Profile provided by Warbird Alley, with permission of Buck Wyndham

# **PROFILE: Vultee BT-13 Valiant**

(Variants/Other Names: BT-15; SNV-1; SNV-2B)

### **HISTORY:**

With retractable landing gear and a powerful engine, the Vultee V-54 basic combat trainer was too lavish for the cash-strapped United States Army Air Corps of 1938. So Vultee redesigned the aircraft and made it less complicated. The first order for 300 new *BT-13 Valiant*s was placed in September of 1939, and it would become the most widely-used American training aircraft of World War Two.

The Vultee BT-13 had a continuous canopy with its crew of two sitting in tandem behind dual controls. It was also equipped with blind flying instruments to teach new pilots the basics of flying at night or in foul weather. BT-13 students soon gave the airplane a nickname which described its most memorable characteristic: *Vultee Vibrator*.

The only major variant of the BT-13 was the **BT-13B**, which featured a revised electrical system. Because of the speed with which the BT-13s were built, there was soon a shortage of Pratt & Whitney Wasp Junior engines. To overcome the shortage and maintain production levels, the **BT-15**, using a Wright Whirlwind engine, was then introduced. Two thousand BT-13s and BT-13Bs were transferred to the US Navy, where they were designated the **SNV-1** and **SNV-2B**.

When production ceased in 1944, 11,537 Valiants had been produced. The Valiant was retired at the end of the war, but over 100 of these aircraft are still registered in the United States today, although it is believed that less than half are actively airworthy. [History by <u>David MacGillivray</u>]

#### **NICKNAMES:**

The Vultee Vibrator, The Bee Tee

#### **SPECIFICATIONS (BT-13A):**

Engine: One 450-hp Pratt & Whitney R-985-AN-1 Wasp Junior radial piston engine Weight: Empty 3,375 lbs., Max Takeoff 4,496 lbs. Wing Span: 42ft. 0in. Length: 28ft. 10in. Height: 11ft. 6in. Performance: Maximum Speed: 180 mph Ceiling: 21,650 ft. Range: 725 miles Armament: None

## NUMBER BUILT: 11,537

NUMBER STILL AIRWORTHY: ~50