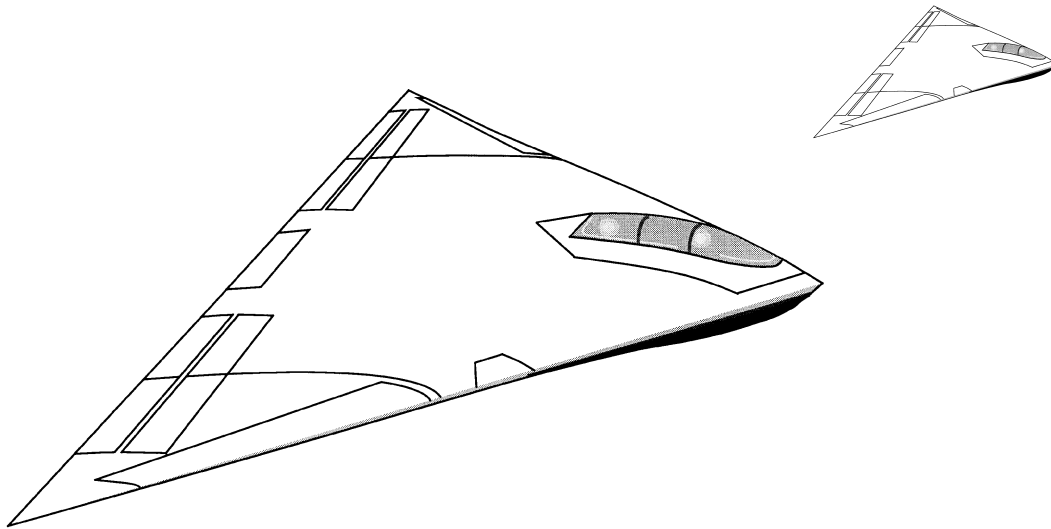


A-12 “Avenger 2”/”Dorito” yet another candidate for P.S.S.?

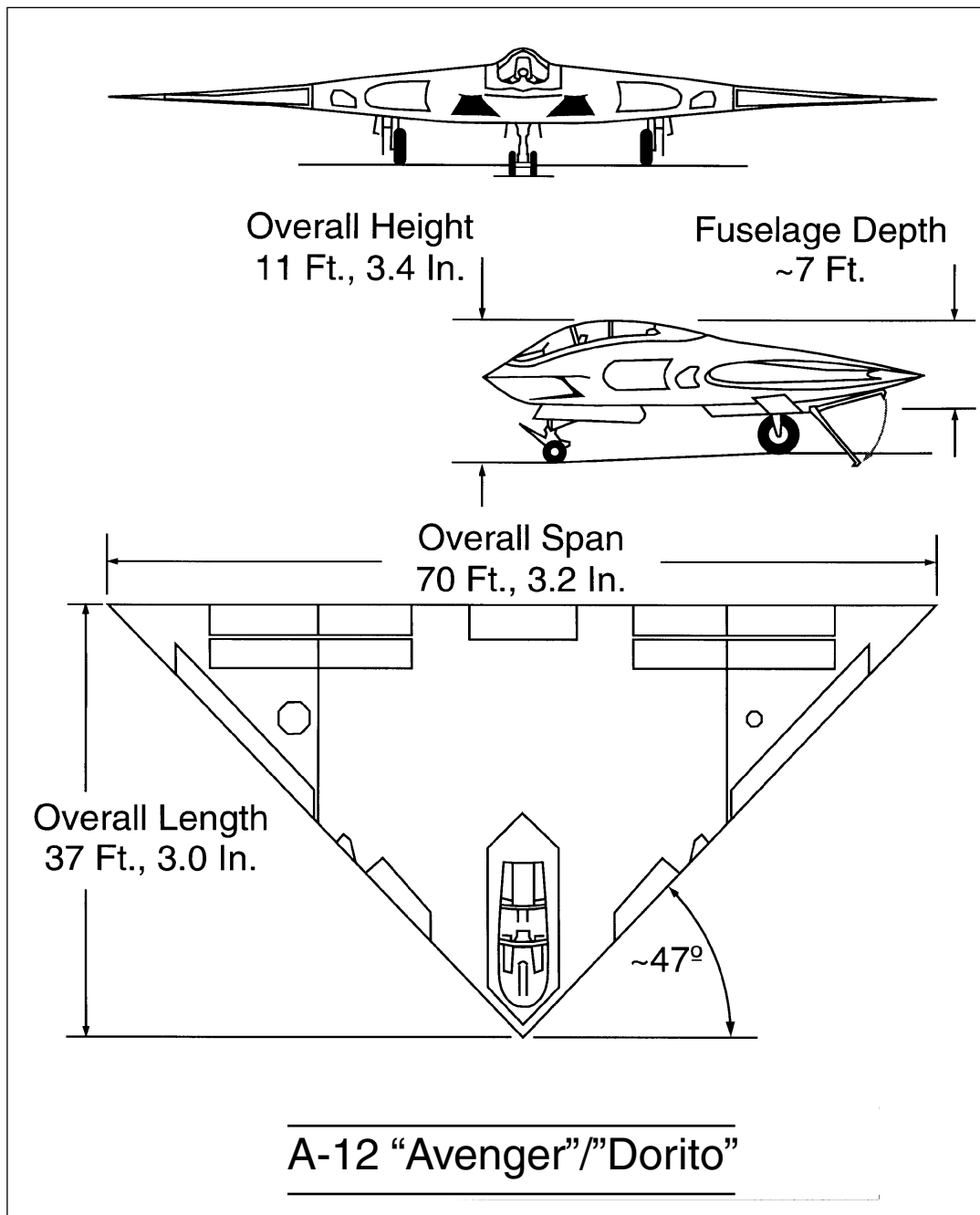


Here's a challenge to you power scale slope enthusiasts — the A-12 “Avenger,” also known as the “Dorito.”

The A-12 was designed for use by the U.S. Navy, and was to be built by General Dynamics and McDonnell Douglas for carrier operations as a replacement for the A-6 “Intruder.” First flights were scheduled for 1992, with sea trials in 1993, crew training in 1994, and entry into operational status in 1995. According to initial plans, 858 aircraft were to be built. The entire project was cancelled in 1991, however, for economic reasons.

The A-12 is a true delta wing, and therefore has a relatively low aspect ratio. A light wing loading was expected to be mandatory for good landing characteristics. To give some idea as to how this translated into the actual aircraft, it should be noted the A-12, although about 20% heavier than the F-14A “Tomcat,” has more than double the wing area, while wetted area is about the same. Further comparison of the A-12 and F-14 may be made using the data within the included table.

The A-12 includes a central elevator for pitch trim (quite reminiscent of the system used on the Douglas F4D-1 “Skyray”), elevons for roll and pitch control, spoilers ahead of the elevons, and leading edge slats which have an aerodynamic effect over about a quarter of the wing area. The A-12 has no vertical surface. Elevons alone should provide sufficient pitch and roll



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authority for a model, but some fin area may be necessary for directional stability, as the forward portion of the fuselage is relatively deep.

We’re eager to hear from any readers who tackle this project.

Information for this column was derived from:

“Stealthy Avenger.” *Popular Mechanics*, November 1990.

Angelucci, Enzo, and Peter Bowers. *The American Fighter*. Orion Books, New York, 1985.

Berliner, Don. “Dorito.” *Model Aviation*, April 1991.

Morocco, John D. “Funding Cuts May Limit Carrier Air Wings to 16 A-12s.” *Aviation Week & Space Technology*, 01 October 1990.

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Dimension	A-12 Avenger 2/Dorito	F-14A Tomcat
span	70 ft. 3.2 in.	64 ft. 1.5 in. max. 38 ft. 2.5 in. min.
length	37 ft. 3.0 in.	61ft 11.75 in.
height, ground to top of canopy	11 ft, 3.4 in.	12 ft.
fuselage thickness	~7 ft.	~7 ft.
aspect ratio, wing	3.75	7.2 max. 2.58 min.
wing area	1,308 ft.2	565 ft.2
gross weight	80,000 lbs.	66,200 lbs.
wing Loading	61 lbs./ft.2	117 lbs./ft.2
design load factor	9g	—
program status	cancelled 1991	~900 in service

It is not because things are difficult that we do not dare,
it is because we do not dare that they are difficult.

— Seneca