

"N" numbers. How and Why?

Category: Scale Articles

Created on Friday, 19 August 2011 00:50

Written by Ron Peterka

EVERY U.S. REGISTERED AIRCRAFT HAS AN 'N' NUMBER

WHY?, HOW?

Ron Peterka

I'm sure every scale model builder, and flyer, knows that licensed civilian aircraft in every country in the world has a unique registration, or license number, just like your auto or motorcycle. The question here is.... Why do almost all U.S. aircraft have a registration number, commonly called an 'N' number, that begins with the letter 'N'?

Of course it took only a few years after the invention of the first practical powered aircraft for governments to realize the need for, and the possibility of using general individual aircraft identification. The Wright brothers made their first flight in 1903 and in 1919, the Commission Internationale de Navigation Aerienne (CINA – the Convention for the regulation of Air Navigation), which was established in Paris following World War I. During that convention attending nations adopted the *Convention for the Regulation of Air Navigation* that was the forerunner of today's international aircraft identification system and regulations.

Each major participating country was allocated a single identifying letter to use as the first letter of that country's national origin identification. Those letter(s) are still in use today. The six major countries then were the United States, Great Britain (British Empire), France, Italy, Japan, and Germany

All other countries were assigned a two-letter code with a separating hyphen followed by a number. (Greece = S-Gxxx),(Guatemala = L-Gxxx), etc. Additionally, the U.S. was assigned the letter 'N', the letters KDA through KZZ, and Wxx through WZZ.

This original effort required each I.D. to consist of five letters, one of which must be a vowel, with the letter 'Y' considered to be a vowel for this purpose.

In 1926 the U.S. Federal Government passed the *Air Commerce Act* to organize aviation in the U.S. This system implemented the Paris system, but deviated by requiring identification marks to be number 0000 to 9999 instead of Roman letters– after all, who in 1926 would have imagined an aircraft fleet numbering over 10,000? It took less than two years for the 10,000th number to be assigned. The Government then decreed that the Roman letter 'E' be added to numbers above 9,999. This convention was exhausted shortly and other combinations have been added to allow alphanumeric combinations in a wide variety of combinations.

Now, you are probably a little confused, so let me finish the job off. In the U.S. we also have several suffix letters immediately after the 'N'. Particularly in the early days we see NC-xxx, which identified early Commercial aircraft. NR-xxx, which identified the Restricted category aircraft, and NX-xxx, which was used on experimental aircraft before they were certified Commercial. In 1938 the letter 'C' was removed from some identification marking.

While reading these rules would suggest that hard and fast rules have been applied, we find many examples of exceptions. If you attend air shows you can find aircraft with NC registrations, and war birds with NL, NX, and NR registrations. These military aircraft are registered as civilian aircraft.

We still haven't quite gotten to the question "Why 'N' for U.S. aircraft nationality? Let's try.

In an article prepared for the American Aviation Historical Society, a panel of researchers found at least *five* variations and descriptions of the origins of using 'N' for the U.S. letter. We will look only at one of the most likely histories.

The U.S. was allocated the “N” for its national registration mark to match regulations used for wireless communications (radio) put in place in 1919. Also, for several years, the U.S. Navy had used the call sign ‘N’xxx as radio station call sign identifiers. U.S. military aircraft generally use the government ‘Bureau’ number assigned as the aircraft is added to inventory.

Articles in *Aviation*, a magazine of the day, appear to support the supposition that the CINA adapted the call-sign identifications set up by the International Telecommunications Union. Incidentally, Canada was a British Territory at the time and England was quite content with the letter ‘G’ which stood for “Great Britain”.

One of the great problems for aviation historians researching specific aircraft has been the Department of Commerce’s early practice of re-issuing registration numbers from aircraft, which have been removed due to the export sale, or destruction, of an aircraft. It appears that the FAA may have reinstated that practice.

The registration N-1 was issued originally to a government owned DeHavilland DH-4, then to a Northrup Alpha 2, on to a Ford 5-AT, next to a Lockheed 12-A, a Douglas DC-3, and is currently used on a government Grumman Gulfstream G-IV.

Modern practice is to NOT reissue registration numbers. Recently an owner restored and modified a Lockheed 12 ‘Electra’ to match the aircraft Amelia Earhart flew on her final flight over the Pacific Ocean. The builder was issued the original serial numbers for the engines, which had been built up from spare parts, but the aircraft keeps its original registration. The registration number is just one letter away from the original Earhart aircraft and the owner of the restored plane tapes a portion of the last letter in the tail registration so it will match the Earhart aircraft, but only when it is on the ground.

Well, now you have some of the story of how the U.S. got its registration marking allocation and how it has been used over the years. Federal Aviation Regulations – Part 4 is the current regulation that controls the assignment, size, and location of registration numbers. I am indebted to the AAHS article “What’s in an “N” Number” from the Society website for much of the information given in this shortened story of our ‘N’ numbers.