

WARBIRD

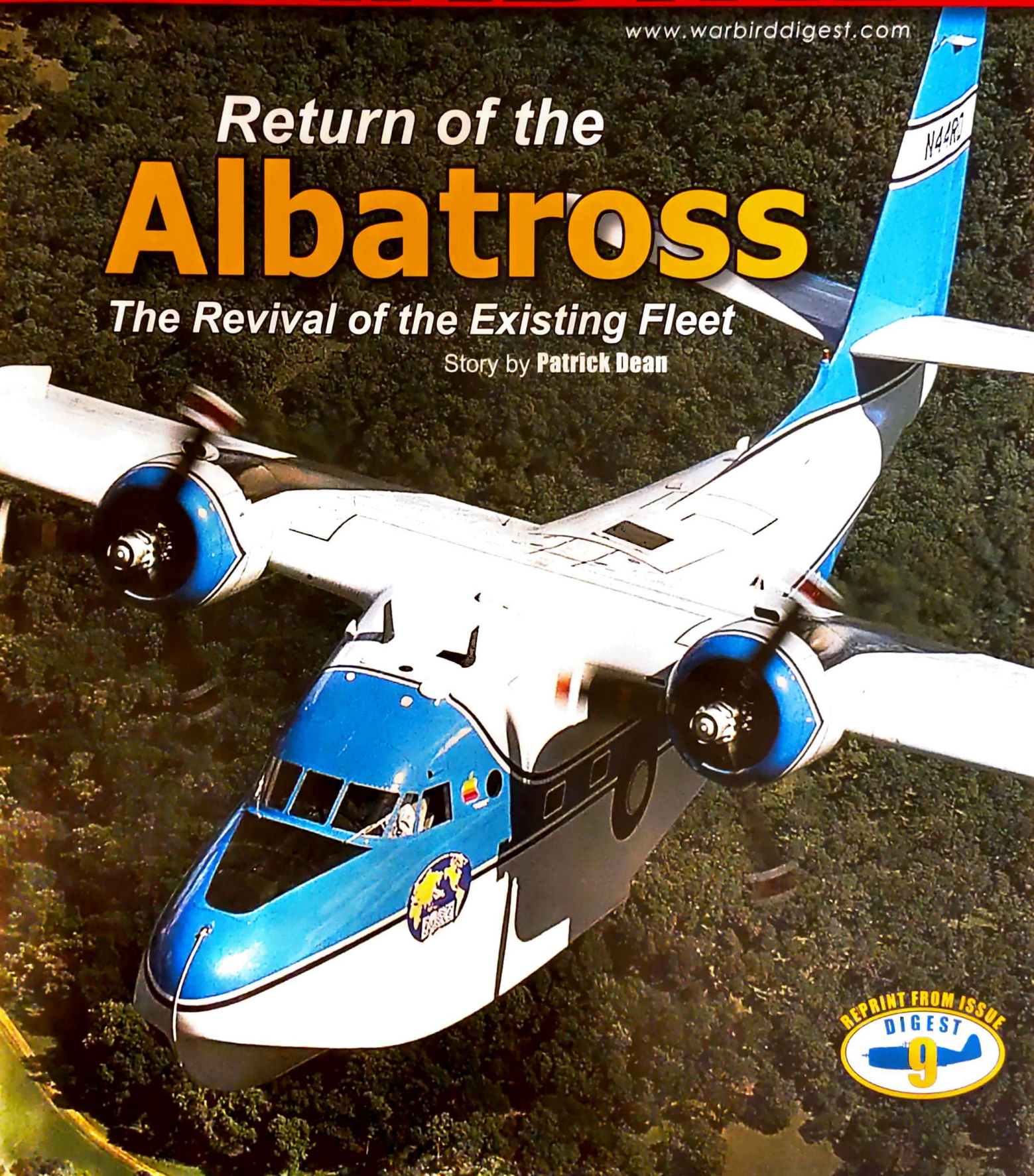
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Return of the **Albatross**

The Revival of the Existing Fleet

Story by **Patrick Dean**



A high-angle, aerial photograph of a Grumman HU-16 Albatross aircraft in flight. The aircraft is white with blue accents on the nose and engine nacelles. It is flying over a dense, green forest. The title "Return of the Albatross" is overlaid on the image in large, bold, yellow and white letters.

Return of the Albatross

The Revival of the Existing Fleet

The Grumman HU-16 "Albatross" is a popular warbird and executive transport. Several are currently under restoration and a number of finely restored examples ply the sky. Patrick Dean reports on his new found passion for all things Albatross. He takes a look at a few of the approximately thirty operating as warbirds. Story by **Patrick Dean**

The Albatross is not an aircraft I had taken a special interest in over the years. My first encounter with the big amphibian was while I was serving with the USAF in the 1960s. I was temporarily assigned to a unit in Michigan which was phasing out the SA-16, in exchange for the HC-97. My interest at the time was in heavy-lift aircraft, so I only gave the Albatross a passing thought. However, a few years ago I was fortunate enough to photograph N3HU, an HU-16C (c/n G-281, formerly Navy UF-1) that belonged to Richard Sugden of Wyoming. Although impressed, my interest was not really sparked until I later spotted N695S, a HU-16B (c/n G-444) at Cartersville, Georgia. This 1958 model originally received USN BuNo. 146426 for administrative purposes only. It actually served with the German Navy as SC+101 and RE+501. Returning to the U.S. as N13048, it was later re-registered as N695S and became the second Albatross operated by the Smithsonian Institution before eventually going to Omni Engineering.

Also at Cartersville was N8497N (c/n G-87, USAF Serial No. 51-014). This truly rare and strange-looking bird is the most radically modified Albatross variant. Although this HU-16B/ASW was disassembled at the time, both the huge radome and extendable MAD (Magnetic Anomaly Detector) boom were intact and clearly visible. These unique features stirred my interest in these warbirds and I began to take notice. I discovered this ship was one of 37 converted to an anti-submarine version in 1963 for friendly foreign military use and had served with the Chilean Air Force.

At the time I was unaware of the extensive Albatross service record in Korea and Vietnam where it rescued sixty-six and seventy downed airmen respectively. I quickly realized these were true warbirds that had served well and earned the respect of their crews. My interest in the type continued to grow.

Recently while crossing the United States I stopped at Kingman, Arizona, where several HU-16s were undergoing maintenance at



N3HU Former Navy UF-1 short wing C model Photo: Patrick Dean



Photo: Jim Straube



N695S Former German Navy and Smithsonian Research HU-16B Photo: Patrick Dean



Photo: Chris Leoni

The oldest ship at the event was N7141S (c/n G-099) a 1950 HU-16B (USAF serial 51-105). This former SA-16A was originally built with an 80-foot wingspan. It was returned to Grumman for upgrade to 'B' standards with a 96-foot wing span. The 'A' models are quite rare today since 241 of them were converted to HU-16Bs. This example owned by Dennis Buehn of American Warbirds was parked next to the hangar with a most appropriate American flag flying from a mast above the cockpit. Buehn has rescued many HU-16s from the bone yard and brought them back to service. On the other side of the hangar were four more examples. We stopped and talked to the crews and engineers performing maintenance and learned that several of them would be going out for check rides later in the day.

Standing alone on the gravel ramp was N44RD, a beautiful blue and white Albatross. We inspected the aircraft and began talking with Dave Cummings who was standing nearby. He inquired if we owned an Albatross. We told him we certainly wished we did, but we were retired from the airlines and only there to admire the fleet. Cummings told us that he currently maintains and flies the only Howard 500 in service and was involved in the restoration of N4478E, a former SA-16B (c/n G-243). He was waiting for the owner of N44RD, Reid Dennis, in order to take some photos inside the cockpit and ask some technical questions. In a few minutes Dennis arrived and graciously asked if we would like to come on board. We were about to learn that Reid Dennis has set the benchmark for Albatross restorations.

Dennis, a successful venture capitalist, purchased his first aircraft in 1964 and is an accomplished pilot. His current stable includes the Albatross, a 1946 Grumman Mallard which he has owned for 32 years plus two Citation Encores.

While sitting in the cabin, which is finished in teak and leather in the tradition of a fine yacht, Reid told us that this ship (c/n G-405) was originally a HU-16C (Navy designation for an 'A' model) manufactured in 1955. He obtained it from storage in Tucson and decided to embark on a major rebuild project to create the amphibian of his dreams. In order to improve low speed handling on the water he decided to extend the original 80 foot wingspan. While he could have opted for a later model surplus Navy aircraft with a 96 foot wingspan, these aircraft have a limited life span.

According to Dennis "We began adding parts to the wing and the entire project took on a life of its own. We ended up with the droop leading edge cuff of the later model, which added 10-inches to the front of the wing. Then we gained 30 inches on each side by adding the longer wingtips." He also added the five-foot ailerons and the 18-inch taller vertical stabilizer, longer rudder and 12-inch tail planes tips of the later series. The overall result was an 86.6-foot wingspan and an increase of 9.5 percent in wing area, which give it the best water handling characteristics of any Albatross built. In addition airflow fences were added on top of the wings along with rapid fuel dumps on the underside outboard of the outer wing-mating joint.

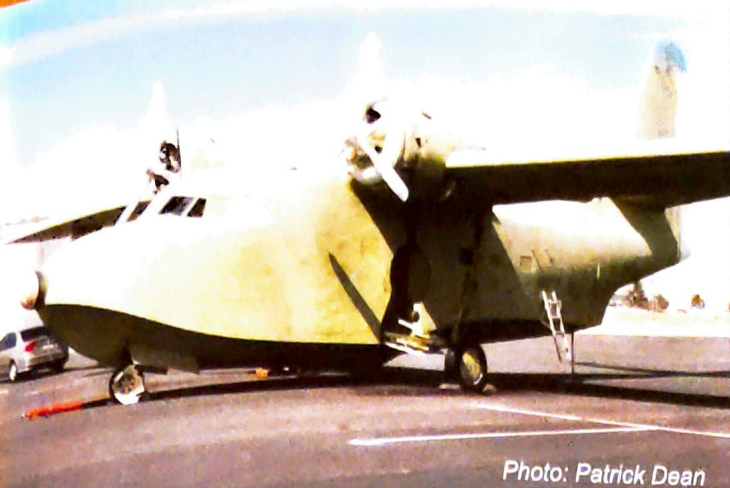


Photo: Patrick Dean



Photo: Patrick Dean



Photo: Paul Bowen

The cockpit and panel were completely updated with modern avionics, which includes a Universal flight management system similar to the one in his Citation Encore. The engines are Wright R-1820 C9HE series. The exhaust has been routed over the top of the wing and are modified for noise reduction and cabin comfort. Dennis indicated that the exhaust systems are critical in this aircraft and care must be taken at take-off. If one neglects to make the power reduction from 50" of manifold pressure down to 36" one may very well burn a hole in a stack, which will then begin burning through the cowl.

Dennis' Albatross restoration is topped off with a beautiful classic yacht passenger cabin in teak and leather complete with galley, dining booth, six first class passenger seats and lavatory. The wing and airframe modifications were so extensive that Reid had to apply for a new one-of-a-kind FAA type certificate. Since it is halfway between an 'A' and 'B' model it is the only Albatross that has been re-designated HU-16RD.

In 1997 Dennis flew his Albatross as the photo plane and support ship following a vintage Lockheed Electra duplicating the ill-fated 1937 attempt by Amelia Earhart. Major sponsorship from Pratt & Whitney and support from Jeppesen, Universal Avionics and the Smithsonian Institution made this possible. The Albatross flight commanded by Dennis covered 26,347 nautical miles, 195 flying hours, and took ten weeks to complete. They visited 30 cities, 20 countries, and six continents.

N7141S One of many HU-16s brought back to life by Dennis Buehn. Photo: Patrick Dean



▲ (top left) N29853 Former USAF and Coast Guard now owned by John Shoffner is currently in for painting at Kingman AZ.

▲ (middle left) Bill da Silva's HU-16C in Navy colors with clear radome.

◄ (top right opposite page) N70258 Restored only to be lost in tragic incident at Ft. Pierce Florida.

◄ (middle right opposite page) Owned by Billabong Hawaii N121FB is a former USAF, Coast Guard, and Chalks International ship equipped with supercharged 1525 hp engines.

Former Navy HU-16D N20861 flying the skull and cross bones.
Photo: Patrick Dean



N117B is one of only 16 built with supercharged 1525 hp engines.
Photo: Patrick Dean

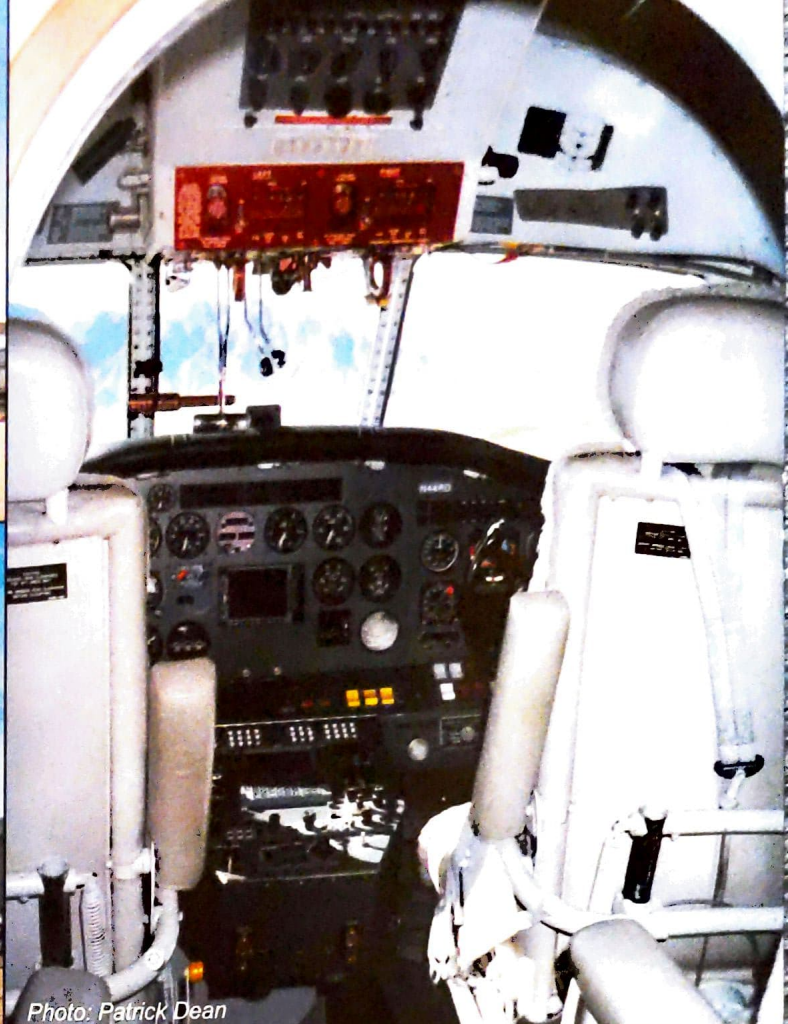


Photo: Patrick Dean

The HU-16RD is certified to 15,000 feet but during the entire circumnavigation they never flew above 7,000. Although the HU-16A normal gross take off weight is 27,500 pounds and the HU-16B is 30,350 with a maximum of 37,500 pounds, under one extreme circumstance the HU-16RD actually took off at a gross weight of 39,500 pounds. According to Dennis "The aircraft loves dense air and when heavily loaded flies most comfortable between 1500 and 2500 feet at 128 to 132 knots. On the long over water segments we would take off, climb to 1500 feet, peg the airspeed at best lift over drag, set the power at minimum to hold altitude and sit back. The beauty of flying an amphibian over a seaplane is we can avoid landing in salt water if there is an airfield nearby. The increased risk of salt-water corrosion is too much of a problem and one that can be avoided. If necessary we could, but so far we have confined all our water landings to fresh water."

At that point in the conversation Dennis stood up and said, "Let's take a ride." To our surprise Dennis and copilot Andy Macfie pulled up the ladder closed the hatch and climbed into the cockpit. They started the number one engine as two other aircraft, N7973B a HU-16E (c/n G-407), and N20861 a HU-16D (c/n G-425) taxied by. As the other two took taking off Reid started number two. As the checklist was completed we taxied out. After roll out we climbed to 1400 feet. I was amazed at how smoothly and stably it flew. It was almost like we were not moving. We flew along the Colorado River and through several canyons to the Arizona side of Lake Mead.

Much to my amazement we started letting down in an area where the water was smooth as glass. We touched down so smooth that the only indication we were on the water was the spray going by the window. Macfie said to Dennis, "Do you want to slow her down or just keep her on the step?" Reid answered, "Just hold her here." He then advanced the throttles and we lifted off. By now I was wondering if this was really happening or just aviation imagination.

We climbed back out and flew around for a few more minutes as we spotted the other two HU-16s landing about two miles away. We were commenting on the first landing and the stability and handling as Dennis started to let down again. This landing was going to be different. In this area the wind was blowing and there was a chop on the water. Once again she settled down on the water, this time with two slight bumps. In spite of the chop once again it was smooth. Dennis kept her on the step once again then lifted back off. Just when I didn't think the afternoon could get any better, Dave Cummings came back and offered to let me have the seat in the cockpit behind Dennis. As Dennis flew he explained his approach to flying the big amphib. "When I'm in the cockpit there is none of this 'you're the boss stuff'. Safety is my number one concern. We always fly dual cockpit and keep each other's skills sharp. I just love to fly."

We had been flying around for an hour when Dennis decided it was time to stop. We had worked our way over into Arizona to a fairly remote area and he told Macfie to look around for



Photo: Paul Bowen

any boats as well as the other two HU-16s. We started our let down again and spotted something ahead. Dennis said, "Is that a boat or one of the other two aircraft?" Macfie quipped, "I think it is a boat but lets hope it isn't a Martin Mars coming toward us." Within seconds the boat turned off in the other direction and we sat down on the water. We taxied into a cove and the amphib settled into the water. He turned the Albatross around and prepared for take-off. The water sprayed off the pontoons as it rose up on the step. Even with the drag and suction of the water at 65 mph it was trying to lift off with the only sense of motion being the water spray going past the windows. Macfie pointed out a small island coming up in front of us which Dennis said we would clear easily. The modified wing allowed us to lift off so easy and smooth that we passed over it by hundreds of feet.

Once we leveled off at 1400 feet Dennis decided to head home. We started back flying through the canyons, admiring the incredible scenery and passing within a half-mile on the western side of Boulder Dam before crossing back into Nevada. As we turned on the downwind leg to Boulder City airport I noticed we were at 125 mph. Passing south of the field Reid turned on final to runway 9R. As we came over the threshold a crosswind was pushing us a little off to the left. Dennis recovered nicely as Macfie called out the airspeed down to a 65-mph touchdown. We were in awe of the stability, handling, and response that the modified wing gave the old bird.

After securing the aircraft and calling for the fuel truck Reid Dennis accompanied us around to the other aircraft pointing out the different series and wing configurations.

A very unique Albatross in attendance was N117FB (c/n G-461). Originally built in 1961 as a HU-16B it received U.S. Navy serial BuNo 148326 for administration purposes only. It is one of only 16 HU-16Bs built new with 1525 hp Wright R-1820-82 engines. These engines have a two-speed supercharger and different ignition system. This series Albatross is easily identified by the fat engine cowling with carburetor intake scoops on top of the nacelles. Six of this series went to Japan and the other ten to Canada. This ship was transferred to the Japan Air Self Defense Force as JMSDF 9053, where it served until purchased by Resorts International, parent company of Chalks International Airline. After returning from Japanese service it was re-registered in the U.S. as N3479F and converted to G-111 airline standards with the forward emergency exits. Only 13 ships were actually converted to G-111 civilian standards and only two are flying. The Albatross proved uneconomical for Chalks International; consequently, most examples were placed in storage. This is the only HU-16 on hand at Boulder City that is licensed in Standard category. The remainder are licensed in the Aerial Survey or Forestry category.

Another former Chalks International ship now owned by Paul Rivas is N7973B. Used as the Chalks trainer it was never put into airline service. It has a striking new white paint scheme

with blue and yellow trim making it stand out among the other aircraft. This former UF-1G (c/n G-407) was built in 1955 and served with the U.S. Coast Guard as USCG 1311. It was re-designated HU-16E in 1962 when all Coast Guard HU-16s were standardized as 'E' models. Although owned by Chalks, it was not converted to G-111 civilian transport standards since it was used for training only.

Terry Smith, who is a pilot for Alaska Airlines, flew in with his HU-16C (c/n G-214) known as the 'Aleutian Goose'. This 1955 model, now registered N116AG, holds the distinction of having been assigned to the U.S.A.F. (Serial No. 51-7164), U.S. Navy (BuNo. 142429 designated UF-1L), and the U.S. Coast Guard as a UF-1G. This example is very unique in the fact that although it served with three branches of military service, it was never sent back to Grumman for upgrade to Air Force 'B' or Navy 'D' standards. The nose radome was never installed and it has the short standard 80-foot wingspan. All older UF-1Gs were retired from the Coast Guard service before the HU-16E went into service.

Two more Navy examples built in 1955 were on hand. The first was HU-16C, N7025N (c/n G-409) USN serial 141262. It served with the U.S. Navy until declared surplus and stored. It is now owned by Bill daSilva of Sea Air Adventures of Tecumseh Michigan. It is painted in U.S. Navy markings and has a clear nose replacing the radome. It is unique in the fact that it has the upgrade radar nose of the later model yet has the short 80-foot wings. Since it came off the line the same year (1955) the 'A' models (Navy 'C' models) were being returned to Grumman for upgrade to 96-foot wings, it retained the short wing. It was built with some 'D' model features such as the radome, which had become standard.

The other 1955 model in attendance was an HU-16D (c/n G-425) USN serial 141278. This former Navy UF-1 was upgraded by Grumman to the 96-foot wing. After Navy service it was stored at Aerospace Maintenance and Regeneration Center (AMARC) at Tucson. Intended for the Smithsonian Marine Laboratory, it is now registered to Upper Limit as N20861.

The ships at Boulder City represented an excellent cross section of the different series of HU-16s. The only example not present was the SHU-16B anti-submarine model with bulbous radome and MAD (Magnetic Anomaly Detector) boom. I was fortunate enough in one day to learn what an incredible warbird the Albatross really is. Of the 464 production models, there are currently about 30 flying, and nearly a third were in attendance at the event. While this was reason enough to make it to the event, I also had the privilege to fly in the quintessential restoration. It doesn't get any better than that. 🇺🇸



Alaska Airline pilot Terry Smith's HU-16C 'Aleutian Goose'.
Photo: Patrick Dean



Former Chalks Trainer N7973B owned by Paul Rivas sports new paint applied at Kingman AZ.
Photo: Patrick Dean



▲ (top) Air Force HU-16B N4478E currently being restored in Minnesota by Dave Cummings for Tony Phillippi.
Photo: Dave Cummings

▲ (middle) N8497N, a Chilean Air Force HU-16B/ASW with Anti-submarine radome and MAD boom.
Photo: Patrick Dean