Duke

FLYERS ASSOCIATION NEWS

Number 10-1 **March 2010**

2010 FLY-IN

WAUKESHA, WISCONSIN

September 23RD – 26TH

PRESIDENT
Earle Olson
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VICE PRESIDENT
Al Uhalt
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SPARE PARTS FOR YOUR DUKE

(2) Generators
(2) Starters
(2) Flap Motors
(1) Tach Generator
(2) Magnetos
(2) Landing Gear Motors

Above are located at Aircraft Systems, 5187 Falcon Road, Rockford, IL 61109. They will ship item to you by UPS or Federal Express. You return your part (same day) to them. They will overhaul, charging your credit card for work done, and then item becomes Association emergency part. Phone 815-399-0225.

Cowl Flap Actuator
Electric Boost Pump
Exhaust Transition Pipe
Lycoming Exhaust Pipe #77429
Prop Brush 3E1206-2
Recognition Bulbs DN25-5
A/C Door Actuator
Overhauled Turbo
Oil Cooler (new)
Engine Cylinder Assembly
Prop Spinner (Less Back Plate)

Above - contact Earle Olson @ P. O. Box 1043, Medina, OH 44258
Phone 330-723-3210 (O) 330-723-9977 (FAX)

Windshields - Contact Gary Bongard @ 612-281-5158 (cell)

WELCOME NEW MEMBERS

Dwight Baldwin P-344
S. Ogden, UT

Mark Ridley P-405
Twin Falls, ID

Kevin Griffin P-509
Renton, WA

Ron Schmidt A-36
Ogallala, NE

Jim Plettner V-35
Cincinnati, OH

Ernie Benner A-36
Berryville, VA

Harold Ayliffe P-505
Woodinville, WA

John Indrizzi P-237
Perth AUST

William Palmerton P-535
Carmichael, CA

Scott Anderson
Riverton, WY

Don Ristow
Wichita, KS

Greg Tullis
Akron, OH

Dennis Racine
Williamsport, PA

Bob LeVine
Granite Bay, CA

COMMENTS FROM: *EARLE OLSON, PRESIDENT*

This year has delivered so much snow in Ohio that our kids and grandchildren are not impressed with our tales of how much snow we had in years gone by. Hope you all have been able to cope with it and that it has not impeded your travel schedule.

Good news, we've added 14 new members since our last newsletter. Several of these are joining in anticipation of buying Dukes just as Ab Fuoss did. Ab's purchase was Bob Stan's Duke that had been sold to another party before Ab got it. Maurice Miller has sold his Duke to S Strauss. We'll miss Maurice and his wit. Maybe we can talk him into joining us in Waukesha even without his plane.

The web has been a source of info for some of our new members and our older members have been exchanging ideas on trickle charging batteries, heater problems, XM weather and the 5 year requirement for checking wing bolts. For some reason the crush washers which are required under the forward wing bolts have sky rocketed in price. What use to cost $80.31 is now $470.00 and there are two required for each time the procedure is performed. That does not include the wing bolts or other washers. We are researching this with Drew McKewen to see if DFA can commit to buy enough that we can save us all some bucks.

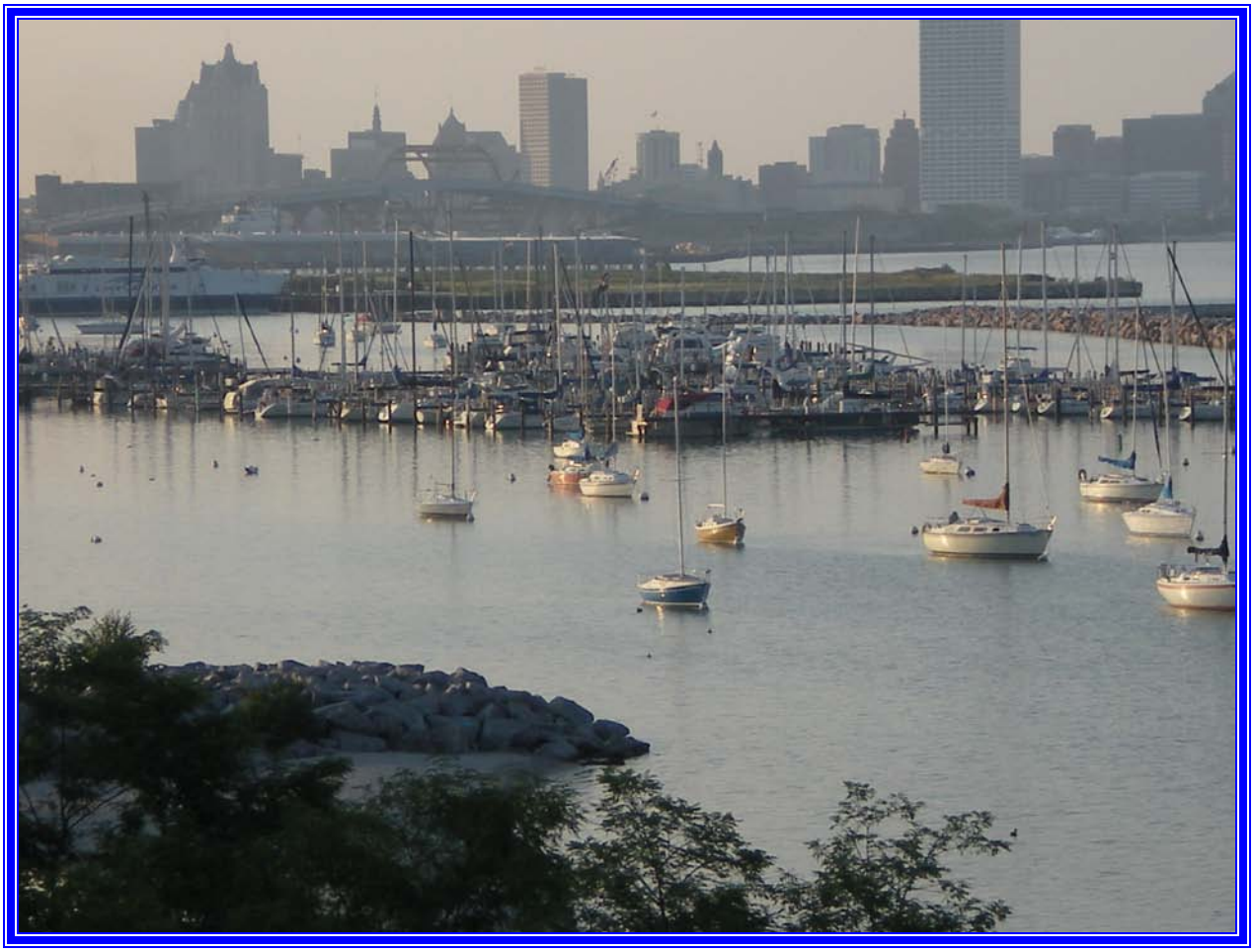
Bob Hoffman has shared his syllabus for initial training new pilots in the Duke with me. This is a much needed program since Beech no longer does it and none of the commercial training firms have a specific program or simulator for the Duke. I can't imagine anyone buying a Duke and not getting a proper check out actually flying the plane with a competent instructor. Kudo's, Bob, nice job. It is important for all of us to have our fleet flown by well trained pilots so we keep our safety record up and accidents down.

Unfortunately, we have lost another Duke and member. Dr John White from Decatur, IL, had departed Huntsville International Airport on January 18, 2010, in Visual meteorological conditions. The pilot reported he had experienced right engine failure and was returning to HSV. Witnesses reported the airplane flying low with one engine not operating and apparently part of the engine cowling appearing to be open. Shortly after this, the plane struck the top of some 70 ft tall trees and impacted the ground within a housing development approximately 3 miles north-east of HSV. The plane was essentially consumed by fire. The accident report stated that there was a 5 ½ by 6 inch hole in the top right portion of the crankcase and the crankcase was circumferentially cracked through the No's 2 and 4 cylinders. Apparently he had a catastrophic engine failure which may have caused the cowling to be displaced and cause considerable drag. The Duke is totally manageable on one engine but it sounds like Dr White may have had too much of a disruption of the engine cowling to maintain altitude. We offer our condolences to his family. A more complete report may be had from the NTSB's report ERA10FA115.

Hope to see you all in Waukesha September 23rd to the 26th Dane Skag has a fantastic Fly-In planned and you can see the airport that your author learned to fly from in 1954. It has changed a lot. For all you motorcycle fans, we will be seeing the Harley Davidson motorcycle museum, which has gotten great reviews; one of the famous Milwaukee breweries; and some of the best German dining you can get anywhere. On arrival, you will be treated to a barbeque at the airport hosted by Dane Skag and Rawlena, his good friend, and personal pilot Gary Johnson and his wife Katharine. The menu and barbeque will be prepared by Chef Michelle C. Palmer (known as the BBQ Queen) and a good friend of the Johnson's, who promises this to be one of her best BBQ's ever. Don't miss this Fly-In or you will never forgive yourself.

Let's remember to spread the good news that flying is one of life's best experiences, and we need to share it with everyone.

Earle



DUKE ACCIDENTS
Some are Minor – Some are Tragic
Kingsley Hill (Member 877) Reviewed the NTSB Base

Recently, someone said to me that he had heard that Dukes are prone to landing-gear collapses. I decided to study the NTSB records and see what causes most bent Dukes. I think the results are enlightening.

There are 115 total Duke Events in the NTSB database, including 31 fatal events with 93 fatalities.

The most common cause of bent metal was "Landing Events" (landing long or short not due to mechanical failure) 19.11% of all events, thought relatively few fatalities occurred (7.53% of all fatalities). The past decade (2000+) saw a marked decrease in this type of event.

The next most common cause were the "dumb s#%t mistakes" (failing to extend landing gear, retracting landing gear on roll out, descending below minimums, etc). These accounted for 14.76% of all reports, and have been fairly steady through all the decades of Duke Flying. 19.35% of these events resulted in one or more fatalities.

Next we get to the first cause that involves failure of the airplane, and that is the maintenance category. 13.08% of events were caused by maintenance mistakes. Some piece of the airplane failed because it was not installed correctly, was an inferior part, or similar cause. This does not include engineering failures except as different engineering might have prevented the improper installation of the component. Maintenance related events peaked (6 events) in the 80's and again nearly as high in the 2000's (5 events).

Fourth we get to everyone's favorite, fuel starvation. 11.32% of all events were the result of engines shutting down for lack of fuel. This event peaked in the 80's with 10 such events, and there were only 2 in the 2000's.

Other mechanical failures, engine failures with successful landings, intentional gear-ups due to gear failure, etc accounted for 9.55% of events with peaks in the 70's and 80's and only one each in the 90's and 2000's. Perhaps our mechanics have learned to check for these possible points of failure.

My Flight Instructor's favorite event is 6th. Single-engine landings 8.71% of events occurred when an attempt was made to land with one engine out. As the instructor says…" if you think you too high (single engine), you aren't high enough." These events are rather evenly distributed through the years.

In terms of fatal events, Distraction is the worst. Distraction by an event that is not in and of itself dangerous (baggage door opening in flight, propeller overspeed, etc) only accounts for 4.35% of events, but is responsible for a disproportionate 16.13% of fatal events and 20.43% of fatalities.

Honorable mentions go to:

Brake failure: In the 70's and 80's there was a rash of failures due to worn brakes, leaking brakes, and lack of brake fluid. No further brake failure events after the 80's.

Blown Tires: In the early days, tires seemed to blow often and cause the landing gear to collapse. No further mention after the 70's.

Weather: Thunderstorms account for 3.48% of events, and Icing is the principle cause of 6.10% of events. Icing and CB events peaked in the 70's, but still appear in recent years (2 and 1 respectively in the 2000's)

The event that we all train for so diligently (loss of an engine on takeoff) accounted for damage to the aircraft (other than what the failed engine directly caused) only once. There are two references to the engine failures on take off where the pilot successfully brought the airplane back with no further damage. It sounds like all that training pays off.

Addressing the original questions about gear collapses. There is only one gear collapse that cannot be attributed to running off the runway or inadvertently retracting the gear after landing (or prematurely retracting the gear on take off). There are two references to gear not extending properly and both appear in the better maintenance category.

If anyone is interested in the full study, let me know. The data shows that the most important component in the airplane is the loose nut behind the wheel. Only two fatal events can be attributed to structural failure of the airplane where the pilot had no change and both of those events involved thunderstorms. As was shown in the most recent thunderstorm encounter, the Duke normally holds together and even sacrifices itself to get the occupants safely to the ground

Your organization has extra cash which could be very well used to acquire additional spare parts for future use. Review our current list on page 2 and advise Jim Gorman of suggested additions.

THERE IS AN ERROR IN THE MEMBERSHIP LIST

Correction is: Glenn A. Wood
333 Woolston Dr.
Morrisville, PA 19057