Page 23 - Bell and Baldwin's HD-4
ISSUE : Issue 21
Published by Ronald Caplan on 1978/12/1

mentation never really stopped but it was greatly reduced. He did carry out some model experiments. HD-1 and -2 are basic? ally the same with modification. HD-3 at? tained a speed of 50 m.p.h. • that's going fairly quickly. In 191? when the U. S. de? clared war, he decided to go ahead with hydrofoil development. Casey talked about joining the navy. Bell talked him out of it. He told him he could do his war bit by~ producing a craft that could be used as a naval platform' as a gun platform. And Baldwin agreed. And from that point on all the design and construction was Baldwin's. Bell had a lot of input. But Bell never a- greed with the HD-4 as the most viable en? tity for his concern. He always thought a hydroplane was not as susceptible to dis? ablement as a hydrofoil. If you put ob? structions in the way, the foils can be wiped out, as they found out with the HD-4 when they did the record run September 9th, 1919. They went across the bay here and they hit something and the main wood hydro? foil was carried away. They still did the record run, without the main hydrofoil • 70,86 m.p.h. with a damaged HD-4 • but they also learned that it was vulnerable. At another time they picked up seaweed and found that their speed was reduced by some- . thing like 20 m.p.h. • just seaweed on the foils themselves. So Bell always felt they should have gone to a hydroplane boat • an ordinary speedboat is a hydroplane • it planes across the top of the water • it uses the bottom surface of a foil, basic? ally. Baldwin felt, on the other hand, that a hydroplane is only good in relative? ly smooth water; whereas with the hydro? foil, all that's below the water and on top of the water is the foils which just cut right through it. And the -main body is above the waves. (If 'the hydrofoils are really the whole story here, why did the craft have this peculiar cigar-like shape?) Well, it's based on the zeppelin. That's the whole concept. Because they'looked upon this as the zeppelin of the ocean. The airship of DRIVE SOFnY. thruway mmm mufflercentre Your neighborhood thruway mufflercentre has expert ways to keep your car quiet. Visit your nearest thruway mufflercentre. You'll leave quietly. We promise. • No installation charge • Full guarantee for North American-made cars** Free inspection • Quality parts and service • Independently operated by an exhaust systefn expert • Chargex/Master Charge accepted We're waiting to hear from you. THE MASTER MUFFLER 349 George St., Sydney 539-6691 Dr. Bell and Casey Baldwin side by side in the cockpit of the HD-4. ~ the ocean. See, Bell said to Baldwin, why don't you produce a design that would also be good for progression through water? And Baldwin felt its time in the water was a necessary evil. He wanted it out of the water as quickly as possible, after which it becomes basically an airship. And you want the shape that is most aerodynamical? ly sound. And at that time the shape was most aerodynamically sound was the zeppel? in, more or less bullet-shaped. It offers least wind resistance • he wasn't too con? cerned with water resistance • he intended for the foils to lift it quickly up out of the water • so he was concerned with wind resistance. So in 1917 they decided to go ahead and build the thing. They built a 17-foot mod? el first of all' basically on Bell's in? sistence that you should always try some? thing out with models. It was never

pow? ered; it was pulled behind a boat. They found out it worked very well and* I think, in December of 1917 they decided to go a- head with construction. In the next 3 or 4 months they completely constructed the HD- 4. They did 54 m.p.h. in that season with Renault engines and they wrote a report. With the report' Bell did some politicking HAitOLD'S n mufflers only. HH'HI vl W Stephens Limited cMstle building centre fttiioiKs sv??n.iis HAIIOWARI ANB PAIMTt WOODWORKitS AND MIIL WOtK Phone the Lumber Number 564-555' Sydn#y. f oviflk Scotia Local Distributors of Angelstone and Mason Windows A Full Line of Flooring and Insulation*