FAR 61 requiring a certificate holder to be able to read, speak, write, and understand the English language.
- If you logged pilot-in-command time in a tailwheel airplane after April 15, 1991, you will need an endorsement in your logbook, by a flight instructor, in make and model of tailwheel airplane – FAR 61.31
- If you are renewing your instrument rating, there is no need any more for six hours of instrument flight time to remain current. Now-a-days, you need only log six instrument approaches every six months, along with holding procedures and intercepting and tracking courses either in actual or simulated flight – FAR 61.57

3. New trends

There are some really interesting trends for the GA pilot in the works. One is the proliferation of the glass cockpit equipped aircraft. For example, Cessna and Cirrus are manufacturing new aircraft with the Garmin and the Avidyne Entegra systems respectively. In the Cessna line, new aircraft are equipped with Garmin's G1000 technology. If you have the



opportunity, check into a glass cockpit system and see what a difference there is between the standard analog steam gauges versus the new digital integrated technology. The new systems from either Garmin or Avidyne are awesome.

One of the real comebacks of the 2000s is the development of smaller two place aircraft called Light Sport Aircraft (LSA). Generally, the LSA could be described as an aircraft with a maximum gross takeoff weight of less than 1320 pounds, a maximum airspeed in level flight of 120 knots, with either one or two seats. It must also have a fixed undercarriage, a fixed-pitch propeller, and a single reciprocating engine. Interestingly, you don't need a medical to fly one as long as you have a valid driver's license proving that you are in good enough health to fly. You do need a Sport Pilot or higher certificate to be PIC. The LSA can be used to train

a person to acquire either a Sport, Recreational, or Private certificate. At present, there are more than 80 companies, all over the world, getting into this market. Hopefully, with the proliferation of the LSA, the cost of renting, or acquiring a pilot certificate, will be reduced.

A recent innovation and safety device is the addition of the whole airplane parachute to some airplane models. These are known as BRS (Ballistic Recovery Systems). These parachutes are developed for sport, experimental, and certified aircraft. The first approved BSR for a certified airplane was for the Cessna 150/152. At present the BSR system is installed on various aircraft models. They have already saved many lives.

4. Medical Examiner and your Health

Now that you've decided to come back to flying, you may have to obtain a medical certificate. 'May', in this case, refers to the Sport Pilot certificate – to obtain a Sport Pilot certificate you can have either an FAA airman medical certificate or a current and valid U.S. driver's license. Any other level of pilot certification requires a medical. If you hold a Recreational, Private, or higher certificate, and want to keep this privilege, you will need to visit a Medical Examiner and acquire a medical certificate. The medical has three classes – first, second and third. There has been a change. If you hold a third class medical, and you are under 40, it expires in five years. If, however you are 40 or over, it will expire in two years. The first class medical is good for one year if you are under 40 and six months if you are 40 or older. The second class is valid for one year regardless of age. See FAR 61.23



How is your health? If you have a condition that you think may sideline you, discuss it with your medical examiner. There have been many changes in the previous medical regulations. Some conditions that used to be disqualifications can now possibly be acceptable – check it out.

5. Find the Right Flight Instructor

Two of the most important conditions that your relationship with a flight instructor must have, is trust and respect – especially if you are the eldest of the two. These two conditions must be earned. However, it is possible to get some knowledge of an instructor's personality and ability be-