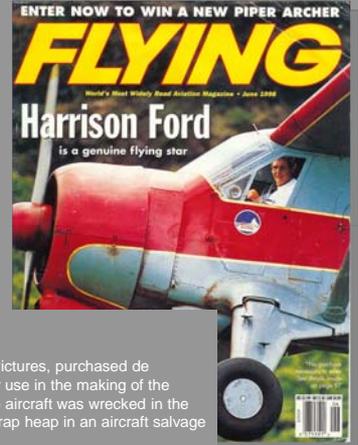


# The Re-Creation of de Havilland Beaver 799



*A Victim of Show Biz...*



In 1997, Makatea Productions, a subsidiary of Touchstone Pictures, purchased de Havilland Beaver S/N 799, along with five other Beavers, for use in the making of the movie "Six Days, Seven Nights", starring Harrison Ford. The aircraft was wrecked in the course of filming, and was ignominiously relegated to the scrap heap in an aircraft salvage yard near Denver, Colorado.

## Rescue

In May of 2000, the project aircraft was purchased by Douglas DeVries, and the various parts were trucked to his restoration shop in Redlands, CA. After dismantling the aircraft and assessing the damage, the restoration team started on the wings. The wings were de-skinned, and all structural components were stripped, inspected, and repaired as required. All parts were prepped and primed, and approximately 90% of the skins were replaced with new parts fabricated from sheet aluminum. In the process, nearly 8,000 rivets were replaced in each wing. The restoration of the wings took approximately 2,000 man hours and was completed in 2002.

Next up was the fuselage. Due to the extensive damage to the fuselage, a jig was built and attached to the fuselage at critical "hard points". The dimensions of the hard points were established from the original DHC-2 fabrication drawings. Extensive structural repairs were conducted, and 80% of the fuselage skins were replaced, requiring the installation of nearly 6,000 new rivets. The unique Beaver floors, constructed from phenolic with aluminum reinforcing members, were scratch built from original plans.



Stripping the old paint off the fuselage



Wings as received



Fuselage jig on rotisserie for easier access



Fuselage mounted on jig with new skins and floors



## Creating a Modern Classic

In order to upgrade the forward cockpit and panel areas to accommodate modern instruments and avionics while maintaining the classic retro look of the Beaver interior, the entire front panel system was modeled in 3D using Solidworks. This modeling process facilitated an ergonomic placement of instruments, while insuring proper fit in the cramped space between the panels and firewall. Upgraded interior and leather upholstery was installed by Jan Stroh of J&B Enterprises.

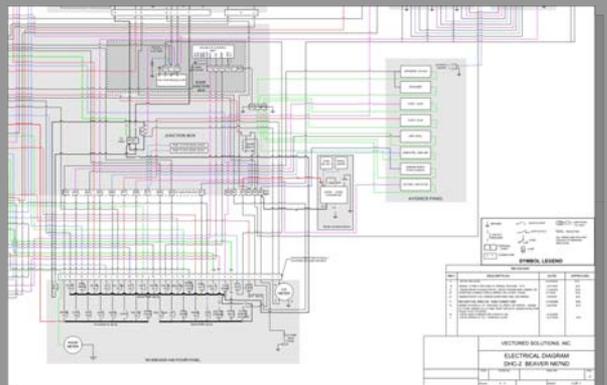
The following upgrades were installed:

Sealand cabin extension and Alaska door  
Kenmore sea fins  
Hartzell 3-blade prop  
Kenmore gross weight increase  
Wipaire electric fuel pump and primer  
Cessna fully articulating seats six places

Sealand tip tanks  
Bracket air filter  
Kenmore domed cabin windows  
Jasco 70 A alternator  
Pulsellites  
S-TEC autopilot

## Wiring it All Together

In order to accommodate the numerous new components, a new Wiring Diagram was created using Visio. Installing the new wiring, using current aircraft technology, took ten man-weeks.



**Beaver S/N 799, re-christened N67DN took its first flight on June 11, 2006. The project took 6 years and consumed an estimated 7,000 man-hours.**