

HORIZONS

A publication of the Massachusetts Air and Space Museum

The Massachusetts Air and Space Museum inspires new generations to explore, experience, and pursue interests and opportunities in science and technology

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Massachusetts Air and Space Museum 200 Hanscom Drive Bedford, MA 01730 www.massairspace.org

Boston MedFlight Serving All of New England

Inspired by the effective use of medical helicopters during both the Korean and Vietnam Wars, and the on-going use of rotary-wing aircraft by the United States Coast Guard and other military branches, **Boston MedFlight** has developed a rapid form of transportation for critical-care patients. Ground traffic can often hinder the quick delivery of a critically-injured patient via conventional ambulances. Ambulances have the added problem of maintaining a stable platform on which medical personnel can treat



Sikorsky S76

that patient while en route to a hospital. Enter the air-ambulance.

Medical transport helicopters have become commonplace in major metropolitan areas nationwide. But Boston MedFlight repre-

sents so much more than just an air delivery service throughout the entire populated portions of the six New England states. It is the only such service in New England that is not vendor-operated. That ultimately makes

Continued on Page 3

3rd Annual MASM General Aviation Forum

Worcester Airport Main Terminal (ORH)

Saturday, March 24, 2018

From 8:30 AM to 2:00 PM

Due to overwhelming popular demand, the Massachusetts Air and Space Museum will again be hosting its third-annual General Aviation Forum on Saturday, March 24, 2018 from 8:30 AM to 2:00 PM in the main terminal at Worcester Airport. In addition to the array of interesting speakers and topics to be presented and discussed, keynote speaker for the conference will be **Captain Rick Kenin (USCG-Ret)**; the current director of aviation operations for **Boston MedFlight**. As both an experienced rescue helicopter and a fixed-wing pilot, Rick will offer both insight and opinion on the world of general aviation. Of particular interest will be Rick's new role in shaping New England's premier emergency rescue and medical transport organization at **Boston MedFlight**.



Capt. Richard Kenin (USCG-Ret)

Rick is slated to speak near the beginning of the day, so you'll want to be there early to get a seat.

If you are a Massachusetts group leader (EAA, 99s, etc.), airport manager, run a flight school or FBO, come share your plans and schedules for 2018 with your colleagues. It's a great op-



Rick Kenin, General Manager of Aviation Operations, Boston Medflight

portunity to coordinate efforts to make general aviation more appealing and more productive.

As has already become customary, coffee and pastries will be available in the morning, and a box-lunch will be served to all who attend toward noon. There is no cost to attendees for the conference, but registration

is requested. You can contact Keith Young to preregister at: kyoung@massairspace.org

We'll look forward to seeing you there! ➔



Boston MedFlight Mission Fleet

a big difference to the patient, as you will see.

Being FAA Part 135-Certified, Boston MedFlight is its own entity. It is providing cutting-edge technology for the delivery of medical services, but also for the aviation side of the equation. Pilots are trained both in-house and on advanced simulators for both visual flight rules (VFR), and instrument flight rules (IFR). In addition, all crew members are equipped, fully trained and fully qualified in the use of night-vision goggles.

Of all the emergency medical helicopter services in the country, only 10% are non-profit organizations, like Boston MedFlight. Other air services utilize private vendors to provide flight crews. Medical personnel on board are routinely associated with the sponsoring medical facility, but the pilots are usually employees of the private for-profit vendor. Boston MedFlight is the only nonprofit 501 (c) 3 and non-vendor operated air ambulance in New England.



Airbus EC145

relationship with each other through shared best practices, and each offers flight support to the other services when it is needed. It more or less follows a similar system used by fire and police departments with their mutual aid support practices.

Boston MedFlight provides two major benefits to their service area that other services do not. The first is that it has a fixed-wing aircraft that is capable of flying patients from conventional airports when helicopters aren't able to fly. Helicopters can't fly during



Beechcraft King Air 200

icing conditions, which is commonplace with New England winters. This would leave residents in places like Nantucket and Martha's Vineyard without a rapid transport to the mainland when needed.



Boston MedFlight's Beechcraft King Air 200 offers not only transport from remote airstrips, it has a range sufficient to do long-distant transports to places as far away as Chicago.

distance transports that are beyond the range of the rotary-wing aircraft.

While versatility in transport might seem to be their

Sikorsky S76



At the moment, Boston MedFlight utilizes three critical care ground ambulances that are staffed with a registered nurse for transports. They maintain rotary-wing aircraft: Airbus EC145s based at Hanscom Field in Bedford, at Lawrence Municipal Airport, and one at Plymouth Airport, with a fourth location to begin soon at Mansfield. They also offer the King Air 200 for either weather-related emergency transports when the helicopters are grounded, and for long-



EC145

strong point, Boston MedFlight offers one more very desirable element for their patients. Like most non-profit services, it operates at a loss. Between maintaining air crews, a critical-care nurse and a critical-care paramedic on each flight or transport, plus the licensing, maintenance and fueling of the equipment, the operating costs



Airbus H-145

are substantial.

Medicare and Medicaid reimburse only half of the cost of a transport. Even with supplemental insurance covering a patient, Boston MedFlight is lucky to be reimbursed at roughly 80% of their total operational costs. That 20% net-loss is why other services have gone to being vendor-operated. Those for-profit vendor organizations collect the government and private insurer funds, then pursue the patient directly to make up the cost difference. Boston MedFlight doesn't chase patients for money because it is a non-profit entity that works with a consortium of seven metropolitan Boston hospitals that subsidize their flight operations. Other services affiliate with a single hospital that sanctions, but does not financially underwrite, the cost of their operations.

But there are big changes on the horizon for Boston's premiere emergency medical airlift organization. According to general manager of aviation operations at Boston MedFlight, Rick Kenin, they are about to acquire an entire new fleet of Airbus H145s in April, and it is anticipated that they will go into full service by June. The H145 is a twin-engine platform that boasts a 400-mile range. This would mean that now every part of New England would be accessible from either Bedford or Lawrence.

The Airbus H145s offer a variety of improvements over their older cousins, but reliability is number one. With new more powerful engines, it boasts true single-engine flight capability under all conditions. Another big change is the ability to configure the cabin in a number of space-saving ways. This means more and better equipment on board with which the medi-

cal team can work. It also means that two patients can be transported simultaneously, leaving room for up to three medics to treat them.

Additionally, the Airbus H145 is more fuel-efficient thanks to being powered by the Safran helicopter engines, greatly reducing operating costs and providing reliability of operation. It requires less-frequent routine inspections and fewer maintenance checks, also a money-saver. And, having a fleet of the same type of aircraft means a reduction in the number of spare parts needed on hand, and the in-house mechanics only need to work on one type of aircraft. This method of operation has worked well for economy air-carriers like Southwest Airlines, the flies on Boeing 737s.

The H145 is especially friendly to the pilots, who will have a glass cockpit from which to operate. It is fully integrated to work with night-vision goggles and other sophisticated navigational equipment, providing pilots with better situational awareness during critical phases of flight.

The fully-enclosed tail rotor offers an added margin of



Safran Helicopter Engine

safety for people moving about nearby.

The H145 has the ability to

hold a stable hover even if it were to lose one of the main engines. And, it is quieter than most rotary-wing aircraft, making it neighborhood friendly when approaching and departing from urban hospitals.

Boston MedFlight's personnel are training constantly to do the job better. The agency is upgrading its equipment to meet the demands of modern emergency medical practices and extending its reach to cover all of New England. The motto they operate under is, "***We want to be the best thing that happens on the worst day of your life.***" With a standard like that, Boston MedFlight is a resource well worth keeping!➔

MASM Collection Update

By Collections Curator

Barbara Jagla



al major Cold War conflicts. A limited number of highly modified United States Air Force aircraft served in Southeast Asia until 1969. It was a fast aircraft capable of carrying a large bomb load. A range of guns could be fitted to produce a formidable ground-attack aircraft.

The A-26 was originally built in two different configurations. The A-26B had a gun nose,

A recent donation to the museum collection is a December 1944 edition of Erection and Maintenance Instructions for Army Models A-26B and A-26C Airplanes from Mr. Robert Sceppa. Mr. Sceppa's uncle worked on A-26's and B-25's during World War II. This 758 page book contains procedures and specifics for creating and troubleshooting these aircraft.

"The Douglas A-26 Invader (designated B-26 between 1948 and 1965) is an American twin-engine light bomber and ground attack aircraft. Built by Douglas Aircraft Company during World War II, the Invader also saw service during sever-



which originally could be equipped with a combination of armament including .50 caliber machine guns, 20mm or 37mm auto cannon, or even a 75mm pack howitzer (which was never used operationally). Normally the gun nose version housed six (or later eight) .50 caliber machine guns, officially termed the "all-purpose nose", later commonly known as the "six-gun nose" or "eight-gun nose". The A-26C's "glass" nose, officially termed the "Bombardier nose", contained a Norden bombsight for medium altitude precision bombing. The A-26C nose section included two fixed M-2 guns, later replaced by underwing gun packs or internal guns in the wings."

https://en.wikipedia.org/wiki/Douglas_A-26_Invader

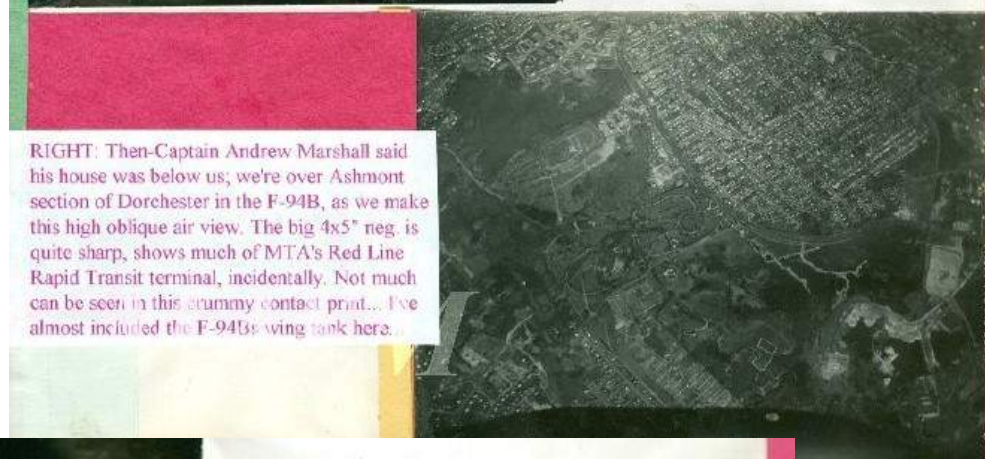


Photos to the right and below have just been added to the museum's collection—each image is captioned accordingly.

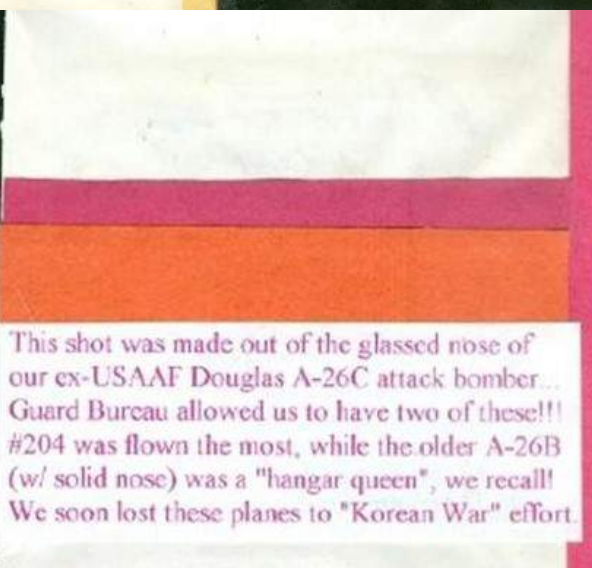
RIGHT: I really had to study the print to figure out what airport I had shot here. I forgot that Revere Airport had a crosswind runway, until now!!! (1950)



This shot was made out of the glassed nose of our ex-USAAF Douglas A-26C attack bomber... Guard Bureau allowed us to have two of these!!! #204 was flown the most, while the older A-26B (w/ solid nose) was a "hangar queen", we recall! We soon lost these planes to "Korean War" effort.



RIGHT: Then-Captain Andrew Marshall said his house was below us; we're over Ashmont section of Dorchester in the F-94B, as we make this high oblique air view. The big 4x5" neg. is quite sharp, shows much of MTA's Red Line Rapid Transit terminal, incidentally. Not much can be seen in this crummy contact print... I've almost included the F-94B's wing tank here...



This shot was made out of the glassed nose of our ex-USAAF Douglas A-26C attack bomber... Guard Bureau allowed us to have two of these!!! #204 was flown the most, while the older A-26B (w/ solid nose) was a "hangar queen", we recall! We soon lost these planes to "Korean War" effort.

Airmail via Helicopter?

More of MASM Collection



Bell 47B Helicopter

Upon the conclusion of World War II, aviation had introduced new flying machines that required no runways whatsoever. They could rise aloft vertically, making the sky available without the need for major infrastructure. As a result, the US Postal Service authorized an experimental mail delivery service that was conducted with a helicopter. Boston was among the first test-beds for this initiative. With the financial backing of Wm. File-ne's Sons Company, a Bell 47B helicopter was used to fly mail between numerous greater Boston communities, all of which had a Filenes store located within them.

The January 4, 1947 experiment in Boston proved the concept, and later that year Los Angeles Airways launched the first regularly-scheduled airmail service

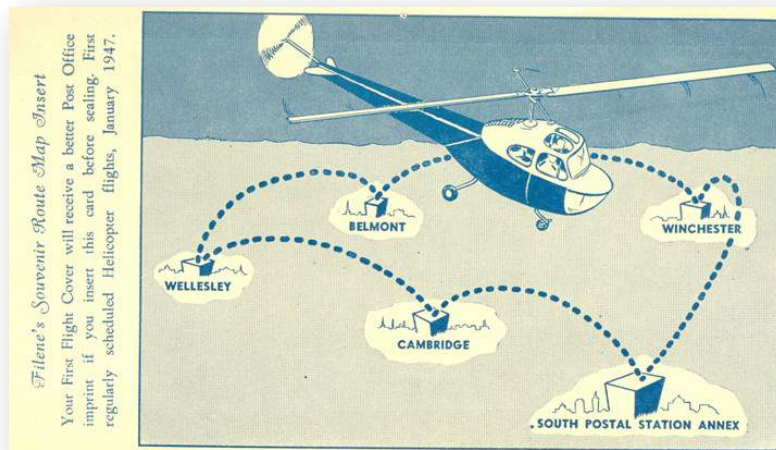
by helicopter in and around Los Angeles.

An envelope, a map insert and a letter from Wm. Filene's Sons Company, sponsors of the First Helicopter Flight between Boston and Cambridge flying U.S. Mail

in 1947, are part of the Crocker Snow Collection donated to the museum by William Deane. The airmail envelope with first flight cover is post-marked Boston Mass Jan 4, 1947 and is signed by Patrick J. Connelly, Postmaster. The personalized letter to Mr. Crocker Snow is signed by H. D. Hodgkin-

son, Vice President and General Manager of Wm. File-ne's Sons Company. A Filene's souvenir route map insert was included.

Although the insert map indicated a circular route in and around Boston, this was not the actual route flown. It did, however, show the various node points



from where helicopter airmail would come and go.

Employing the Bell Helicopter model 47B, the air service began with a single pilot lifting off from Logan Airport and flying the short hop across the Mystic River to Cambridge.

It should be noted that these flights were merely a test of the theory of using rotary-wing aircraft for mail delivery. Actually, the special mail delivered by the aircraft would be placed in the



Los Angeles Airways first scheduled airmail flight by helicopter October 2, 1947

EXECUTIVE OFFICES
Wm. Filene's Sons Company
Boston 1

December 30, 1946

Mr. Crocker Snow
Ipswich, Mass.

Dear Mr. Snow:

Are you a stamp collector? If so, we thought you might like to have this first flight cover in connection with Boston's first regularly scheduled helicopter delivery and mail pick-up service. If you are not a stamp collector, you probably have a relative or friend who is.

We are happy to have been instrumental in making this service possible, even though it is still in an experimental stage. The Post office has expressed gratification at the prospect of receiving much valuable statistical data.

We want to take this chance to thank all the influential people and organizations without whose whole hearted cooperation it would not have been possible for us to provide this service.

Sincerely,


H. D. Hodgkinson
Vice President &
General Manager

HDH:CH

regular mail at the destination and handled normally.

Among the very first letters to be sent via this experimental airmail service was that message from N. D. Hodg-

kinson, General Manager of the Filene's Sons Company to Crocker Snow of Ipswich, Massachusetts.

Crocker Snow was himself a pilot of considerable repute, having logged over 15,000 hours in his career, and flying 140 different aircraft. He was also the director of aeronautics for the Commonwealth of



Atlantic. He subsequently piloted some 20 B-24 bombing missions in the Pacific, leaving the U.S. Air Force as a Lieutenant Colonel.

He returned to his work controlling air traffic in the Bay State and, in the 1970s, served as chairman of the Federal Aviation Advisory Commission.

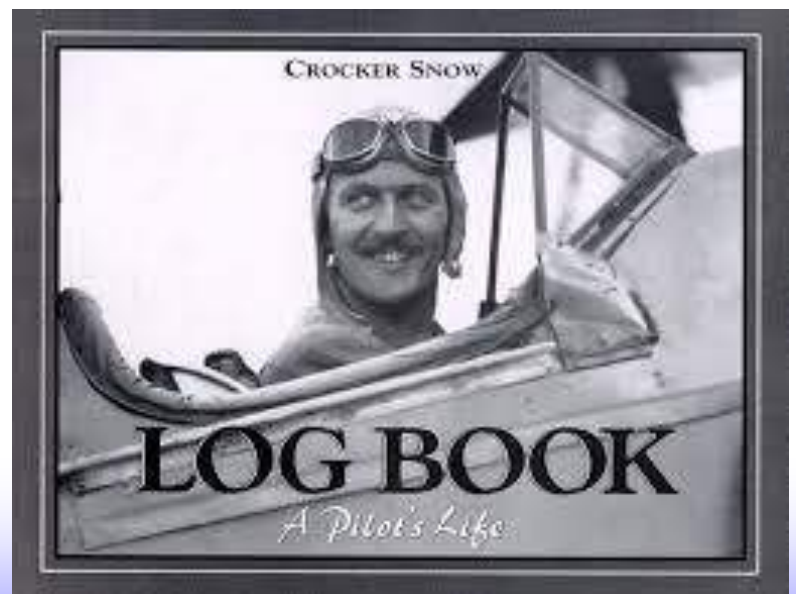
Massachusetts.

While in his freshman year at Harvard University, Snow earned Massachusetts pilot's license #5, issued by the Bay State. He left school after only a year and began his own air service, Skyways, Inc. in early 1928, one of the first commercial air services.

In 1939, Crocker Snow became the first director of aeronautics for the Commonwealth of Massachusetts.

Snow joined the United States Army Air Corps in 1941 and became responsible for ferrying aircraft from the U.S. to Europe. He was responsible for helping establish bases in Maine, Newfoundland, Iceland and Greenland, creating a path that would help bombers hedgehop their way across the North

Crocker Snow went on to write a book about a pilot's life entitled Log Book. 🛩



Memorial

to

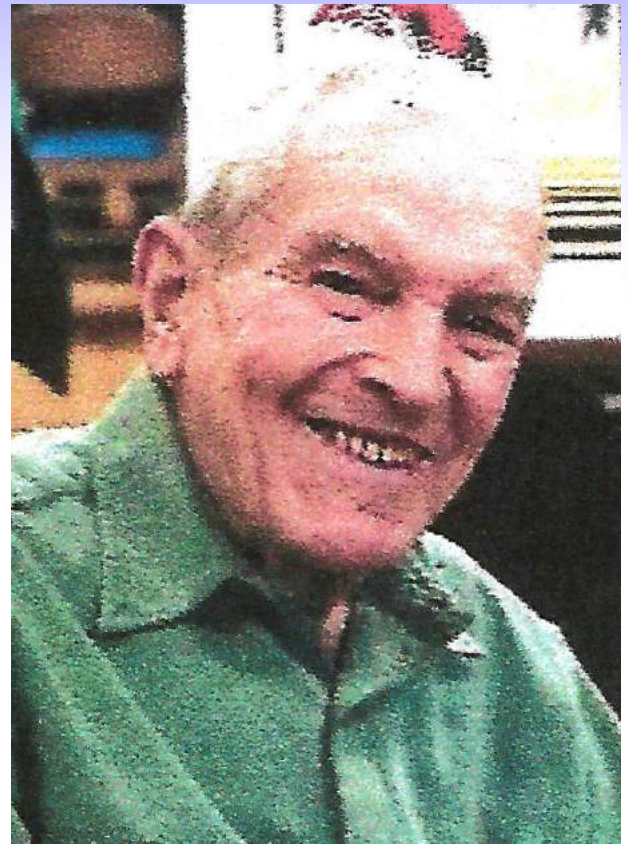
Thomas S. Cuddy

Honored MASM and MAHS member Tom Cuddy passed away this past December. He was one of the principle members of the MASM calendar committee, who, like Bill Deane, had virtually all of Massachusetts aviation history at his personal recall, especially as it related to civil aviation and early aircraft.

Thomas S. CUDDY, II, age 91, died unexpectedly at his home on Sunday, December 24, 2017. Thomas was born in Boston on October 24, 1926, the son of the late Dr. Thomas S. Cuddy and Gertrude (Reymershoffer) Cuddy. He was the beloved and devoted husband for 64 years of Helen (Dahlgren) Cuddy of Sherborn. He leaves his sisters, Elizabeth Burn of South Hadley, and Janet Buckbee of Pound Ridge, NY; his niece, Ginger Burn and her husband Dr. Ray Hubbe of Pelham, MA; his nephew, Jeffrey Burn and friend Mary Flannery of New York, NY, and his nephew, Hunter Buckbee of Pound Ridge, NY.

Tom spent his formative years in Natick and was a graduate of the Rivers School in Weston. He attended Norwich University in Vermont and Northeastern University in Boston. He proudly served his country during World War II as a private, first class with the United States Army.

An accomplished motor vehicle mechanic, for over 30 years, he was the proprietor of



Motor In Automotive of Natick. He retired in the early 1990s.

From childhood, Tom was interested in airplanes and aviation. He became an active member of the aviation history community, with a vast knowledge of history and events that he shared willingly and unsparingly. A noted aviation photographer, he created a large collection of photos of historical aircraft, some of which were published in articles, books, and calendars.

Tom was an avid gardener and a long-term member of the Cactus and Succulent Society of Massachusetts. Tom and Helen created beautiful gardens surrounding their home, enjoyed throughout the seasons by family and friends. He will be fondly remembered as a kind, humorous and friendly gentleman. ➔

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Complete the form below and include it with your contribution to get on our mailing list. Your donation of \$25.00 or more will automatically enroll you as a Member of MASM with the benefits as outlined on our web site. You will receive our electronic newsletter "Horizons" which will be emailed to friends of the museum free of charge. This publication is informative and interactive, and online you will find links that will connect

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Brian Regan



Tim Conway & Harvey Korman



Monty Python



Southwest Airlines



Dean Martin & Foster Brooks