



# Illinois Valley Beacon

February 2009

Chapter 563 Chartered in 1976

Volume 16 Issue 2

The **First Breakfast** will be held on the **First Saturday, February 7th**, in the EAA Hangar from 8:00 to 10:00.

The **Regular Meeting** will be held on the **Second Thursday, February 12th**, in the EAA Hangar at 7:00 pm.

The **Directors Meeting** will be held on the **Third Thursday, February 19th**, in the EAA Hangar starting at 7:00 pm. All members are welcome to attend.

The **Second Breakfast** will be held on the **Third Saturday, February 21st**, in the EAA Hangar from 8:00 to 10:00

## EAA Chapter 563

### January 8, 2009 Meeting Minutes

Chapter President Al Phipps called the meeting to order at 7:05 pm

Due to the fact that the Chapter Christmas party was held in December there was no regular Chapter meeting. Therefore there were no meeting minutes to be read and approved.

There was no old business. Under new business a Motion to send \$506 for Insurance for the hanger went unapproved when it was deferred to the board of directors for further review.

There was no other business brought up for discussion. Since everyone seemed anxious to listen to our speaker for the evening. The meeting was adjourned.

Vice President Bob Young introduced our speaker Ed Foster.

Ed earned his pilots license in 1974 after receiving his training at Mt Hawley. He started out hauling night cargo to build up flight hours. In 1990 Ed left his captains position at Com Air for which he had flown for 12 years to get his college degree from Embry Riddle.

In 1993 Ed started working in Alaska for the Interior Department as a pilot for fire jumpers. There are 70 fire jumpers in Alaska and

Interior Department as a pilot for fire jumpers. There are 70 fire jumpers in Alaska and 400 in the lower U.S. proper Even though his main office is in Alaska he also has been sent to fires in several western states. Besides flying over the fire and dropping the fire jumpers his other responsibility is to lead the fire retardant tankers to the drop zone. All tankers have a lead plane taking them to the drop zone and telling them when and how to drop their load.

Ed is 1 of 35 pilots the Government has at their disposal to use as they need arises. Since the government doesn't need these pilots in the non fire season Ed works approximately 9 months in Alaska and has 3 months off living back here in Peoria. For the past five years he has also been assigned to Interior Resources. He is used to fly all type of missions including one recently when the government wanted pictures of Sara Palin's house for security reasons. These missions are quite interesting but also can be quite dangerous as the terrain in Alaska may be fantastic looking from the air but very desolate and unforgiving if your plane decided to quit flying. Ed shared many picture with us he had taken while flying in Alaska as well as when fighting forest fires..

Respectively Submitted  
Your Secretary Donald Wolcott

## Directors Meeting

January 15, 2009

The January Directors meeting was held at the Chapter Hangar on the 15th as scheduled. Three members were not present so a regular agenda was not used and the meeting was spent discussing potential speakers and presenters for future meetings. Chris Tate ended up with a good list of likely candidates for this year.

Respectfully submitted by M. Caudill

## Tax Deductible

Chapter 563 expenses are not entirely covered by dues. In order to keep annual dues at a reasonable level, we rely on other sources of income to break even. Breakfasts and donations play a big part in keeping us in the black. We are happy to acknowledge donations of any amount on our "Honor Roll", which you can see posted on our hangar bulletin board. Can we add your name to the list?

## Speaking of Dues

Checking the Chapter Roster I find that only 42% of us have paid their 2009 dues.

For the next four weeks our treasurer, Gerry Pilon, will be out of town visiting his relatives in N. Carolina. It would help things if you would send your check to me, your editor and I will update the roster and deposit your money in the Chapter account. My address is on the last page of this newsletter.

## CARGAS

I've been told that the Phillips 66 Station on Prospect Av. is not longer a Phillips station but, they have resumed selling 100% gasoline at one pump. They are the only one in the near North side of town. The other one I have been using is in Dunlap.

## ALCOHOL TESTING WITH RAIN GAUGE

*(This article was taken from an old EAA news letter)*

From Herberg C. Liebmann, EAA 174811, Rt. 2, Box 210, Luxemburg, WI 54217.

I have before me your Field Information Bulletin No. 8501 Rev. 9/16/85.

I would like to offer a variation of the graduated cylinder method of testing for alcohol using a simple rain gauge.

**Procure a tapered cylindrical rain gauge, from a garden supply of other store, which is calibrated in millimeters as well as inches, and proceed as follows:**

1) Place water in the gauge to a depth of 10 millimeters.

Note: Use care with this step as alcohol percentage is read from any increase in this volume at the end of the test.

2) Add 100 millimeters of the fuel to be tested, bringing the level to the 110 MM mark on the rain gauge.

3) Place piece of plastic bag or sheet over open top of gauge and shake vigorously.

4.) Allow mixture to settle for several minutes.

5) Read any increase of the water volume as percentage of alcohol extracted from the gas sample.

This test procedure eliminates any need to do a calculation of any kind as we use exactly 100 millimeters of rain gauge depth as our sample and any alcohol transferred to the water can be observed directly on the rain gauge scale and read directly as percentage to the nearest 1.2 percent.

Sincerely, Herbert C. Liebmann

Fill with water to 10 MM level

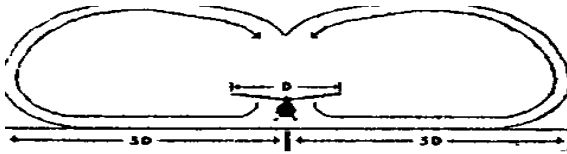
Add gas to 110 MM level Shake vigorously and let settle

Read increase of level In millimeters as % of alcohol in gas sample.

Precision -  $\pm 1/2\%$  (1/2 graduation)

## How to ruin a good day

*(You should be aware of the helicopter activity at Mt. Hawley. There is a flight school operating a small, two passenger, a privately owned one, four passenger, and the OSF chopper practices approaches and hover taxi frequently. This article was printed in the EAA Technical Counselor News, June/July, 1986.)*



RE: Collision between a Cessna 152 and Sikorsky S 76A.

The student pilot in the left seat of the airplane was killed and the instructor pilot seriously injured when the plane struck the helicopter during a takeoff attempt. The two pilots in the helicopter suffered minor injuries.

The S-76 had returned from a flight to Point Pleasant, New Jersey and made an approach to an area between runway 3 and its parallel taxiway. It was transitioning from the approach into a hover, at a position about 100 feet to the right of the runway centerline. The two corporate pilots intended to land and ground-taxi back to base.

**It appeared as though “ the airplane was sucked into the helicopter.”**

Meanwhile, the Cessna had been in the pattern practicing touch-and-goes at the airport, which is an uncontrolled field. Witnesses listening to the radio said both aircraft made appropriate calls, although the helicopter pilots were unaware of the Cessna until the collision impact.

The airplane instructor later told investigators that as the student flew the base leg, he could see the helicopter making its approach. The instructor said he kept the helicopter in sight and he felt that adequate clearance from it was being maintained during the student's landing. According to witnesses, the plane touched down just prior to the runway intersection, or about 1,600 feet along the 3,770 foot runway. Believing separation from the helicopter was adequate, the instructor allowed the takeoff portion of the touch-and-go to proceed. The plane rolled a short distance and lifted off.

The CFI later told investigators he now noticed that

the student was having trouble keeping the aircraft from drifting to the right, and a right bank was increasing. The instructor took the controls, but now found full left deflection was ineffective, and the Cessna continued in an uncontrolled bank to the right until contacting the Sikorsky's main rotor blade.

NTSB's investigator noted that the wind was out of 045 degrees at the time of the accident, which would have made the helicopter's wake tend to drift toward the runway.

One ground witness described the accident, and said it appeared "as though the aircraft was sucked into the helicopter," the investigator said. In addition, rescue personnel arriving within moments of the collision said the survivor (the instructor) told them, "We got caught in the prop-wash - help the other guy."

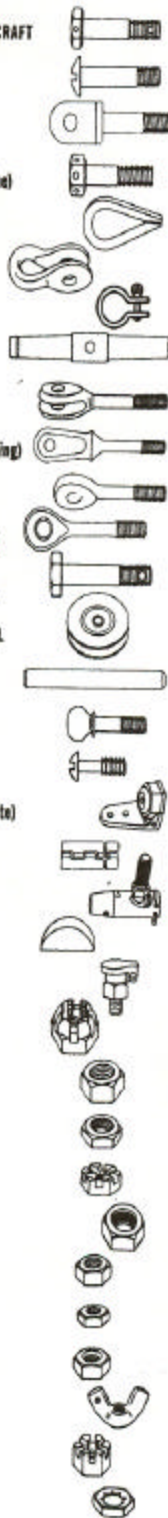
The investigator cited an article on helicopter hover-taxiing procedures in the July-August 1984 issue of the Helicopter Safety Bulletin, published by the Flight Safety Foundation in Arlington, Virginia. The article suggests the "3D rule" for separating fixed-wing aircraft from hovering rotorcraft, showing evidence that gale-force rotorwash extends outward to a distance of about three rotor diameters. The main rotor blade diameter of the S-76 is 44 feet, the investigator noted.

NOTE: This exact same downwash affected a Breezy at Oshkosh several years back. The helicopter was a heavy military machine, and had taken off from the area immediately to the east and north of the tower. There was a Breezy in the fly-by pattern that came around at about 200', apparently in preparation for landing, hit the rotor downwash. Pilot control inputs were clearly visible, the left wing dropped and he put in full right aileron and full right rudder. The aircraft still spiraled down to a rather sudden landing after doing a 360 degree turn. The passenger had a minor injury to his hand and the aircraft was not substantially damaged. However, it is of interest to note that quite a few minutes had elapsed since the takeoff of the helicopter and it had, in fact, cleared the runway in the south end of the field approximately a mile from where the Breezy flew into the rotorwash, and the helicopter was traveling slowly.

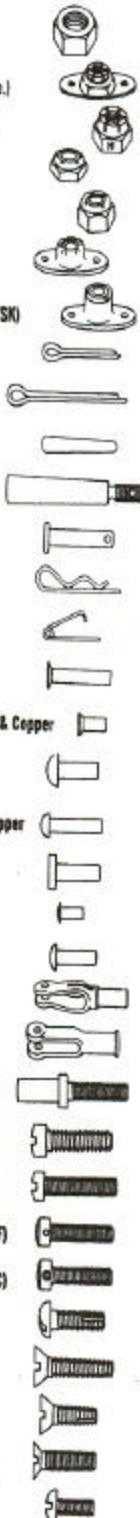
Editor

# AN - GUIDE

AN 3 thru AN 20 BOLT—HEX HD, AIRCRAFT  
 AN 21 thru AN 36 BOLT—CLEVIS  
 AN 42 thru AN 49 BOLT—EYE  
 AN 73 thru AN 81 BOLT—DR HD (Engine)  
 AN 100 THIMBLE—CABLE  
 AN 115 SHACKLE—CABLE  
 AN 116 SHACKLE—SCREW PIN  
 AN 155 BARREL—TURNBUCKLE  
 AN 161 FORK—TI RNBUCKLE  
 AN 162 FORK—TURNBUCKLE (For Bearing)  
 AN 165 EYE—TURNBUCKLE (For Pin)  
 AN 170 EYE—TURNBUCKLE (For Cable)  
 AN 173 thru AN 186 BOLT, CLOSE TOL.  
 AN 210 thru AN 221 PULLEY—CONTROL  
 AN 253 PIN—HINGE  
 AN 254 SCREW—THUMB, NECKED  
 AN 255 SCREW—NECKED  
 AN 256 NUT—SELF LOCK (Rt. Angle Plate)  
 AN 257 HINGE—CONTINUOUS  
 AN 276 JOINT—BALL & SOCKET  
 AN 280 KEY—WOODRUFF  
 AN 295 CUP—OIL  
 AN 310 NUT—CASTLE (Air Frame)  
 AN 315 NUT—PLAIN (Air Frame)  
 AN 316 NUT—CHECK  
 AN 320 NUT—CASTLE, SHEAR  
 AN 335 NUT—PL. HEX (NC) (Semi-Fin)  
 AN 340 NUT—HEX, MACH. SCREW (NC)  
 AN 341 NUT—HEX, BRASS (Elec.)  
 AN 345 NUT—HEX, MACH. SCREW (NF)  
 AN 350 NUT—WING  
 AN 355 NUT—SLOTTED (Engine)  
 USAF 356 NUT—PAL



AN 360 NUT—PLAIN (Engine)  
 AN 362 NUT—PLATE, SELF-LOCK. (Hi-Temp.)  
 AN 363 NUT—HEX, SELF-LOCK. (Hi-Temp.)  
 AN 364 NUT—HEX, SELF-LOCK. (Thin)  
 AN 365 NUT—HEX, SELF-LOCK.  
 AN 366 NUT—PLATE, SELF-LOCK.  
 AN 373 NUT—PLATE, SELF-LOCK. (100° CTSK)  
 AN 380 PIN—COTTER  
 AN 381 PIN—COTTER, STAINLESS  
 AN 385 PIN—TAPERED, PLAIN  
 AN 386 PIN—THREADED TAPER  
 AN 392 thru AN 406 PIN—CLEVIS  
 AN 415 PIN—LOCK  
 AN 415 PIN—RETAINING, SAFETY  
 AN 426 RIVET—100° FL. HD., ALUM.  
 AN 427 RIVET—100° FL. HD., Steel, Monel, & Copper  
 AN 430 RIVET—RD. HD., ALUM.  
 AN 435 RIVET—RD. HD., Steel, Monel, & Copper  
 AN 442 RIVET—FL. HD., ALUM.  
 AN 450 RIVET—TUBULAR  
 AN 470 RIVET—UNIVERSAL HD., ALUM.  
 AN 481 CLEVIS—ROD END  
 AN 486 CLEVIS—ROD END ADJ.  
 AN 490 ROD END—THREADED  
 AN 500 SCREW—FILL. HD. (NC)  
 AN 501 SCREW—FILL. HD. (NF)  
 AN 502 SCREW—DR. FILL. HD. (Alloy Stl.) (NF)  
 AN 503 SCREW—DR. FILL. HD. (Alloy Stl.) (NC)  
 AN 504 SCREW—RD. HD. SELF TAP.  
 AN 505 SCREW—FLAT HD., 82° (NC)  
 AN 506 SCREW—FLAT HD., 82° SELF TAP.  
 AN 507 SCREW—FLAT HD., 100° (NF & NC)  
 AN 508 SCREW—RD. HD. BRASS (Elec.)



AN 509 SCREW—FL. HD. 100° (Structural) (ALLOY STEEL)  
 AN 510 SCREW—FLAT HD. 82° (NF)  
 AN 515 SCREW—RD. HD. (NC)  
 AN 520 SCREW—RD. HD. (NF)  
 AN 525 SCREW—WASHER HD. (Alloy Stl.)  
 AN 526 SCREW—TRUSS HD. (NF & NC)  
 AN 530 SCREW—RD. HD., SHEET METAL (TYPE B)  
 AN 531 SCREW—FL. HD., 82° SHEET METAL (TYPE B)  
 AN 535 SCREW—RD. HD. DRIVE (Type "U")  
 AN 545 SCREW—WOOD, RD. HD.  
 AN 550 SCREW—WOOD, FLAT HD.  
 AN 565 SCREW—HOLESS, SET  
 AN 663 TERMINAL—CABLE, DBLE. SHK. BALL (FOR SWAGING)  
 AN 664 TERMINAL—CABLE, SGL. SHK. BALL (FOR SWAGING)  
 AN 665 TERMINAL—CABLE, THDED. CLEVIS  
 AN 666 TERMINAL—CABLE, THDED. (FOR SWAGING)  
 AN 667 TERMINAL—CABLE, FORK END (FOR SWAGING)  
 AN 668 TERMINAL—CABLE, EYE END (FOR SWAGING)  
 AN 669 TERMINAL—CABLE, TURNBUCKLE (FOR SWAGING)  
 AN 737 CLAMP—HOSE  
 AN 741 CLAMP—TUBE  
 AN 742 CLAMP—PLAIN, SUPPORT  
 AN 900 GASKET—COP.—ASBESTOS, ANGULAR  
 AN 901 GASKET—METAL TUBE  
 AN 931 GROMMET—ELASTIC  
 AN 935 WASHER—LOCK, SPRING  
 AN 936 WASHER—LOCK TOOTH (Ext. & Int.)  
 AN 960 WASHER—FLAT, AIRCRAFT  
 AN 961 WASHER—FLAT, BRASS (Elec.)  
 AN 970 WASHER—FLAT, LARGE AREA  
 AN 975 WASHER—TAPER PIN  
 AN 996 RING—LOCK



# February 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7 Brkfst
8	9	10	11	12 Reg. Mting	13	14
15	16	17	18	19 Dir Mting	20	21 Brkfst
<p>Unless otherwise notified, the Regular Chapter 563 meetings will be held at the Chapter Hangar at 7:00pm on the second Thursday of each month.</p> <p>All Chapter 563 breakfasts will be held at the Chapter Hangar from 8:00 am to 10:00 am on the first and third Saturday mornings.</p> <p>Unless otherwise notified, the Chapter 563 Directors meetings will be held at the Chapter Hangar on the third Thursday of each month at 7:00pm.</p>					27	28

## 2008 Chapter 563 Officers

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