

FLIGHTLINE

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AAHS at the Aerodrome!







(Upper left) Adam Estes, along with Flabob office MGR Charlie Shaw (not shown) manned the book and info both at Fullerton (FUL) Airport Day. The AAHS piggy bank was plumped up by a couple hundred bucks in book sales. Thanks guys!

(Upper right) AAHS volunteer Heather Wilson flew solo at the first annual Community Aerospace Expo at Riverside Municipal (RAL). Both events were held on May 31. At Riverside, several folks expressed interest in volunteering with AAHS.

(Left) Heather is flanked by Riverside mayor Patricia Lock Dawson, Calif. State Assembly member Leticia Castillo, and Riverside City Council member Steve Robillard. On behalf of AAHS, Heather accepted some very nice certificates of appreciation from these local leaders. Great job, Heather!

Have an interest in aviation history and a few hours to spare? If you'd like to help out AAHS HQ at Flabob airport, or maybe you're looking to hone your computer or general organizational skills, we'd love to talk with you about volunteer opportunities at AAHS. We offer plenty of things that can be done remotely, too.

Contact CEO Jerri Bergen at jerri@victorygirl.com, or call the AAHS office at (951) 777-1332, Tuesday-Thursday-Saturday, 11 am to 3 pm. →

Happenings at Flabob

At Flabob airport, the <u>Tom Wathen Center</u> sponsors several summer "Air Academies," like an aviation-oriented summer camp, for elementary and middle-school aged children. The programs are geared to keep the kids busy with aviation related activities, which could include building a foam airplane model, testing different materials for a parachute drop, or launching a rocket. The Tom Wathen Center subsidizes the cost for these programs, to make them affordable for middle and low-income families. AAHS has been asked by the airport to develop a one-hour program that could interest kids in aviation history.

One idea in development is making these youth more knowledgeable about how planes are identified. We're thinking we could give a basic presentation to the kids of how aircraft worldwide are registered with a "tail number," then develop a game to help them practice identifying aircraft. If you have suggestions or ideas for other ways AAHS might support summer education for kids, give us a shout! >>>

Jerri Bergen, AAHS CEO

What might have been

AAHS member Steve Johnston is something of a Golden Age aircraft aficionado. He takes his interest a step further by building models of them—the stick and tissue kind, just like models were made back then. (See his article, "A Vanishing Hobby From the Golden Age of Aeronautical Model Building," in the Spring 2025 *AAHS Journal*.) If he can't find plans or a kit of a particular aircraft, Steve sometimes draws his own. We asked him to share some of his Golden Age favorites with *FlightLine*.

First off the drawing board is the Burnelli UB-20 transport from 1930. (Click <u>here</u> to view Steve's plan.) The Burnelli story was well told by Kent A. Mitchell in the Spring 1997 *Journal*, from which we extracted this brief description. ("Burnelli and His Lifting-Body Transport," pp. 2-19)

The one and only Model UB-20 ("U" representing Inglis M. Uppercu Uppercu, the principal financier of the project, "B" for Burnelli, and 20 the number of passengers) was completed in 1930.

The UB-20's claim to fame, such as it is, resulted from a 1935 flight with a Ford roadster slung underneath it, part of a Sun Oil Company (Sunoco) ad campaign.

The gent in the overcoat next to the camera is broadcaster Lowell Thomas.

And sure 'nuff, there's a short YouTube video of the flight.

Despite carrying U.S. civil aircraft registration markings X397N and later NR397N, the UB-20 never received ATC certification.

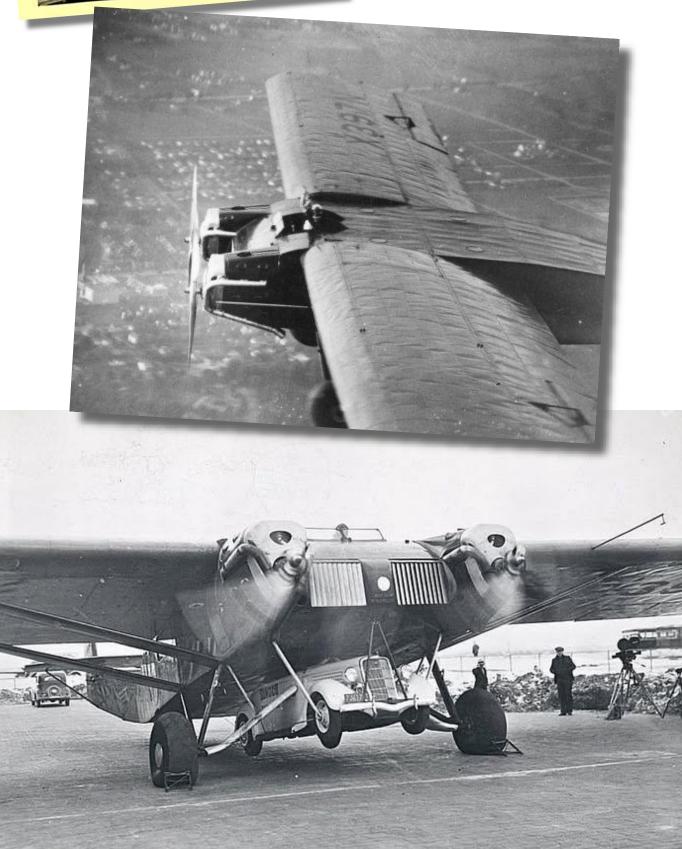




Wide-body seating, 1930s style. In this thumbnail image, we can't count the number of seats. Were there 20, as the designation implied?

We really don't know if the airplane was ever configured for passengers. There isn't much info of any kind on this ol' bird, or of its ultimate fate.

The view below shows the engine mounts and open cockpit arrangement of the UB-20. Some sources state that the airplane was the first American design to employ semi-monocoque stressed skin construction, an honor also clamed by several other types.



Good front-end view of the fuselage mounted liquid cooled Packard engines and radiator shutters. Among its other unusual features, the UB-20 was equipped with Goodyear "Airwheels," claimed at the time to be the largest in the world. Inflated to only 11 psi, they enabled landings on soft ground.



Airborne! The UB-20 with the Sunoco Ford underneath. Since takeoff was from Floyd Bennet Field, that has to be Long Island below.

SUNOCO STARTS FORD AT HIGH ALTITUDE

Low Temperature and High Velocity In No Way Curbed Quick Starting Fuel

When asked what it was like to fly an airplane and an automobile at the same time, the airplane above and the automobile below. Lou Reichers, the trans-Atlantic pilot, replied by taking a long pull at his cigarette—"that's grinned, "drag." Planes it, Planes carrying automobiles slung below the fuselage will become a regular thing, he opined. The weight of the car hardly counts, he explained-the important factor is the air resistance the automobile offers at high airplane speeds.

The novel experiment was conducted at Floyd Bennett Field, N. Y. The type of aircraft was the Uppercu-Burnelli transport, built along the lines of a flying wing. The cabin is broad and has a wing-like lifting shape, 12 feet wide as compared with five for the ordinary big transport. That provided sufficient space to swing a Ford roadster between the wheels of the landing gear. The purpose of the airplane-automobile flight was to test the starting powers of Blue Sunoco Motor Fuel in an automobile exposed to winter conditions at high altitudes.

"It was a question of wind resistance," Reichers observed, "We had to be sure that the tremendous drag at high speed would not tear the automobile from its fastenings and drop it a mile to the ground. And we had to calculate how all that resistance would affect the steering of the plane."

Reichers tells that on the takeoff he immediately felt the pull of
the car slung beneath the plane.
"I had to bear hard on the stabilizer," he said. "The tail tended to
come up and the nose down. And
it was more so, when she was in
the air and began to pick up
speed. Air resistance increases
with the square of the velocity.
At 150 miles an hour, the normal
speed of the big Uppercu-Burnelli,
the drag was nine times what it



would have been at road speeds on the ground. But I never did get the big bus up to normal speed. The air resistance of the car underneath held it down to a hundred and thirty. The effect on the controls was three degrees. To counteract the tendency of the tail to rise and the nose to swing down, I had to keep the stabilizer depressed three degrees below normal."

"How did the Blue Sunoco test ork?" he was asked. "All I work?" know," he replied, "is that Zeke Meyer, the automobile racer who was with me in the cockpit went back into the cabin. We over five thousand feet. He opened a trap door in the cabin floor and climbed down into the front seat. of the car. It certainly was a stiff Blue Sunoco test to switch on the ignition in the icy gale swirling around that car, and I wondered how it was working. With my own hundreds of horse power roaring. I couldn't expect to hear that Ford motor start. And I didn't. A few minutes later Meyer climbed back up into the plane. I looked at him.
"'So what?' I yelled.
"He nodded. 'She started like sea

"He nodded. 'She started like sea level on the equator,' he hollered back."

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