Experimental Aircraft Association
Delaware Valley, Pennsylvania
Doylestown Airport (KDYL)
3879 Old Easton Rd.
Doylestown, PA 18902
Meets: Last Wed each of month (7:30 PM)

January, 2019
Volume 43, Number 1

CHAPTER CHATTER

Chapter Number 78 | Flying Through History

Our annual 2018 EAA Chapter 78 Christmas/New Year's Dinner will be held at:

Giuseppe's Family Restaurant
1380 W. Street Road
Warminster PA 18974
215-674-5550

DATE: January 29, 2019 (Tuesday)
TIME: 6:00 PM (start time)
MENU: (see below)

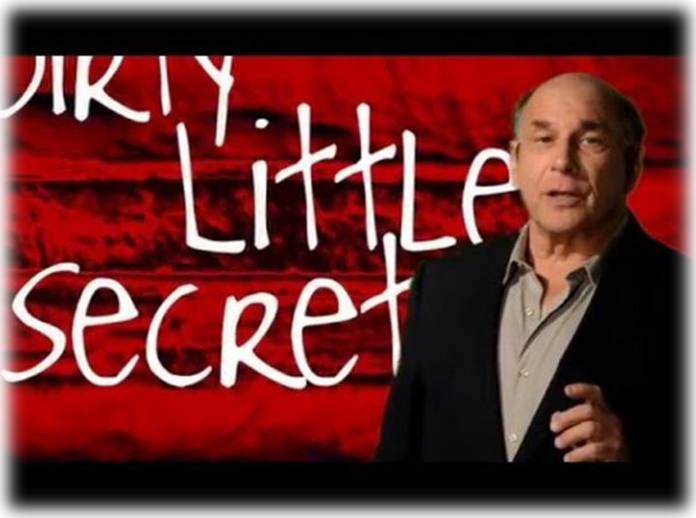
APPETIZERS (2)
- Pigs-N-Blankets
- Chicken Fingers

SALADS (1)
- House Salad (choice of 2 dressings)

SIDES (1)
- Potatoes Au Gratin

PASTA (1)
- Baked Zeti w/Meat Sauce

ENTREES (2)
- Chicken Parmigiana
- Hot Roast Beef



ADS-B NOW! Requirements, Deadlines, and the DIRTY LITTLE SECRETS the FAA won't tell you about.

NTSB Report Out on Fatal 2007 Piper Arrow PA-28-R201 on April 4th, 2018

The NTSB has issued its preliminary, factual report on the crash of a 2007 Piper Arrow PA-28-R201 on April 4th, 2018. Zachary Capra, 25, an Embry Riddle Aeronautical University (ERAU) student was taking a check ride with 61-year-old FAA designated flight examiner John Azma. On takeoff following a touch and go landing on Runway 25L at Daytona Beach International Airport the plane was climbing out and at approximately 900 feet agl it went out of control and crashed, killing both occupants instantly. Investigators immediately discovered that the plane's wing had detached in flight, causing the Arrow to go out of control.

In its report the NTSB found that the wing that broke off suffered from metal fatigue in multiple locations. At the time of the accident, the plane had just less than 8,000 hours total time and had accumulated just over 25 hours since its last annual inspection. In its report the NTSB found that “left wing separated from the fuselage near the wing root and exhibited mid-span buckling of the surface skin…..and that ..”Preliminary examination of the left wing main spar revealed that more than 80 percent of the lower spar caps and portion s of the forward and aft spar doublers exhibited fracture features consistent with metal fatigue.”

In this April 10 photo taken at the NTSB Materials Laboratory, fracture features consistent with metal fatigue can be seen in the aft spar web doubler of the Piper PA-28R-201 involved in the fatal, April 4 crash near Daytona Beach, Florida. NTSB Photo.

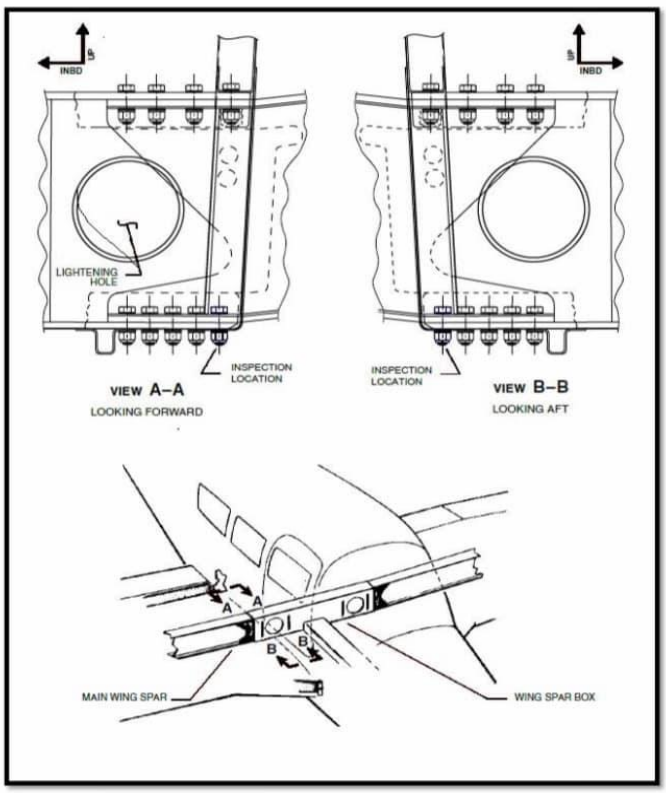


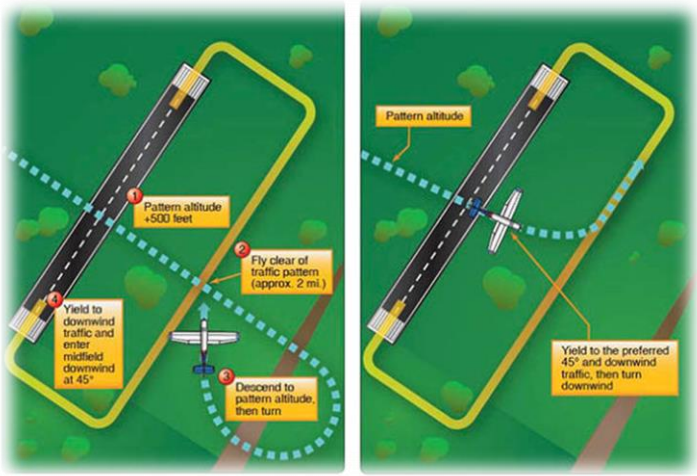
Figure 1. Main Spar Attach Bolt Locations (RH Side Shown)

In the wake of the accident, ERAU grounded its fleet of Arrows indefinitely. The FAA has yet to issue guidance for increased inspections of the affected aircraft models, though it is likely that the FAA will issue an AD for inspections of the wing of some range of PA-28 aircraft at some point soon.

What New Traffic Pattern Rules Mean to You

The FAA’s new guidance on traffic patterns confused many pilots. Here’s our translation.

The FAA has released updated guidance on how we pilots are expected to fly traffic patterns, and the updates are fairly extensive and for the most part really smart, too. Here’s a breakdown of some of the biggest changes contained in the new document, Advisory Circular 90-66B.



1. Altitudes: The FAA has long given license to airport operators to set their traffic pattern at non-standard heights. Most patterns for piston planes were 1,000 AGL (or thereabouts) but many were 800 feet and some were even lower than that. The new rule calls for those patterns to all be 1,000 ft. AGL unless there’s a good reason for them not to be such as obstacles or competing airspace. Turbines would be at 1,500 feet AGL with similar caveats, and ultralights are to be at least 500 feet the piston planes, so 500 AGL in most cases.

2. Left versus Right Hand Flow: This one, like the new altitude guidance, shouldn't change anything at airports that already have standard left hand patterns. But for those that have right hand circuits, they need to have a good reason for doing so and they have to let pilots know of the non-standard pattern flow through light signals (which is cute), markings on the ground or the Rough publications, etc.… The FAA says that it recognizes that many airports already have right hand patterns and the advisory circular didn't prohibit those. But it does require pilots to fly a left hand pattern unless the right-handed version is in place.

3. Entries: This, again, is a big change. The 45-degree entry is retained, but the procedures for entering midfield are different. The FAA now wants planes to enter at 500 feet above pattern altitude and then make a reverse teardrop to join the downwind, initiating the turn only after descending to pattern altitude. The FAA also lists a conventional midfield downwind entry as acceptable, with the midfield crossing done at pattern altitude. The FAA emphasizes that traffic pattern guidance is advisory only.

4. Straight-Ins: This is a reminder that a straight-in approach is an approved way of entering the traffic pattern and that all aircraft flying a standard pattern should keep a close watch when turning base to final for conflicting straight-in traffic.

5. IFR Traffic: IFR traffic is now expected to work themselves into the traffic pattern, so if there's traffic in the pattern already, instead of barreling through IFR flights should accommodate VFR traffic already in the pattern. This guidance will probably come under some scrutiny, as there are a number of complicating factors for arriving IFR flights, including the fact that they are still in many cases under positive control and following a clearance. Unless they've been cleared for the visual, they are on a proscribed flight plan. As we said, there's likely some discussion to come up on this one in particular.

6. Crosswind Turn: Airplanes staying in the pattern shouldn't start the crosswind turn until after they're beyond the departure end of the runway and within 300 feet of pattern altitude and they shouldn't join the downwind leg until they're at pattern altitude.

Quiz: Do You Know What These 6 ATC Phrases Mean?

Turns, Stalls, and Stability Part 1

In this 3 part series you will explore what causes an airplane to turn, how angle of attack is increased, and why unintentional stalls need to be avoided (CLICK HERE or PICTURE).