



# DIRIGO FLYER

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Newsletter of the Maine Aviation Historical Society • 101 Monroe Avenue, Westbrook, Maine 04092 • 207-854-9972

## Maine's Only Astronaut: General Robert A. Rushworth

By Ed Goldman

So who is this man, Robert A. Rushworth, born in the small town of Madison, Maine, who achieved international fame for his exploits at the controls of the pioneering X-15 rocket aircraft, the nation's first manned research vehicle? His commanding general at Edwards Air Force Base described Rushworth as "the cream of the cream of the cream of Air Force test pilots."

Bob Rushworth was born October 9, 1924 in Madison, Maine. He graduated from Madison High School in 1942 just as World War II had begun, and applied for pilot training in the Army Air Corps. Upon completion, he was assigned to the China-Burma-India theater as a transport pilot, flying 178 missions.

After World War II, Bob decided to go to college. He received a degree in engineering from the University of Maine at Orono in 1951. While attending the university, he served in the Maine Air National Guard as a fighter pilot, operating out of Dow Field in Bangor. In 1950, during the Korean War, he was recalled to active duty and flew with the activated Air National Guard.

When the war ended, Bob decided to stay in the Air Force where he attended the Test Pilot School at Edwards Air Force Base in California. Upon graduation, he was assigned as a test pilot for the X-15 project. Data from this program was being used to develop the B-70 bomber, supersonic transport planes, space capsules, and other high-speed vehicles. The X-15 with pilot aboard is carried aloft, secured under the wing of a B-52. At a high

altitude it drops free, its rocket engine cuts in, and the plane shoots upward at a pre-planned angle, leaving the eight jet engine B-52 and even the supersonic chase planes as if they were standing still. Powered flight continues only 80 to 120 seconds, and the X-15 must be piloted back through the extreme heat of re-entry into the heavier layers of atmosphere to an

unpowered landing. The X-15 lands on skids and a nose wheel at a speed above 200 miles an hour, taking a mile to stop. It usually takes 50 minutes to get out there in the B-52, and six minutes to get back. Speed and altitude in themselves are not the primary objectives. The real goals are to gather data on aircraft control and heat problems caused by friction in the air.

Major Rushworth's 13 minute flight on June 27, 1963 made him the second Air Force officer to become an astronaut by flying a winged aircraft, as distinguished from a satellite vehicle, above a 50 mile height. The first was Major Robert M. White, who attained an altitude of 314,750 feet the year before.

On July 26, 1963 in Washington, D.C., Major Rushworth was awarded astronaut wings for the June 27th X-15 rocket plane flight which took him to a height of 286,000 feet. Gen. Curtis Lemay,

Air Force Chief of Staff at that time, presided at the ceremony in the Pentagon, and Mrs. Joyce Rushworth, a native of Norridgewock, Maine pinned the wings on her husband's tunic. Major Rushworth's daughter, Cheri, and his mother, Mrs. Mabel T.

Rushworth, *Continued on Page 2*





### Rushworth, Continued on Page 2

Rushworth, looked on as the test pilot received the honor. Among the Maine delegation that attended the ceremony were Senators Margaret Chase Smith and Edmund S. Muskie and Congressman Clifford G. McIntire.

The flights which qualified him and Major White for astronaut wings were from Edwards Air Force Base in California. They flew the X-15 built by North American Aviation, Inc. for use in joint research of the Air Force, Navy and National Aeronautics and Space Administration (NASA). In all, Rushworth made 34 test flights in the X-15s.

On August 2, 1963, Major Rushworth was honored by the State of Maine. Then-Governor John H. Reed presented him a "Distinguished Maine Citizen" plaque in Augusta. The following day Madison honored its hometown hero with a mile long parade and reception. The Rushworth Gymnasium in Madison was named in his honor.

After his work with the X-15, Rushworth attended the National War College in Washington, D.C. and F-4 Phantom combat crew training. In 1968 he went to Cam Rahn Bay Air Base, Vietnam as Assistant Deputy Commander for Operations with the 12th Tactical Fighter Wing. He flew 189 combat missions.

Rushworth later served as Inspector General, Air Force Systems Command, Andrews Air Force Base, Maryland before returning to the Air Force Flight Test Center at Edwards Air Force Base as Commander.

In 1975, he was selected to command the Air Force Test and Evaluation Center at Kirkland Air Force Base in New Mexico.

In 1976, he returned to Wright Patterson Air Force Base in Ohio where he served as Deputy Commander, Air Force Systems Command, until his retirement as a Major General on June 1, 1981 after 38 years of service.



North American X-15-3 at Edwards AFB.

In July 1990, he was inducted into the National Aviation Hall of Fame, enshrined with the likes of Charles Lindbergh, Chuck Yeager, John Glenn, and the Wright Brothers.

On March 18, 1993 Bob Rushworth, 68, died at his retirement home in Camarillo, California. He was predeceased by his wife, Joyce, and is survived by his daughter, Cheri, and two grandchildren.

*Footnote: Your editor was lucky to be friends with Bob and Joy at the University of Maine at Orono from 1948 to 1950. We did much visiting back and forth, played a lot of cards, and I was very jealous because he was flying out of Dow Field with the 49th Fighter Interceptor Squadron of the Maine Air National Guard. The Rushworths first introduced us to frozen orange juice as the easy way to make screwdrivers.*

*Seriously, here we have Maine's only astronaut, and I think we should look to ways to publicly honor Bob Rushworth and his contributions to Maine and the nation's aviation history. Ideas, suggestions, help wanted. — Leo Boyle*



North American P-51H Mustang of the 101st Fighter Group at Grenier Field, Manchester, NH in July 1953.

Photo courtesy of Ken Miner of Bennington, NH.



## December Meeting

The December meeting at the Portland Jetport was one of the best-attended meetings yet and we have new member Jim Sheppard to thank. Jim gave a great slide presentation on the Tuskegee Airmen, of which he was a member. Jim attended the Aviation High School in New York City, went into the Air Force and served with the 332nd Fighter Group in Tunisia, Sicily and Italy. It was a most enjoyable presentation of a different era and everyone learned something.



*Norm Houle Photo*

- The complete Treasurer's Report for the past year is elsewhere in this issue.
- Bill Robertson told of another visit to the "White Bird" site, and conversations that he has had with Jim Millett. Jim and Leo told of Bill Nungesser's trip to France and possible future help from the French for our search.
- Rob Rohr told of possible aircraft acquisitions from the government, but we haven't received his list yet.
- Carroll Leland showed some aircraft instruments that were donated to the Society, which we are trying to further identify.
- Steps were taken to set up the Museum Committee, and this will be discussed further at the January meeting.
- We are beginning to compile a journal of Maine aviation stories to be published this year. If anyone has any ideas or suggestions, please let Leo know.
- Jim is setting up a meeting in January with the Maine Historic Preservation Commission regarding the protection of Maine's historic aircraft and artifacts.
- We hope to have an interesting speaker for the January 11th meeting.

## Votel

If you haven't already sent in your ballot for the Board of Directors, please do so right away or vote at the January meeting.

## Maine Education Council for Aviation and Aerospace Meeting

The Maine Education Council for Aviation and Aerospace is having an important meeting at the Portland Jetport on Wednesday, January 22, 1997 at 10:30 a.m. and anyone interested is urged to attend. They are also meeting at 6:30 p.m., same date and place, primarily for FBOs but all are welcome.

## 1997 Dues

1997 dues are now payable and the number of members who have already paid is gratifying. Don't forget you can upgrade your membership or make a tax-deductible donation. If there is a white 1997 membership application enclosed with your newsletter, it means we have not received your 1997 dues as of the mailing date. Please take a moment to renew now and continue to receive your *Dirigo Flyer* throughout the year.

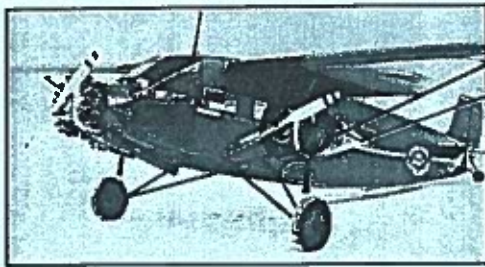
## Mystery Photo Identified

Ed Maliar of Bohemia, NY sure knows his Maine aviation history. Once again, he was the first to identify the December Mystery Photo. The beautiful plane, of course, was a Waco Cabin Biplane. It was owned by Jimmy Colton of Houlton, and Jim used to barnstorm around the state in the 1930s. He used to search out suitable fields near to smaller towns that less intrepid aviators would shun and give rides to the locals. The accident happened in Houlton.

The Mystery Photo will return in the February *Dirigo Flyer*.

## Welcome New Members

175. **James Sodermark** (*Warbirds, Antiques*)  
P.O. Box 52  
Kenduskeag, ME 04450 (207) 884-7655
176. **Peter M. Hurd** (*Maine Aviation, Space, Houlton*)  
P.O. Box 1005 (207) 532-2823 Phone  
Houlton, ME 04730-1005 (207) 532-2377 Fax  
N1SS@aol.com E-mail
177. **Donald E. Saunders** (*Photography*)  
RFD 3, Box 32  
Ellsworth, ME 04605 (207) 667-3688
178. **Alex Saidel** (*WWII Aircraft*)  
268 So. Mammoth Road  
Manchester, NH 03109 (603) 626-7213
179. **Susan Chichetto** (*Historical Photography*)  
12 Woodridge Drive  
Manchester, ME 04351 (207) 623-4324
180. **William Haefele** (*Maine Aviation*)  
391 Water Street  
Ellsworth, ME 04605 (207) 667-9086
181. **Gary Leighton** (*WWII Bombers, Fighters*)  
P.O. Box 912  
Gray, ME 04039 (207) 657-4682
182. **Dakota Aviation Museum** (*DC-3 Dakota*)  
492 Old Ashby Road  
Mason, NH 03048 (603) 878-1622
183. **James A. Sheppard** (*Tuskegee, Maine Aviation*)  
227 Sandy Hill Road  
So. Portland, ME 04106 (207) 772-8325



*Norm Houle contributed the following poem. It was written, he says, by two new Boston & Maine Airways pilots when they saw the Stinson SM-6000 Tri-Motors they were going to be flying.*

### First Flight in a Tri-Motor

by Sam and Rex — *Almost the first and damn near the last!*  
Rex:

Now what is this? Three engines, three throttles?  
Can a machine like this be flown by mortals?  
How the hell do you check the tach?  
Oh — Look out the windows and over your back?  
What's the take-off speed? And climb? And cruise?  
I thought so, all the speed you can use!  
Is there any way to make the mixtures rich?  
I'm beginning to wonder about this son-of-a-bitch!  
It's quite a ways from the nose to the tail,  
Will this stabilizer trim do the job — without fail?  
But Sam says there is much about flying I do not know,  
I think I will renege, and let him go.

Sam:

These are mixtures, and these are throttles, I guess!  
Push the wrong one, and you're in a hell of a mess!  
Push them evenly, and away you go,  
Down the runway and into the snow.  
On instruments, on edge, and praying to God  
That the Tri-Motor and you can do your job.  
Then all of a sudden you break into the clear.  
You give a big sigh, and a tremendous cheer.  
We made it, by God, but what now?  
We've got to get it down, but how?  
We pray to God and all the saints  
That the weather isn't what it ain't.  
All of a sudden we find a hole,  
A mighty small opening, but away we go!  
Down under, we find our haven,  
But before I found it, I was raving.  
And when at last I got it viewed,  
I hurried down, and then got stewed!

Rex:

And now it is my turn to go,  
And I race down the field, my spirits low.  
Plenty of pressure on that right rudder,  
Christ, feel this big bastard shudder!  
And now we're off, and up, and away,  
I've mastered the bastard, hip, hip, hooray!  
Now coming down final, it feels real good,  
Steady and stable, like a flying machine should.  
Ease back power and hold it aloft,  
Feel the wheels tippy-toe, easy and soft.  
Now that wasn't as bad as it might have been,  
I think I'll give it the goop, and go around again!

*Now I guess you know we had a load aboard when we wrote that! Luckily, we flew better than we write . . . Sam and Rex*



## The Passing of the Pioneers

### Harvey H. Lippincott

Harvey H. Lippincott, noted aviation historian, age 78, of Hebron, CT. died suddenly at home on December 30.

Mr. Lippincott was Archivist and Exhibits Director of the New England Air Museum at Bradley

International Airport in Windsor Locks. He was well known in the aviation museum community worldwide and for many years chaired the annual conferences of the International Association of Aviation Museums. In 1959, Mr. Lippincott and a small group of dedicated aviation enthusiasts founded the Connecticut Aeronautical Historical Association which owns the New England Air Museum. At a ceremony in April, the Museum's Board of Directors bestowed a great honor on him by naming one of the two exhibit hangars in his honor.

Mr. Lippincott retired several years ago from United Technologies where he was the company's Corporate Archivist. Prior to that, he spent many years at Pratt & Whitney, beginning as a technical representative assigned to the 57th Fighter Group during World War II. He was a leading expert on the history and development of Pratt & Whitney Aircraft engines.

A memorial service will be held at 2 p.m. on Sunday, January 12, 1997 at St. Peter's Episcopal Church in Hebron.

*Editor's Note: Harvey was one of the founders of the Northeast Aero Historians, which just had its 32nd annual meeting in Philadelphia last fall. Harvey was a gentleman, an historian's historian, and a help and inspiration to many of us. A giant has left a great legacy for us to carry on and he will be truly missed.*

### Earle W. Carlow

Earle W. Carlow, 66, died Monday morning at a Skowhegan hospital. He was born in Falmouth, July 29, 1920, the son of Jack and Vera (Wilson) Carlow.

He married Hilda Ceadel in England in 1942. A 1938 graduate of Skowhegan High School, he joined the Royal Canadian Air Force and completed his pilot's training in Canada.

He then transferred his commission to the U.S. Air Force where he served during World War II as a member of the Eagles Squadron earning the rank of Captain and receiving many awards including five Distinguished Flying Crosses.

On March 21, 1944 Capt. Carlow, flying P-51B 43-6339 of the 335th Fighter Squadron, 4th Fighter Group, 8th Air Force was shot down and taken prisoner. He escaped from POW camp on May 7, 1944 and returned through Spain to England on June 10, 1944.

He returned to Skowhegan in 1946 with his wife and daughter, Lee, and entered the U.S. Postal Service in 1948 serving as post master at the Skowhegan Post Office for several years, retiring in 1975.

He was a member of the Maine National Guard and served as a major in the Air Force Reserve.



## Upcoming MAHS Meetings and Calendar of Events

January 11 .....	9 a.m. ....	MAHS Meeting, Conference Room, Portland International Jetport Terminal.
February 8 .....	9 a.m. ....	MAHS Meeting, TBA.
March 14 .....	9 a.m. ....	MAHS Meeting, TBA.
April 11 .....	9 a.m. ....	MAHS Meeting, Dick Jackson's place, Rochester, NH. Sikorsky S-39 Restoration.
May 9 .....	9 a.m. ....	MAHS Meeting, TBA.
June 1 .....	10 a.m. ....	WWI Air Show, Owls Head Transportation Museum.
June 13 .....	9 a.m. ....	MAHS Meeting, TBA.
June 28-29 .....	10 a.m. ....	Military Aviation & Aerobatic Air Show, Owls Head Transportation Museum.
July 11 .....	9 a.m. ....	MAHS Meeting, TBA.
July 18-19 .....	All Day .....	Great State O' Maine Air Show, Brunswick Naval Air Station.
July 31-August 6 .....	All Day .....	Oshkosh EAA Air Show, Oshkosh, Wisconsin.
August 9 .....	9 a.m. ....	MAHS Meeting, TBA.
August 9-10 .....	10 a.m. ....	Aerobatic Air Show, Owls Head Transportation Museum.
August 31 .....	10 a.m. ....	WWI Air Show, Owls Head Transportation Museum.
September 5-7 .....	All Day .....	International Seaplane Fly-In, Greenville, ME.
September 12 .....	9 a.m. ....	MAHS Meeting, TBA.
September 20-21 .....	10 a.m. ....	Antique Aeroplane Show, Owls Head Transportation Museum.
October 5 .....	10 a.m. ....	Antique Aeroplane Show, Owls Head Transportation Museum.
October 10 .....	9 a.m. ....	MAHS Meeting, TBA.
October 26 .....	10 a.m. ....	Great Fall Auction, Owls Head Transportation Museum. Free admission.
November 14 .....	9 a.m. ....	MAHS Meeting, TBA.
December 12 .....	9 a.m. ....	MAHS Meeting, TBA.

The meeting sites can be flexible. We are looking for suggestions on locations for many of these meetings. The same goes for the weekend hikes — let us know. We are also looking for guest speakers, slide shows, etc. Call Leo at 207-854-9972 or Jim at 207-269-3281 if you have any ideas or can be of help. In addition, we will be scheduling hikes to aircraft wrecks from spring until fall. The search for the "White Bird" will resume as soon as the weather permits. Stay tuned for further details — it's going to be an exciting year!

### Maine Aviation Historical Society Treasurer's Report: 12/1/95 to 12/1/96

Balance 12/1/95 .....	\$441.21
Income	
• Dues .....	\$2670.00
• Miscellaneous <sup>1</sup> .....	549.33
• Contributions .....	1170.00
Total Income .....	\$4389.33
Expenses	
• Postage <sup>2</sup> .....	\$650.75
• Print Newsletters .....	1224.54
• Newsletter Set-up .....	1214.05
• Misc. Set-up and Typing .....	53.77
• Miscellaneous <sup>3</sup> .....	126.00
• T-Shirts <sup>4</sup> .....	283.20
• Non-Profit Status Expenses .....	723.00
Total Expenses .....	\$4221.54
Balance 12/1/96 .....	\$609.00

NOTE: Two complete sets of newsletters from Vol. 1, No. 1 to current are preserved. Varying numbers of different issues are on hand to fill needs. Approximately 40 1994, 180 1995 and 250 1996-97 *Flying Down East* calendars, donated by Leo Boyle and Brian Wood, are on hand.

<sup>1</sup> — Includes T-shirt sales, hat sales, donated calendar sales.

<sup>3</sup> — Includes supplies, projector rental.

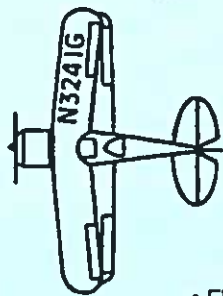
<sup>2</sup> — Mailing newsletters, calendars, miscellaneous postage.

<sup>4</sup> — On hand Dec. 1, 1996: 6 XL, 2 L and 1 M shirt.

(Report does not include misc. services donated by Brown Fox Printing; Prototype; postage and supplies donated by Leo Boyle.)

*Submitted by Leo Boyle, Secretary*

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**'96-'97 *Flying Down East* Calendar**

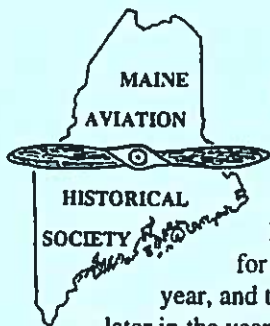
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Dues will be for the calendar year, and those joining later in the year will receive all newsletters retroactive to January of that year. All renewal of dues shall be due on January 1st.

Annual membership includes *12 monthly newsletters!* Mail payment to: MAHS  
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Membership	Dues	Benefits
Regular	\$20 annual	Newsletter
Corporate	\$50 annual	Newsletter, Calendar
Supporting	\$100 annual	Newsletter, Calendar
Lifetime	\$500	Newsletter, Calendar, Lifetime Membership Number (2 annual \$250 payments)

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101 Monroe Avenue  
Westbrook, ME 04092-4020

**JOIN US!**  
Saturday, January 11  
9 a.m.  
Conference Room  
Portland International  
Jetport Terminal