Cessna 150-152 Pilot

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- **2 Velcro That Cowl?**NO! Replace the Fasteners
- **4 Preheating**Some Options To Consider
- 8 Special VFR Don't Be Afraid to Ask
- 11 An Accidental Education
 NTSB Reports in Plain English
- **13 Fewer Accidents**Good News or Bad?
- 16 Through a Child's Eyes



Cowl Fasteners

Page 2



Preheating Tips

Page 4



Now In Our Store

Page 11

Velcro That Cowl On...NOT! by Dan Meler

It seems like one of the more neglected maintenance items on our airplanes is the cowl fasteners. The only time we give them a thought is when the engine cowlings are removed and installed. It's a little like the shed roof that only comes to mind when we notice water dripping on the weed whacker, but heck, it's raining and who wants to work outside in the rain?

I've owned my Cessna 150 model F going on 16 years and I'm sure the majority of the cowl fasteners were original when I bought the airplane. I know a few have been changed out because the rivets are not all the same. Then too, there are a few places where U-type fasteners are used to join the top and bottom cowl pieces and there's no telling how many times those may have been replaced because they just slip into position.

For the past few years I've had to very carefully lay out the cowling screws in a pattern to help me get all of the mixed sizes back into their proper locations upon reassembly. You know, the ½" lag screw goes here, the #8 screw goes here, the threaded railroad spike goes there... etc. Finally after all this time I got the bug this week to remedy the situation and go back to using standard screws, all of uniform size.

I made a trip over to my mechanic's shop and bought about a dozen fasteners from him, which I estimated would be enough to replace all of the troublesome ones. These are called Tinnerman nuts, specifically "anchor nuts NAS 444", Available through Aircraft Spruce and other

ANCHOR NUTS (NAS 444) Riveted or welded in position. Attach access plates, doors or any part that must be fastened securely, yet easily removed with fasteners retained in a blind location. Install with AN426AD-3 rivets. Part No. Screw Size Price/Ea. A6195-6Z-1D #6 \$0.36 A6195-8Z-1D #8 \$0.37

suppliers.

They're the type that use coarse screws, not machine screws. What happens to these over time is they eventually wear from use, and sometimes break a prong from over torquing. The wear can be compensated for, to a degree, by using larger screws, but after a prong breaks you are forced to use a much larger screw than you'd like to get it to take hold. When this happens it's definitely time to...no, not resort to Velcro... replace the fastener. I'll walk you through the task and you may find it is something you're interested in tackling on your own! It's actually easier than I make it sound, so give it some

consideration.

Noticing some of the fasteners had been replaced using pop rivets, I initially thought of using that method for the new ones, avoiding the need for an air compressor, pneumatic hammer, rivet tool, bucking bar, etc. There's no stress on the fasteners really, so pop rivets present a convenient installation solution without compromising safety in any way. Guess what? No place in town could I find the 3/32" diameter pop rivets needed to do the job. They make them, but none of the hardware stores around here carry them and I didn't want to delay the project by ordering them from out of town. I suppose it's possible some specialty business may have them locally, but I didn't want to buy a box of several hundred, which is what always happens at those types of stores.

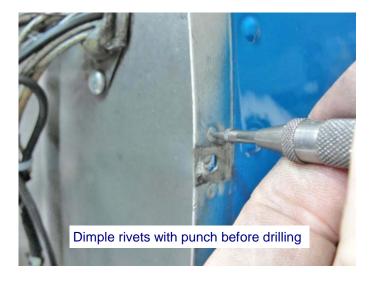
New plan: Use regular aluminum flat head rivets and borrow the riveting tool from my mechanic. I already have an air compressor and, unlike grinders or buffers a pneumatic rivet gun doesn't use a lot of air...nearly any small compressor will do. Woohoo....here we go!

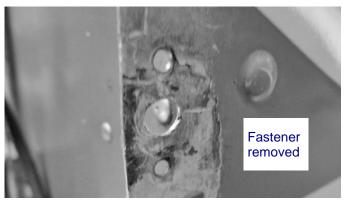
The first thing to do is determine which fasteners you need to replace, unless you want to do them all, which wouldn't involve all that much more work, or expense. After removing the engine cowling I used the size screw I wanted to use uniformly and ran one into each fastener to see if it would hold. The ones that didn't I marked with little pieces of masking tape. Some were obviously shot and didn't require the screw test. Some looked OK, but



weren't.

Next on the agenda is removing the bad fasteners. Removing a fastener is fairly easy, but needs to be done carefully. First I dimpled the center of the rivet heads with a very sharp marking punch because this not only insures you'll be on center (which is essential), but keeps the drill bit from initially trying to wander back to the tail beacon. I like to pre-drill with say a 1/16" bit part way, then switch to the necessary 3/32" bit to do the finish drilling. Once the bit is completely through the rivet I find that moving the whole drill around helps to finish the removal process by





breaking the rivet apart and leaving the empty hole you're looking for.

After removing both rivets the next step is, of course, installing the new fastener. If you use pop rivets this would be quite a bit simpler, but as I said, I went the other route. Holding the fastener in place, as are so many other sheet metal tasks, was accomplished by using a Cleco, which is a clever little widget that you place through both the sheet metal and the fastener with special pliers then it tightens up and holds the fastener in place. If you're unfamiliar but curious...have your mechanic show you how they work. Or Google 'em.

With the fastener held tight I placed one of the itty bitty rivets in place and began the rat-tat-tat operation of installing the them using the air hammer and bucking bar. There's a technique involved here that requires a tiny bit of practice, so if you've never done it you might try a dozen or so practice rivets to develop a feel for it. Having your mechanic demonstrate this little dance, if he will, can be helpful. It's really kind of fun and gives you a feeling of accomplishment to buck a rivet perfectly. OK, back to business. After the first rivet is properly bucked the Cleco is removed and the second rivet can be installed in the other hole in a like manner.

If you want to use pop rivets I believe it would greatly simplify this project so you might want to pre-order some before beginning the work. Also, keep in mind that if someone else has previously used pop rivets you may need to (very carefully) use something like a Dremel tool with a tiny cutting wheel to whack off the bottom of the old rivet...the part that protrudes through the fastener. This way the sheet metal of the airplane is protected from the cutting wheel by the old fastener. Don't attempt to cut off the rivet head, you'll wind up cutting into sheet metal. That's a bad thing. Pop rivets can sometimes be a bear to drill out because they tend to turn with the bit rather than staying stationary for drilling. Be exceedingly careful not to damage the airplane's firewall with the Dremel tool. Additionally, fight the urge to make artistic designs in the windshield with the Dremel tool because, after the initial euphoria wears off, you'll hate yourself the next morning.

Holy Mackerel...that's all there is to it! I repeated the procedure on the rest of them and the job was complete. I had already bought the number of #10 stainless steel screws I needed from a local hardware store, so all that was left was to have my mechanic inspect it, re-install the cowls and be happy with the fact that all of the screws are once again identical. You may choose to use #8 screws, but I used the one size larger to insure that even the older-but-still-good fasteners wouldwould hold securely, and will for years to come.

Cessna 150-152 Pilot

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If In Doubt—Preheat That Engine!

Preheating: When, Why, and How

For you lucky aviators along the southern boarder of this great land I'm guessing preheating your aircraft engines and cabins isn't a topic often discussed as you share that pot of coffee with your comrades in the FBO lounge on a winter weekend morning. Much of the U. S. has a relatively moderate climate and as most of us know from experience...our little airplanes LOVE a moderate climate! If the air is too hot our cylinder head and oil temps can crawl uncomfortably close to the red line, and when we go out to start that marvel of internal combustion technology in sub freezing weather we run the risk of engine damage or, at least, excessive wear on some pretty important moving parts if we don't preheat.

Some engine experts estimate that starting an aircraft engine without preheat in sub freezing temperatures can cause the equivalent of 500 hours of cruise conditions wear in just one start. In that case, four starts and it's time for an overhaul...yikes! I don't know that all of the "experts" agree on this point, but I'm sure they do all agree that starting a preheated engine is much preferable to attempting to start one that's deeply cold soaked. Two important factors concerning starting a cold engine are dissimilar metals and sluggish lubrication. Aluminum and steel heat up at much different rates causing some parts to expand more quickly than others, and in worst case this might cause something such as a rapidly expanding aluminum part to close the normal tolerances between it and a steel part to zero. We all know that when two solid objects attempt to occupy the same space at the same time there's going to be a repair bill to pay!

The most desirable way to preheat the engine is to keep it in a heated hangar. If you have a hangar and can afford to heat it...fantastic! For the other 90 plus percent of us though, there are several methods that vary in practicality by your individual circumstances. Is your airplane kept in a hangar, is electrical power available and convenient, how cold does it get where you live, are you on a budget, how often do you fly in winter months, how difficult does the preheat procedure need to be before you deem it impractical? As you can imagine, with these and other variable thrown into the mix there is no one-size-fits-all answer for everyone.

Personally, although I admire the grit of those hardy

individuals who fly no matter what, if I lived somewhere that was routinely bitterly cold and snowy I'm not sure I'd do ANY winter flying unless I had the luxury of the aforementioned heated hangar. Scraping snow off the airplane and several hours of preheating the engine and cabin would likely not match my preconceived notion of a good time. But...that extreme a climate is not necessary to require preheating. Many pilots and owners feel that anytime the temps are down around freezing or below then it's imperative to preheat the engine to avoid damage or excessive wear, as the case may be. I've noticed that when the thermometer drops into those numbers near the freezing mark that the engine is less than enthusiastic when the starter is engaged...and can you blame it? Some of us pilots aren't too spry at those temps either!

There are only two basic heat sources available to preheat our airplanes...resistance and combustion. Each has its advantages and disadvantages. Electrically powered heaters come in two kinds...one that heats air and blows it into the engine compartment and the other transfers heat directly from contact elements to the bottom of your oil pan and/or cylinders. Combustion heaters, such as those powered by propane generally need electricity to run a fan that moves the heat more efficiently and, depending on which model you buy, the required current may be either 110 volt AC or 12 volt DC. In the following paragraphs I'll give you a brief overview of several popular types/brands for your consideration. I'm not endorsing one brand over another here and have only included one example of each type of preheater.

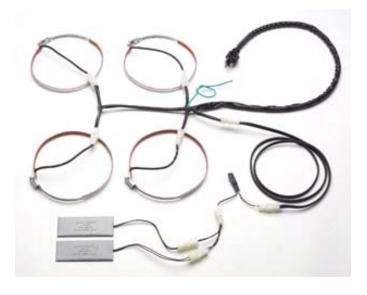
Starting with one of the least expensive, simplest units



we'll first look at the E-Z Heat Aircraft Engine Heater. Aircraft Spruce lists this basic heater for \$149.95. This unit consists of a thermostatically controlled pad that is bonded to the bottom of the oil pan with a peel and stick adhesive strip. Simple installation, no STC required, log book entry only. The specs say that the unit will heat 12 quarts of oil from -40F to +60F in one

hour using 300 watts of electricity or less. Of course you'll want to remember that with an oil-sump-only heater after just one hour the cylinders would still be doggone cold, so you'd need to let it continue for some time to bring the whole engine up to a safe temperature. E-Z Heat states that to thoroughly preheat a cold soaked engine it should take 3-5 hours. They also mention the added convenience of a "Lite Brite" plug which glows when plugged in, showing you at a glance that the heater is indeed getting power.

REIFF Preheat Systems takes the oil-sump heating pad and adds another component to the system. Although you can buy their stand alone heating pad, called the HotStrip System, they also offer their HotBand System which consists of metal bands that wrap around the base of the cylinders and heat each cylinder individually. The two systems working together reportedly do a nice job of preheating in a reasonable amount of time. REIFF shows several options available from \$189 for the basic oil-sump heater to their top of the line Turbo XP system which includes the sump heat strip and the 100w cylinder bands for \$635.



Using the combustion method for heat we have the Red Dragon Engine Preheaters. This is one of the more complex units, burning propane for heat and using electricity to run the fan. The Red Dragon makes a lot of BTUs and is said to run a minimum of 2 hours on 5 gallons of propane. You may purchase models that use either 110V AC or 12V DC current and they say an automobile or aircraft battery will easily run the fan with very little drain. This heater has multiple safety features and can also be used to heat the hangar, melt ice/snow from the aircraft exterior, and warm the cabin...so it's quite versatile, and it does have the ability to preheat the engine much quicker than a simple



oil-sump heater. A/C Spruce lists the basic model for \$312.95 and shows a number of accessories available. Propane bottle not included.

The last one I want to tell you about is the Aerotherm Aircraft Engine Heater, the newest model called the



Deuce. The Deuce is configured much differently than any of the units above in that it is a very small forced air electric heater that produces 6500 BTUs and blows hot air into one side of the front cowl opening and draws it back out the other side, re-circulating and reheating the same air for efficiency. This unit cannot be powered by a car or aircraft battery and must be plugged into a regular outlet or a moderately sized portable generator. It uses quite a bit of electricity, but is said to warm the engine in reasonably short order. Another desirable feature is that the whole thing is small enough to actually be considered portable. A/C Spruce lists the Deuce at \$499.

Aerotherm also offers a Remote Control Switch that is activated by phone and will work with any two electrical devices you choose, including their engine heaters. This programmable RCS has a dedicated cel

(Continued on page 6)

Preheating (Continued from page 5)

number that, when called, will activate up to two devices for whatever periods of time you've programmed in. You also program the RCS to recognize any of up to 200 phone numbers you might call from and it will only recognize those numbers for activation. This is the safety feature that prevents a



"wrong number" from turning something on accidentally. Pretty slick huh? The RCS lists for \$399 and there is no cel number activation fee.

There are other major players in this arena and they deserve to be mentioned too, but my intent here is to give you an overview of what's out there commercially and bring to your attention some of the available options. Your individual situation will dictate which of these systems might best serve your needs.

Or, maybe "None of the above" is your answer. Many pilots have devised their own home grown preheating systems that work just fine for them at a fraction of the cost of the commercial products. Anything you can think of that will safely and conveniently preheat your aircraft engine in an amount of time that you feel is reasonable is probably the right solution for you. Whatever you decide, be kind to your engine in cold weather and do yourself a favor by remembering that even the most expensive system here is cheaper than replacing even one cylinder!

Both optimists and pessimists contribute to the society. The optimist invents the aeroplane, the pessimist the parachute.— *George Bernard Shaw*

Best Of The Forum Great Tips From Our Online Forum

Pesky Fuel Senders? - Read This

From member Paul Knapp

Paul Malkasian can rebuild just about any kind of analog instrumentation or sender. Here's a snippet from his website on Cessna fuel senders:

Cessna Fuel Gauge System

Don't let your customers become glider pilots Make sure they know how much gas is in their tanks. Fuel gauge accuracy is essential and can be achieved. Too many pilots fly by their watches only to find out too late that they should have trusted their fuel gauges when they registered empty.

The fuel sender gives the greatest problem due to wear that occurs with the wiper. To check operation, take ohmmeter readings between stops. These readings should be about 20 to 235 ohms with no intermitents. Stops on the body of the sender must be nearly vertical, as their main function is to prevent the wiper from running off of the resistive strip and grounding out or jumping off to the opposite side of the strip. Fuel gauge accuracy must be checked with a good sender. If you go from stop to stop and the gauge goes from E to F, this indicates that the electrical parameters are OK. However, if the arm wire has been incorrectly bent, then the in-tank reading will be affected. The thing to remember is that it takes approximately 1 1/2" of fuel to lift the float before any readings take place, so the arm should be at rest 1 1/2" above the tank bottom, which is the empty point. If the gauge still reads incorrectly, it may require instrument shop bench calibration of the coils.

Cleaning and Installing Fuel Systems

The fuel gauge actually has three connections on its back: the two threaded studs you normally see, and a brass strip that is most important. It is your ground return to the sender body. Corrosion or tarnish on this ground return will cause false readings or occasional needle pegging. Contact with normal airborne moisture and dirt over the years causes a hard brown tarnish to form on this small brass strip, which slows or interrupts current flow. Symptoms of poor grounding are slow or inconsistent gauge readings and occasionally the meter needle will peg.

To remedy this gauge problem, remove the gauge and clean the brass strip and the instrument mounting with

#600 wet or dry grit and electrical cleaner. Polishing and cleaning these contacts will clear electrical paths. It is very important to understand the electrical paths in the actual fuel gauges. For instance, when removing the gauge, there will be insulating fiber or plastic washers on the studs. Failure to install these washers, or ignorance as to their importance, can result in burnt out meter coils by causing short circuits. A strong light source and a large mirror will help during removal and installation of the gauge.

-Paul Malkasian 360-683-6245 www.fuelsenders.com

Budget Flight Bag

From member Dale DeWeese

I was shopping at Lowes the other day, and I stumbled onto a great alternative for a flight bag at a very reasonable price (\$20).

The bag is an AWP 16" Cargo bag. It has a widemouth opening, appears sturdy and is very cavernous. It's worth a look.

Shine It Baby, Shine It!

From member Jay Potter

I just spent most of this morning washing/waxing my 152 with a product that was suggested to me by a local Cherokee driver--- its called Collinite (#870) Fleet wax. It is marketed as a cleaner wax for Marine, RV and Aeronautical finishes. I also topped it off with another Collinite product called insulating wax. The insulating wax is supposed to be like a protective top coat. I have a 1979 C-152 with an original paint job and I have to say this is the best wax I've used on the plane. I'll have to see how it holds up in the hot Carolina sun but for now it looks real impressive.

Seats Looking a Little Frayed?

From member Mark vanWyk

My seats are "serviceable," but the seat back on the pilot side broke a few months back. I purchased a salvage seat from Dawson's, stripped off the upholstery/cushion from my seat broken seat back; and put it on the frame of the salvage seat back.

My existing upholstery and especially the cushion material are in reasonably good shape, although the fabric is somewhat soiled.

Rather than a total re-upholstery job, I got some FAA-approved fire resistant sheepskin slip covers from Rocky Mountain Sheepskin (www. rmsheepskin.com) in San Jose, CA. My friend, Jim Peterson (a pilot), owns the place. I took the seats to his place and he installed the slip covers for me. Very easy to do. Anyone can do it in 5 minutes.

If you are not quite ready for a complete reupholstery, and your seats are still in fairly good shape, you might want to consider this as a very economical alternative to complete reupholstery -about \$400. Tell Jim I sent you.

Spark Plugs - Less Prone to Fouling From member Gary Shreve

In response to a member asking about spark plugs that might be less inclined to lead fouling:

The REM-37BY plugs were developed, as I understand it, specifically to address the poor operational reliability due to lead fouling in the O-235 series engines. I would think the Sparrowhawk STC paperwork would be specific regarding appropriate models of spark plugs required. If an REM-37BY was specifically prohibited, that would be prominently emphasized due to the popularity of the REM-37BY plug in the O-235's.

On the other hand....My engine (O-320E2D) has fine wire plugs. I've put almost 500 hours on this set of plugs, and the wear is barely perceptible. I'm not sure I'd spring for the fine wires over the REM-37BY's, but the fine wires are a darn nice plug. I do clean the plugs every 35 hours or so.... whenever I do an oil change. I change my oil either every 4 months, every 35 hours, or if the oil begins to get darker than I like...whichever comes first.

I would be very interested to know if the Sparrowhawk conversion prohibits REM-37BY plugs, though. Remember...the third character...if it's an M, you're ok. If it's a B...think of it as "BLOW" a hole in your piston.

SPECIAL VFR CLEARANCE Yes or No?

This time of year one of the most important considerations that affects our decision to fly or not to fly is the weather. As the old quote says: "We can't change the wind, but we can adjust our sails"....or something to that effect.

Sometimes it's obvious to us that if we could just take off and get clear of the airport we'd be in good enough conditions to continue the flight safely, but will the tower say yes to a SVFR clearance request? The following piece was included in the Premier Issue of the Cessna 150-152 Club Newsletter and it's a succinct, well written article that I believe will be helpful to many of our readers, as it answers common questions about the SVFR clearance. I have been granted SVFR clearances in the past, and I've been denied them...you just don't know until you ask. If weather conditions are good enough a controller will likely grant your request...UNLESS it might interfere with incoming/outgoing IFR traffic.

Special VFR...Weather or Not

A special VFR (SVFR) clearance may be issued in many control zones that are reporting IFR conditions. It is a useful tool for the careful pilot who understands the limitations of the clearance, as well as his own.

Control zones are established at certain airports, and usually extended outward for a radius of at least five statute miles, and may extend even further to include instrument departure and approach paths.

A special VFR clearance allows a VFR pilot to operate in a control zone in weather conditions that would normally require an instrument clearance. The emphasis in SVFR is on Visual, and demands that the pilot remain clear of clouds and maintain a minimum of one statute mile visibility.

A pilot should recognize the kinds of conditions that might warrant the use of SVFR. For instance, haze may reduce visibility on an otherwise perfect flying day to less than three miles, or an overcast may settle in at 900 feet, yet visibility is 15 miles. In either example the airport control zone is legally IFR.

However, a SVFR clearance may make it possible for a pilot to land at his home base in the haze, or allow another pilot to practice a landing or two under the overcast. Those operations would be legal and, with care and good

judgment, would also be safe.

A clearance must be obtained prior to flying in a control zone under SVFR. Requests should go to the operating tower in the control zone. If there isn't one in operation, then direct the request to the nearest tower that is in operation.

Generally, the pilot must identify himself, giving his position and stating his intentions. This will be sufficient information to obtain a clearance if it will not interfere with IFR operations. The clearance is likely to include an assigned altitude or route in an effort to allow the pilot to maintain visibility and to remain clear of clouds.

In those situations where the pilot is given specific altitude or routing instructions, it is up to the pilot to maintain the visibility and cloud clearance requirements of SVFR. The controller must be advised if his directions are going to put the pilot below SVFR minimums.

SFVR flying warrants some caution on the part of the pilot, especially since the flight is likely to be at low altitudes. Keep in mind the requirements for minimum safe altitudes must still be complied with.

Familiarity with the control zone will be especially helpful. In fact, that familiarity should be carefully weighed before undertaking a SVFR flight. A pilot unfamiliar with the local area may have difficulty orienting himself when visibility is limited. **That may warrant staying on the ground**. Navigation by pilotage and using towns, hills, highways, and towers will help keep the pilot's eyes outside the cockpit. Major highways that may leave an airport area can provide an excellent route to follow in the event that deteriorating weather calls for a 180 degree turnaround.

It should be clear that SVFR is **not** intended as a "quickie" license to allow VFR rated pilots to fly in IFR conditions. Anytime a control zone is considered IFR a pilot should carefully review the weather. He should be wary of leaving the airport and flying into conditions that would call for an instrument clearance and IFR skills. Changing weather may close down the departure airport and leave the pilot with no viable out in the event he cannot continue the flight as planned. Flying at low altitudes in poor visibility conditions can be disconcerting.

Although the pilot will be assisted inside the control zone in maintaining separation from other traffic, he's not guaranteed that same assistance outside the control zone. The pilot will be expected to be alert for traffic in addition to keeping an eye out for checkpoints. SVFR operations at night are permitted, but require the pilot be instrument rated and operating an IFR equipped aircraft.

Coming Soon to our Online Store STC'd Oil Cooler For Your 150



We are happy to announce that the we will be offering an STC'd Oil Cooler kit for all Cessna 150's. This is a top quality mod that can take the oil temperature worries out of summer flying. Designed for the Continental O-200, this mod has been extensively tested and proved to do the job...and do it well!

Fewer Accidents Good News or Bad?

The good news is, over a 10 year period from January 1, 2001 through December 31, 2010 the number of accidents reported to the NTSB involving Cessna 150's and 152's has gone down by approximately 50%. THAT's a huge percentage when compared to declines in other accident statistics, crime, etc. Seems like we must really be doing something right to achieve that kind of success doesn't it?

Ok...and you knew this was coming...the bad news is, the number of hours flown in Cessna 150's and 152's has declined proportionately. We can attribute the decline in flight hours to many things but in the order of their impact I'd place **cost** as the #1 culprit. Most of the other contributing factors can be traced back to cost, but due to attrition and to the fact that fewer and fewer young folks are entering the world of general aviation, we haven't seen the present numbers for a long long time.

In 1990 the NTSB shows 282 reported accidents (involving C150-152s) with 56 fatalities. 1995 shows 178 accidents with 36 fatalities. Fast forwarding to 2010 there were 50 accidents totaling 9 fatalities. Yes, it's great that 2010 had only one fourth the number of fatalities, but the **rate** of them has held relatively steady from 1990 through 2010.

So, with these statistics in mind, is there a net gain in safety? Not really. So, what does it all mean? I'll go out on a limb here and offer my take on it after having read dozens of the NTSB reports, both older and later ones. It is human nature to make mistakes, sometimes really dumb mistakes. It is a fact of life that anything more mechanically complex than an anvil can suffer a mechanical failure, even when carefully maintained. When you add these two factors into the mix...there's gonna be accidents in aviation no matter what. Mechanical failures account for only a small percentage of aircraft accidents, and pilot medical

issues are even far less common. By the way, engine stoppage due to fuel starvation is generally not considered a mechanical failure:)

The fact is, human error seems to have been regulated to about as low a point as possible for at least the past couple of decades and since the accident rate per hours flown and fatality rate per accidents occurring are steady, the declines are virtually all from the lack of flying. That's BAD NEWS, in this writer's humble opinion.

Each and every one of us considers ourselves to be safety conscience, careful pilots. Safety was drilled into us beginning all the way back to ground school and from that time forward to the most recent flight taken while in the company of a CFI. Safety, safety, safety times 1000. We know about safety, we do our best each flight to observe the procedures that will bring the flight to a happy conclusion, so even though it might put the accident statistics on the rise, let's try to do something this year to promote this sport/hobby/ passion we all share.

Take every opportunity to talk up aviation, especially to young people. If you routinely give rides to non-flyers, keep doing that and maybe even a little more. If you have always been on the quiet side about airplanes, be a little bolder this year and talk to people about them. Give a few free "introductory" rides. Share with others your passion for flying and for these little Cessnas that have become so much an extension of our own personalities.

Airline Safety

If you were born on an airliner in the USA in this decade and never got off you would encounter your first fatal accident at 2300 years of age. Even then you would still have a 29% chance of being one of the survivors.

— Les Lautman, Safety Manager Boeing Commercial Airplane Company, 1989

Replace That Old Style Gascolator With The Latest Technology.

Many of our airplanes still have the original gasoclators, which are subject to a

number of inherent problems such as deterioration and leakage.



This unit, STC'd for all Cessna 150 and 152's by Steve's Aircraft, will eliminate your gascolator problems and give you peace of mind knowing you have the finest gascolator on the market.

Available In Our Online Store

We bowed our heads before the mystery of it and then lifted our eyes with a new feeling in our souls that seemed to link us all, and hope sprang eternal for the great new future of the world.

-Mary M. Parker, regards seeing the first airplane fly over Chicago, 1910

November/December 2010 Accidents

Important: The Cessna 150-152 club publishes these accident reports in the hope that readers will consider the role that each pilot's decisions played in the outcome and learn from the experiences of others. These reports are solely based on preliminary NTSB reports which may contain errors. They have been edited for clarity. They are not intended to judge or reach any definitive conclusion about the ability or capacity of any person, aircraft, or accessory.

November/December 2010 Statistics: 2 Airplanes, 3Persons, 1Uninjured, 0 Minor Injuries, 0 Serious Injuries, 1 Fatality.

NTSB Identification: WPR11FA046 14 CFR Part 91: General Aviation

Accident occurred Sunday, November 14, 2010 in Tucson,

ΑZ

Aircraft: CESSNA 150J, registration: N60858

Injuries: 1 Fatal.

This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected

when the final report has been completed.

On November 14, 2010, about 1215 mountain standard time, a Cessna 150J single-engine airplane, N60858, sustained substantial damage when it impacted terrain while on final approach to runway 33 at Ryan Field Airport (RYN) near Tucson, Arizona. The airplane was registered to a private individual and operated by Kelly's Aviation under the provisions of Title 14 Code of Federal Regulations Part 91. The student pilot, sole occupant of the airplane, was killed. Visual meteorological conditions prevailed and no flight plan was filed for the local supervised solo flight. The flight originated from RYN about 15 minutes prior to the accident.

A certificated flight instructor (CFI) employed by Kelly's Aviation reported that prior to the accident flight; he had flown with the student pilot in the airport traffic pattern at RYN. After completing 5 or 6 uneventful takeoffs and landings, the instructor exited the airplane with the intent of watching the student conduct a solo flight within the airport traffic pattern. The flight was to consist of three takeoffs and landings. The CFI stated that upon exiting the airplane, and remaining in an area near the air traffic control tower, he observed the student takeoff from runway 6R uneventfully.

The CFI continued to observe the student pilot conduct one touch-and-go landing on runway 6R before the wind shifted. Due to the wind shift, the student pilot changed runways and conducted an uneventful touch-and-go landing on runway 33. The CFI said that the third approach to landing seemed normal with the exception of being slightly high. With anticipation of the student pilot landing and taxing to the ramp, the CFI began walking towards the ramp tie-down area when he observed the airplane suddenly pitch downward, about 60-

Nov/Dec 2010 Accidents (Continued from page 11)

feet above ground level (agl), and descend out of sight below a hangar. The CFI then heard the sound of impact.

Examination of the accident site by the Safety Board investigator-in-charge (IIC) revealed that the airplane impacted the ground about 72 feet north south east west of the approach end of runway 33. The airplane came to rest inverted on a magnetic heading of 179 degrees. Wreckage debris which included plexi glass and the nose wheel landing gear were located within 80 feet of the main wreckage. All major structural components of the airplane were located at the accident site. The wreckage was recovered to a storage facility for further examination

NTSB Identification: CEN11CA056 14 CFR Part 91: General Aviation

Accident occurred Thursday, November 04, 2010 in Ken-

mare, ND

Aircraft: CESSNA 150H, registration: N23099

Injuries: 2 Minor.

The pilot reported he applied full flaps while on final approach to land in a farm field and that he did not flare quickly enough. The airplane bounced twice prior to the nose gear collapsing and the airplane nosing over. The airplane sustained substantial damage to the firewall and wings. No anomalies were found with the airplane.

CEN11WA094

On December 1, 2010, at 1711 coordinate universal time, a Cessna F150H, SE-IGU, was substantially damaged upon impact with terrain after initial takeoff from the Linköping Airport (ESSL), Linköping, Sweden. The pilot was fatally injured. The airplane was owned and operated by a private individual. The local flight was originating at the time of the accident.

At 1650, a weather reporting station at ESSL reported winds calm, visibility 5,000 meters, mist, no surface clouds, no significant clouds, temperature 1 Fahrenheit (F), dew point 0 F, and a barometric pressure of 30.30 inches of Mercury. At 1650, a weather reporting station at Malmen Air Base (ESCF), located approximately 4 miles west of the accident site reported winds from 200 degrees at 1 knot, visibility 100 meters (with no directional variation), light snow showers, freezing fog, broken ceiling at 100 feet, temperature 0 F, dew point -4 F, and a barometric pressure of 30.30 inches of Mercury.

The investigation is under the jurisdiction of the

Government of Sweden. This report is for information purposes only and contains only information released by the Government of Sweden.

NTSB Identification: ERA11LA103 14 CFR Part 91: General Aviation

Accident occurred Friday, December 31, 2010 in

Wimauma, FL

Aircraft: CESSNA 152, registration: N28BA

Injuries: 1 Uninjured.

This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed.

On December 31, 2010, a Cessna 152, N28BA, operated by Citrus Aviation Inc., was substantially damaged during a forced landing after takeoff from Wimauma Airport (FD77), Wimauma, Florida. The private pilot was not injured. Visual meteorological conditions prevailed and no flight plan was filed for the planned flight to Sarasota/Bradenton International Airport (SRQ), Sarasota, Florida.

During a previous flight in the accident airplane, another pilot reported a rough running engine and performed a precautionary landing to FD77. After the landing, the other pilot thought water in the fuel caused the rough running engine. The accident pilot was also an airframe and power plant mechanic. He advised the other pilot not to attempt to fly the airplane back to SRQ. Rather, the mechanic would fly to FD77 in another airplane and trade airplanes with the other pilot. Subsequently, the mechanic performed a thorough inspection and troubleshooting of the engine and fuel system, and did not find any problems. He also performed a thorough run-up of the engine, with no anomalies noted.

The pilot/mechanic then departed FD77. When the airplane was about 300 feet above ground level, the pilot heard a loud "bang." He leveled the nose and verified that the throttle lever was in; however, he was unable to maintain altitude. The pilot felt he was too low to return to FD77 and elected to land in a field ahead of the airplane. During the landing, the airplane struck a fence and a pole, slid across a road, and came to rest upright in a ditch.

CLASSIFIED ADS

Aircraft For Sale: 1960-150 4,498TT 520SMOH Maintained and used as Corporate Photo Aircraft/ Hangared, Annual due: April, 2010, Flown Regularly Photo Hatch for Vertical or Oblique Digital Photography, Used Extensively to Mount and Calibrate Nikon D1X and D2X Cameras Located at Madison County Airport Ohio [UYF]; Hangar T-1, New Equipment Includes: Sensenich Propeller Slick Magnetos Michel MX11 Transceiver 2 ea. Telex "Echelon" Headphones, Lap and Shoulder Harness, Upholstery and Headliner, Tires, Battery, Photoport for Verticals and Obliques, Exterior: Imron Paint. Madison County, OH Dean Merchant (614) 451-6897 \$16,500 (Ohio)

Aircraft For Sale: 1964-150D 3,665TT 2,048SMOH 1,200 STOH, Straight Tail w/ Horton STOL Kit, Single Nav/Com Dual PTT & Intercom Garmin 196 Series Panel Mount w/ Wiring (Except Antenna, All Airframe and Engine Logbooks available Interior: Rated 7 of 10, Exterior: Rated 5 of 10 Wayne Chastain (541) 403-0610 \$16,500 No Trades (Oregon)

Aircraft For Sale: 1965-150E 5155TT 810SMOH Stene Aviation Leading Edge STOL kit. No Corrosion. Great Paint & Interior. King KX-175 Nav/Com. Narco AT-50A Transponder. Chad Hanson (701) 400-1113 \$19,500 (North Dakota)

Aircraft For Sale: 1966-150F 4,391TT ADs have been complied with. Next annual due June 2011. MX170B 2 Vors, Narco AT 150 Transponder. Aircraft is currently hangared at KDCY Washington, In, Formerly hanger at Sioux Falls, S.D. Recently flown from S.D. to Indiana. Ron or Dee Coleman (281) 415-6145 \$14,000 OBO (Indiana)

Aircraft For Sale: 1967-150G 2,460TT 11.3 STOH. 4 New ECI cylinders. RT328T Navcom, TKMX11 com, Garmin 295 GPS, Garmin 320A transponder, wheel pants, EZ Heat Pad. 4 Point Harnesses. New seat rails. New mains. New nose tire. Full Flow oil filter. Interior 7, Exterior 7. Always hangared. Never a trainer. No damage history. All logs. Debra Dubois (479) 527-6929 DebraDee@cox.net \$22,500 (Arkansas) http://debradubois.com/Site/3316Juliet.html

Sale: 1964-150D 3,419.6TT Aircraft For 716.2SMOH Fresh annual 8/2009. Engine: Continental O-200-A48 SN - 250411. TSTOH: 141.8 (574.4) New ECI Titan Cylinder complete assemblies (retimed to 28) F&M spin-on oil filter conversion. Carburetor rebuilt @ 536.8 - all new advisories complied with. Mags 500 hour service and retiming @ 655.2. Aerobat style breather. Chrome rocker covers. Prop: McCauley DCM6946/1A101 TPOH: 91.4 (624.8) - Static RPM 2525 - Cruise RPM 2750. All Ads complied with. Auto fuel STC - Standard 13 gallon tanks. Complete Corrosion X treatment @ 601.3. Newer tires and tubes. New Gill G25 battery. Cowling inserts with solar battery charger. Interior: new 12/99 - 7/10. Red/ grey cloth seats, door panels, headliner, hat rack (9/10). AFRC Visors. Vernier mixture cable. Vernier throttle cable. Equipment List: Metal panel). ICOM ICA-200 VHF Transceiver. Narco AT150 Transponder. Narco AR850 Altitude encoder. IIMorrow GX55 Panel GPS. Sigtronics SPA400 ICS. EDO 5000B-9 Gyro Horizon. Aeritalia 31101C DG. Narco 110 VOR. EBC 102A ELT. Davtron HOBBS. Airframe: Paint 5/93 - Dupont Chromaguard - Air Force replica theme -7.5/10. Good glass. Micro VGs wings and vertical stabilizer. Met-Co-Aire Wingtips. New wing fuel drains. Brackett air filter conversion. Belly drain conversion. New style vented gas caps. Skybolt cowl fastener conversion. Custom forced air vents. Skycatch door catches. Stephen Haggerty (435) 586-1446 cctve@qwestoffice.net \$21,000 (Utah)

Aircraft For Sale: 1967-150G 114SMOH Plane just finished annual, hangered since the mid 1970's New paint and upholstery in 1999, but it looks like it just came out of the paint shop except for a little hanger rash in spots, New O-200 engine installed 2004 (Current 114 hrs), New Fiberglass Wing Tips added 2004, New Vortex generators added to wings and tail 2004, New Mitchell flip/flop NAV/ COM 170B added 2004 Most of the flight instruments were either rebuilt or replaced in 2004, Apollo GX55 GPS, IFR en-route certified installed. Dec 2010 2nd NAV with Glide slope indicator added Dec 2010 2nd COM antenna with hand held radio connector added Dec 2010 New Headliner and speaker added Dec 2010, New Main Tires and Tubes added Dec 2010, Battery upgraded to a

Concord Nov 2008,I lost my medical, Plane is based at Tracy, CA (KTCY) Howard Welte (209) 629-4818 PCwelte@aol.com \$ Call (California

Aircraft For Sale: 1967-150/150G 3,095TT 985SMOH Equipped with 150 HP Lycoming O-320. (662) 526-1700 \$22,900 (Mississippi)

Aircraft For Sale: 1967-150G 2,000TT 410SMOH TKD 300, 2nd NAV/COM with GS/MB, Transponder, Intercom, Wheel Pants, Interior: redone 2006, Exterior Painted: 2004 Good Paint. Fred Obermueller (908) 479-4789 \$19,500 (New Jersey)

Aircraft For Sale: 1968-150H 3,437TT 261SMOH Transponder 2006, Garmin 250 GPS/Radio, Interior & Windows Good, Auto Gas STC, Wheel Pants, New Tires/Brakes, Hangared Williamson, NY Chris Black (585) 216-7413 \$19,500 (New York)

Aircraft For Sale: 1968-150H 8,350TT 950SMOH Two Coms One Nav,All Three Wheel Fairings, Moses Lake, WA Cameron White (509) 710-7265 \$18,500 (Washington)

Aircraft For Sale: 1968-Cessna 150H Commuter, 3900TT, 701SMOH, 50SPOH, Garmin GNC300 GPS/COM, ModeC, Transponder, Wheel Pants, Spin-on Oil Filter, Auto Fuel STC, Recent Carpet-Door Panels-Headliner-Tires- Windshield-Brakes, Intercom/Headsets, Nice Interior, Needs Paint, Same Owner since 5-29-2000, Not a trainer, Always hangered. Dave Wigglesworth (913) 963-2829 davegwig@aol.com \$17,500 OBO (Kansas)

Aircraft For Sale: 1973-150L 4,798TT 1,544SMOH 1 73/80, 2 75/80, 3 74/80, 4 75/80, Narco MK12D, Bendix-King 89B GPS, Narco AT 150 w/Blind Encoder, KN 53 Nav Receiver, Collins MKR 350, 2 Place Intercom SPA 400, PTT Pilot/CoPilot, Auto Fuel STC, Complete Logs, Spin on Oil Filter, NDH, Pitot Heat, Tow Bar, Wheel Pants, Sun Shades, Belly Drain, Wing and Tail Strobes, CO Detector, New Items - Wind Shield, Spark Plugs, Vacuum Pump, Ignition Harness, Seat Covers, Carpet, Seat Belt Webbing, Cowl Fastners, Fuel Caps, Brake Pads and Disc, EZ Heat Strip, Starter, Custom Cover, Hangared, Tullahoma, TN. (THA) Charles Mitchell (931)455-0847 hm (931)273-5196 cell mitc170@bellsouth.net \$18,900 (Tennessee)

Aircraft For Sale: 1975-A150M - Taildragger 2790TT 725SMOH 110 STOH with new Millenium Cylinders. Texas Taildragger conversion, 7.00x6 6-ply tires, Michel 300MX Digital Nav/ Com, RT359A XPNDR, Garmin 296 in Air-Gizmo dock, PS Engineering intercom. New last 4 years: new windshield, carpet, flap rollers & washers, all bearings and bushing in tail and rudder, BAS Tail Pull Handle, TFL Oil Filter Kit, Oil Pan Heater, Belly Drain, Corrosion X treatment, brake pads, rudder stop AD kit, Annualed January 2011. Former Pima Air Museum Display Aircraft. Hangared. Lots of fun to fly but I don't need 2 airplanes. Great mechanical condition, original paint. Mike Dann (785) 841-0703 dann1@aol.com \$32,500 (Kansas)

Aircraft For Sale: 1978-152 Taildragger 3,280TT 204SMOH 110 HP, Prop 210 TT, Texas Tail Dragger Conversion 1993, Hangared, Complete Logs Available on Disk, Avionics Master, KX170B Nav/Com, KLN90B GPS, Transponder, Strobes, Sky Lites, Auxiliary Power Plug, Refueling Steps, Interior:Original Rated 8 out of 10, Exterior: Painted 1989 Rated 8 out of 10, Reed Dow (360)356-6257 Brent Grabinger (503) 680-7202 \$35,750 (Oregon)

Aircraft For Sale: 1976-150M 3,839TT 1,551SMOH SPOH 600 Hours, Fresh Annual 4-1, No Damage, New Market Avionics:VFR Digital Nav/Com Mode C Two Place Intercom, New Sky-Tek Starter, Oil Filter, Auto Fuel STC, Interior is Striped out Paint is 6, Location: Timberville, VA Robert Thomas (703) 898-1157 \$17,000 (Virginia)

Aircraft For Sale: 1978-152 Taildragger 1,766TT LYN O-235-L2C, 4 Cycles, 4 TSO 435 SFRM Prop(s): McCauley, Useful Load: 535 Lbs, Fresh Annual September 2010, All AD's Complied, 300 Nav/Com 300 ADF 300 Xpdr Full Flow Oil Filter Quick Oil Drain Valve Tinted Windows, New Tires, Very Fast. At 8,000 Feet, 75% Power, TAS is 102 Kts with a Fuel Burn Rate of only 5.5 GPH! Oil Consumption is 17 Hours per Quart, New En-

gine, Carb, Exhaust System, Starter (Light Weight), Mags, Ignition Harness, Spark Plugs, Lord Mounts, etc. Interior: Rated 6 Exterior: Paint: Rated 7, Location: Brigham City, UT Jim Williams (435) 257-5992 \$33,000 (Utah)

Aircraft For Sale: 1982-152 10.684TT 905SMOH Exceptionally well-maintained and regularly flown trainer, King KX155 NAV/COM, Plane will be delivered with a fresh Annual. This plane has received 50 hour and 100 hour maintenance for the last eight years. We painted the airplane a few years ago and the paint still looks great. This airplane has been flown regularly as a trainer and flies great, We would be willing to keep this airplane on leaseback as well. No Damage and Good Paint, Engine Program: 50 Hour and 100 Hour Maintenance Intervals Loc. Annual Inspection Due: 11/1/2010 Complete Logs, No Damage History, The Seat Covers, Carpet, and most of the Interior Plastic has been Replaced Exterior: The Paint is 7-8, San Luis Obispo, CA Jim Willis (805) 783-2359 (805) 459-1911 \$32,990 (California)

Wanted: Looking for a good 1976/77 M model engine mount. Part # 0451120-1 Paul Vinson (770) 488-4640 pev1@cdc.gov

Wanted: Stall warning horn for Cessna 150B. Myron Waldrop (770) 891-2063 cell

Wanted: O200 crankshafts and oil sump, runout engines, O200 misc parts. Andy (810) 650-2893 Call or Text rugerr@yahoo.com

Wanted: I am missing and in need of the on/off valve position plate that is affixed to the floor in front of the fuel valve on a Cessna 150. Jim Kent (757) 788-9907 Jrkent11@cox.net

Wanted: Looking for a low time Engine and Airframe Cessna 150 older model 1963 - 64 straight tale 150 / 150HP preferably with Stoll, tundra tires, IFR etc. for a bush flying here in the south of Chile. Edward H. Wale ewale@surnet.cl

Wanted: Can anybody help me find a Cessna 152 winterization kit? Thank you, Jeff mailto: dekalbaviation@yahoo.com

Blue Sky Door Latch Kit (Pair) \$45.95* Cig-Pen Pen& Flashlight Holder \$25.95* Pilot Light Pro (Circle Desired Color) Red, Green, Blue Map Light Pro \$80.95* LED Finger Light, (Batteries Included) \$6.55* Book: Owning Buying or Flying the Cessna 150/152 By Mike Arman MT101 STC Belly Drain For 1966-1985 C150-152's MT101-1 STC Belly Drain For 1959 - 1965 C150's Fuel Dipstik for C150 with 13 gal tanks Free Personalization. Available for Liters \$32.00* Fuel Dipstik for C150 with 19 gal tanks Free Personalization. Available for Liters	* Great Stuff In Our Store *			
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