Yesterday's Wings The Wheelair III-A

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Aviation's archives are liberally sprinkled with examples of promising new general aviation designs that for various reasons did not make it past the prototype stage. Only in rare cases have single new models developed by new and small firms become significant items in the marketplace.

One of the long-forgotten one-andonlies that had better-than-average potential was the Wheelair 111-A of the early post-World War II years.

Back in 1944, Popular Science magazine held a paper design contest for what was hoped would be the postwar family airplane. The contest was won by Donald J. Wheeler, an aeronautical engineer then working for Boeing in Seattle. On the strength of his win, Wheeler left Boeing, secured \$500,000 in backing, and formed a new company to develop and market his design. This was Puget Pacific Planes, Inc., with a

WHEELAIR 111-A

Specifications and Performance

Span	37 ft 0 in
ength	26 ft 61/2 in
Ving area	180 sq ft
Powerplant	Lycoming 0-435-AP,
	190 hp @ 2,550 rpm
mpty weight	1,350 lb
Gross weight	2,500 lb
ligh speed	140 mph
cruise speed	125 mph
anding speed	55 mph
nitial climb	760 fpm
Service ceiling	11,500 ft
Range	600 mi on 50 gal
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plant in Tacoma, Wash.

The airplane, the Wheelair 111-A (not roman numeral III, as sometimes misprinted) was unconventional only in that it revived the tail-boom pusher concept last seen in general aviation on the famous Stearman-Hammond Y of the mid-1930s. Particularly in plan view, the Wheelair looked like the Stearman-Hammond stretched to make a fourseater. Wheeler's tooling was no match for Stearman-Hammond's, however, and the prototype 111-A proved to have a much more angular body than that shown in the promotional literature. Except for the nose cone, all the fuselage skin was flat-wrap.

The advertising bore down heavily on the automobilelike atmosphere of the roomy cabin, where the throwover control wheel was actually one from a Mercury automobile. Emphasis was also placed on the easy, two-control flying that made piloting no more tiring than driving a car. It was a two-control plane. Like the Ercoupe, it eliminated the rudder pedals but did not tie the rudder (or rudders in this case) into the aileron control. There were no rudders; the two fins at the ends of the tubular booms were fixed. The need for rudder control was eliminated by "new design" ailerons that could handle the turning job all alone.

The powerplant for the all-metal Wheelair was to have been the 125-hp



As a "pod-and-boom pusher," the Wheelair 111-A naturally invites comparison with the famous Stearman-Hammond Y of the 1930s. Tricycle landing gear was an innovation when the Y appeared, but was rapidly becoming the standard when the 111-A was introduced.

WHEELAIR 111-A continued

Lycoming O-290, but the prototype ended up with a 190-hp Lycoming O-435. This was mounted high in the rear of the pod and drew cooling air through a single scoop on top of the cabin.

The four-place cabin of the Wheelair was modeled like the interior of the family sedan and was intended to be one of the design's strongest selling points. The seats and even the control wheel were automotive items.



Completed in 1947, the Wheelair encountered the usual problems of podand-boom pushers: engine overheating and loss of propeller efficiency through blanketing. In the latter case, the 52inch-wide cabin, praised for its roomy comfort in the promotional literature, was a definite handicap.

While the Wheelair did have its shortcomings, it was not a "dog" and actually came quite close to some of the preflight claims. With a little more detail refinement, it might have been able to make a place for itself, even though its performance was well below such four-place contemporaries as the new Beech Bonanza and North American Navion, and even the strut-braced, fixedgear Stinson Station Wagon. Unfortunately, the company ran out of money before the test and certification program could be completed. Wheeler had left earlier, and his design never did get certificated or into production.

The prototype languished on Seattle's Boeing Field for a couple of years and then vanished into the same oblivion shared by many other interesting but unsuccessful designs. Whether it was scrapped or stored in someone's barn is not known. If it still exists, the son of one of the original backers would like to restore it as a unique and flyable antique. It is hoped that an AOPA member in the Northwest might have the answer.