



Dirigo Flyer

Newsletter of the Maine Aviation Historical Society
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Volume XVIII No. 5

SEPTEMBER - OCTOBER 2010

This issue continues to cover some odds and ends of articles and pictures in an attempt to catch up with a number of items submitted over the past year. Both modern and past aviation items are covered and hopefully may bring back memories and also bring some hope for the future of aviation in Maine.

The following article is used with permission of the online magazine *MaineBiz* (www.mainebiz.biz), author Carol Coultas, photo by Whit Richardson. The entire article can be found on the MaineBiz website.

Eye in the Sky

by Carol Coultas

Skybus 80K floats in the stale air of an old Loring Air Force Base military hanger that once sheltered B-52 bombers. Tethered by ropes and weighted with yellow and blue sandbags, the huge unmanned airship is typically seen only by the eight-man crew working on its flight and data systems and the occasional pigeon roosting in the rafters.

But by the end of May, the white, 80,000-cubic-foot blimp will be launched into the Aroostook County spring air on a test flight in preparation for the public unveiling to prospective buyers later this summer. If all goes well, the Loring hanger could one day become a manufacturing and training facility for unmanned airships.

The Skybus 80K is the brainchild of the Loring research and development division of Telford Group Inc., a subsidiary of Bangor's Telford Aviation founded by President Bob Ziegelaar. For the past four years, this division of Telford Group has developed unmanned airships whose surveillance potential has caught the interest of the Department of Homeland Security, the U.S. Customs Border Patrol, the U.S. Coast Guard, and other government agencies. At a sale price of roughly \$1 million, Telford Group hopes the Skybus will bring new business to the privately held company, as well as a boost to the local economy through a new production and training facility that could employ 30 or more people.

Several companies are developing aircraft that can perform surveillance applications, but the Loring unit of Telford is the only one to receive an experimental certificate from the Federal Aviation Administration for an unmanned, lighter-than-air craft. (*Editor's note: registration no. N805BX*) The certificate, awarded in April, allows Telford to execute demonstration flights and R&D test flights with the Skybus in civilian airspace, a crucial step in preparing it for the civilian market.

Steve Ouellette, Telford's facility manager at Loring, says the Maine operation is well ahead of its competitors. An aviation mechanic by training, Ouellette stands in the hanger and ticks off on his fingers Skybus' advantages over the pack. It can easily carry a payload of 750 pounds and is designed to travel at

15,000 feet within a 15 to 20 mile radius from its ground station. Most importantly, says Ouellette, it can stay airborne for 32 hours, while surveillance fixed-wing aircraft and helicopters max out at seven hours.

Competition for the surveillance work is stiff. A handful of companies are developing unmanned vehicles for surveillance that must be propelled into the air, such as airplanes and helicopters, says Ziegelaar. Lighter-than-air craft like Telford's are cheaper to build and operate. The Skybus 80K would cost about a quarter the price of a Predator, the \$4 million fixed-wing, missile-toting aircraft developed for the Air Force for reconnaissance missions and raids. One of Telford's biggest rivals,



North Carolina-based Blackwater Airships, is working on the Polar 400, a blimp that dwarfs the Skybus by 60,000 cubic feet. But it doesn't have an experimental certificate, giving Telford an edge in getting Skybus to market.

Blimps like Telford's can be used to monitor seacoasts and shipping lanes for drug runners, expanding the reach of the Coast Guard. Homeland Security could apply its motion technology to detect illegal immigrants along the U.S. border. Add infrared technology to the blimp's payload and the government could find terrorists hiding in remote terrain. Affix audio detection technology and it could even overhear conversations.

Besides the Big-Brother applications, Skybus can help restore cell phone services and other communications when transmission towers topple after a natural disaster such as a hurricane.

In the 1980's, Scientific Applications International Corp., a Virginia-based company, began experimenting with airships for commercial and government use. They weren't successful, said Ziegelaar, but five years ago Scientific Applications approached Telford Aviation to collaborate on R&D that eventually produced Skybus 30K, the forerunner of Skybus 80K. The two companies had collaborated before, and SAIC's research and engineering skills complemented Telford's technical and mechanical resources.

The Skybus is powered by a turbo-charged, 115 horsepower Bombardier Rotax engine, which propels the vehicle at an average speed of 40 knots. Coupled with its 30-plus hour flying time, it can travel a distance of 600 miles and back.

The shell is made from a specialized coated fabric that prevents the helium from seeping out of the cells. Ouellette says helium atoms are so small they can escape from a stainless steel box welded shut. The Skybus has no internal structure, differential pressure keeps it rigid.

Note: A video of the flight can be found at www.video.aviationweek.com

President's Message

As we approach the end of the year the Maine Aviation Historical Society organization faces some difficult challenges ahead. I noted in the last newsletter that the museum had another successful year, but was operated throughout the 2010 season by only the same few volunteers weekend after weekend. Additionally, I need to inform you all that attendance at our monthly member meetings has dropped off. The October "end of season" meeting and social gathering was not very well attended compared to the past couple years. I believe it is important to highlight these reductions in participation as they could have undesirable consequences for the future of our group and the Maine Air Museum. I raise the concern of member involvement especially now since we are entering election time for new officers and board members. As a point of reference, the total membership count at the end of October, 2010 stands at 140, not much different from the past several years, but this includes a handful of members we have kept on the roster but haven't renewed in over a year. Additionally, as you might expect a fair number of our membership is comprised of folks in their 70's & 80's, and understandably for one reason or another not all are able to be actively involved with the museum, meetings

and/or events around the state. Couple this with a percentage of members that are a distance, residing outside the state and across the country, and there aren't that many hands available to keep every element of the organization thriving. My concern is that we are approaching the point where our key functions are all struggling for lack of involvement by those other members that are not volunteering or otherwise contributing and are so needed for us to remain viable and successful. I mentioned the museum operations and our meetings, but the same is true with regards to putting together and publishing the newsletter. We recognize that for some of our most senior members and those out of state the *Dirigo Flyer* is the critical element this organization offers for their continued membership. But, after nearly a decade of operation the *Maine Air Museum* has become an equally important cornerstone and without question is the signature mark of this organization within the State of Maine.

I'm confident you all believe we have something very desirable and special in the case of the *Dirigo Flyer* and the *Maine Air Museum*, but without the help of a greater number of you neither can be sustained. If the membership at large doesn't see a benefit in getting together at monthly meetings we may have to revise the meeting criteria and schedule. So, we need input from each and every one of you. This starts by getting involved . . . and the election of new officers and board positions coming due for a vote is the perfect opportunity to come forward and assist in shaping the future of MAHS & MAM! For those members that are just not able to help in one of these positions, please consider applying your talents and ideas by providing much needed material for the newsletter, working on some of the museum projects that can be done off-site and during the winter months, plus when we reopen in the spring helping man the museum a couple Saturday's or Sunday's which isn't much to ask. Above all, you should be encouraging and recruiting others to come join in and grow this wonderful organization and support its important mission.

In closing, I wish to remind everyone again, the off season meetings will take place around the state as with past years. For November the off-site member meeting will be held at the Lewiston-Auburn airport terminal just opposite the airport café, and we have the honor of being able to get into the Lufthansa hangar again to check first-hand on the progress of the Super Starliner restoration project in conjunction with our meeting. The location for December's meeting will be announced at the November members meeting and will be listed on our website.

Happy Thanksgiving to all *Bob Umberger*

Now available:

Memoirs: With an Angel By My Side by member Alfred Cormier.

His flying life as told by Al and available exclusively from the Maine Air Museum.

\$16.00 at the museum, \$20.00 via mail. To order, call or email the museum. "...a great story by a member of the Greatest Generation. Exceptionally good reading, riveting to the end." Bill Townsend Teacher-in-Space, STS-51.

*The United States Air Force
in Maine*



*Progeny of the Cold War
John C. Garbinski*

The United States Air Force in Maine, Progeny of the Cold War

by John Garbinski.

Another exclusive book from the Maine Aviation Historical Society. Softbound, 134 pages, 151 illustrations.

\$20.00 (plus \$4.00 postage and handling). To order, call or email the museum.

Buy a Brick and Support the Maine Air Museum

The Maine Air Museum is proud to announce the new Memorial Pathway Program. To successfully carry out and reach the museum vision, and to help refurbish Building 98, the Maine Air Museum needs the financial support of businesses and public community leaders and individual private citizens. To this end, the museum board has established a means for receiving your monetary donation and recognizing your gift permanently in the museum pathway and wall of honor. These donations are fully deductible.

Details available on our web site: www.maineairmuseum.org or from the museum by request.

Answers to last month's quiz: 1. B Maheaux Airport, Minot, ME. 2. C. 1911 3. D Maplewood Park
4. A. Delta Airlines 5. D. Stroudwater Field 6. C. Jean-Guy Paquel 7. B. Arthur Schiber 8. D. Leviathan
9. B. 1.5 million 10. D. Pittsfield 11. B. 11,400 12. B. 72,295' 13. B. SAC Alert KC-135 14. D. Piano and organ maker 15. A. Greenwich Mean Time (GMT) and 16. D. Al Cormier.

MUSEUM NEWS

The Maine Air Museum added several outstanding new features and expanded exhibits to its already impressive array for 2011.

ROTATING BEACON. The Bangor International Airport rotating beacon that graced the water tower for many years has retired to the museum thanks to the airport management. To make it feel at home it is now on a red and white checked base just like the water tower where it served on “active duty”.

INTERNET. Thanks to a grant from the Bangor Savings Bank the museum is now on line. BSB also donated three computers. Now we can see “Flight Aware” and our archives will be available on-line in the near future.

GROUND OBSERVER CORPS. We now have an exhibit honoring the volunteer “Plane Spotters” who manned observation posts along our coast lines during WWII. Most of the artifacts are from sites in Belfast and Waldo County, Maine.

N.A.S. BRUNSWICK. The exhibit doubled in size with the donation of many rare and unique artifacts from personnel who had been stationed there.

BERNOULLI’S 3-RING CIRCUS. Thanks to the Museum of Science and Industry in Tampa, Florida and Andy Hughes, Hughes Tech, Benton, we have a scientific interactive display that demonstrates Bernoulli’s Principle that is a learning experience and fun! This exhibit is portable and can be loaned out to schools and taken to air shows. Who was Bernoulli? Look him up.

PHOTO OF BIA. The Bangor International Airport management recently gave the museum a large color overhead photo of the airport and its surroundings. This will be displayed next to a similar photo of the airfield taken during WWII.

SANFORD AIRPORT RUNWAY THRESHOLD/END LIGHT. Thanks to the Sanford airport management we now have a rare piece of aviation memorabilia.

WIND TUNNEL. Under construction this winter. Unique scientific design which will be made available to schools. Major technical components donated by the Museum of Science and Industry, Tampa, Florida.

You can see these exhibits plus over 40 more by visiting the museum at 98 Maine Avenue, Bangor International Airport. That is near where Hammond Street meets the runway at the airport. The museum will reopen on Memorial Day weekend for the summer and will be open on Saturdays from 10:00 a.m. to 4:00 p.m. and Sundays from 12:00 to 4:00 p.m. thru Labor Day weekend.



Left. Mr. James Hobbs with his home-built Parasol Airplane in 1927 at Maple Street in Bangor, Maine. Mr. Hobbs sold the aircraft to an unknown buyer in the Bangor area. What is not known is if the aircraft was ever completed and flown. (*Hobbs family photo*)

Center. Boston and Maine Airways Captain Hazen Bean on a stop over at the Portland Airport in Scarborough, Maine (now the Scarborough Industrial Park). Captain Bean was hired by Boston Maine Airways in August 1933 and flew until his retirement at age 60 in 1969. The sidarm he is wearing was a Post Office requirement for pilots flying the US Mail at that time. If the spats the Captain is wearing was also a Post Office requirement is not known. (*Maine Air Museum file photo*)

Right. Dave Berquist and his “English is a Second Language” summer camp with students from Malawi, China, Viet Nam, and the Republic of Georgia.

NEW MEMBERS

We welcome the following new members:

- 515 Jay Rowe of Winthrop, ME
- 516 Wade Maddox of Hampden, ME
- 517 Finn Grant of Goffstown, NH
- 518 Luke Uhlman of Bangor, ME
- 519 Hayden Goulet of Hollis, ME
- 520 Leonard Harlow of Carmel, ME
- 521 Robert Hall of Milford, Me and Venice, FL
- 522 John O'Dea of Augusta, ME

While we are on the subject of membership, we are still looking for members email addresses in order to send museum updates and other important information to our members.

SAINT CROIX AIRPORT, BARING, MAINE.

This is one of an occasional series on abandoned and little known airports here in Maine. The editor has a particular affinity to this airport as it is where he first flew in an airplane, an old Piper Cub when he was 10 years old back in the year ****censored****. Much of this information comes from former pilot Eddie Ketchen, now in his 90's who flew out of St. Croix for many years.



Located beside U.S. Route One in Baring Maine, just north of Calais at 45.12 N and 67.31 West, this single runway airport was first constructed just after WWII for the Bridges Bros. Blueberry Co. At the time it was a short, dirt runway with power, phone, and utility wires at the Route 1 end and dense woods at the other. Ketchen states that one had to use full flaps to land due to the short length of the 17/35 runway.

Ketchen taught the Bridges brothers how to fly at this airport. In the 1950's Tommy DiCenzo of the DiCenzo construction company lengthened the field from 1900 ft. to 3000 ft. It was hot topped and a culvert for a stream that crossed the runway was constructed along with the woods at the 17 end being cut. Aircraft for the DiCenzo company used the field extensively. The power lines at the Route 1 end continued to be a problem but were finally relocated underground along that end of the runway in the 1990's.

A large hanger was constructed and at one time as many as five aircraft were using the field. In 1976 the field was removed from the list of active runways and became a private field for the Bridges Bros. Blueberry Co. It is apparently still used on occasion but the hanger and surrounding area is being used for storage of equipment for the Bridges company. A member of the family told the editor that some local aircraft still land there on occasion. Being only a half-mile from the Canadian border one actually may overfly Canada when making an approach on 17.

The November meeting will be held at the Lewiston/Auburn Airport. The meeting will be held on Saturday 11/13 at 10:00 AM. We will use the room across from the Restaurant. We have confirmed that we be able to have the group revisit & tour the Lufthansa hangar to get an update on the Constellation restoration after the meeting.

Don't forget to vote in the upcoming election of officers, information will be included with the mailing of this issue of the Dirigo Flyer. We could really use your active participation on the Society and the museum.



An F-18 as seen from the museum (Scott Grant photo)



Maine Aviation Historical Society Maine Air Museum * Membership Form

Name: _____

Address: _____

City, State, Zip: _____

Special Interests: _____

Phone: _____ Email: _____

Dues are for one year, and membership will expire in the month you joined.

Annual membership includes six newsletters!

Mail payment to:
Maine Aviation
Historical Society
PO Box 2641
Bangor, ME 04402-2641

Membership	Dues	Benefits
Regular	\$25 annual	Newsletter, Museum Admission
Family	\$35 annual	Newsletter, Museum Admission
Corporate	\$100 annual	Newsletter, Museum Admission
Supporting	\$100 annual	Newsletter, Museum Admission, .
Lifetime	\$500*	Newsletter, Lifetime Membership Number, Museum Admission,
	* 2 annual \$250 payments	

We need volunteers-docents, mechanics, maintenance, librarians and exhibit specialists, etc.

- Please call me. I want to be active in the organization.
 I cannot join now, but would like to help. I am enclosing a check for \$_____.
 Contributions over \$20 are tax deductible within the limits of the law.
 I wish to support and obtain membership by purchasing a memorial brick.

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