Huron County Airport

Scud Runner

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NOFA Inc.

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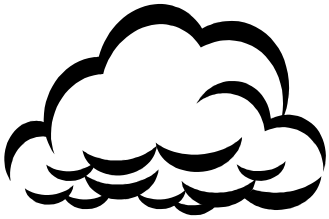


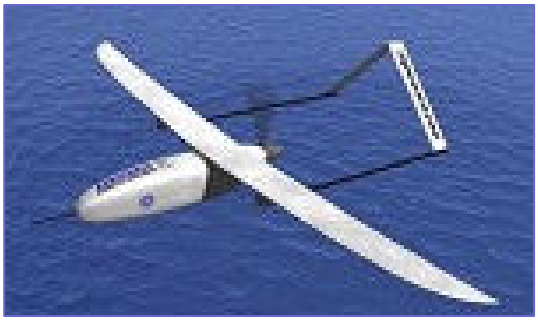
"When there's snow on the ground, I like to pretend I'm walking on clouds."

Takayuki Ikkaku, Arisa Hosaka and Toshihiro Kawabata
Animal Crossing: Wild World, 2005

Pilot's Lounge: *Aerosonde UAV*

By Sandy Gordley, Airport Manager

The Aerosonde UAV (unmanned aerial vehicle) was designed to collect weather data, including temperature, atmospheric pressure, humidity, and wind measurements, over oceans and remote areas. On August 21, 1998, a Phase I Aerosonde completed a 2,031 mile flight across the Atlantic. This was the first crossing of the Atlantic Ocean by a UAV.



In November 2007, the Aerosonde completed a history-making flight into Hurricane Noel. It was the first hurricane mission in which an unmanned aircraft was able to explore the storm's eye and eye wall. The 17-hour, 27 minute flight duration was a record for unmanned aircraft hurricane missions, and the Aerosonde aircraft gathered data from as low as 300 feet above the ocean's surface.

On October 20, 2009, the University of Colorado announced that its Aerosonde participated in a six-week exploration of the cold, rough katabatic winds present on the coast of Antarctica. After extensive observation, University of Colorado scientists can now generate highly detailed, three-dimensional maps to help study the katabatic winds' relationship to Antarctic sea ice formation. AAI's crew flew four Aerosonde aircraft, which logged more than 130 flight hours and flew nearly 7,000 miles during their 16 flights.

The FAA has now announced they have issued a certificate of authorization to Kansas State University to fly the Aerosonde UAV over an emergency response training area in central Kansas. The vehicle, operated by Flint Hills Solutions, will fly over Crisis City, which is adjacent to the Air National Guard's Smoky Hill Weapons Range near Salina, Kan.

The ability to fly over Crisis City opens the door to more extensive training in search-and-rescue operations through the use of sites that include a mock disaster-struck city, crashed transportation vehicles and a collapsed building. "The authorization is a huge step in opening up the market for the utilization of UAVs in emergency response scenarios," said Roger Powers, CEO of Glint Hills Solutions.

The next step for Kansas State will be to apply for emergency COAs, allowing the Aerosonde to fly in different locations across the state, including weather-related disaster sites, within a matter of hours.

Length: 5' 8" Wingspan: 9' 8" Height: 2' 0" Maximum speed: 90 mph Range: 1,875 miles

Squawk: *Winter Precipitation*

By Sandy Gordley

Unlike summer months, winter brings a broader range of precipitation types due to sub-freezing temperatures. Since the atmosphere is variable and seldom uniformly warm or cold, precipitation comes in several forms of the frozen variety. Simply put, temperatures above the surface of the earth are important to determine the type of precipitation. How much (if any) of the mid-levels of the atmosphere is above freezing goes a long way to determining if what falls will be frozen, semi-frozen, or liquid.

SNOW: is the simplest form of frozen precipitation and requires no special conditions in the upper atmosphere to form. It is also the most common. The only requirement for snow to form is that temperatures are at or below freezing at all levels of the atmosphere.

SLEET: needs some special conditions in order to form. At the surface, temperatures must be below freezing. As one moves up through the atmosphere, temperatures rise until, for a short period, they are above freezing. Nearer to the cloud layer, temperatures fall back to sub-freezing levels. As precipitation falls from the clouds, it is snow. When it passes through the shallow layer of above-freezing temperatures it will melt, but not completely. This allows the partially melted snow to refreeze, and become pellet-like in shape.

FREEZING RAIN: There is only a very shallow layer of sub-freezing air at the surface when freezing rain forms. The rest of the atmosphere, sometimes even including the cloud deck itself, could be above freezing. Since this cold air layer is so small, it only freezes when it comes in contact with the surface.

Compass: *New A&P at 5A1*

By Sandy Gordley

Jim Molnar has set up a shop in Building B-East at Huron County Airport. Jim may be a newly licensed A & P but he certainly is not new to the business. He started working on airplanes in 1969 for Island Airlines at Port Clinton during his senior year in high school. He helped restore one of the two 1928 Ford TriMotors that were flying to the Lake Erie Islands. He was in the U.S. Navy from 1970-1974 and worked on Chance-Vought F -8J Crusader single-engine jet fighters. He has been working on GA aircraft on and off since then.

He has his Private Pilot Single-Engine Land Certificate, an Aircraft Mechanic – Airframe & Powerplant Certificate and owns and flies a 1966 Cessna 150F. His college degrees include: Associate of Applied Science in Auto-Diesel Technology, Associate of Applied Science in Electronics Engineering Technology and Bachelor of Science in Electrical Engineering.

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