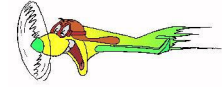
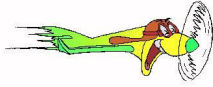


Huron County Airport

Scud Runner



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NOFA Inc.

Visit the 5A1 airport website:
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"Flying a plane is no different from riding a bicycle. It's just a lot harder to put baseball cards in the spokes."

*Capt. Rex Kramer
Movie: 'Airplane'*

Pilot's Lounge: Skywriting

By Sandy Gordley, Airport Manager

When I was a kid, my family would always go to Indianapolis for Memorial Day. My grandmother had a restaurant on W. 16th Street and it was only about a half mile from the Indianapolis 500 Speedway. We would all gather there and have a big breakfast and then head for the track. One of the highlights of the day, for me, was the skywriter. I would try and guess what he was saying and it seemed like it took forever.

Skywriting was a way of advertising that got someone's attention longer than whizzing past a billboard or glancing at a newspaper....and it probably made a more lasting impression.....for me anyway.

It is usually done by one plane that can generally write up to six characters, with a skilled pilot who, at times, is maneuvering upside down. He also has to decide when to use smoke for the letters. Five to seven planes are needed for longer messages (up to thirty characters) so that the entire message is visible at once.

Today, it is generally called Skytyping and the smoke is emitted in a series of bursts, like dots. A computer generates the master plan and electronic signals control the smoke output. The blurring

of the smoke makes the desired end effect.

• Most sources attribute the development of skywriting (1922) to John C. Savage, an Englishman. In that year, Captain Cyril Turner wrote "Daily Mail" over England and "Hello USA" over New York. The American Tobacco Co. picked up the technique for their Lucky Strike cigarettes.

• The first skywriting advertisement was in 1922 and on April 8, 1924, Savage received a patent for "Method of producing advertising signs of smoke in the air"

• A letter can be as high as one mile and a message can stretch up to fifteen miles.

• The letters may be seen for 30 miles in any direction, can last 20 minutes and the writing occurs usually at altitudes from 7,000 – 17,000 ft.

• The paraffin oil vaporizes at 1500 degrees in the heat of the plane's exhaust and is environmentally safe.

• The skywriting that appeared in the movie, "The Wizard of Oz," was done by special effects in a tank with an oil and water mixture.

One company in New York "writes" more than 50 marriage proposals a year in the sky.



Oshkosh 2008

Squawk: *Airplane Tires at High Altitude*

By Sandy Gordley

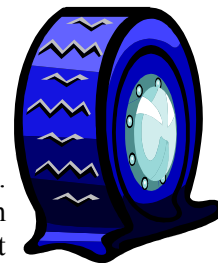
The tires contain pressurized air. Going from sea level to flight altitude drops the pressure. The exact pressure drop depends on how high the plane is flying, but is typically around 10 to 13 pounds per square inch (psi). This drop in pressure places a stress on the tire as the air within tries to expand. The materials the tires are made from have sufficient strength to resist the forces exerted by the enclosed air without failing.

As a home experiment, take a half empty two liter soda bottle and press in on the sides while screwing on the cap VERY tight. When you are done the bottle

should look somewhat crumpled.

Now start shaking the bottle. Carbon dioxide bubbles will start coming out of the soda and pressurize the bottle.

You will see the bottle expand and become very rigid. This is the same as a tire going from sea level to a few thousand feet. The plastic of the bottle is similar to the rubber in the tire in that it contains the pressure within the bottle without exploding. Return the bottle to the refrigerator for an hour to allow the gas to dissolve back into the soda and the pressure to return to normal.



Touch and Go: *Precipitation Static or P-Static*

By Sandy Gordley

Precipitation static is caused by aircraft in flight coming in contact with uncharged particles. These particles can be rain, snow, fog, sleet, hail, volcanic ash, dust; any solid or liquid particles. When the aircraft strikes these neutral particles the positive element of the particle is reflected away from the aircraft and the negative particle adheres to the skin of the aircraft. In a very short period of time a substantial negative charge will develop on the skin of the aircraft. If the aircraft is not equipped with static dischargers, or has an ineffective static discharger system, when a significant negative voltage level is reached, the aircraft may go into "CORONA." That is, it will discharge the static electricity from the extremities of the aircraft, such as the wing tips, horizontal stabilizer, vertical stabilizer, antenna, propeller tips, etc. This discharge of static electricity is what you will hear in your headphones and is

what we call P-static. Each of the following problems was caused by P-static:

1. Complete loss of VHF communications
2. Erroneous magnetic compass readings (30% error)
3. High pitched squeal or audio
4. Motor boat sound on radio
5. Loss of avionics in clouds
6. VLF navigation system inoperative most of the time
7. Erratic instrument readouts
8. Weak transmissions and poor receptivity of radios
9. "St. Elmo's Fire" on windshield

Compass: *Miscellaneous*

By Sandy Gordley

Temporary Closures: The FAA approved the temporary closures for the drag strip for this year only. This includes, "Night Under Fire" on August 2nd (rain date August 9th). The airport will be closed on that day from 9 p.m. to 3 a.m. After this event, you will be receiving a questionnaire from the Airport Board asking your opinion on how you believe the closing procedures were

handled.

Wings & Wheels: Mark your calendar: August 8th from 8 a.m. to noon. The Civil Air Patrol will be taking care of the breakfast this year; however, we still need volunteers to help out. We have a few who have "enlisted" but could use a few more.

