

BT-13A Vultee Valiant #501

In June 2012 I met "Sky" the owner of BT-13 501 at a fly in at Valle, AZ. After talking to him about my interest in the BT-13 and how I've made representations of them for flight sim, he offered to take me on a ride. We flew around the area for about 10 minutes, which you could see the Grand Canyon at a distance, he asked if I wanted the stick. I enjoyed having the opportunity to try to keep it straight and level since the wind that day had up to 35 mph gusts, what a thrill! I promised Sky that I would make a repaint of his plane, which I have now completed for both FS9 & FSX. Here's a photo of Sky and myself taken that day:



Since then, we have become good friends and last year I helped him out driving him back and forth from an airshow, where he left his plane, back to his "diggs". As a payback, he took me for an hour ride back from Casa Grande airport where the Copperstate Fly-In was at to Falcon Field in Mesa. We flew for about an hour and I got about 30 min's of stick time. Just last weekend I was a passenger on a C-45 flight he arranged for 5 paying passengers to Sedona. On the way back I was in the right seat up front and he surprised me after we were up for about 10 min. and said the stick is yours, I flew all the way back to Mesa, within 3 miles of Falcon Field before he took over again - what a privilege!

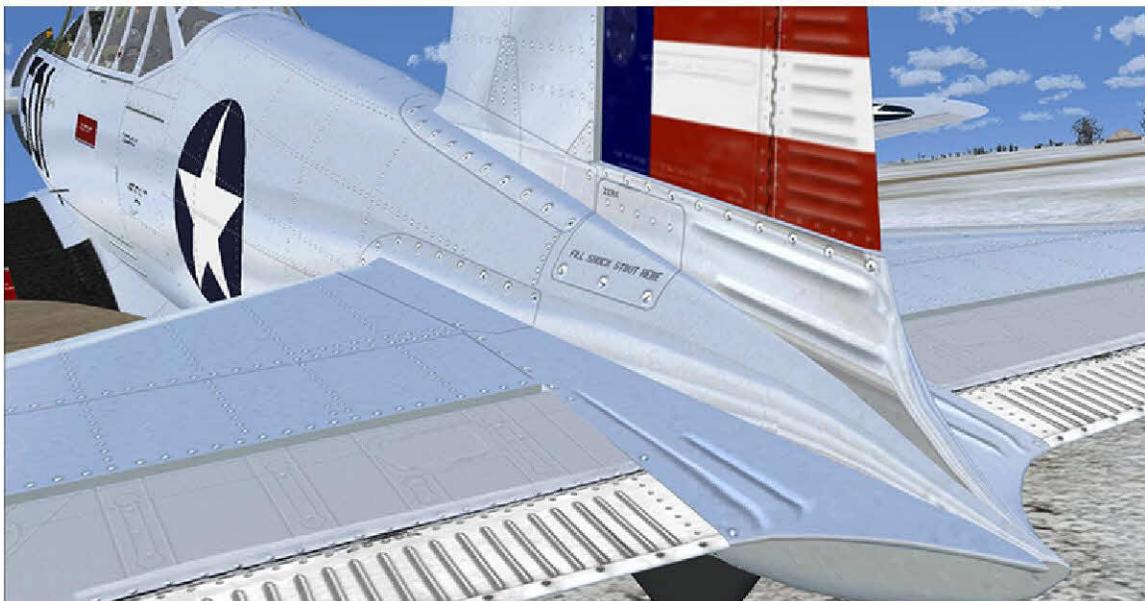
Here's a photo of Sky and 501 at Casa Grande in 2013.

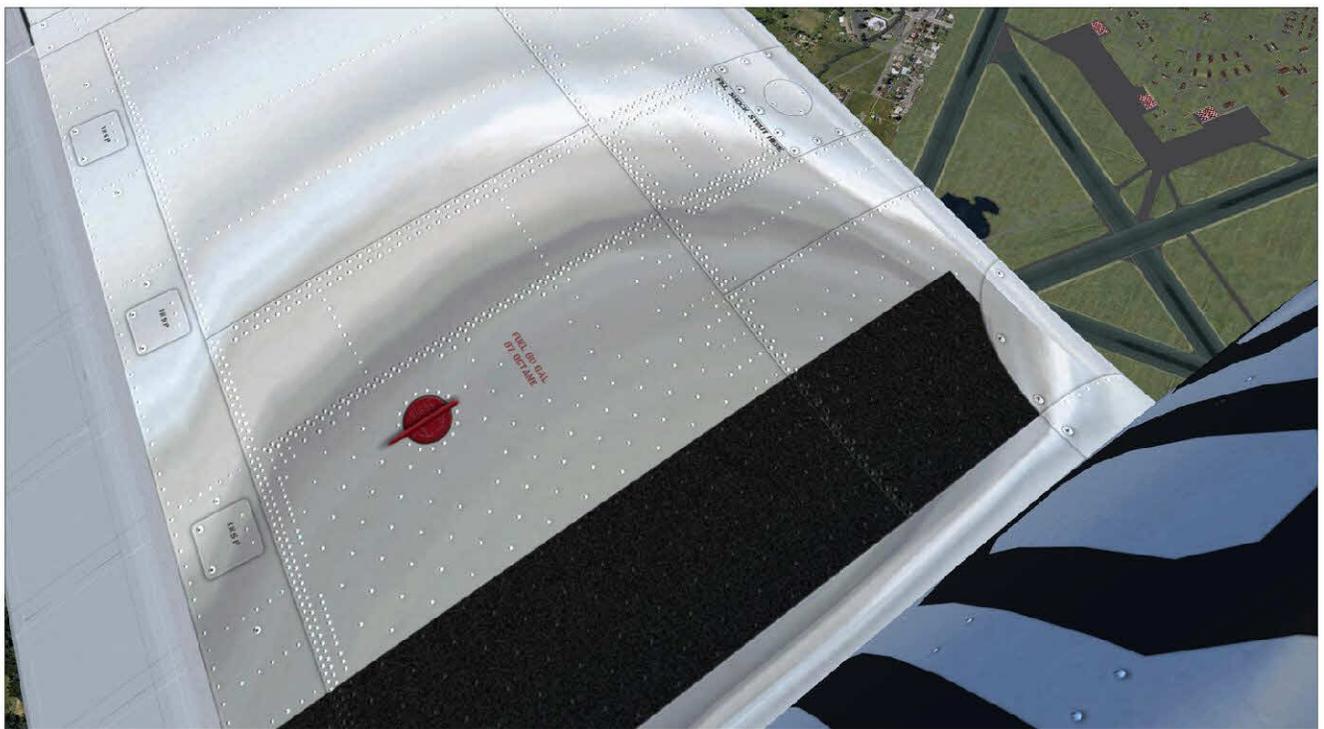


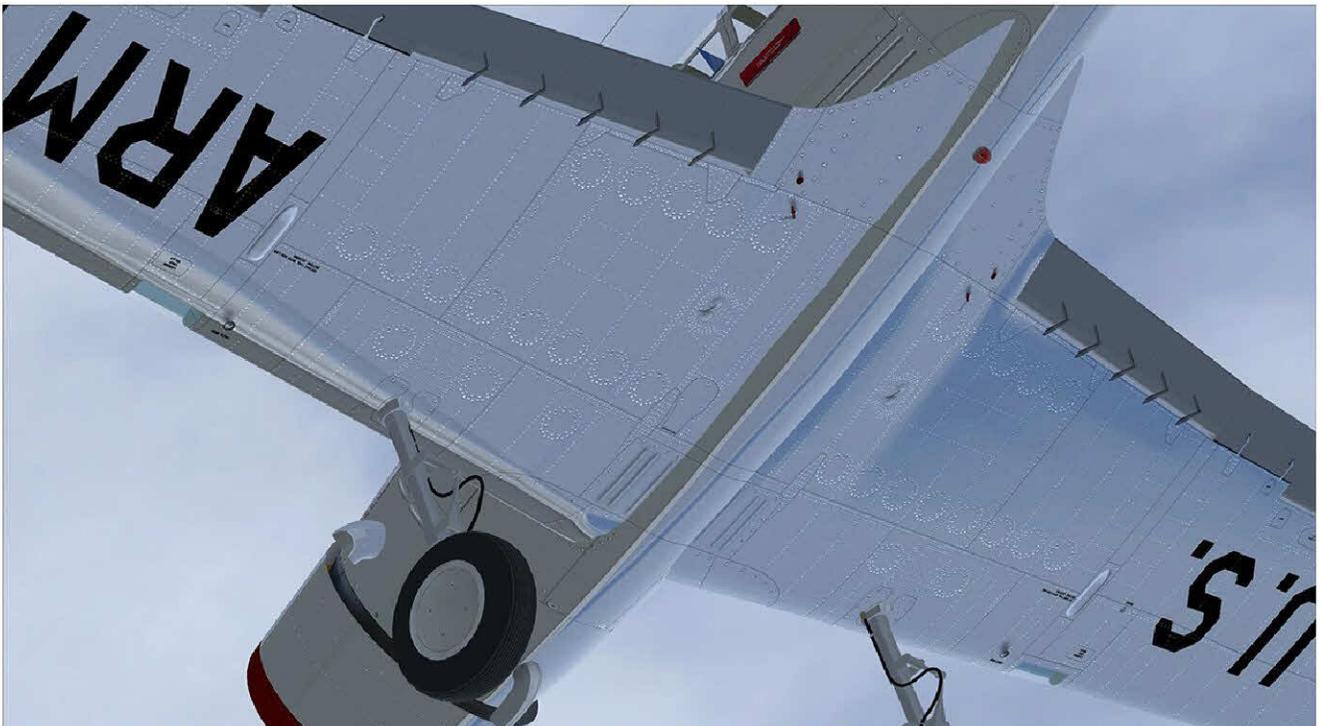
Here's my rendition.

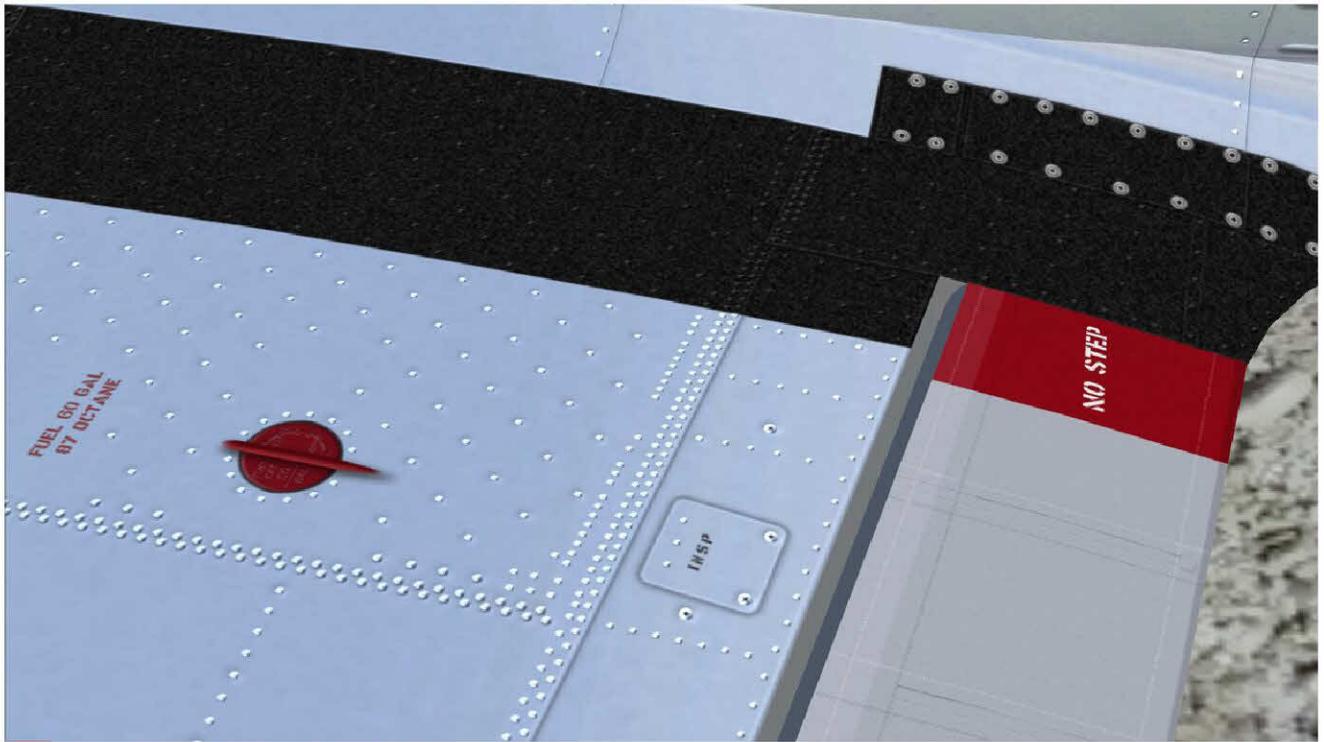


I first completed the version for FS9, which has a lot of detail. Then I made a version for FSX - a completely new copy because the resolution instead of being 1024x2 pixels is 4096x2, which is 16 times greater resolution. This allowed me to use photos of parts like rivets, screws, and the stencils are crisp and clear. Making rivets in the past were done by grouping some black and white pixels together then making them almost transparent. Now, with hi resolution I can use actual photos I took of the fasteners and place each rivet or screw copy down one at a time. There were thousands of fasteners placed as close as possible on each part of the exterior as accurately as I could based on the pictures I took of several BT-13's, it took 6 months to complete. Here are some screen shots of the FSX version:









Here's the history of 501



1942 BT-13A Vultee Valiant

USAAF Serial No. 41-22410
Vultee Serial No. 6488
Span: 42'0" Length: 28'10"
Empty Weight: 3375 lbs
Maximum Weight: 4350 lbs
Engine: P&W R-985-AN1, 450 hp

Top Speed: 180 MPH
Cruising Speed: 150 MPH
Fuel: 120 Gallons
Range: 725 Miles
Service Ceiling: 21,650 ft

The Valiant was designed in 1939 by the Vultee Aircraft Company, Downey, California, as an intermediate trainer for the U.S. Army Air Corps. Over the next five years a total of 11,538 Valiants were built as the USAAF BT-13, BT-13A, BT-13B, and the Navy SNV-1 and SNV-2.

During World War II, new cadets began with 11 weeks and 60 flight hours in Primary Training, flying a simple airplane such as the Stearman PT-17 or Ryan PT-22. Next was 11 weeks and 60 hours in Basic Training, flying a BT-13. Here they learned cross country navigation, formation flying, night flying, aerobatics, and instrument, or "blind" flying. (The Valiant was equipped with a retractable black canvas hood in the cockpit to restrict the cadet's vision to the instrument panel.) Those who made it through this tough course—and there were plenty who "washed out"—went on to the Advanced Training phase, flying the AT-6 Texan. The graduates were awarded their wings as pilots and sent to transition training in the type of aircraft they would fly in combat, and sent off to active duty in the war. Many never returned.

Documented History of BT-13A 41-22410:

July 21, 1942	Completed by Vultee Aircraft Co. at their plant in Downey, California, for the government contract price of \$18,082.
July 31, 1942	Accepted by U.S. Army Air Forces.
August 7, 1942	Posted to Basic Flying Training School at Minter Field, Bakersfield, California, USAAF Flying Training Command.
December 5, 1942	Transferred to Basic Flying Training School at Mather Field, Sacramento, California, USAAFFTC.
June 1, 1943	Transferred to Polaris Flight Academy (a civilian contract flight school), 14th Basic Flying Training Detachment, USAAFFTC, Lancaster, California.
June 24, 1944	Transferred to 3034th Base Unit, Basic Pilot School, USAAFFTC, Gardner Field, Taft, California.
November 25, 1944	Transferred to Reconstruction Finance Corporation at Gary Field, Blythe, California, for disposal as surplus.
Postwar, until -?- July 17, 1993	Carried civilian registration N63545. Purchased in Sacramento, California, as a derelict hulk. Completely restored to original military configuration and airworthy condition; registered as N2808. She flew once again on September 11, 1996.

Enjoy flying 501 on your setup!

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Model available at: <http://www.topflightsimulation.yolasite.com>