

■ Have you replaced the battery in your ELT at the expiration of its half-life? If not, your plane is not legal, and you are grounded until you pop in a fresh, approved battery.

Do you know the last day you can legally fly with your current medical certificate and your last biennial flight review?

On the day a pilot does what is necessary to meet one of the legal requirements for flying, he usually knows that rule and how long he will remain legal. However, as the months go by, he can easily forget that his medical will run out on March 3, 1976 or that the FCC radio-station license for his plane will expire on Feb. 29, 1980.

Some pilots may not only forget deadline dates but may not even be aware of them all. There are requirements that apply to the pilot, and others aimed at the airplane owner. In addition to concern for the safety of ourselves and our passengers, there is also the question of whether our insurance is going to be valid in case of a mishap. A pilot would be discomfited after taxiing into a neighbor's Duke and damaging it to the tune of \$200,000 to discover that his insurance is not in effect because he had not submitted his annual FAA Aircraft Registration Eligibility, Identification, and Activity Report prior to April 1 of the current year.

Many insurance policies are nullified if the plane or the pilot is flying illegally at the time of a claim. The courts have swung both ways in deciding whether an insurance company must pay if the pilot or the plane is not legal. For the pilot's own safety, financial protection and composure it pays to be legal.

Whether you feel that some requirement like the biennial flight review is a boon to aviation safety or a bureaucratic intrusion upon your personal rights makes no difference. These laws exist and if you are not in compliance, you are inviting trouble. In addition to FAA rules, there are other nonlegal dates to remember for safe and efficient flying, such as not flying after your insurance has expired and changing the oil on time.

Even the nonowner pilot who rents an aircraft or flies a club airplane has some responsibility for the legality and airworthiness of his craft. Common sense says that the owner of a rented airplane is responsible for its being legal when he furnishes it to a pilot. Maybe. But remember the magic phrase, "pilot in command." While this grand title is great for the ego and may make the weekend renting a Cessna 150 for two hours feel like a jetliner captain, it means what it says.

Are You Legal?

Dates to remember for both pilot and plane

How will insurance companies and courts look at a claim for a passenger fatality when it is discovered that the rental pilot was "in command" of an airplane that was two hours beyond its required 100-hour inspection? It is probably not practical for the renter or the club member to check the owner's files completely to assure that all requirements have been met. He can, however, ask the FBO or the club to furnish a statement certifying that the aircraft is fully legal.

A general word about how the FAA usually figures dates and months. Any requirement for a period of months such as 24 months on a medical certificate or 12 on an annual inspection is figured from the last day of the month in which the requirement is met. For example, an annual inspection done on June 13, 1975 makes the airplane legal for the rest of that month and 12 months thereafter until June 30, 1976.

Similarly, in looking backward, the IFR pilot who must have logged six hours of instrument time in the last six months may want to fly IFR on July 29, 1975. His "six months" of countable time go back to Jan. 1, 1975. If he had flown six hours and made six approaches during the first week of January and none thereafter, he would be legal (but perhaps foolish) to fly IFR through July 31, 1975. For some incomprehensible reason this system does not apply to figuring the two years of validity for the biennial flight review. According to the handbook issued by the FAA to its field personnel, this is figured from actual date to date. A BFR on Sept. 15, 1975 is good until Sept. 15, 1977.

Take a look at the Dates To Remember checklist. You may want to cut it out or copy it into the back of your log. At the top, pencil in the date on which you compile this list. Since the critical dates change all the time, write them in pencil so that you can insert new ones as time passes. Those that change frequently you may prefer to keep on a card in your wallet or flight kit. Remember that this article has been written in 1976, and undoubtedly additional

requirements will come along.

So, what are the dates and deadlines to remember? First, there are nine for the pilot himself to be sure he is legal in any airplane. They are numbered to correspond to the items on the checklist.

1. Current pilot certificates (FAR 61.19). Only the student pilot and the flight instructor have to worry about this. Their certificates expire on the last day of the 24th month after issuance. All other certificates are valid forever, providing that other requirements are met.

2. Current medical certificate (FAR 61.23). Depending upon what class certificate you hold and the type of flying you want to do, pick the date or dates that apply to you from the Medical Certificate Currency table.

Joe, for an example, holds a commercial license with an instrument rating. He passed the examination for a second-class medical certificate on Apr. 11, 1975. He is legal to fly for hire up to Apr. 30, 1976. From that date through Apr. 30, 1977, he cannot fly commercial, but he can do any VFR or IFR flying that requires a private license.

Another pilot, Bill, passed his third-class medical on June 4, 1975 and received his student-pilot certificate on that date. He is legal for noncommercial flying until June 30, 1977 even if he earns his private ticket in August 1975 and his instrument rating in 1976.

In addition to these specific rules about medical certificates, FAR 61.53 makes the pilot, himself, his own medical examiner by stating that he must ground himself any time his physical condition is impaired by a known deficiency that would make him unable to meet the standards of his current medical certificate.

3. Biennial flight review (FAR 61.57). This makes your pilot certificate legal until the same calendar day of the 24th month following the checkride and log entry. However, if at any time during that period you qualify for a new certificate or rating, you are legal for a new 24-month period from the date of qualification.

Dates to Remember

As of: _____
(date)

For the pilot:

- | | |
|--------------------------|--|
| 1 Pilot certificate | |
| 2 Medical certificate | |
| 3 Biennial flight review | |
| 4 Passengers — day | |
| 5 Passengers — night | |
| 6 IFR currency | |
| 7 Written tests | |
| 8 Insurance | |
| 9 State license | |

For the aircraft:

- | | |
|------------------------------|--|
| 1 Annual inspection | |
| 2 100-hour inspection | |
| 3 ELT battery | |
| 4 Federal use tax | |
| 5 FAA report | |
| 6 State license | |
| 7 FCC license | |
| 8 Insurance | |
| 9 Transponder | |
| 10 Altimeter — static system | |
| 11 VOR receiver | |
| 12 Airworthiness directives | |
| 13 New battery | |
| 14 Engine overhaul | |
| 15 Oil change | |
| 16 Vacuum filters | |
| 17 Other maintenance: | |
| _____ | |
| _____ | |

As an example, Harry, holder of a private certificate, had his BFR checkride with a CFI on Nov. 28, 1974. If he earns no new certificates or ratings, he is legal through Nov. 27, 1976.

Sally, holder of a private certificate, took her BFR checkride on Jan. 3, 1975 and thus was legal through Jan. 2, 1977. On July 7, 1975 she received her instrument rating so no additional BFR is required until July 7, 1977.

4. To carry passengers as a private or commercial pilot during daytime hours (FAR 61.57). You must have made three landings and three takeoffs (day or night) in an aircraft of the same category and class within the prior 90 days. For a tri-gear airplane these can be touch and go's. For a taildragger, they must have been in a taildragger and full stop. Except for the special case of airplanes that require a type rating, the landings and takeoffs need not be in the same type aircraft as the one in

which the passengers will be carried. Check backwards in your log to find the date of your third most recent takeoff and landing. Add 90 days. That's your legal date.

5. To carry passengers as a private or commercial pilot at night—one hour after sunset to one hour before sunrise (FAR 61.57). You must have made three landings and three takeoffs to a full stop at night within the past 90 days. These must be in an aircraft of the same category and class but not necessarily the same type. Figure your date as above.

You can cover both day and night requirements by meeting the night standards in either a nosegear or tailwheel airplane depending upon which you will use for passengers.

6. Current instrument experience for flying IFR (FAR 61.57). The rule sounds very simple—six hours and six approaches in the last six months. But it is rather tricky and may require detailed

analysis of your log to determine whether or not you are current and, if not, how you can get current. There are two different six-month periods to be considered. First, the six calendar months preceding the date you want to fly IFR. Second, the six calendar months following the last day you were legal. There are three steps for determining or establishing instrument currency. Let's work them through for Sam who holds a private certificate and an instrument rating. Refer to the Summary of Sam's Log.

Step one. Examine Sam's log for the six months prior to any given date. If six hours of IFR time and six approaches have been logged, or if an instrument-competency check has been accomplished, he is current. The six hours can include actual IFR, hood time in an airplane, or up to three hours in a ground trainer. The required six approaches can be any type, and all can be in either a ground trainer or an airplane.

For example, Sam looks in his log on Apr. 5, 1975 and sees that for the six months from Oct. 1, 1974 through Apr. 4, 1975 he has over the required six hours and six approaches. In fact, he notices that because he flew six hours and six approaches in December 1974, he is legal for sure until June 30, 1975. In mid-July 1975, he again wants to fly IFR and his log tells him okay because the period from January through June shows six hours and six approaches. August 1975 is something else. His log says no—only four hours and five approaches from February through July. Therefore, he goes on to:

Step two. Sam must examine his log to discover the last day he was current and whether that was more or less than six months ago. In effect, the FAA gives us a six-month grace period to easily catch up if we lose currency. If Sam looks back to Aug. 15, 1975, he discovers that he was current until July 31—much less than six months.

In August 1975, Sam needs two more hours and one more approach to be current. He has several options. He can: solo in a ground simulator; take dual in a ground simulator with an instructor; fly hood in an airplane in VFR weather with a licensed pilot in the right seat as safety pilot (Remember that the safety pilot can also log this time as second in command.); fly dual in an airplane (hood or actual IFR) with a CFI or CFII in the right seat; or take an instrument competency checkride.

Let us suppose that on Aug. 15 Sam elects to fly hood with a private license

buddy as safety pilot. He flies three hours and shoots two approaches and becomes legal. When September comes, he again wants to fly IFR. Alas, he finds that he once more has lost his currency. In the six months from March through August he has his six hours but only five approaches. So, on Sept. 7, he hops in a ground simulator for 30 minutes and logs three approaches. Now he is okay for the balance of September—but not October.

During the winter months of 1975–1976 Sam is unable to fly much. In December 1975 he puts one hour in a simulator and logs two approaches. Not current. In February 1976 he has one hour of dual in the air under the hood with a CFII and shoots three approaches. Still not current. In early April 1976 he plans a long cross-country that will undoubtedly require some instrument flying. He is not current and has not been since Sept. 30, 1975. Since he is now more than six months past currency, he cannot get it back merely by logging more IFR time as he did in August and September 1975. He has no choice except:

Step three. The only way to revalidate an instrument rating after six months of not being current is by an instrument competency check. This check must be given by an FAA inspector or a CFII and recorded in the pilot's log. It qualifies the pilot for six more months of IFR. Back to Sam again. He takes and passes an instrument competency check on Apr. 19, 1976, but then his planned trip is canceled for business reasons. On Apr. 27, Sam's airplane is destroyed when the hangar roof falls on it in a storm. He decides to give up flying, but because of the instrument competency check, he remains currently qualified for IFR until Oct. 31, 1976.

Sam's case illustrates the way to determine two things that you may wish to know. First, am I IFR-current right now? Second, to what date will I remain so without more logged time or approaches? All IFR time and every approach you log may change your currency status, so if you hover near minimum requirements, it is a good idea after every flight to refigure and write down the future date to which you are current.

7. Have you passed the written test for any advanced certificate or rating but have not yet taken the flight test? If so, don't postpone the flight test for too long. The written is valid for only 24 months, except for air carrier employees who pass the ATP written. They have no limit.

8. When does your insurance lapse? If

you are both a pilot and an aircraft owner, you probably have a single policy that covers you and the airplane. If you are not an owner, you may have a renter policy. Do you also have special life or accident insurance to cover you while flying in private aircraft? When must it be renewed?

9. Are you based in a state that requires a state-issued pilot license? If so, when does it expire?

So much for you as pilot. But for the pilot-owner, the battle is less than half won. Here are 17 important dates for the airplane. Most of them apply to all owners.

1. Annual inspection (FAR 91.169). If you have not qualified for a progressive inspection program, the aircraft and engine must be inspected by an airframe inspector (AI) or a certified repair agency and proper notation must be entered in the logs, every 12 months. For example, if this was accomplished on any day from July 1–July 31, 1975, you are legal until July 31, 1976.

2. 100-hour inspection (FAR 91.169). Exactly the same checks are made as for an annual inspection, but they can be done by an AI, a certified repair station, or an A&P mechanic. An inspection is required for any aircraft used to carry people for hire or for flight instruction for hire. The 100-hour limit may be exceeded by not more than 10 hours, if necessary, to reach a place at which the inspection can be done. The excess time, however, is counted against the next 100 hours of time in service.

3. Emergency locator transmitter battery (FAR 91.52). Batteries used in ELTs must be replaced (or recharged if rechargeable) any time the ELT has been used for more than one accumulated hour, or when 50% of the useful battery life (or 50% of the useful energy of rechargeable batteries), as established by the manufacturer, has expired.

The expiration date of an ELT battery must be marked on the outside of the transmitter. Read the label to find out when your battery's half-life expires. When you buy a new battery, it will be marked with the date of manufacture and the number of months of life for which the manufacturer has certified it—50% of that life expectancy is all you are allowed. So, make sure you get a fresh battery, manufactured no more than a month or so before the date you install it.

For example, your ELT has a sticker on it indicating that the present battery becomes illegal on the last day of August 1975. You buy a new battery manufactured in June 1975 and certified for three years of life. This battery will have to be replaced in 18 months from the date of manufacture—on or

before Dec. 31, 1976. This date will be marked on the battery itself, and a new date sticker will be provided for the outside of the ELT.

4. Federal use tax. This is imposed upon the owner or long-term lessee for each fiscal year from July 1 to June 30. The base tax is \$25 for all planes, plus a weight tax of two-cents per pound for piston aircraft or three and a-half cents per pound for turbine aircraft. The first 2,500 pounds of a piston aircraft are exempt from the weight tax. Returns are filed and tax paid to the Internal Revenue Service on Form 4638. The tax is due on the last day of the month following the first month in which the plane is used during the fiscal year. If you fly in July, you must pay by August 31. Quarterly installments are allowed.

5. FAA aircraft registration eligibility, identification, and activity report (FAR 91.53). This annual report is made on AC Form 8050-73. Part I is compulsory; Part II is optional. The report must be submitted for each calendar year before April 1 of the following year. It is required of owners or anyone who leases an airplane for a period of three months or more. Normally the FAA will send a form to each owner or known lessee in advance of the April 1 reporting date, but their failure to do so does not relieve you of responsibility for submitting the report on time.

6. State license or registration. Most states have a system for the annual licensing and taxing of aircraft based in the state. What is the date in your state?

7. FCC aircraft radio station license. When you buy a new or used airplane, you must get an FCC station license in your name within 30 days. FCC Form 404 is used for the initial application or for subsequent modification to add different classes of transmitters such as a transponder or DME. The license is valid for five years, at which time it must be renewed using FCC Form 405-B. A renewal application must be submitted from 30–90 days before expiration. Send the form and check, or money order, for \$4 (no cash) to the Federal Communications Commission, Gettysburg, Pa. 17325. If you modify your avionics setup and buy a new license covering additional equipment during a five-year license period, the new license starts fresh for a full five-year term on the entire package.

Incidentally, your Restricted Radiotelephone Operator Permit, which allows you to operate aircraft radios, is issued for a lifetime and never needs renewal.

8. Aircraft insurance. Your agent or insurance company will probably notify you of the premium due date to renew

Summary of Sam's Log

	1974	1975												1976											
	Dec.	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
IFR hours	6	2	1	2	0	0	1	0	3	½	0	0	1	0	1	0	*	0	0	0	0	0	0	0	
IFR approaches	6	1	2	1	0	0	2	0	2	3	0	0	2	0	3	0	0	0	0	0	0	0	0	0	
Is he legal this month?	+	+	+	+	+	+	+	+	+	+	-	-	-	-	-	-	+	+	+	+	+	+	-	-	

*Instrument competency check + = yes - = no

Medical Certificate Currency

	Number of months for which medical certificate is valid		
	First class	Second class	Third class
For flying that requires ATP certificate	6	—	—
For flying that requires commercial certificate (VFR or IFR)	12	12	—
For flying that requires private or student certificate (VFR or IFR)	24	24	24

your policy before the old one expires, but it's your neck if he forgets, so put the date on your list to keep your coverage continuous. Also, it is a good idea to recheck your coverage each year to be sure it is what you want under your present circumstances.

9. ATC transponder test. (FAR 91.177). After Jan. 1, 1976 no transponder can be used unless it has been tested within the prior 24 months by the manufacturer or a certificated repair station and appropriate entry has been made in the log. If you have your transponder checked in December 1975, you are legal until Dec. 31, 1977. This is required for you to be legal when you turn on your transponder, whether or not the transponder is actually required for VFR or IFR flight. For those who have altitude encoders feeding into the transponder, this requirement applies only to the transponder itself and not to the encoder equipment.

At present there is no requirement for periodic checking of either an encoding altimeter or a separate blind encoder. However, watch for the addition of such a requirement, either as part of the transponder check, or the altimeter check described below, or a separate test.

10. Altimeter and static system check for

IFR (FAR 91.170). No person may operate an airplane IFR in controlled airspace, unless within the prior 24 months the altimeter and static system have been checked and approved by the manufacturer or an appropriately rated and certificated repair station. Approval must be entered in the aircraft log.

11. VOR equipment check for IFR (FAR 91.25). A VOR check by one of the approved methods must be made within the last 10 days and the last 10 hours of flight, and *written* notation must be made in the aircraft log or "other permanent record." The law requires that this notation show date, place, bearing error, and *signature* of person making the test. Obviously, it is also good policy that the notation include tach time and type of test conducted. Since this information is updated so frequently, the aircraft log (which should not be carried in the plane, anyway) is a poor place to keep it. The "other permanent record" is best achieved by a card or a slip carried in the flight kit of the airplane.

12. Airworthiness directives. Sometimes an airworthiness directive (AD) is issued that does not require an immediate fix but does require periodic inspection of the affected part by the

operator or an A&P mechanic. For example, on a certain model airplane that has experienced some frequency of gear failure, the AD may require that the gear attach point be examined every 50 hours and signed off in the log as showing no cracks. If your aircraft carries such an AD, write down the tach time or date for the next required inspection.

13. Replace battery. Most of us probably stick with our battery until it shows its age by its inability to operate the starter. This is reasonably safe procedure since we are usually on the ground when we get the word. However, some owners like to be more certain by replacing the battery on schedule every 24 or 30 months. If this is your policy, list the date for your next new battery. If not, it would be a good idea to write in this space the date you installed your current battery.

14. TBO. Write down the tach time when your engine will be due for major overhaul. Be an optimist. Maybe it really will keep humming up to that point.

15. Tach time for next oil change.

16. Tach time or date for cleaning or replacing filters in the vacuum system or instruments. Your maintenance shop may not do this as part of the annual inspection, or you may fly enough hours to need it between annuals.

17. Other periodic maintenance required more often than 100 hours or annual inspection. Such requirements will be stated in the owner's manual. For example, lubricate nose-gear torque links every 25 hours, or clean the carburetor air filter every 50 hours.

Getting all these dates figured out and written down is quite a chore, but once you do it, keeping current is easy enough. Nuisance though it is, it helps enhance your own safety and that of your passengers and can prevent license revocation due to violation of legal requirements. If that doesn't seem to justify the effort, consider how being illegal exposes you to lawsuits and possible judgments against you for vast sums of money. □