

aloft

THE MUSEUM OF FLIGHT MAGAZINE



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FROM THE DAYS OF SAILING SHIPS

QUESTIONS ANSWERED BY: JOHN LITTLE, ASSISTANT CURATOR AND RESEARCH TEAM LEADER



A RED NAVIGATION LIGHT ON AN AIRCRAFT WING TIP.

Q: WERE THE DOUGLAS WORLD CRUISERS (DWCS) THE FIRST AMERICAN AIRCRAFT TO HAVE FACTORY-INSTALLED NAVIGATION LIGHTS?

A: First, let's define "navigation lights," which actually date from the days of sailing ships. Navigation lights are small, colored lights that enable other air traffic to determine an aircraft's orientation at night. The left wing tip carries a red light, the right wing tip carries a green light, and the rear of the aircraft carries a white light. So, for example, if a pilot is flying at night and sees three lights in a row, red-white-green, from left to right, that pilot knows that he or she is approaching another aircraft from dead astern. According to Curator Emeritus Dennis Parks, navigation lights were installed on the Douglas DT-2 torpedo bomber, which preceded the DWCs by two years (first flights: November, 1921, and November, 1923, respectively). Dennis also found, however, that navigation lights were installed on American airships at least as early as 1917.

Q: WAS THE MUSEUM'S REPUBLIC P-47 THUNDERBOLT BUILT IN FARMINGDALE, NEW YORK, OR IN EVANSVILLE, INDIANA?

A: The full designation for the Museum's P-47 is "P-47D-2-RE," which indicates that it

was built at Republic's plant in Farmingdale, Long Island, New York. The clue is the manufacturer's code, "RE," which indicates that the airplane was built by "REpublic Aviation, Farmingdale, New York." By contrast, all P-47s that were built at Republic's Evansville, Indiana, plant carried the manufacturer's code "RA," for "REpublic Aviation, Evansville, Indiana."

Q: MY BROTHER FOUND A FUEL TANK THAT WAS MANUFACTURED BY THE BOEING AIRCRAFT COMPANY. FUEL CAPACITY: 212.5 GALLONS, U.S.; PART NUMBER 75-5017-1; SERIAL NUMBER 4286; DATE OF MANUFACTURE 9-20-40. CAN YOU TELL ME FROM WHAT BOEING AIRPLANE THE TANK COMES? (THE PRIOR OWNER WAS THINKING OF MOTORIZING IT AND TAKING IT TO BURNING MAN.)

A: Driving around in a motorized fuel tank at Burning Man? What could possibly go wrong there? Obviously, this was another case for our ace research volunteer, Bruce "Sherlock" Florsheim, who really outdid himself this time. Here is Bruce's reply. "The size of the fuel tank, 212.5 gallons, says it is from a large airplane. The date of manufacture, 9-20-40, narrows it down to 4 Boeing airplane types, most likely a B-17. Checking the B-17 first, I found a match. The B-17's inboard fuel tanks were of that size,

What's new in the collection?

BY: CHRISTINE RUNTE, REGISTRAR

Aaron Cardis and his family are frequent visitors to the Museum, and after seeing some of our early aviation exhibits, he thought that we might be interested in his Hindenburg dishes. Max Henneberg, father of Maxine Henneberg and grandfather of Aaron Cardis, began working as a Room Steward on the Hindenburg in 1935. He was on the Hindenburg at the time of its crash at Lakehurst, New Jersey, in 1937. He escaped through a window in the dining room, waiting until the zeppelin was close enough to the ground so he could jump. The dishes are some of the memorabilia he collected while affiliated with the Hindenburg. His collection was eventually left to his three daughters, including Maxine, and passed down through the family. Max Henneberg is highlighted on the Faces of the Hindenburg website, facesofthehindenburg.blogspot.com.



THE MUSEUM OF FLIGHT COLLECTION

but the outboard tanks were larger....The only B-17s that were being built when the fuel tank was manufactured were B-17Cs. Ergo, the tank was used on a B-17C bomber." Hopefully, that makes the tank too valuable to be sacrificed at Burning Man!

HAVE A QUESTION?

Submit it to aloft@museumofflight.org and it could appear in the next issue of *Aloft!*



STUDENTS PRESENTING AT THE PPGS GRADUATION/THE MUSEUM OF FLIGHT

Supporting Future Pilots

THE MUSEUM'S PRIVATE PILOT GROUND SCHOOL (PPGS) has been one of our most popular programs since it launched in 2015 to meet the growing demand for aviation professionals. This 90-hour class offers high school students the opportunity to explore aviation and begin learning the technical knowledge to pass the Federal Aviation Administration private pilot written exam, as well as earn high school and college credits for free.

This summer, the Museum celebrated the achievements of the 96 students who completed the curriculum in 2018—our largest enrollment ever! Delta Air Lines Seattle Vice President Tony Gonchar addressed the students at their graduation in July: "Your being here is no small achievement," he said. "It's exciting to see so many young men and women tap into their interest in aviation, aerospace and aerodynamics. Continue to work hard and focus on your dreams."

The PPGS program is in partnership with Raisbeck Aviation High School, Puget Sound Skills Center and Green River College. This year marks the beginning of a 3-year sponsorship from Delta to provide funds for student recruitment, program supplies and scholarships. Delta professionals also provided curriculum support for students. Thank you for encouraging the next generation of pilots to "Keep Climbing!"



STAY UP-TO-DATE by liking and following our new **Boeing Academy for STEM Learning Facebook and Twitter** pages to keep up with news, updates, and videos about our hands-on education programs.



LEFT TO RIGHT: Anthony Bui, Sameer Romani, Gada Ahmed, Matthew Yamashita, Brooklyn Cross, Alexandra Reyes, Scarlett Stelzer, Hunter Whitlock, and Dane Anders. CREDIT: THE MUSEUM OF FLIGHT

Funding a Future in Aviation

THIS YEAR, THE MUSEUM'S Boeing Academy for STEM Learning granted five new annual scholarships to pursue flight training and post-secondary aviation education to nine Seattle area high school students. Requirements included participating in one or more of the Museum's Academy programs and demonstrating an intention to pursue aviation or aerospace. Thanks to the generous endowments established by Jim and Sue Johnson, Alaska Airlines, Pacific Northwest Business Aviation Association, and the Estate of Frank "Sam" and Betty Houston, these students received a total of \$143,000. The scholarships were awarded in a reception at the Museum on June 11, where investors personally commended the recipients. Many of these talented Academy alumni have already earned licenses and college credits, and we can't wait to see what they achieve in the future. Congratulations to Dane Anders, Gada Ahmed, Anthony Bui, Brooklyn Cross, Alexandra Reyes, Sameer Romani, Scarlett Stelzer, Hunter Whitlock, and Matthew Yamashita.



THE MUSEUM OF FLIGHT

Montana Welcomes WAS!

THE WESTERN AEROSPACE SCHOLARS (WAS) annual Junior Summer Residency touched down at the Montana Learning Center and opened their inaugural Montana residency. In this 6-day program, already well-established at the Museum for Washington and Oregon residents, students plan a crewed trip to Mars covering all aspects of mission planning including getting there and back, living and working there, mission integration, public relations, and ethics. This program joined three Museum-hosted sessions of Junior WAS and eight sessions of Sophomore WAS across Washington, Oregon, and Montana, in which students plan a robotic mission to Mars in three days.