STATE AVIATION JOURNAL

Issue No. 2

June/July 2009

Airport Data

Keeping pace in 21st Century

State Focus

Aviation In Nebraska

STATE AVIATION JOURNAL

CONTENTS

JUNE/JULY 2009 ISSUE

On the cover: GCR recently held a 5010 training class in San Diego June 2nd through the 5th. Pictured left to right are, Mike Flores, President and CEO, Richard Gossen, Joyce Piacun and David Murla. See special photo coverage beginning on page 10.

Cover Photo by Kim Stevens

State Aviation Journal

Publisher/Editor/Photography	**Kim J Stevens**
Graphic Design	**Andrew Stevens**
Business Manager/Development Director	**Jenine Johnson**
Contributing Writers	**Andrea Brennan**
	Gary Ness
	Penny Rafferty Hamilton
Columnists	**Chuck Howe**
	Nel Stubbs

FAA AIP is fully funded, *and then some*..

NOW IS THE *IDEAL TIME*
TO *UNLOCK* YOUR AIRPORT
TO ALL PRIVATE AND COMMERCIAL IFR OPS

SUPERAWOS

Eligible for 95% FAA AIP Grant

MEETS All private ***and commercial*** flight requirements
GREETS Inbound pilots on Unicom
ADVISES Pilots of weather, runway, and area traffic
PROVIDES Complete radio-check services

Continually adapting to always-changing unicom congestion

Get started now

Go to **www.SUPERAWOS.com**

Or Call **800 207 8999** *ISO 9001*

Made in the USA

From the Publisher

Coming Home

In this issue of the State Aviation Journal we invite you to explore aviation in Nebraska. As I began to read the articles that were submitted, it was like coming home for me, having spent over forty years of my life in the Cornhusker state. It was in Nebraska that I developed my love and passion for both aviation and journalism.

It was my Dad who introduced me to aviation and to the man that would mentor me in the publishing business. Before my dad came to a crossroads in his early life opting for music over aviation, he had become a commercial pilot and I'm sure it was my exposure to flying through him that lead to my interest. I also grew up in the shadow of Eppley Airfield in Omaha, watching all sorts of airplanes come and go. (Note the story in the Nebraska Focus on Eppley Airfield.) I lived on the other side of a small lake from the airport and would look through my telescope at the various commercial aircraft on the ramp; DC-3s, 6s, 7s. I remember when United flew in the first jet!

I would later learn to fly at that airport. Those were the days when GA was on the same side of the field as the airline terminal. I found the mix of traffic to be extremely beneficial to my instruction and to this day I feel very comfortable at large airports, probably more-so than non-controlled fields.

For many years in Omaha, I made my living working for various newspapers and magazines. But even then I found myself hanging out at the airport on lunch breaks and after work. I still have the mock-up of an aviation magazine I created back then. Thirty years later that dream has become a reality! I guess that should be a good lesson for all of us; don't give up on your dreams no matter how long it takes. Coincidently, my mentor in journalism got his pilot's license a few years ago and has been flying his C-182 around the country. All those years when I worked for him I had no idea that we shared the same interest. Had I known I might have invited him to hang out with me at the airport during lunch.

Former Colorado Aviation Director Returns to D.C.

Heads FAA's Flight Services Program

By Andrea Brennan

Aviation safety in the United States has improved, due in part to technology advances in FAA programs such as Flight Services Program Operations (FSPO). Dennis Roberts, the new Director of FSPO since January 2009, points to several positive aspects of the program and the changes he has seen in aviation since he began his career.

The primary job of FSPO is to provide timely and accurate information to pilots about weather and other environmental factors affecting their flight plans. The FSPO relies on Lockheed Martin Flight Services (LMFS), which operates ten automated flight service stations (AFSS) and three hubs in Texas, Virginia, and Arizona to cover the lower 49 states plus Puerto Rico (CONUS). Additionally, the FSPO is responsible for the FAAôs operations in Alaska where three AFSS (Juneau, Kenai and Fairbanks) and 14 flight service stations are operated by FAA personnel.

Roberts, a former state aviation director from Colorado, estimates that the Lockheed Martin FSPO contract will save taxpayers approximately $1.3 billion over a 13 year period while placing emphasis on meeting customer needs. In 2005, when the FAA awarded the contract to LMFS following the Office of Management and Budgetôs (OMB) A-76 outsourcing process, a total of 58 AFSS locations were operated by the FAA. Today, the program has been consolidated into three hubs and their 10 continuing FSS sites. The program is implementing new technology that provides on-demand information to pilots and air traffic officials. The delivery of aviation weather, for example, represents ñhuge opportunities for technological advances to general aviation,ò said Roberts. In the past, the information has been provided from one person to another after it is requested. Now the opportunity exists for information to be uploaded to pilots at any time in real time. Pilots wonôt need to call the FSS all the time, Roberts explained, potentially avoiding bad situations.

Dennis Roberts

Operating under a performance-based contract, Lockheed Martin must satisfy 22 performance measurements in order to qualify for full payment on their contract. However, while this unique business model has improved the programôs efficiency, FSPO is not in the business of making money, says Roberts. ñIf Lockheed Martin is assessed a ñcreditò (reduction in payment) by the government, that means they arenôt meeting the performance measurements and not satisfying customers.ò Part of his role is to help Lockheed Martin help customers get the performance they deserve. His office conducts customer satisfaction surveys regularly to assess LMFSôperformance. A similar survey is being developed for the FAAôs Alaska operation as well.

State-level aviation uses FSPO in several ways, and Roberts supports the interaction with and outreach to state aviation officials. The flight service stations give pilots the information they need, such as pre-flight briefings, notices to airmen (NOTAM), pilot reports, airport closures, and help determine whether the pilots will need to file IFR for their flights. Roberts participates in listening sessions and face-to-face meetings, and attends conferences such as those sponsored by the National Association of State Aviation Officials. Lockheed Martin has its own outreach; the companyôs training and sales teams work with key aviation organizations.

Roberts believes this is an exciting time in aviation and for FSPO in particular; a new U.S. President, Secretary of Transportation, and incoming FAA Administrator will be working with new technology such as satellite-based information transfer, unmanned aerial vehicles, an upgraded aircraft fleet, and new composite materials.

These exciting times come with challenges, however. The FAA, Roberts notes, works very hard to guarantee the public receives the level of safety we have all grown to expect and deserve. But, we are always asking ñhow do we make the system safer?ò Roberts sees a need to make the FSPO more proactive when seeking to prevent aviation

accidents, pointing out that aviation saw an unprecedented two-and-a-half years without a fatal accident, providing less data to analyze.

Another challenge facing the aviation community is attracting new talent, especially from younger generations. Roberts became interested in aviation when he was a teenager. At 16, he started hanging around the general aviation airport in his small town. His 17th birthday present was a ride in a Cessna 150 with a flight instructor. Aviation, however, competed for his attention with other interests such as math, science, and civil engineering.

Students today might not realize how aviation touches every discipline, from political science to information technology, medicine, and engineering. "We need to keep fresh and qualified talent going forward," said Roberts. He goes to middle schools and high schools to mentor students, encourages students to intern in aviation jobs, and asks young professionals to consider public service.

For Roberts, commitment to aviation and public service has led to rewarding positions in a successful career. His first job was working for an engineering consulting firm in Kansas City, "drafting all day long and flying by night"; he was the first director of the Colorado Division of Aeronautics; he helped develop the next generation of the airport transit system while he was Vice-President of Government and Technology Affairs for the Aircraft Owners and Pilots Association; and he oversaw the transition from ground to satellite-based technology while working at the Louisville, KY International Airport in conjunction with United Parcel Service.

Roberts's career has led him to several areas of the country. He enjoys hiking and biking, and loves the dry climate of the Southwest. He also loved living in Colorado and said he had separation anxiety when he left. Roberts and his family adapted to their first residency on the "cosmopolitan" East Coast and learned they missed it when they moved to Seattle. Now that they are back in the "other Washington", Roberts takes advantage of the area's public transportation system. Because of the close proximity of his home and office to Metro, Roberts was able to pare down to one family car.

Coming to Washington, D.C. for the third time in his career, Roberts notes the differences in his present responsibilities from past positions. His role now is more process-oriented and analytical; the performance-based objectives draw upon his business experience and training. "FSPO is full of hard-working, dedicated people," Roberts said, creating the "safest and most efficient air transportation system in the world." His goal is to integrate Air Traffic Operations into the rest of the FAA, facilitating communication.

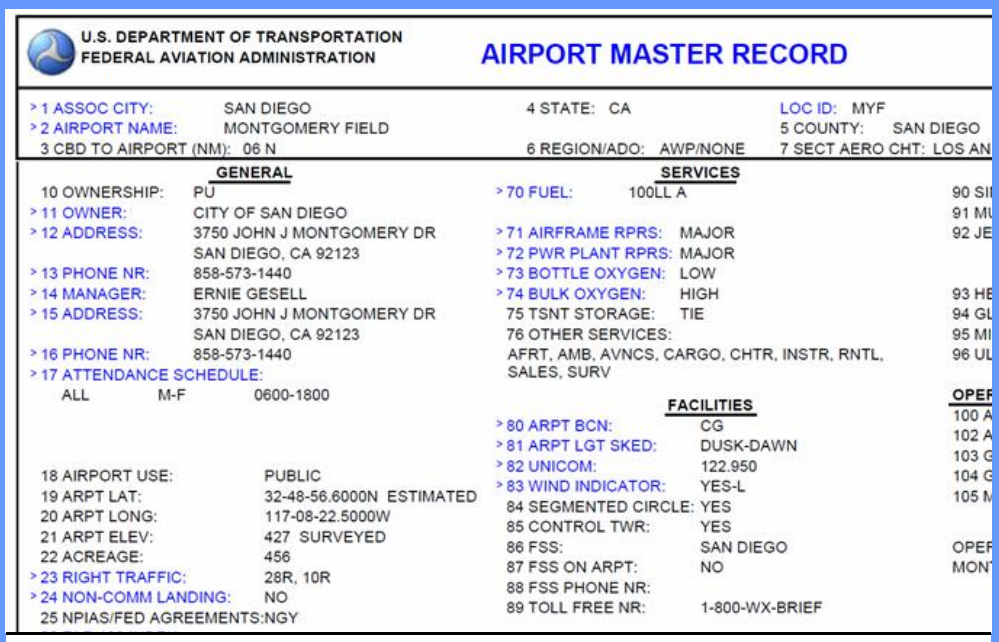
Airport Data, Keeping Pace in the Twenty-First Century

By Andrea Brennan

US Airways/America West Flight 1549 Captain Chesley Sullenberger: "I am not sure if we can make any runway... oh what's over to our right … maybe Teterboro."

New York TRACON LaGuardia Departure L116: "Cactus fifteen twenty nine turn right two eight zero you can land runway one at Teterboro … you also got Newark Airport off your two o'clock and about seven miles."

--Transcript from FAA Aircraft Accident File N90-TRACON-0122



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

AIRPORT MASTER RECORD

> 1 ASSOC CITY:	SAN DIEGO	4 STATE: CA	LOC ID: MYF
> 2 AIRPORT NAME:	MONTGOMERY FIELD		5 COUNTY: SAN DIEGO
3 CBD TO AIRPORT (NM):	06 N	6 REGION/ADO: AWP/NONE	7 SECT AERO CHT: LOS AN

GENERAL

10 OWNERSHIP:	PU
> 11 OWNER:	CITY OF SAN DIEGO
> 12 ADDRESS:	3750 JOHN J MONTGOMERY DR SAN DIEGO, CA 92123
> 13 PHONE NR:	858-573-1440
> 14 MANAGER:	ERNIE GESELL
> 15 ADDRESS:	3750 JOHN J MONTGOMERY DR SAN DIEGO, CA 92123
> 16 PHONE NR:	858-573-1440
> 17 ATTENDANCE SCHEDULE:	
ALL	M-F 0600-1800

18 AIRPORT USE:	PUBLIC
19 ARPT LAT:	32-48-56.6000N ESTIMATED
20 ARPT LONG:	117-08-22.5000W
21 ARPT ELEV:	427 SURVEYED
22 ACREAGE:	456
> 23 RIGHT TRAFFIC:	28R, 10R
> 24 NON-COMM LANDING:	NO
25 NPIAS/FED AGREEMENTS:	NGY

SERVICES

> 70 FUEL:	100LL A
> 71 AIRFRAME RPRS:	MAJOR
> 72 PWR PLANT RPRS:	MAJOR
> 73 BOTTLE OXYGEN:	LOW
> 74 BULK OXYGEN:	HIGH
75 TSNT STORAGE:	TIE
76 OTHER SERVICES:	AFRT, AMB, AVNCS, CARGO, CHTR, INSTR, RNTL, SALES, SURV

FACILITIES

> 80 ARPT BCN:	CG
> 81 ARPT LGT SKED:	DUSK-DAWN
> 82 UNICOM:	122.950
> 83 WIND INDICATOR:	YES-L
84 SEGMENTED CIRCLE:	YES
85 CONTROL TWR:	YES
86 FSS:	SAN DIEGO
87 FSS ON ARPT:	NO
88 FSS PHONE NR:	
89 TOLL FREE NR:	1-800-WX-BRIEF

An example of the FAA Airport Master Record.

When this emergency landing situation occurred on January 15, 2009, the air traffic controller relied on, among other information, current and accurate airport data provided in part by airport inspections using Airport Master Records and published in the Federal Aviation Administration's Airport/Facility Directories. The validity and currency of these records is vital to the aviation community, requiring FAA and state inspectors to verify the Airport Master Record data as one phase of a Part 139 certificated airport and non-Part 139 general aviation airport inspection; the FAA 5010 program makes it possible to efficiently maintain and distribute the data.

The FAA is the source for aeronautical data, said Henry Felices, the program manager for the 5010 program. If an airport is on record with the FAA and in the Air Traffic database, the FAA can produce an Airport Master Record that describes the physical and operational characteristics of the facility on the day it was inspected; this description might change as facilities are either updated (new runway) or age (cracks appear in runway or painted markings are faded). Airports have two reasons to provide this information, said Felices: pilots use the data when flying through our nation's National Airspace System, and aviation officials can produce computer reports that assist them in planning and programming. For example, the 5010 data can be used to determine emergency landing areas: pilots would use sectional charts and Airport/Facility Directories that are produced using airport data stored in the Air Traffic database, and the general public relies on the information found in web sites such as http://GCR1.com/5010web/ or http://airnav.com whose webmasters rely on FAA airport data as their source.

Airfield information has played an important role in aviation since air travel began. In the 1960s and early 1970s, the FAA distributed Airport Master Records and then collected changes when a state requested an

Henry Felices

Airport Data

update to the FAA Facilities Directory. At the time, these records were printed on two-page-wide cards. An airport inspector would update or correct the data on the card with a red pen and then mail or fax the cards to the FAA. ñMost of the state agencies had airport inspectors who were responsible for physically inspecting public-use airports and then updating the 5010 form for that airport with any new or changed information,ò remembered Ed Scott, Executive Director of the United States Parachute Association, who chaired the National Association of State Aviation Officials (NASAO) in the early 1990s. Each state returned the completed 5010 form to a foundation called the NASAO Center for Aviation Research and Education (NASAO/CARE), where staff validated the data to catch any errors and then submitted the final forms to a FAA office. ñOnce the inspection results were mailed to Washington, D.C., several weeks elapsed before the data could be verified for accuracy,ò recalled David NewMyer of Southern Illinois University-Carbondale (SIU-C), a consultant for 5010 inspections. The FAA facilities directories, published every 56 days, might be up to three printing cycles out of synch with actual airfield availability because of unknown amounts of data in transit.

The FAA began automating the 5010 database in the mid-1980s. Some states, such as Arizona in 1986, had approval from the FAA to electronically submit the 5010 data. NASAO/CARE contracted with the FAA in the 1990s, and in turn sub-contracted with the state aviation agencies. As GCR President and CEO Mike Flores recalls, in 1993 a printer malfunction disrupted the data collection cycle, and officials started to consider a more efficient solution. GCR created a software application based on the 5010 Airport Master Record, and they took on the responsibility of providing the form on a floppy disk to state inspectors. The facilities directory updating cycle was compressed into the 56-day printing schedule.

PHOTO BY MIKE MCGOWAN

Ed Scott, former NASAO Chair and current Executive Director of the USPA.

In 2001, the format changed again to reflect improved technology. The FAA, via GCR, began using a secure Internet web site to collect inspection data electronically and implemented a central database to store the data. In 2004, GCR teamed with SIU-C to ñserve as the liaison with the various states that é can not contract directly with a private entity to do this sort of work,ò said NewMyer. This changed the program dramatically to become a proactive, consistent process of obtaining and maintaining the data. ñThe new system allows a state or federal airport inspector to enter airport inspection results as soon as the inspection is complete,ò added NewMyer. The 5010 program verifies data from nearly 1700 airfields per year in all fifty states and Puerto Rico.

How 5010 Inspections Work

The inspection and information update process has changed since aviation officials requested updates to their Airport Master Records. The entire process is proactive, as GCR requests inspections at about one-third of active public-use airfields each year and inspectors continuously update the Airport Master Records. Over 200 certified inspectors, either employees of state aviation agencies or subcontracted through Southern Illinois University-Carbondale, are identified in the 5010 system. Each inspector reviews the information in the Airport Master Record and verifies or updates the data. The inspector then logs into the http://5010Web.com website. After the 5010 website recognizes the inspectorôs login ID, the inspector can enter the new or modified data directly in the database. NewMyer adds that SIU-C subcontractors ñalso receive and check the inspection entries done by the states and help to upload the new information to the national 5010 website.ò

To promote data consistency, the FAA provides 5010 training twice per year at various sites, contracted through GCR. To maintain an adequate pool of qualified 5010 inspectors, NewMyer said, Jim Bildilli, the primary inspector subcontracted through SIU-C, provides field training for two to four new student airport inspectors each year, bringing them to assist with an inspection whenever a state requires a 5010 update.

See special photo coverage beginning on page 10 of GCR's Airport Inspection Class held recently in San Diego.

Students in a 5010 Training Class interview Ernie Gesell, Airport Manager of Montgomery Field, San Diego. Pictured in the inset is class instructor Randy Coller with the Michigan Department of Transportation, Bureau of Aeronautics.

Impact of Automated 5010 Data Collection

The 5010 data collection has worked so well that the FAA has expanded it to quantify the aircraft inventory at U.S. airfields. This was the first time, noted Flores, the FAA and state agencies were communicating to quantify the inventory. The FAA expected initial inventory counts to be around 170,000, but the actual count was closer to 155,000 aircraft. The discrepancy was analyzed and then easily explained: if an aircraft uses more than one airfield, the Airport Master Record includes that aircraft at each airfield in use. Flores said that up to 15,000 aircraft are in multiple Aircraft Master Records; some aircraft have been reported at up to six different airfields.

Improved communication is also helping inspectors address aircraft identification issues such as confusing zero (0) for O, the number five (5) for S, and the number one (1) for the lowercase letter l.

As the 5010 data collection and dissemination matures, the program is expanding beyond public-use airfields. The FAA, according to Flores, is now seeking information from private airport owners, an effort that had previously been abandoned. This could mean adding up to 15,000 new airfields to the 5010 database. The 5010 program has also attracted interest from countries outside the United States that desire an accurate and easy-to-update database of operational airfields, although Felices notes that other resources, such as the International Civil Aviation Organization (ICAO, www.icao.int), already maintain information about non-U.S. airfields.

The ñnext generation visionò of the 5010 program will include geographic information systems (GIS) data, Felices added. In the future, FAA airport data will be consolidated into one program that will be ñmore complete, more comprehensive,ò he said.

Collaboration between the airfield owners, aircraft owners, and inspectors has led to a better understanding of airfield use in the U.S. Felices touted the one-on-one relationship between the inspector and the airport manager. ñThe value of the program is that everyone is working in unison,ò said Flores. ñFederal and State aviation officials communicate better with airfield and aircraft owners.ò

More info (links):

FAA Part 139 Certification: http://www.faa.gov/airports_airtraffic/airports/airport_safety/part139_cert/

FAA 5010 program: http://www.faa.gov/airports_airtraffic/airports/airport_safety/airportdata_5010/

5010 forms and 5010IQ: http://www.gcr1.com/5010web/

National Based Aircraft Inventory Program: http://www.gcr1.com/5010ba/faq.asp

FAA Private Use Airport Data Program: http://www.gcr1.com/privateairports/faqs.htm

Photo by Kim Stevens

San Diego

Serves as Backdrop to

Airport Inspection Training Class

Each year GCR holds two 5010 airport inspection training classes:

one in New Orleans and one in a different part of the country.

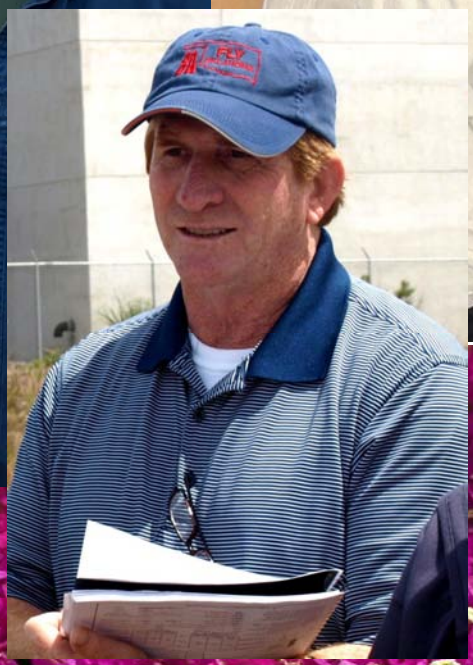
continued on next page

San Diego Serves as Backdrop for 5010 Training

Photos By Kim Stevens

Eighteen students from across the country, including Alaska, attended a 5010 Training Class held by GCR & Associates in San Diego, CA, June 2-5, 2009. According to GCR's Joyce Piacun, Gary Cathey, Chief for Caltrans Division of Aeronautics, helped facilitate getting the class to California. Field training is normally done at non-controlled fields, however due to excellent communication and coordination between GCR, the State, Montgomery Field and the FAA Tower Chief, they were able to hold training inspections at the busy general aviation airport. The next class will be held in

Pictured below at Montgomery Field are from left, Steve Marcozzi of Kentucky, Bryant Walker of Missouri and William Bullock of Alaska. To the right is Terry Washington, FAA Southern Region—Air Space Analysis. Below is Dale Williams of Oklahoma.



David Murla, GCR, in the center of the upper left photo, prepares students for the airport inspection at Montgomery Field in San Diego. Instructor Randy Coller, left, Mike Flores, GCR, center, and Michael Pouliot of New Hampshire, look at an inclinometer used to measure the angle/percent to the top of an obstruction. Lower left is Keke Rice, FAA ADO in Atlanta. Below, clockwise from the top are Janet Victory, FAA in Alaska, Debbie Alke, Montana DOT, Jerry Chism, Arkansas Department of Aeronautics and Mike Lewis of Kansas. Oh, and the unidentified flower was in the RPZ.

San Diego Serves as Backdrop for 5010 Training

Students stayed in downtown San Diego and were treated to scenes such as the one below. Stephen Powell observes as Tralee Knapp of Oregon, upper right, takes a measurement. Jerry Chism, below left, from Arkansas, prepares to take a measurement with the wheel.

From 18 to 114 Degrees Fahrenheit

Airport Inspectors Face Extremes

BY JIM BILDILLI

At first glance, one might surmise that this range in temperature was a typical factory specified operating range for a piece of equipment. However, on a more personal note, I can assure you that it more closely relates to the encountered temperatures while performing 5010 updates around the U.S. Considering that the airport locations ranged from near sea level to well over 7,000 ft. MSL and the geography ranged from the Mexican to Canadian borders, itôs easy to see why there was such an extreme range.

Temperatures aside, the 5010 program has not only introduced me to a lot of new friends and geography, but has helped the Southern Illinois University (SIU) Aviation Management students gain valuable field experience. Iôve always believed that attending college provides you with the knowledge of where to find things in the library or in todayôs world, on the internet and the ability to express yourself. However, it is only when you enter the ñreal worldò that the application of that knowledge becomes important.

Since 2005, students have taken an active part in the gathering of data and the updating of the information contained in the Airport Master Record. The first of these outings occurred in Arizonaé .in August. Not exactly the best time to schedule the walking of asphalt pavements, but it did fit into their schedules. After ñsurveyingò the objects in the approach area, one of them remarked that it was ñat least 20 degrees cooler when you stand on the white runway markings.ò Being most familiar with the endless fields of corn and soy beans of Illinois, Arizona also introduced them to new varieties of

soil, vegetation, and wildlife. A few of the airports were located on Indian reservations which provided an insight into a new form of government.

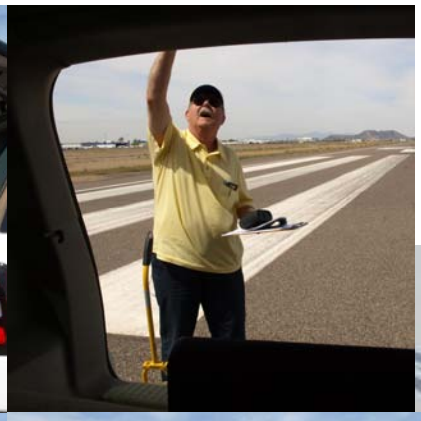
In West Virginia, students learned that the only place you can put an airport is either on top of the mountains or in the valleys in-between; and that airports are easier to find from the air than on the ground. On one occasion, it was decided to use the hand held GPS to find one of the more remote airports. Of course, the GPS was for in-flight and not ground use, but at least it showed the proper direction. Finding a nice wide road that appeared to head toward the airport, all went well until a rather large Mega-Ton coal truck appeared in the windshield. Soon thereafter, the GPS was replaced by a more accurate West Virginia Gazetteer.

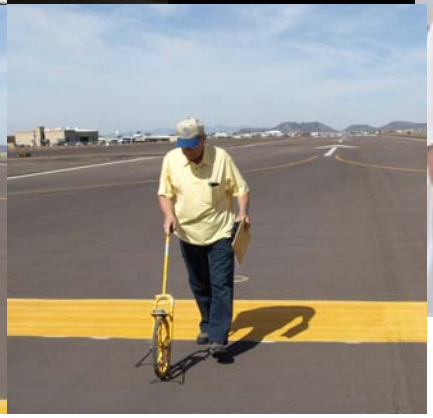
In Texas, students visited their first roof top heliport in downtown Ft. Worth and several privately owned airports with some rather expensive fly-in, drive-in subdivisions. They marveled at how well the concept appeared to work and thought that it should be considered at more locations throughout the nation. I guess I have to agree with them on that idea.

In Maine, the students visited an airport in the middle of one of the largest wild blueberry farms in the nation and rode a ferry to get to an

Jim Bildilli, Leah Bewer and Matt Romero at a Maine airport.

Jim Bildilli conducts an airport inspection at Deer Valley Airport in Phoenix, Arizona. Deer Valley is run by the City of Phoenix.





island airport. They learned that timing was important because of the limited ferry schedule. If the last ferry was missed, the whole crew would have to wait until the next day for a return trip. It goes without saying that they also enjoyed the rather large selection of fresh sea food that was available.

Besides performing and assisting with the 5010 field inspections, the students also upload the revised information to GCR & Associates and send letters and photos back to the airports and respective states that delineate any non-standard or hazardous situation. Necessarily, they get to meet with the various airport owners and managers during the visit and are also participants in any discussions that may occur. Most owners and managers like the opportunity to ñbounceò an idea off of someone new or just ask questions about project eligibility, compatible land use and the all too frequent subject, ñGrant Assurances and compliance.ò The latter can sometimes become quite involved especially when it involves airport leases and agreements.

When not in the field, the students back on campus, monitor each stateôs progress in completing the 5010 inspections. This is primarily due to the fact that the contracts are between SIU and the states and not with the FAA. They also prepare quarterly reports that are shared with each state and the FAA. Each year, they are responsible for coordinating the execution of the contracts and issuing notices to proceed. As much as possible, electronic mail is used extensively in this process.

The whole process is quite unique and provides the students the opportunities, experiences, and contacts they would not gain anywhere else. It certainly helps to be able to list their accomplishments and experiences on their resumes.

From left to right, are the author, Jim Bildilli, Matt Romero and Ryan Anderson after completing the 5010s in the Ft. Worth, TX area.

NEBRASKA AVIATION

Special Focus

Eppley Airfield...
Symbol of Growth

Aviation Institute...
Building a Strong Foundation

Air National Guard...
Hustlin' Huskers of the 155th

Fightin'55th Wing...
Continuing a Proud Tradition

Duncan Aviation...
Big Facilities, Small-town Values

Nebraska Aeronautics Commission...
Commitment to Leadership

"Fly-Over Country"

By Stu MacTaggart

PHOTO BY JNEL HUBBARD

They call it "fly-over country"—that vast expanse of landscape midway between the Adirondacks and the Sierra Nevada range. Not a destination, they say. Strange… My wife (from Scottsdale) and I (from Sacramento) are here by choice. We initially chose Nebraska for the great schools and quality of living; but we soon learned that this state has so much more to offer. Having spent a career in aviation, I was delighted to learn of the multifaceted roles aviation plays in my adopted state.

Aviation in Nebraska is more than a mere hobby. It's medivac from the Sandhills; it's the resupply of Broken Bow; it's fire suppression at Chadron; or protecting our harvest in O'Neill. It's business and it's government, linking the 400 mile breadth across the state. It's truly a community. From the early days of 1911, when the Savidge brothers first climbed aloft in their flying machine, to the 1920s when Charles Lindbergh took lessons in Lincoln - Nebraska has had a passion for aviation. The training of bomber aircrews took place here during WWII and the famed Strategic Air Command deterred our nation's most formidable enemies from Bellevue, Nebraska. In short, this is not "fly-over" country. Rather - this is where you want to be if you speak aviation.

This state consists largely of small towns - rural communities that understand the crucial role aviation plays in their quality of life and their economic viability. But, there is a lighter side. On any weekend, from May to September, you can turn back the clock and enjoy the "Saturday Evening Post" side of aviation. You will see gatherings of Stearmans, Navions, vintage Cessnas and others. You'll see pancake feeds, Boy Scouts, Main street parades, classic cars, and yes - pretty girls. All centered around the local airport.

I flew over this country way too many times. Now I know what I was missing. It is particularly rewarding for me, as my Department is involved in so many of these diverse activities. The Nebraska Department of Aeronautics is both the architect and the user of the state's aviation resources. Since we are a channeling state, our small Engineering Division serves as the agent for some 81 public-use airports. That means it's impor-

tant to understand the communities' needs and just how to deliver. Since the Department actually owns and operates three airports, we have a good grasp of our customers' needs. One of the more unique functions of the Department is located in Kearney. Our NavAids Division designs and/or services a wide spectrum of aviation aids—from the archaic Non-Directional-Beacon to the state-of-the-art GPS approach procedure. Believe me when I say the "Wichita Lineman" has nothing on these guys. Aviation takes wing with our Operations Division. This division consists of a scheduler and four, highly experienced pilots—all rated as Airline Transport Pilots. In addition to publishing the state aeronautical chart and airport directory, they transport state officials and perform aerial photography and remote sensing in support of other state agencies.

It shouldn't be a surprise that I'm proud of the Department's accomplishments. These are dedicated people with a passion for excellence, and a need to share that passion with future generations. I am especially proud of our efforts to educate and mentor our heartland kids through our youth aviation programs. You can't see it from FL390; you really need to feel it first-hand. You can see it in the wide-eyed gal from Ord and the inquisitive kid from Ewing. The romance of aviation still exists. They are not familiar with the term, "fly-over" country. They love their home state of Nebraska and their connection with aviation makes it even more special.

PHOTO BY SANDI DECKER

Stuart MacTaggart

Stu was appointed to his position as Director of the Nebraska Department of Aeronautics by then Governor Johanns and reappointed by Governor Dave Heineman. He holds a masters degree in Aviation Science. As a career Air Force Officer he held numerous command and staff positions in operations. His decorations include the Distinguished Flying Cross, the Air Medal and the Legion of Merit. He retired as a Colonel and Command Pilot with over 1,600 combat flying hours. After living in 10 states and three foreign countries he and Kay chose Nebraska for the quality of life and flying opportunities.

NE Department of Aeronautics at-a-Glance

The Nebraska Department of Aeronauticsôgoal is to, ñEncourage and Facilitate the Development and Use of Aviation in Nebraska.ò The State maintains a strong and effective presence through its various programs including the following:

Flight Operations and Services

Air transportation for State and University personnel is provided by a staff of four pilots, a flight scheduler and three aircraft. The aircraft include a 1982 Piper Cheyenne, 1977 Piper Navajo, and 2001 King Air B200.

Aviation Education

The Department realizes the importance of educating children about aviation and sponsors an annual ***Aviation Career Exploration Camp*** (ACE) and an Art Contest.

Department Revenue

Aviation gasoline (avgas) and jet fuel excise taxes are the primary state funding source for the Department of Aeronautics. The excise tax consists of five cents per gallon on each taxable gallon of avgas and three cents per gallon on each taxable gallon of jet fuel sold in Nebraska. This money is deposited into the Department of Aeronauticsôcash fund to be used to operate the Department and provide programs, grants and loans to Nebraska airports.

Nebraska Airport Pavements

The Department regularly evaluates pavements at Nebraska public-use airports, using the Pavement Condition Index (PCI), on a scale of 1 to 100. The average PCI for primary pavements (i.e., main runways, taxiways, and aprons) in the state is 87.5, placing Nebraska airportôs pavement index rating among the highest in the United States. This value is constantly improving due to AIP paving projects.

Crack, Joint Sealing and Marking Program

Nebraska airports have access to a pavement maintenance program, developed to assist in extending the useful life of pavement. This essential preventative maintenance program ensures quality and is cost effective for airport managers. The Department supplies personnel, equipment, and materials at actual cost. In 2008, the Department provided services to 31 airports.

Navigational Aids

The Navigational Aids Division is responsible for the installation, maintenance and operation of numerous State-owned electronic navigational aids. In addition, this Division is responsible for many of Nebraskaôs Automated Weather Observation Systems (AWOSôs). These disseminate data into the FAAôs National Data Interchange Network (NADIN).

EPPLEY AIRFIELD:

A Symbol of Growing Nebraska Aviation and Economy

By Andrea Brennan

If there ever was a doubt that an airfield benefits the communities it serves, one need look no farther than Omaha, Nebraska and Eppley Airfield. The airfield, managed by the Omaha Airport Authority (OAA) has created a hospitable climate for business and cultural growth, which in turn has increased commercial and general aviation air traffic in the region.

The longevity and location of Eppley Airfield has played a part in its successful relationship with the Omaha business region. The airfield was first used as an airport in 1925, noted Steve Coufal, the Executive Director of the OAA. The airfield was used early on for commercial and air mail carrier service. Major airlines, such as Braniff and United, began flying out of the airport in the 1930s. Don Smithey, the previous Executive Director since 1989, recalled that in the mid-1990s, three airlines added passenger service at Eppley, providing several non-stop routes to New York, Los Angeles, Chicago, Denver, and Phoenix. The combination of small and large carriers increased competition, said Smithey, driving fares down 25ï 45 percent and traffic up 100 percent. Today, nine major passenger carriers use 29 gates at Eppley, including low-cost providers such as Southwest Airlines,

Don Smithey

Eppley Airfield, Omaha, Nebraska

national carriers like American, and 11 regional partners, cited Coufal.

The airfield is located near Interstate Highways 29 and 80. ñPassengers drive from as far as the Quad Cities, Rapid City (SD), Worthington (MN), Des Moines (IA), and Northern Missouri and Kansas to take advantage of multiple airlines, non-stop destinations and competitive fares,ò said Coufal. ñIt is a natural for people to get to the airport,ò said Smithey.

Eppley Airfieldôs impact on the Omaha business community goes ñhand in handò with the areaôs economic growth, says Smithey, because it is easy and affordable to come to Omaha. Over time, a major business corridor has developed along the route between Omaha and Eppley. In addition to an industrial park that recently expanded to include several mid-size businesses, in 2003 a new convention center and arena, Qwest Center, opened, leading to the construction of several hotels in the area. Major corporations and institutions, such as Gallup University in 2000, established their headquarters in Omaha because of the aviation service at Eppley, said Coufal. ñGoogle and PayPal data centers are just across the river,ò added Smithey. ñThe reason they located there is because of the airport.ò

Steve Coufal, Executive Director

Major events in the local area take advantage of the improved aviation facilities and hospitality services, boosting the areaôs economy. For example, the May 2009 annual shareholders meeting of Berkshire Hathaway drew nearly 35,000 people to Omaha, filling up area hotels and the Qwest Center, Coufal said, in addition to using the fixed base operators (FBOs) at Eppley Airfield, TacAir and Elliott Aviation. During June, Smithey noted, the NCAA Menôs College World Series takes place; in 2011, the baseball teams will play in a new $128 million, 24,000-seat stadium in downtown Omaha.

General aviation thrives at Eppley Airfield. The FBOs service 80 percent of the corporate aircraft in Nebraska and provide fuel to the major carriers. Coufal anticipates that general aviation will continue to play a vital role in the Omaha community. The airfield also maintains an excellent safety record, and is used for training by the Omaha Aviation and Flight Academy. Eppley was recognized with a FAA Part 139 Airport Safety Enhancement Award in 1992, 2002, 2005 and 2008; a regional award for water rescue capabilities in 2002; and a special national award in recognition of their enhancements in aircraft rescue fire fighting in 1991.

The airfield and Omaha air travelers have experienced a few challenges in recent years. Security measures implemented since September 11, 2001 required changes in baggage and passenger screening. The OAA and Transportation Security Administration (TSA) worked together to balance the new responsibilities with continued efficient air travel. The recession has affected passengers and carriers alike: airlines are consolidating, reducing their capacity, and raising consumer fees; passenger travel is down 4.6 percent in 2009, Coufal said. However, he optimistically notes, ñthe economy in Omaha and the surrounding area has remained strong when compared with other areas of the country and has played a significant role in the vitality of Eppley.ò

Eppley continues to grow as it faces the future. Coufal listed construction projects underway or completed at the airfield: Taxiway Alpha, Runway 14R/32L, and two parking garage additions. These projects should be finished before Winter 2009. Additionally, ñthe OAA has also developed a terminal master plan that will accommodate twice the enplaned passengers of today,ò Coufal said. ñThis plan is designed to utilize the current facility in the future through modifications and facility expansion.ò

Looking back at his tenure with OAA, Smithey stated that his greatest accomplishment was the improvement of air service to the Omaha community. Looking forward, Coufal, who took over the Executive Director role from Smithey in March 2009, summarized the impact of the airfield on the regionôs economic health: Eppley ñis positioned to continue to serve as a strong economic engine for the City of Omaha and meet the needs of business and leisure travelers for years to come.ò

Airmen of the *Fightin' 55th Wing*

Continue Proud Tradition Around the World

Their slogan says it best,

"The sun never sets on the Fightin' Fifty-Fifth."

The 55th Wing (WG), headquartered at Offutt Air Force Base, Nebraska, is Air Combat Commandôs largest wing. With seven groups, 35 squadrons and four detachments located worldwide, their slogan has never been truer than it is today.

The Fightinô Fifty-Fifth employs 48 aircraft, including three different airframes with a total of 12 separate models. Its mission includes the Air Forceôs most diverse flying operation supporting worldwide intelligence, surveillance, reconnaissance, command

Modeling a proud history and tradition, the Fightin' Fifty-Fifth employs 48 aircraft today including three different airframes with a total of 12 separate models. Photo above is 55th SRW, Offutt AFB, 1980. Photo to the right is an EC-135 Looking Glass, 1990.

and control, Presidential support, and nuclear treaty verification missions. As host unit for Offutt, the Wing provides base support to 95 associate units, including U.S. Strategic Command and the Air Force Weather Agency.

The 55th WG traces its lineage to the 55th Pursuit Group (PG) that was activated on January 15, 1941, at Hamilton Field, California. During World War II, the 55th PG garnered two campaign medals, seven theater streamers and two distinguished unit citations. It flew its last mission on April 21, 1945, and was inactivated on August 20, 1946.

On February 24, 1947, Strategic Air Command activated and re-designated the 55th Fighter Group as the 55th Reconnaissance Group at MacDill Field, Florida, operating the RB-17. The newly activated groupôs mission consisted of aerial photography, mapping, charting, and photo reconnaissance missions.

The group then converted to RB-29 and RB-50 aircraft and transferred to Topeka (later Forbes) AFB, Kansas, in 1948. On July 19, 1948, the 55th Strategic Reconnaissance Wing (SRW) activated and was bestowed with the awards and honors of the 55th Reconnaissance Group at Topeka AFB. Early in 1950, the Wing moved to Ramey AFB, Puerto Rico, before returning to Forbes AFB in 1952 and converting to RB-50s. The Wing formally assumed a global strategic reconnaissance mission in 1954 and transitioned to the RB-47H/E/TT ñStratojet.ò

For the 55th SRW, the decade of the ó60s was history making. On July 1, 1960, the Wing gained worldwide attention when an RB-47 was shot down over the Barents Sea located north of Norway and Russia. Then, in 1962, the 55th SRW provided significant reconnaissance information during the Cuban Missile Crisis. In 1966, the Wing moved to Offutt and assumed the Looking Glass airborne command post mission.

The ó70s were exceptionally busy for the Wing and in the early years it received several versions of the RC-135 aircraft. The Wing also added the E-4A, National Emergency Airborne Command Post, to its mission.

Through the 1980s, the FightinôFifty-Fifth SRW continued its worldwide operational missions and gained host responsibility for Offutt. Operationally, the Wing continued to

55th SRW Gulf War

perform its missions in support of U.S. defense against the Warsaw Pact, but also supported U.S. operations in regional contingencies. These operations included Urgent Fury in Grenada, El Dorado Canyon in Libya and Just Cause in Panama.

While the 80s introduced the Wing to conventional contingency operations, the 90s found such contingencies to be the status quo. In 1990, the Wing was one of the first to deploy aircraft and personnel in support of Operation Desert Shield. During Operation Desert Storm the 55th WG logged nearly 7,500 flying hours. While supporting these operations, the 55th SRW was re-designated and restructured as the 55th WG on October 1, 1991, as part of a reorganization of the Air Force.

From 1995 to 1998 there were several more organizational changes to the Wing. The most important was the retirement of the EC-135 fleet, subsequent inactivation of its squadron and transfer of the Looking Glass mission to the U.S. Navy after 38 years.

With the turn of the century, the 55th WG continued to support operations around the globe. Following the terrorist attacks of September 11, 2001, their role in current operations expanded even more with the addition of the EC-130H Compass Call aircraft and the 55th Electronic Combat Group at Davis-Monthan, AFB, Arizona, in October 2002.

RC-135V 1980

The Wingôs slogan gained even more prominence on January 11, 2007, when the Fightinô Fifty-Fifth marked a milestone by RC-135 Rivet Joint crews and maintainers of 6,000 straight days of deployment by someone within the Wing.

What was started back in World War II is carried on today by the 55th WGôs aircraft and Airmen supporting combat operations in the area of responsibility and providing national-level intelligence collection and command, and control support.

Without a doubt, the Fightinô Fifty-Fifth leads the fight around the globe.

RC 135 2008

University of Nebraska at Omaha's Aviation Institute, Mavericks in Aviation Education

By Scott Tarry
Director, UNO Aviation Institute


UNO's Advanced Simulator

The downturn in the airline industry and on-going uncertainty about the economy have not deterred students at the University of Nebraska at Omahaôs Aviation Institute from preparing themselves for a variety of careers in aviation and transportation. While most of the Instituteôs more than 125 undergraduate students enroll initially with the intention of becoming pilots, many soon discover the incredible opportunities that exist outside the flight deck as well. The Institute provides courses and other experiences that allow students to meaningfully explore aviation careers that they did not even imagine before starting college. Even within the professional flight program, students are exposed to flying careers outside the airlines, such as charter, corporate, and even military aviation. In short, the Institute provides an opportunity for students to explore the breadth of aviation while building a foundation of skills and knowledge that prepares them to meet the challenges that lay ahead.

The Instituteôs faculty is comprised of dedicated instructors who are actively engaged in the personal and professional development of their students. The Instituteôs curriculum is dynamic and responsive to the changes in the industry and the needs of employers. Students are able to augment their traditional courses with internships through a variety of firms and agencies, including the Federal Aviation Administration, Jet Linx Aviation, Nebraska Department of Aeronautics, Omaha Airport Authority, Transportation Security Administration, Mutual of Omaha Corporate Flight Department, and Southwest Airlines.

Students in Scott Vlasekôs special topics course are using computer simulation to study airline business models and decision making. Students are tasked with building an airline from scratch. They are given $300 million virtual dollars in start-up capital, but all other funding comes from stock sales, bonds, or loans. Students select the aircraft they wish to operate and configure them with the classes and amenities that they want to offer. Students also develop a flight schedule and create marketing pieces for their airline. Finally, students monitor their airline, as well as, the other studentsô airlines to ensure profitability and that their services and fares are competitive. This is truly a hands-on, critical thinking course and students leave the class with a better understanding of how an airline operates and the skills required to review and evaluate the effectiveness of airline operations.

Students in Patrick OôNeilôs senior capstone course conduct in-depth research on a variety of topics. This year, students studied among other things, aviation safety, airport finance, and sustainability. Students in Scott Tarryôs airport planning course worked in teams to develop master plans for a new regional airport for the Omaha-Lincoln area.

The Aviation Institute gives students the opportunity to learn from a variety of scholars and practitioners outside the Institute. This year, students in International Aviation were taught by Dr. Keith Mason, a Senior Lecturer in Air Transport at Cranfield University in the United Kingdom. Dr. Mason is a recognized authority on low-cost carriers and the European air carrier market. Capt. Jennifer Shamsy, who flies for Atlantic Southeast Airlines taught Human Factors. Chris Martin, who recently retired after a lengthy career with Northwest Airlines and currently serves as the Director of

Operations for Omahaôs Eppley Airfield, taught Airline Operations. Students benefit immensely from their interaction with these professionals

The Aviation Institute at the University of Nebraska at Omaha (UNO) has served the aviation community for nearly 20 years by providing undergraduate degree programs in aviation administration and professional flight. The Institute also collaborates with UNOôs School of Public Administration to offer aviation and transportation concentrations at the graduate level. The aviation administration concentration within the MPA program is offered on-line, which provides an excellent opportunity for mid-career aviation professionals to pursue a fully-accredited and nationally ranked degree regardless of their location. Alumni of the MPA program are currently working for the Federal Aviation Administration, as well as, a variety of airlines, airports, and airport consulting firms. The PhD in Public Administration offers another opportunity for aviation educators and practitioners to pursue graduate training. The doctoral program is offered on the Omaha campus and provides broad training in public affairs research, as well as, experience in the study of aviation and transportation policy and administration.

Many UNO students, like their peers at other metropolitan universities, tend to live off campus and work at least part-time while pursuing their degrees. The University has added new dorms in recent years as the campus has expanded, but most students tend to live throughout the Omaha area. The Institute draws most of its students from Nebraska, but students also come from the surrounding region, across the country, and from other nations. Aviation students can participate in a number of groups and activities, including UNOôs chapters of Women in Aviation International and Alpha Eta Rho, as well as, the Flying Mavôs sponsored by Jet Linx Aviation who compete in the National Collegiate Flight Association. The Institute supports students financially as well by awarding over $20,000 in scholarships each year, thanks to the generosity of various donors and sponsors.

The Instituteôs offices are located on UNOôs main campus in the newly remodeled College of Public Affairs and Community Service (CPACS) building. Students have access to tutoring, computers, and aviation materials in the Aviation Resource Center, which is sponsored in part by the Nebraska Space Grant Consortium. Flight students also benefit from the Instituteôs flight simulation facility, which provides the opportunity to train and practice flight operations in aircraft ranging from single engine pistons to twin engine turbo-props. Faculty offices, meeting spaces, and aviation classrooms are all located in the CPACS building as well.

The Aviation Institute continues to fulfill its mission to train the next generation of aviation professionals. The staff and faculty of the Institute are committed to providing exceptional educational experiences and value for UNO students. For more information about the Institute and its programs, or to arrange a visit, please see our website at http://ai.unomaha.edu or call 800-3FLY-UNO (800-335-9866).

2008-09 UNO Flying Mavs sponsored by Jet Linx Aviation

2009 50th Anniversary

Strategic Air & Space Museum

PHOTO BY SANDI DECKER

The **Strategic Air and Space Museum** is a museum focusing on United States Air Force military aircraft and nuclear missiles located near Ashland, Nebraska, along Interstate 80, southwest of Omaha, Nebraska. The objective of the museum is to preserve and display historic aircraft, missile, and space vehicles and provide educational resources. The museum is regarded as having one of the top collections of strategic aircraft. For more information go to http://www.sacmuseum.com/.

DUNCAN BOASTS BIG FACILITIES, SMALL–TOWN VALUES

BY PENNY RAFFERTY HAMILTON

Award winning Duncan Aviation has world-wide outreach. Their www.duncanaviation.aero website boasts ñBig facilities. Small-town values in Lincoln, NE with 1,000+ well-trained employees and 430,000 sq ft of comprehensive services to the aviation industry. And we still know our customers by name.ò

Duncan Aviation has been providing outstanding service and support since 1956 from its Corporate headquarters on Lincoln Municipal Airport. John Wood, airport manager, said, ñDuncan Aviation has been voted one of the top businesses to work for in the USA for several years. All around a great asset to our community and aviation industry. They have a world-wide reputation.ò

Duncan Aviation industry services include major and minor airframe inspections and maintenance, engine services, major retrofits for airplane cabin and cockpit systems, in addition to full paint and interior design services and even aircraft sales and acquisitions. Duncan also provides aircraft components solution experts available 24-7 at 800-562-6377 expertly trained to handle any aircraft system problem.

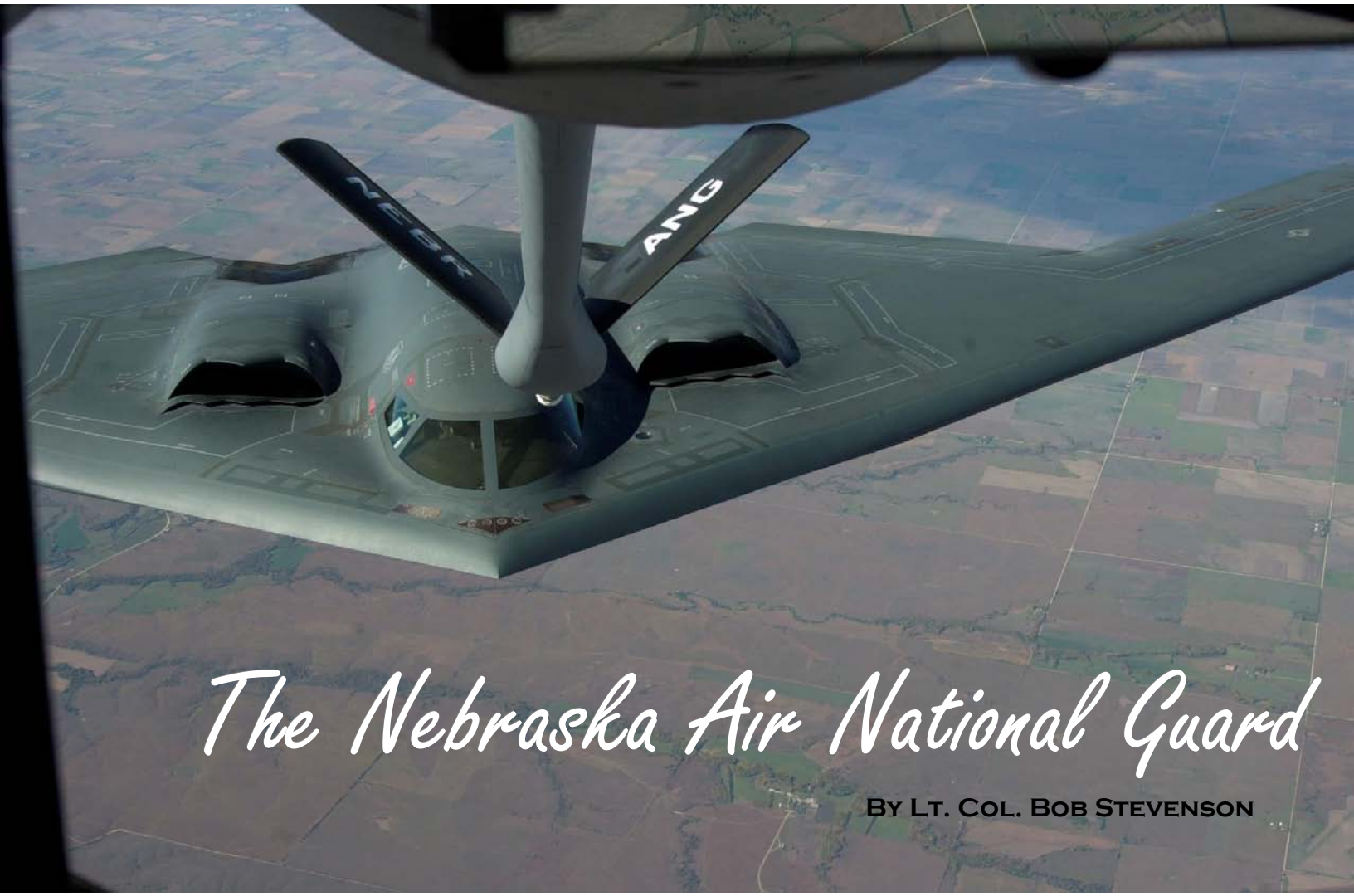
Continuity of ownership and long-time employees have built the outstanding service reputation for Duncan Aviation. Todd Duncan is the grandson of the founder, Donald Duncan. ñAs Chairman, one of my most important tasks is to spend time talking with customers and business partners throughout the industry. Our customers love to talk about Duncan Aviationôs team members. They mention specific experiences and individuals by name and go out of their way to tell others about us.

Outside Duncan's Lincoln, Nebraska facility.

ñItôs gratifying when, in tough times, others stand up and say youôre making a differenceô that your people and teams are something really special. Itôs experiences like this that reinforce my opinion that Duncan Aviationôs greatest asset is our people,ò continued Todd Duncan. ñThey are extremely experienced and fiercely loyal. It is because of them and our internal cultures that our reputation and long-term relationships continue to strengthen and grow. We are what we are because of the dedication and hard work of our team members.ò

Recognizing their dedication to employee wellness, Governor Dave Heineman recently presented Duncan Aviation with the Governorôs Wellness Award. ñDuncan Aviation is a well respected company. It is a privilege to have a national leader of private industry wellness in our state.ò As the nationôs largest family-owned aircraft support and service organization in the world, Duncan Aviation is a major industry leader from the Nebraska ñBig Redò Heartland.

Duncan Aviation industry services include major and minor airframe inspections and maintenance, engine services, major retrofits for airplane cabin and cockpit systems.



The Nebraska Air National Guard

By Lt. Col. Bob Stevenson

Touching two planes together at 300 mph is touchy business, especially if one of them is a B-2 Bomber with a $150 million paint job, but that is a weekly occurrence over mid-America for the Hustlinô Huskers of the Nebraska Air National Guard.

The 173rd Air Refueling Squadron of the 155th Air Refueling Wing at Lincoln, Nebraska, (KLNK) operates eight KC-135R refueling aircraft. The unit has two basic flying missions which it performs for the USAFõs Air Mobility Command, aerial refueling (AR) and strategic airlift.

In a typical week, 10 to 15 sorties will launch out of Lincoln. Some will fly out to an AR track over the United States to provide refueling support and training to active or ANG /Reserve fighters, bombers, cargo or special platform aircraft. This may involve just a ñtokenò offload that merely allows the receiver pilots to re-hack their refueling contact currency or other times, there will be tons of fuel passed to extend the receiverõs range and complete a mission across the country or even overseas.

If you think about it, they are in the business of controlled mid-air collisions, something that requires practice on the part of all involved; the receiver pilot, the tanker pilot and the all important Boom Operator who flies the nozzle of the refueling boom into the receiverõs receptacle.

The other primary flying mission of the Wing is to provide strategic airlift. The KC-135R is capable of holding approximately 50 passengers or five pallets of cargo or a lesser combination of the two.

Additionally, at least one mission per month, but more likely two or three, is an Aero-Medical Evacuation to somewhere in the world. This mission involves a Medical Team of nurses and technicians who specialize in moving patients long distances in pressurized aircraft. Air crew members in the squadron compete vigorously for the missions that haul wounded Soldiers, Marines, Airmen and Sailors from the combat zones of Iraq and Afghanistan. Those missions involve grueling 15 to 18 hours of flying in a 22 to 24 hour work day, but are very rewarding, humbling flights in which to participate.

Following Hurricane Katrina, the 155th was one of the first units on the ground in New Orleans, bringing much needed fuel to keep the rescue helicopters flying, as well as over 60,000 meals, ready-to-eat.

The 155thôs aircraft were all built between 1957 and 1963, but to look at them up close, youôd think they were as old as your average airliner. That comes from meticulous care by the Wingôs Maintenance Group.

The cockpits donôt look 50 years old either. The 155th was the first ANG unit in the U.S. to convert to the latest Block 40 avionics package, which consists of a sophisticated, ñsmall glassò Flight Management System with data link and SATCOM communications capability. When crossing the ocean, all air traffic instructions come to the aircraft as data link text messages; radios are just for back-up communication.

Refueling is critical to all that the USAF does. While the 155thôs aircraft are well maintained, they will not last forever and a new tanker is needed to continue to give the USAF the global reach necessary to project military might or humanitarian relief anywhere in the world.

Sixty percent of the unit are part-time members who give up one weekend a month and fly about once per week to support the unitôs missions. They each then travel for a week every three months or so and deploy for three-to-four months at a time in the Air Expeditionary Force 20-month cycle to provide needed assistance to the Active Duty force. Those deployments are over and above their ñnormalòweek in, week out business.

The Citizen Airmen of the 155th Air Refueling Wing truly are part of the Total Force of todayôs military.

Nebraska Aeronautics Commission:

Leadership is Key to System Success

By Penny Rafferty Hamilton

Created in 1945 by law, the mission of the Nebraska Aeronautics Commission (NAC) has remained largely unchanged in the past 64 years. The Legislature directed the NAC to allocate state funds and approve the use of federal funds to be spent for the construction or maintenance of Nebraska airports; designate the locations and approve sites for airports; arrange and authorize the purchase of aircraft upon behalf of the state; select and approve pilots to be employed by the state; and to assist the director in formulating the regulations and policies to be carried out by the Department under the terms of the State Aeronautics Act.

NAC consists of five Aeronautic Commissioners appointed by the Governor for a term of five years with reappointment possible for additional terms. That continuity and longevity of purpose has served Nebraska well. Bill Hamilton, the current Aircraft Owners and Pilots Association Central Regional Representative, also served on the NAC starting in 1989. ñThe reason Nebraska has such a strong system of airports, weather data collection and navigation aids is because Nebraska established its state aviation trust fund early-on, one of the first in the nation.ò

Current NAC Chairman, Steve Wooden further explained the importance of commission leadership. ñHaving served on the Broken Bow Airport Authority for over eight years, I know the critical role a vital community airport plays. I feel under the NAC and with the great staff of NDA (Nebraska Department of Aeronautics) Nebraska has one of the very best airport systems in the nation.

ñWe also have worked hard to

NAC Chairman Steve Wooden

share that information and invite and welcome input from the aviation community,ò Wooden continued. NAC minutes starting in April 2003 are available for public review at www.aero.state.ne.us/commish.html The 2009 NAC meeting schedule and locations are also published on this site.

Commissioner Wooden said, ñThe NAC members take their commitment seriously. Several of our members have dedicated many years serving on this important Commission.ò Ken Risk of Kimball has served on NAC since 1999 and will complete 15 years at the end of this term. Wooden now living in Albion has served nine years already and flies himself to the meetings. Doug Vapp of McCook and Barry Colacurci of Lincoln have already served seven years and were reappointed in 2007. A relatively new commission member is Dorothy Anderson of Holdrege appointed in 2008.

Former NAC 1992 Chairman, Bill Hamilton, shared how well NAC has played its important role, ñWhen aviation trust fund dollars are short, you have to put those dollars where they will do the most good and, especially where they can best be used to leverage additional dollars out of the FAAôs federal aviation trust fund. The Nebraska Aeronautics Commission has been extremely good at that. Nebraska has every reason to be proud of its Department of Aeronautics and the leadership of the Commission over the years.ò

PANTHER
INTERNATIONAL, LLC

www.pantherinternational.com

What Defines Green?

Today, the buzz words of "Going Green" seem to be cropping up everywhere. Realtors are jumping on the bandwagon just the same as many large scale manufacturing companies. Everyone recognizes the social and commercial values of being considered "Green". As mentioned in "Which basket do I put my eggs in?" (February blog, *State Aviation Journal*) the Leadership in Energy and Environmental Design (LEED) sets standards for designing, constructing, and operating buildings in a manner that is lighter on the environment through incorporating operating and construction efficiencies, re-use of materials, and using more biological-based materials (such as insulation made from old blue jeans or spray-foam insulation made from soy-based products with no formaldehydes).

Finding new ways to harness diverse energy resources is a priority for Boeing.

John Deere is emphasizing the need to look to its green roots (and theme color) to become more environmentally conscious and reduce its overall carbon footprint. As referenced in an article published in the Bureau of National Affairs, Inc. (March 20, 2009), testimony before the House Select Committee on Energy Independence and Global Warming appeared to be a show-and-tell of what new and re-thought ideas the industry has come up with to help accomplish common goals of protecting the environment. Alternatives to cars and traditional modes of transportation are high on the list, but more popular and closer to the reality of today is looking into alternative fuels, such as biomass fuels. Domenic Ruccolo, Sr. VP of Construction and Forestry Division of John Deere, testified that urban environments would benefit from the development of biomass fuels. Many alternatives are being evaluated, from the use of cultivated biomass to material re-use (such as wood biomass generated from forest thinning projects to help reduce fire hazards in areas of urban sprawl).

Mogollan Brewing Company, based in Flagstaff, Arizona, is developing a biomass power plant fueled from its spent barley and hops. The ever-growing success of micro-brew beers provided Mogollan Brewing Company with opportunities to pursue other environmentally-sensitive interests and re-use. Consistent with the nature of the community of Flagstaff, the owners of the company are looking at progressive means to re-use materials and provide a needed resource within a small industrial subdivision west of Flagstaff.

Chuck Howe

The most visible within the U.S. Aviation industry is Boeing. Boeing's 2009 Environmental Report was recently issued, which states the goal of improving the environmental performance of its products, along with improving the fuel efficiency of each new generation of commercial aircraft by at least 15%. The report highlights the 2008 reductions in the energy and water consumption, CO2 emissions, and hazardous waste at its facilities worldwide. Six international locations and 23 of its U.S. facilities have achieved the ISO 14001 standards for environmental management . International Organization for Standardization (ISO) is the world's largest developer and publisher of international standards.

As cited in GreenAir Online (May 20, 2009)

"Protecting our planet's environment and finding new ways to harness diverse energy resources continues to be a priority for Boeing," commented Jim McNerney, Boeing's Chairman, President and CEO. "Over the past year, the pace of progress has accelerated even in the face of a global economic slowdown."

The article goes on to reference the recent biofuel demonstration flights that Boeing conducted with Virgin Atlantic, Air New Zealand, Continental, and Japan Airlines. There was also a mention of Boeing's progress in other areas includ-

Sources:

ISO 14000 Resources: http://www.iso.org/iso/iso_catalogue/management_standards/iso_9000_iso_14000/more_resources_14000.htm

GreenAir Online:

Pace of Environmental Progress: http://www.greenaironline.com/news.php?viewStory=453

New Biomass Boiler at Stansted Airport : http://www.greenaironline.com/news.php?viewStory=417

Aircraft Fleet Recycling Association: http://www.afraassociation.org/

Boeing Environmental Report: http://www.boeing.com/aboutus/environment/environmental_report_09/environmental-stewardship.html

ing air traffic management efficiency. What will the future of biofuels bring to aviation?

A huge step in reducing waste, as well as, reducing the energy consumption necessary for new production, Boeing worked collaboratively with 11 companies to develop the Aircraft Fleet Recycling Association (AFRA). The association now consists of 41 member companies and has recently published a document of best practices as guidelines to be used for safe and environmentally sound management of the reuse and recycle programs promoted by AFRA. "Collectively, AFRA member organizations have:

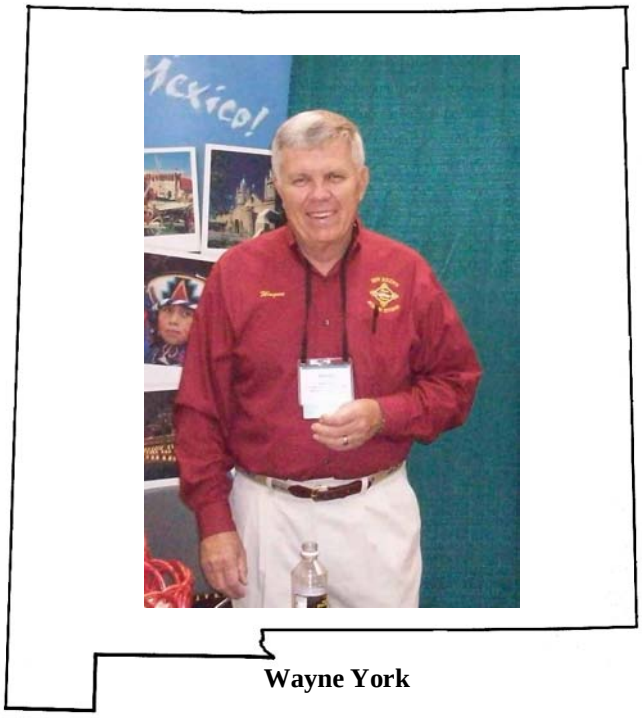
- Recycled more than 6,000 commercial aircraft
- Recycled more than 1,000 military aircraft
- Re-marketed approximately 2,000 airplanes"

Source: www.boeing.com *(see complete on page 34)*

Listed in a separate article in GreenAir Online (April 7, 2009) is the application of a biomass boiler used at Stansted Airport in London to heat the passenger terminal. This boiler uses wood chips to generate heat, replacing the previous natural gas system. More than a 30% reduction of natural gas use was seen following the installation of the biomass boiler.

There are many excellent examples of practices being implemented throughout the industry to reduce carbon footprints and greenhouse gas emissions through good stewardship practices, waste reduction, and re-use. What will we be discussing next year? 10 years from now?

York to Retire After 15 Years with New Mexico



Wayne York

Wayne P. York, Safety, Education and Air Service Bureau Chief for the New Mexico Aviation Division, announced that he is retiring in July after almost 16 years with the State. "Fifteen years and four months" to be exact, said York. His last day is July 15th, however he may use vacation time and leave sooner.

After a 30-year career in the Air Force, York was originally going to stay with the State for only two years. "I didn't know much about general aviation", said York. The F-4's that he primarily flew in the Air Force didn't lack for power, but he quickly learned that with the density altitude in New Mexico, the Cessna 172 and regularly aspirated C-182RG he was flying wasn't going to cut it!

The lowest airport in New Mexico is at 3,000 feet and the highest is over 7,000. "Density altitude can bite you in the butt," said York. A turbo Cessna 210 turned out to be the ticket!

York, who served with five different directors during his tenure, is proud of the airport safety improvements made over the years and has worked air service issues for a long time as well. "We now have for the first time, jet service from somewhere other than Sunport (Albuquerque International)." American Eagle is flying RJ's from Roswell to Dallas and will begin service soon from Santa Fe to DFW and Salt Lake City.

York was quoted in the weekly NASAO (National Association of State Aviation Officials) Brief as saying it has been a blast and another job (like flying fighters in the Air Force) that I can't believe they have paid me to do.

By Gary Ness

Dusters, Sprayers or Aerial Applicators Do You Know Them?

Contributing writer Gary Ness presents Part I in a series on aerial applicators. Ness is the former Director of the North Dakota Aeronautics Commission, having served in that capacity for over 20 years.

Dusters, sprayers or aerial applicators: the evolution of names given to the part of the aviation industry that is an important link in the food chain from farm to city table. Not many folks know the industry, including those who call aviation their chosen career field. In the coming issues of the *State Aviation Journal*, I will try to present insight into the history and changes in this part of the aviation industry.

What is a Catalpa tree? Could you identify a Sphinx Moth? Who is Lt. John A. Macready? What is a Curtiss JN-6? We know where Ohio is, right?

Ohio, the state that produced the Wright Brothers, is where it all came together. In 1921, the Ohio Department of Agriculture contracted with the U.S. Army to experiment with spreading dust insecticide over the Catalpa trees to kill the Sphinx moth larvae. The Catalpa tree was an important tree for the telephone poles and power poles industry and an important economic factor for Ohio, as well as the federal government. Lt. John A. Macready, flying the modified Curtiss JN-6, a WWI trainer, spread the dust with a successful outcome. Thus, Macready became the first ñDusterò.

A piece of history that was lost among those who flew the oceans, traversed the North and South poles and circumnavigated the globe, was an experiment that started an industry that has changed with the times and the farming structure of the world. History does tell us that in 1922, modified ñJennyôsò were first commercially used in the cotton fields for boll weevil control in the area around Tallulah, Louisiana. In 1923, Huff-Deland Dusters, Inc., the company that became Delta Airlines, provided the first commercial dusting of crops with an aircraft built for the job.

Aerial applicators of today ñtreatò (the word for pesticide application) more that 25 percent of the agricultural crops grown today. That is a large percentage of the worldôs daily food requirement. There are 3,200 operators in the United States. This industry started using old ñWar Surplusò aircraft with just enough horsepower to get out of their own way and evolved into large horsepower turbines that carry 800+ gallons of product to do the job required today.

If you have the FAA-FAR handy, go to Part-137 and review the why, why notôs and donôt doôs of the world of aerial application. It is interesting reading. Confusing you say? Then try Part-135. Truth is, it is important to understand all of it and the FAA makes it clear that confusion is no excuse!

Why do I find this industry interesting? I grew up in it. My father was a pioneer in the business here in North Dakota, a business that continued for 45 years. I had the opportunity to ride around in the back of his Jeep when he was ñselling sprayingò to farmer costumers owning wheat fields of 40 acres. His first aircraft was a PA-11 (90 hp) with a 40-gallon backseat tank and twenty feet of boom suspended under the wing.

I went from that kid in the back to loader, marker, ground supervisor and graduated to the guy who got yelled at a lot. Some ñSprayersò had a tendency to do that! What I hope to do in the coming issues is to give readers an up close and personal look at the development of the industry and present the true story of the business professionals who participate in this incredibly demanding part of aviating.

By Andrea Brennan

An Interview with Congressman Ehlers

General aviationôs voice is getting louder. To help their fellow members of Congress understand the importance of general aviation to the economy and the transportation system, Representatives Allen Boyd (D-Fla.) and Vernon Ehlers (R-Mich.) have partnered with the aviation industry to form the General Aviation Caucus (GA Caucus) in the House of Representatives. By holding regular briefings, the bipartisan effort will help raise awareness of the issues affecting general aviation while also educating lawmakers about the benefits to their constituents.

In a letter inviting colleagues to join the Caucus, Boyd and Ehlers noted that the GA industry contributes more than $150 billion to the U.S. economy annually, and it employs nearly 1.3 million workers. The letter continues, ñthere are more than 230,000 GA aircraft in the United States, which service nearly 19,000 small and regional airports, many more than the 500 commercial airports in the United States. These airports help connect people and industries that do not always have easy access to our commercial airports.ò

Representative Vernon Ehlers

Boyd and Ehlers co-sponsored the Caucus, Ehlers explained, because so many rules and regulations relating to aviation had been passed in Congress. ñWe already have an aerospace caucus,ò he said, ñbut general aviation needed representation.ò Ehlers noticed the negative impact on aviation and the airplane building industry when the public reacted sharply to auto executives using private jets to fly to Washington and then asking for funding. Companies stopped purchasing planes. ñIt is not a ófat catô thing,ò Ehlers said. ñWe had to give the real story,ò which included the actual cost savings of using private aviation and humanitarian use such as Angels of Mercy flights.

The GA Caucus has already had one meeting since forming in April: a presentation to members of Congress on May 21 explaining the impact of regulation on individuals and companies. A company executive testified that with the corporate jet he could send employees to widely dispersed plants and send replacement parts to factories without costly delays. Aircraft Owners and Pilots Association (AOPA) President Craig Fuller spoke about the lack of understanding of GA, introduced the AOPA GA Serves America campaign, proposed security regulations and user fees, and implementation of the Next Generation air traffic control system (NextGen).

Already, the Caucus has positively affected legislation. Ehlers pointed to an amendment, sponsored by the GA Caucus, which would alter the standard for when the Transportation Security Administration (TSA) may issue an emergency regulation or security device without adhering to the rule making, public notice, and comment provisions of the Administrative Procedures Act (APA). TSA can now change a regulation or security directive when needed ñto respond to an imminent threat of finite durationò as long as they have a hearing within 180 days. ñThis was a major victory in the House today,ò Ehlers said, ñand without the Caucus the amendment would not have been offered.ò

Ehlers told *SAJ* his support for the Caucus stems from a lifelong interest in aviation. ñI learned to fly as a student at the University of California-Berkeley.ò After taking a long break, Ehlers started taking flying lessons again a few years ago. ñMy goal is to build my own airplane and then fly it,ò said Ehlers. As a pilot (he earned his license in 2008) and a farmer, Boyd has seen firsthand the critical role that general aviation plays in creating jobs and bolstering the local economy in rural communities.

Boyd and Ehlers have also lent their support to the AOPA GA Serves America campaign, the National Business Aviation Association (NBAA), and the General Aviation Manufacturers Associationôs No Plane No Gain initiative.

ROW 13-F

By Kim J Stevens

To see the world through the window of 13F is truly amazing! The perspective from thousands of feet in the air is quite a gift.

A perfect example was the tug I saw pushing a string of barges up river. I was watching the landscape drift by as we flew back to Phoenix from Atlanta not too long ago. As we approached the Mississippi I was struck by how far I could see the river meandering to the North. Even at 33,000 feet, I could see the water boiling under the rear of the boat as it labored against the flow. You could see the wake trailing off to the river's edge. It brought back a memory of sitting on the bank of the Missouri River when I was a kid growing up near Omaha. When a barge went by, the water level would rise.

It's interesting to note that the pilot of a tug can only see as far as the next bend in the river. He has to trust that he can navigate beyond that point, that he can power on. He knows that somewhere up ahead lies his destination even though he can't see it, even though there is uncertainty.

From the window seat, however, the whole world opens up. You can see beyond each bend, beyond any uncertainty. You can see adventure snaking along for miles. And there, just below a hazy, mostly obscure horizon lies your destination. Can you see it? With practice comes clarity.

Isn't that just like life! We find ourselves struggling along, one foot in front of the other, not quite sure what lies beyond the next bend. Wondering if our destination is truly there. Yet, when you see your life from altitude, you see things from a different perspective, and the task at hand doesn't seem so daunting.

That's why I like to fly. That's why I like the window seat. Because it offers a fresh perspective. It helps me to see things differently, to re-focus. Like the pilot of the tug, if we know that others have made the journey before - that should embolden us; if we have a map - that builds confidence; but until we run the race and make the journey for ourselves, life is not complete. Seeing the course from the window seat encourages me, it gives me hope. When we see our lives from altitude, we see what lies beyond the next bend, and we might even see our destination, right there - just below a hazy, mostly obscure horizon.

STATE TAX UPDATE

(2008 – 2009)

There is growing attention among the states regarding aircraft and the application of state taxes. Among some of the known high enforcement states such as, Illinois, California, New York, Indiana, Michigan, Texas, and Arizona; we are adding Florida, Colorado, Washington, and Kentucky. With all this attention being paid to aircraft of all sizes it is even more important to understand how each of the 50 United States tax aircraft and even more so, to know when there are changes within the tax code that could affect aircraft.

It is important to the various departments of aviation in each state to understand how the various states tax aviation and how this could have an impact on their state. For instance, if your state taxes maintenance work done on non-resident aircraft and all the states around you do not, why would owners bring their aircraft to your state and have to pay a tax when they can go to another state nearby. Owners are always looking for ways to save money on the operation of their aircraft and taxes play a big part in this.

There have been significant changes to taxes impacting general aviation aircraft within the states over the past two years. Following are some of the changes that have occurred in 2008 and 2009.

2008

COLORADO – Effective 8/8/08. The sale of a new or used aircraft is exempt from taxation if sold to a non-resident and removed within 120 days after the date of the sale.

INDIANA ï Effective 4/1/08. The state sales/use tax rate went up from 6% to 7%

INDIANA ï Effective 7/1/08. An aircraft acquired by a person for rental or leasing is not exempt from the sales tax unless the person establishes that the annual amount of the lease revenue derived from leasing the aircraft is equal to or greater than 10% of the cost of the aircraft, if the cost was less than $1,000,000, or 7.5% if the cost is equal to or greater than $1,000,000.

MARYLAND – Effective 1/3/08. The state sales/use tax rate went up from 5% to 6%

MISSOURI – Effective 8/28/08. The definition of commercial aircraft for personal property tax purposes changed from aircraft that weigh more than 7,000 pounds to aircraft that weigh 3,000 pounds.

NORTH CAROLINA ï Effective 10/1/08. The state sales/use tax rate increased from 4.25% to 4.5%.

OHIO – Effective 6/24/08. Sales of materials, parts, equipment or engines used in the repair or maintenance of aircraft (aircraft means aircraft that weigh more than 6,000 pounds) at a FAA certified repair station are exempt from the state sales/use tax.

UTAH ï Effective 1/1/08. The state sales/use tax will decrease from 4.75% to 4.65%.

2009

GEORGIA ï Effective 1/1/09. On May 4, 2009, the Governor signed legislation that extended the aircraft maintenance exemption to June 30, 2011.

IDAHO ï Effective 7/1/09. The sale, lease, purchase or use of aircraft primarily for air ambulance services are exempt from sales/use tax.

MINNESOTA ï Effective 7/1/09. The state sales/use tax rate will increase from 6.5% to 6.875%.

NEVADA ï Effective 7/1/09. The school support tax rate will increase from 2.25% to 2.6% bringing the overall state sales/use tax rate to 6.85%

NEW YORK ï Effective 6/1/09. The definition of transporting for hire was changed to not included transporting agents, employees, officers, members, partners, managers or directors of affiliated persons

OHIO ï Effective 2/1/09. The maintenance work does not have to been accomplished at an FAA certified repair station in order for the exemption to apply.

UTAH

1. Effective 1/1/09. The state sales/use tax rate increased from 4.65% to 4.7%

2. Effective 1/1/09. The Registration Fee changed to .4% of fair market value and the Uniform Fee changed to $25.

WEST VIRGINIA ï Effective 7/1/09. The assessed value of aircraft for the purpose of ad valorem taxation shall be its salvage value. Salvage value means the lower of fair market salvage or 5% of the original cost of the aircraft.

As you can see, state taxes are a moving target for aircraft owners and to keep current on these activities is a daunting task. A resource for more information regarding state taxes, Conklin & de Decker publishes a *State Tax Guide for General Aviation* which is updated on a continuous basis.

If you would like to suggest a topic, please email me at nel@conklindd.com and I would be more than happy to discuss it in this column.

Focus on

COLORADO

Aviation

PHOTO BY KIM STEVENS

Coming in August

State Aviation Journal 9866 W Lone Cactus Drive Peoria, AZ 85382 623-326-1125
www.stateaviationjournal.com