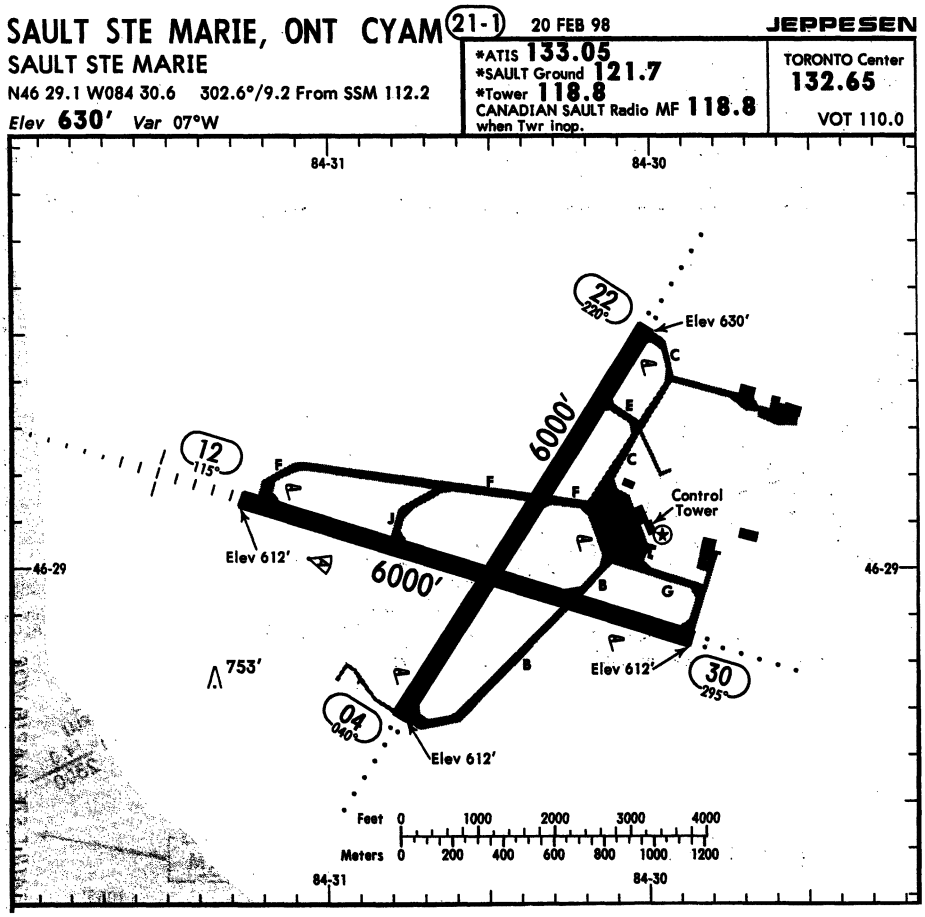
FLYERS ASSOCIATION NEWS

NUMBER 02-2 **AUGUST 2002**



Ron Comeault has a great program for us September 26, 27, 28, 2002 Annual Fly-in at Sault Ste Marie, Ontario, Canada. If you do not receive registration forms in the near future contact Ron at 705/759-7090 (Office) or Fax 705/759-0699.

President	Vice President	Secretary-Treasurer
Mike Greenblatt	Ralph Cohen	Marge Gorman

Spare parts on hand for your Duke

1 - Generator
1 - Starter
1 - Pilot Hydraulic Seat Control
1 - 5 x 6.0 Nose Wheel Tire
4 - Prop Brush 3E1206-2
6 - T10541 Cylinder Assemblies
1 - Gear Motor
4 - Voltage Regulators (see below*)
2 - Oil Coolers
1 - Magneto
1 - Lycoming Exhaust Pipe Part No. 77429
1 - 19 x 6.75-8 Main Gear Tire
1 - 19 x 6.75-8 Main Gear Tube
1 - Flap Motor
Recognition Light Bulbs, DN25-3
1 - Tach Generator

The arrangement we have with Aircraft Systems, 5187 Falcon Road, Rockford, IL 61109, is they will ship an O/H generator, starter, magneto, or motor to you by UPS or Federal Express. You return to them (same day) your part. They will overhaul, charging for work done and the item becomes Association emergency part. Phone number 815/399-0225.

For oil cooler contact Gary Bongard, 952/944-2628 (office).

For other items contact Jim Gorman 419/755-1223 (office).

Remember: Overhaul of generator at 900 hours will cost you three times more than O/H at 500 hours.

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FAA issued AD 2002-10-13 which requires installing a new exterior operating placard for cabin exit door. Compliance is required within next 12 calendar months or 100 hours in service. See Newsletter 01-1, Page 8.

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Dan Truszkowski advises American Cooler Service, 921 W. Mayfield Road, Suite 136, Arlington, TX 76015, 817/419-8008 offer recored Duke oil coolers for $575.00 exchange or $775.00 outright. Also our Association has purchased 2 new oil coolers which Gary Bongard 952/944-2628 has in stock. Price is $995.00 FOB Eden Prairie, MN.

Embry-Riddle Aeronautical University was fined $24,999 by EPA for doing what we all do – draining the sumps and then dumping it on the ground. Their procedure is now to pour clean fuel back into fuel tank. Very good article on subject in *Aviation Maintenance Magazine* June 2002. A worthwhile magazine – *Aviation*, POB 3227, Northbrook, IL 60065. They might offer you a complimentary subscription.

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A general rule of thumb, which has proven accurate over the years, is 10% of flying aircraft are for sale at any one time. A recent *Trade-A-Plane* listed 36 Dukes for sale which is below average.

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As reported in Newsletter 02-1 Raytheon have a new instrument air check valve, Part HE7007-5 which cost less than ½ of the older model - $648.00. The Organization has 2 of these on hand at DFA price of $595.00. At this price is might be a good idea to install a new one at your next annual. Remember: Dukes are between 33 and 19 years old. For more information see Newsletter 01-2, Pages 4 and 5 and Raytheon Safety Communique enclosed.

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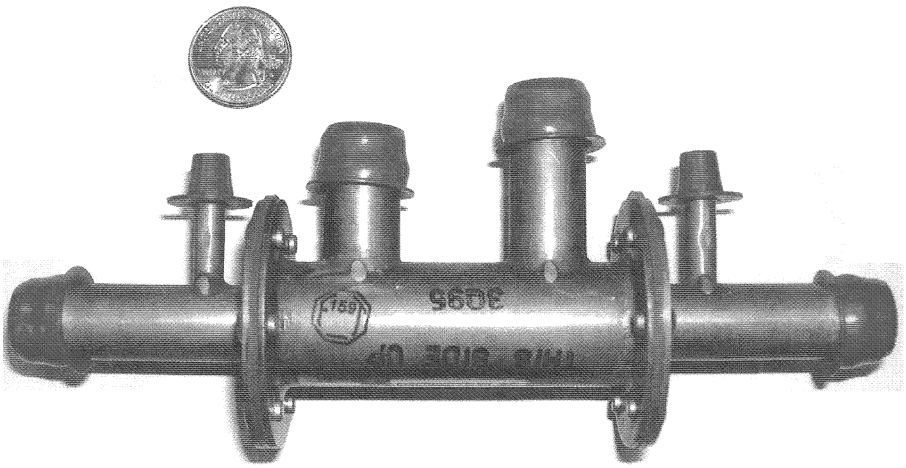

NEW CHECK VALVE

The ins and outs of the Duke cabin door

The Duke cabin door has almost every means of leverage possible.

There is not much you can do as a pilot/owner to your cabin door, but there are a few things you can have done to save you some grief and possibly a few bucks in the future.

One thing that can be done is lubrication. Anytime the door panels are removed lubricate the manual moving parts of the mechanism. Lubriplate on the chains. A good lithium spray on the slides, cams and bearings.

If the door hasn't been looked at in the past, you might want to have it looked at and lubed at your next scheduled inspection and put it on your to do list at 500 hours or 5 year or sooner.

The door panels and handles are not that difficult to remove, depending on the type of interior you have.

One other note about the door, the door seal. Protect the seal any way you can and make certain there are no kinks or twists in the seal.

The door seal on the Duke p/n: 60-430225-3 list for $1,786.80. So if you ever have a need to replace the seal, have it done right and you will probably never have to do it again. Al Lewis, Stevens Aviation, Vandalia, Ohio comments on cabin door.

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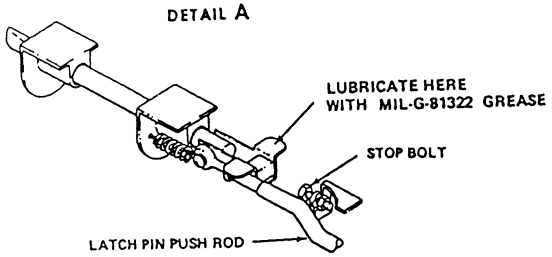
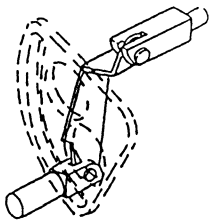
Bill Barrett reports on a stop in Vero Beach – I was very impressed with the strength of a Duke after I saw P575 in VRB on June 7. While I was paying for fuel, the counter peopled asked me if I had seen the "other" Duke in the non-transient parking area. They suggested that I take a look because it had suffered a gear up landing while on a local training. Instead of "landing" at the airport where the incident occurred, which I understood was 15 or 20 minutes away from VRB, the pilot and instructor decided to fly back to VRB.

At least 6-8" of all six prop tips were bent like Q tips. The left wing was obviously misaligned with the fuselage. The flaps were bent, scraped and disarrayed. In short, that airplane was a mess. It must have been uncomfortable, to say the least, to have flown to VRB. The engines and props must have vibrated excessively, etc. I was surprised that the landing gear deployed because of the obvious damage and derangement of the wings.

P-575 had nice paint and winglets, strakes, etc. I suspect that it will cost $$$$ to make it airworthy. Perhaps the insurance company will "total it." Whoever decided in that split second to continue flying rather than complete the "landing" was very lucky.

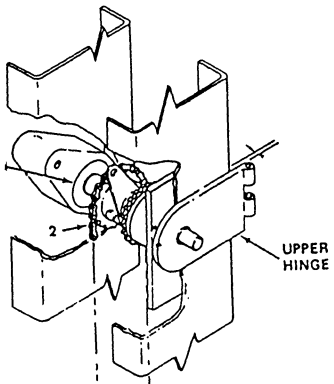


DETAIL A

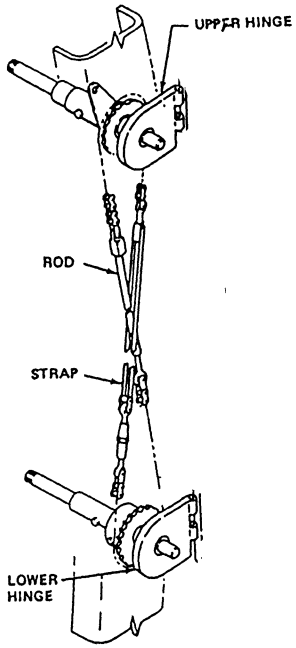


PUSH BUTTON SAFETY RELEASE

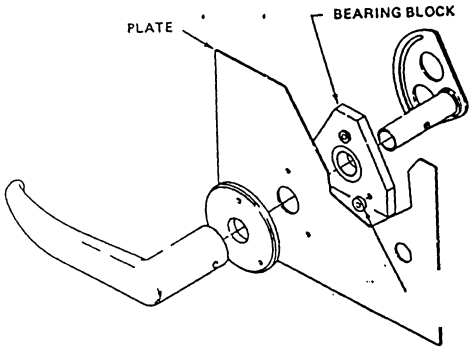
DETAIL B



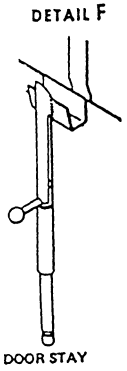
DETAIL C



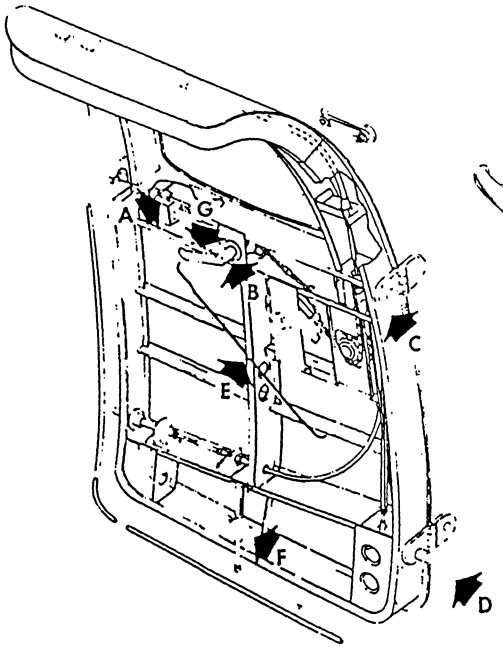
DETAIL D

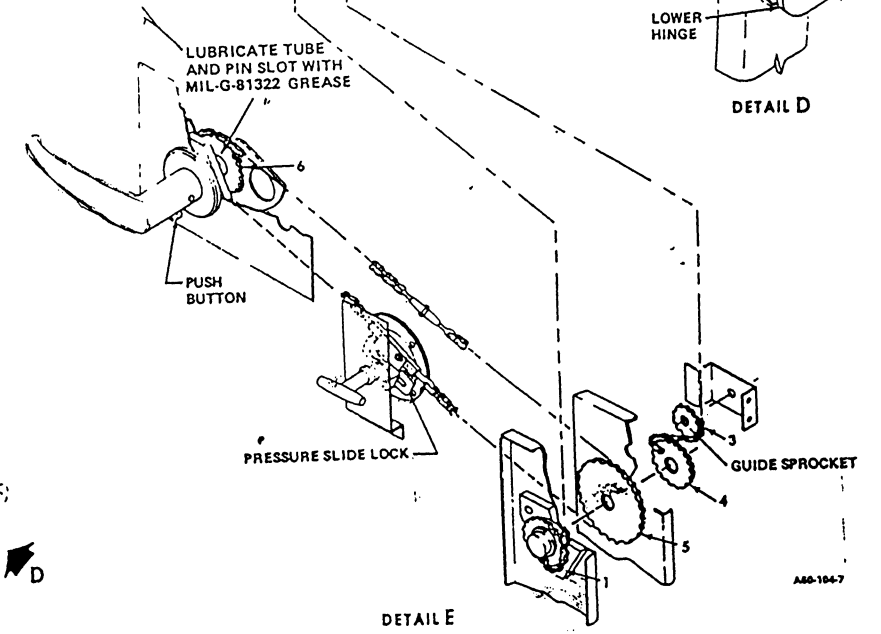


DETAIL G



DETAIL F





DETAIL E

Have had some serious conversations with two excellent Ohio FBO's regarding lifter spalling. These FBO's operate a number of airplanes, Navaho's, Islanders, 206's among other types. They tell me rust was appearing in engines with engine heaters which cycle on and off. It appears when the outside temperature rises and heaters cut off warm engine attracts moisture and rust begins, causing spalling of lifters and cams. This applies to both Continental and Lycoming. Also both have switched from synthetic oil to petroleum based oil. They advise plug in heater only to warm engine before flight. Do not use on a continuous basis day in and day out.

Jim Gorman

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The Duke Flyers Association has learned that the Beechcraft Pilot Proficiency Program (BPPP) has started a program to include Duke training.

The BPPP is a wholly owned subsidiary of the American Bonanza Society Air Safety Foundation.

You can learn more on the web at WWW.BPPP.ORG. They have 12 schedules a year at different locations. For information call 970/377-1877 or contact Duke member Fred Wenninger at 509/928-9663 or fred@wenninger.net. He has attended the course and gives an excellent recommendation.

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WELCOME NEW MEMBERS

Don Monday	Michael Budd	Michael Sheils
Gary Shields	Joseph Nibeel, Jr.	Michael McCallum
Tom Weissenburger	Terry Malone	Randall Kemp

They are listed in the roster.

Safety Communique

Beech
Hawker

June 2002

TO: **ALL OWNERS AND OPERATORS, RAYTHEON AVIATION CENTERS, CHIEF PILOTS, DIRECTORS OF OPERATIONS, DIRECTORS OF MAINTENANCE, ALL RAYTHEON AIRCRAFT AUTHORIZED SERVICE CENTERS, AND INTERNATIONAL DISTRIBUTORS AND DEALERS**

MODELS: **95-B55, Serials TC-2003 through TC-2456; E95, Serials TD-708 through TD-721; D55, Serials TE-452 through TE-767; E55, Serials TE-768 through TE-1201; 56TC, A56TC, Serials TG-52 through TG-94; 58, Serials TH-1 and after; 58P, Serials TJ-3 through TJ-497; 58TC, Serials TK-1 through TK-151; 60, A60, B60, Serials P-4 through P-596; 65-B80, Serials LD-362 through LD-511; A65, A65-8200, Serials LC-271 through LC-335; 70, Serials LB-1 through LB-35; 76, Serials ME-1 through ME-437.**

SUBJECT: **PNEUMATIC MANIFOLD CHECK VALVE FUNCTIONAL TEST**

Raytheon Aircraft Company (RAC) is issuing this Safety Communiqué to notify the operators of the affected airplanes of the potential of an inoperative instrument air manifold/check valve going undetected and to define a functional check to verify that it is operating correctly.

The Instrument air systems on the noted RAC piston twin engine airplanes employ a combination manifold/check valve through which the air driven instruments are supplied and which also functions to isolate the instruments from a single inoperative source. The check valve function is performed by elastomeric flapper valves. As these flapper valves age they become less flexible and will eventually fail to seal properly. A manifold/check valve that is inoperative and undetected can prevent source isolation in the event of a subsequent inoperative instrument air pump and lead to loss of function of the air driven gyro instruments, potential spatial disorientation, and potential loss of control of the aircraft.

The procedures currently published in the affected airplanes' pilot operating procedures do not specifically check for proper manifold/check valve function. Supplements to the pilot operating procedures for the affected airplanes are in process to define a procedure for functional check of the instrument air manifold/check valves over the course of a flight cycle. In the interim, Raytheon Aircraft Company recommends that during the pre-flight and post-flight phase of each flight, the following checks be performed:

SAFETY COMMUNIQUE

990-32204
Issued 8/96

MANIFOLD CHECK VALVE FUNCTIONAL PROCEDURES

Pre-flight

- ❑ Start the left engine in accordance with the pilot operating procedures.
- ❑ Prior to starting the right engine, observe that the right red instrument air source fail indicator button is visible and the left red instrument air source fail indicator button is not visible.

Post-flight

- ❑ Shut down the left engine in accordance with the pilot operating procedures.
- ❑ Prior to shutting down the right engine, observe that the left red instrument air source fail indicator button is visible and the right red instrument air source fail indicator button is not visible.

Adherence to this procedure will ensure that from the prior shutdown to the next startup, both sides of the manifold check valve will be functionally checked without putting the strain of additional start cycles on an engine starting system.

Raytheon Aircraft Company must stress the importance of properly checking the Pneumatic Manifold Check Valve and recommends that a copy of this Safety Communiqué be carried in the aircraft until the supplement is received and incorporated.