

The Harvard turns 70: A Birthday Story

An anniversary of note for any aviation enthusiast recently occurred. Frank Parker, who pilots most things that fly but particularly the lead Harvard of the Roaring 40's Display Team, provided the following testament to a much loved aircraft.

THE RATIONALE of why a 'ship' is a 'she' is long lost in antiquity, however this tradition has transcended from the oceans to the sky where aircraft are generally referred to in the feminine gender. It is reasonable then to refer to our subject which recently celebrated 70 years since its inception, as a Gentle Grandmother.

The Harvard Evolution

North American Aviation was founded in December 1928 as an 'aviation holding company'. Due to political changes in aviation law the company was reformed as a manufacturing concern about 1934. The new President, James "Dutch" Kindelberger, moved the Company to California and concentrated on Training Aircraft, believing they could not compete with the larger, established manufacturers for the more exotic Fighter and Bomber aircraft requirements.

The NA-16, a low wing monoplane design won the 1934 Army Air Corps (AAC) Trainer Competition. This modest



The NA-16 Trainer.



The BT-9 Trainer.

open cockpit aircraft with a 400 hp Wright engine began the genesis of an aircraft that would remain in military service for the next 47 years.

The NA-16 was first modified to Military requirements to have enclosed cockpits (it was cold on the Prairie) and became the BT-9 (BT standing for Basic Trainer), which was operated by the AAC.

The BT-9 design was further modified to include retractable undercarriage and a larger engine (Pratt and Whitney R1340 Wasp) to become the AT-6 (AT standing for Advanced Trainer).

In this guise, in 1938, the aircraft was purchased by the UK to meet RAF training requirements.

Following RAF tradition, as a training aircraft it was named after a university (compare with Airspeed Oxford), in this case to reflect its country of origin, and so began the Harvard Story.

Subsequently the design was adopted by the major Western Powers to fulfill pilot training requirements as an advanced trainer, including pure flying and operational roles of bombing and gunnery.

In the USA the aircraft was the 'T-6' in the AAC, the 'SNJ' in the US Navy (this designation comes from S = Scout [i.e. small/light aircraft], N = designation for heavier than air aircraft [the Navy operated airships at this time], and J = manufactures designation for North American [N had already been allotted to Northrop]). In the 1940's North American opened a factory in Dallas Texas where much of the T-6 production became based. This led to the 'Texan' name by which the aircraft is commonly referred to in the United States.

In Commonwealth Service (UK, Canada, South Africa, NZ), in line with the RAF, the aircraft was referred to as the Harvard. Meanwhile Australia had developed an indigenous design, based on the NA-16, known as the Wirraway. This aircraft is 'very similar' in appearance to the Harvard, but very different under the skin.



The first Harvard (North American designation NA-49) purchased by the RAF.

Military Pilot Training

During the War Years an estimated 17000 Harvard, T-6, and SNJ variants were built and most Allied Pilots came to terms with it at some stage of their flight training. Hence the aircraft's reputation as 'The Pilot Maker'.

Many Air Forces continued using the Harvard for training after the war years.



The RNZAF took delivery of 202 Harvard's during the war. In 1977 when they were retired from Air Force service there were 19 left flying and many more in storage. (As an ATC Cadet in the 1960's I can recall amazement at the stacks of wings and fuselages in the hangars at Woodbourne).

The South African Air Force was the last Military Service to retire the aircraft after 55 years service in 1995.

The Warbirds Movement

As the Harvard was 'demobbed' from military service it became an entry level aircraft to the 'Warbirds' movement. Indeed in 1977 an ex RNZAF aircraft in flying condition could be purchased for around \$6000, the cost of an average family car.

Harvard 1092 (ZK-WAR) was purchased by a group of enthusiasts to become the foundation aircraft of the NZ Warbirds Association. Currently there are six aircraft based with NZWA at Ardmore and at least another six flyable examples scattered throughout the rest of New Zealand.

Outside of the enthusiasts involved in maintaining and operating these aircraft, they are probably best recognised by the public through their appearance in the Airshow Circuit by the NZWA Roaring 40's Team. The concept of this formation aerobatic team was created in the 1970's by Trevor Bland and Ernie Thompson flying ZK-WAR and ZK-ENE "doing aerobatics and low level beat-ups". By the mid 1980's the Roaring 40's became an established NZ Warbirds Team with four or more aircraft and a polished routine. The Roaring 40's



RNZAF Harvards, circa 1970.



The Roaring 40's Display Team

name, from the winds of the 40's latitudes was chosen as it reflects the roar of the aircraft, their time of manufacture, their age at that time, and the age of the pilots, though the later is debatable!

In the USA, a robust aircraft owners group, the 'North American Trainer Association', NATA, which includes T-6 / Harvard, T-28, P-51 and B-25 aircraft (all North American Aviation WW II aircraft) is proactive in promoting the continued

operation of these aircraft for future generations to enjoy. NATA is currently working with the USA FAA reviewing the operation of 'aged aircraft' with emphasis on metal fatigue and maintenance procedures. This work and the continued support of enthusiastic owners will ensure the Harvard Growl will echo the skies for many more years ahead.

In the USA it is normal to attract 30 to 40 aircraft to NATA sponsored 'fly-ins' and more to events like Sun 'n' Fun (Florida) or EAA at Oshkosh.

Meet a Gentle Grandmother

And so, the next time you see one of these aircraft and hear that 'beautiful noise' (as the propeller tips break the sound barrier), take time to reflect on

70 years of aviation history. This 1930's girl is letting you know she's in town, so make the opportunity to talk to the guys and girls who have the time and energy (plus a few dollars) to keep this piece of history where it belongs - in the air, rather than languishing in a static museum environment. Take a photo with the kids. We are passionate about our "Harvards" and would be delighted to share that passion with you.



T-6 Texans at the Dubque Iowa Fly-in.



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