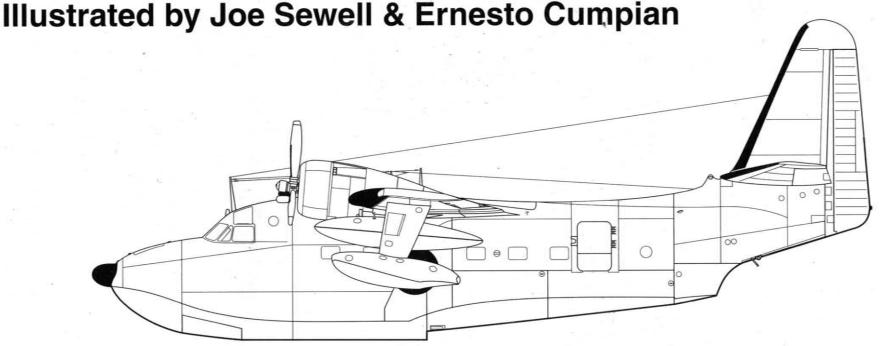


HU-16 Albatross

By Robert D. Migliardi Color by Don Greer in action







On 14 March 1966, this HU-16B (serial 51-0071) of the 53rd ARRS landed off shore near Haiphong Harbor to effect a rescue of a downed F-4C Phantom crew. Before the aircraft could complete the pick-up, it was hit by fire from North Vietnamese shore batteries, with two of the Albatross crew being killed.

Acknowledgements

Among those who have helped me assemble Albatross material over the years, I especially want to thank the following: Aldo Bellei, Dana Bell, Nick Nieves, Doug Sloviak, Isao Miyamoto, Antonio Linhares, Mike Stubbs, Jim Wood, Jim Rinkenberger, Larry Buettner, Hugh Muir, Jerry Narland, Stan Goddard, Norm Taylor, and the late Franz Schaedler. And thanks to all of you whose names I've forgotten or whose addresses I've lost years ago. Special thanks to Steve Sauve for his work in digging out negatives and checking the final work. Thanks to all the USAF, USN, ANG, and USCG units which helped - or at least did not ignore me. And finally, thanks to all the great folks at the now defunct Grumman Aerospace history department. All aircraft companies should be so cooperative and helpful with researchers.

Dedication:

First, to my mother, a real "Rosie the Rivetter" who built Wildcats during the Second World War. And second, to the old modeling gang from Polk's - Bob, Ray, Ron, Arnie, Bill, Sam, Marcos, John, Richard, Warren, Count von Bobek, et el. Have one for me next time you get together.

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A SA-16A Albatross on a flight test from the Grumman facility during 1949. The aircraft was overall Aluminum lacquer, with Gray walkways and radome. (Grumman)



Introduction

Few aircraft, with the possible exceptions of the C-47 and C-130 Hercules, have seen such widespread military service as the Grumman Albatross, and certainly none have been put to such varied use. To date it has been operated by the armed services of twenty-three countries, in roles ranging from search-and-rescue to cargo and personnel transport, training, pollution control and even anti-submarine warfare. Long after production ceased the number of operators constantly expanded. As aircraft were phased out of one service, they were usually refurbished and passed along to another operator. Thus the Mexican Navy, for example, wound up with ex-RCAF machines, while those used by Greece originally saw service in Norway. All this accounted for a constant ebb and flow of finishes and markings, and so from an aircraft enthusiasts point of view, few subjects offer as wide a variety of interesting schemes.

The Albatross is unusual in that, unlike most military aircraft, it's design .work started as a private venture. Grumman had a long history of expertise in the design of successful military amphibians, beginning with the single-engined JF-1 Duck in 1933. The Goose, which first flew in 1937, was Grumman's first twin-engined amphibian, and a workhorse of the U.S. Navy and Coast Guard during WW II. The slightly smaller Widgeon first flew in 1940, and although a successful executive aircraft, the military version (designated J4F) was hampered by the low power of its six cylinder Ranger engines. The first post-war Grumman amphibian, the Mallard, first flew during 1946, and a total of sixty-one were built. With the exception of two built as VIP transports for King Farouk of Egypt, all were used by civilian operators as corporate aircraft or with small bush flying airlines.

The Grumman Goose was used as an amphibian transport by the Navy. It saw widespread service during the Second World War in both Navy and Coast Guard service. (R. Zmijewski)



XJR2F-1 Pelican

In April of 1944, Grumman design G-64, later to evolve into the Albatross, was initiated as a potential Goose replacement, operating as a utility transport, trainer, and air-sea rescue aircraft. In the event, the design would have a long gestation period. Although superficially resembling the Mallard, the XJR2F-1 prototype, which eventually flew on 1 October 1947, was a much larger aircraft, in fact, the largest aircraft Grumman had ever built, being almost twice the size of the Goose. At this stage, the aircraft was known by the short-lived name of Pelican and the second prototype was given the interim U.S. Navy designation of PF-1. The Navy funded construction of the two prototypes and, although pleased with the aircraft's performance, lacked additional funds for a production contract. Fortunately for Grumman, the U.S. Air Force had recently achieved new status as an independent branch of the military (previously being the U.S. Army Air Force). With its new status as an equal branch of service alongside the Army and Navy, the Air Force was eager to begin maritime operations. Additionally, it had a requirement for a rescue amphibian to replace the aging OA-10 Catalina. Moreover, it had money to spend.

It assumed the original Navy order for thirty-two PF-ls, changed the designation to SA-16A, and contracted for an additional batch of 258 machines. This would, later grow to 273, making a total of 305. It would be December of 1949, before the Navy finally took delivery of its first of ninety-nine aircraft. In March of 1952, the U. S. Coast Guard received the first of its forty-six aircraft. Foreign interest soon followed.

During its service life, the Albatross has had a number of confusing designations, and it may be helpful to clarify them at the outset. The Grumman prototype designation was XJR2F. The original Air Force designation for the Albatross was SA-16A, while the Navy's designa-

The XJR2F-1 Pelican lands at Grumman's Bethpage facility in October of 1947. As an anti-corrosion measure, the aircraft was painted in overall Aluminum lacquer. At this point, the prototype carried no radar under the wing. (Grumman)



tion for production aircraft was UF-1, and the U. S. Coast Guard designated their aircraft UF-1G. All the aircraft were essentially identical, with minor differences in onboard electronics to fit the needs of the using service. Early production aircraft were fitted with an AN/APS-31A search radar carried in a pod under the port wing. Later aircraft had the radar mounted in the standardized nose radome, with most of the early aircraft being retrofitted to this configuration. There were also two specially winterized aircraft, designated UF-IL by the Navy, used for Operation DEEP FREEZE in Antarctica. Five UF-ls were completed as navigation trainers and assigned to the U.S. Naval Academy with the designation UF-IT.

In 1956, an improved version of the Albatross was introduced which was designated SA-16B, UF-2, and UF-2G by the Air Force, Navy and Coast Guard respectively. An ASW version was built under the designation SA-16B/ASW (Navy designation UF-2S).

As if this were not confusing enough, during 1962 a unified designation system was introduced in the military which resulted in the USAF machines becoming HU-16As and HU-16Bs, Navy aircraft becoming HU-16Cs and HU-16Ds, and Coast Guard aircraft becoming HU-16Es (by this time all the early UF-1Gs had been retired). The UF-1T and UF-1L became the TU-16C and LU-16C. The SA-16B/ASW became the SHU-16B. Foreign operators often applied their own designations to the Albatross.

Tests with the prototypes confirmed that the flying characteristics of the Albatross were quite conventional. Stability around all three axes was good, and control forces were light. A rudder boost system aided controllability during single-engine operations. To reduce the air-

A SA-16A Albatross airframe is tested to destruction during static tests at the Grumman Bethpage facility. This form of testing used hydraulic jacks and pumps to simulate aerodynamic loads and was a common way to determine the overall strength of an airframe. (Grumman)

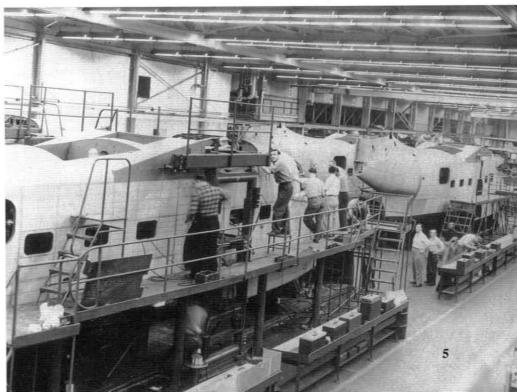


craft's take-off run, useful when carrying heavy loads or when engaged in open sea or snow and ice operations, the Albatross could be fitted with either two or four JATO bottles. The JATO equipment was stored in the cabin, and the crew could deploy the equipment without exiting the aircraft, an important consideration if the aircraft was afloat. The JATO mounting brackets could swing up and be serviced through the open doors. At the same time, reversible pitch propellers helped keep roll-out to a minimum when landing.

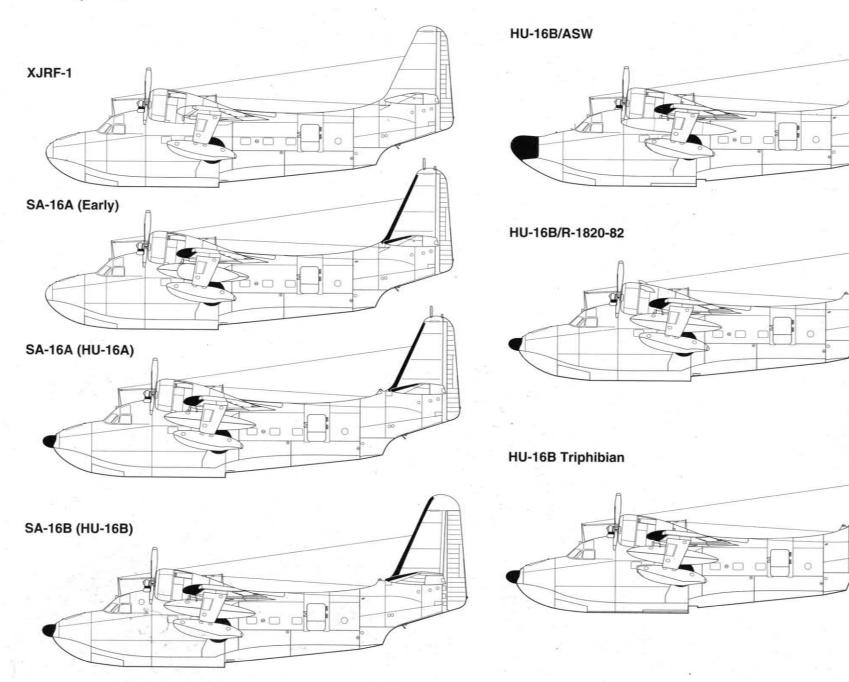
A major prerequisite for an aircraft engaged in search and rescue or surveillance operations was endurance, and the Albatross had it in abundance. Auxiliary underwing tanks of 100, 150 or, more commonly, 300 gallons could be carried. With these larger tanks feeding the economical engines, later versions of the Albatross could easily stay airborne for twenty hours. Pushing it to the limit an endurance flight of more that twenty-five hours was logged. In fact, the Albatross held numerous records for amphibious aircraft including longest non-stop flight (3,104 miles) and altitude record (32,883 feet).

Normal performance figures for the early models include a maximum speed of 264 mph, service ceiling of 22,000 feet, and initial rate of climb of 1,450 ft/min. The later SA-16B had a maximum speed of 234 mph, service ceiling of 24,000 feet, and climb rate of 1,000 ft/min.

Albatross airframes move down the Grumman assembly line during 1950. The aircraft was equipped with a large hatch in the upper fuselage. In actual service, this hatch was rarely, if ever, used. (Grumman)



Development



HU-16A (SA-16A, UF-1, UF-1G)

The initial production version of the Albatross was of conventional all-metal construction consisting of a deep 'V' two-step hull and a shoulder mounted wing. The wing on the HU-16 incorporated fixed leading-edge slots outboard of the float pylons. These slots served to enhance low speed performance and handling characteristics. The first six production aircraft had dry floats. On all other aircraft the pylon mounted floats served double duty as fuel tanks, containing an additional 200 gallons each. The undercarriage retracted up and flush into wells on the hull sides, just forward of the "step". Power was supplied by two 1,425 hp Wright 1820-76s air-cooled radial engines driving Hamilton Standard three-bladed constant speed, controllable pitch, reversing propellers. Two JATO bottles could be mounted on each side of the fuselage, on the exterior of the port and starboard rear hull doors. The port side door was a two part 'Dutch door' design. In heavy seas the lower section could be left closed ensuring that there was enough freeboard to prevent the aircraft from taking on water. A hatch on the hull nose in front of the cockpit allowed a crewman to handle a boathook or lines to assist with rescue operations or mooring. Aircraft of the first production batch did not feature a nose mounted radome, the search radar being carried in a pod under the port wing. The nose mounted radar was soon made a standard feature, and was found on all later aircraft. It was also retrofitted to most of the early aircraft as well.

In its basic configuration for the search-and-rescue role, the Albatross generally carried a crew of six (pilot, co-pilot, radar operator, navigator, flight mechanic, and paramedic) plus

Three HU-16A on the Grumman ramp awaiting delivery to their respective services. The aircraft in the foreground is a UF-1 for the Navy, the second aircraft is a UF-1G for the Coast Guard and the last is a SA-16A for the Air Force. The Navy aircraft is in overall Seaplane Gray while the others are in Aluminum lacquer. (Grumman)





This early UF-1 (BuNo 124379) was stored at NAS Litchfield Park after being withdrawn from service. Early UF-1s did not have a nose mounted radar. (Swisher via Ginter)

four litters. The interior could easily be reconfigured for other roles including; medical evac (five crew and twelve litters), personnel transport (four crew plus ten seats), and cargo transport (three crew and 568 cubic feet of cargo), or a combination of all three. A large overhead hatch facilitated changing interiors or loading bulky cargo items, although it appears that this feature was rarely, if ever, used.

The third production UF-1 carries the original radar pod under the port wing. The aircraft was being evaluated by the Naval Air Test Center, NAS Patuxent River, Maryland during August of 1950. (Navy)

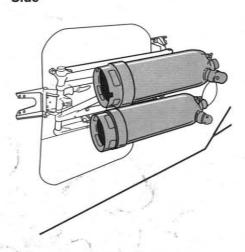


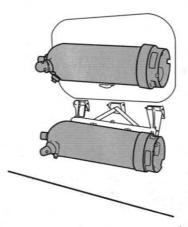


JATO Installation

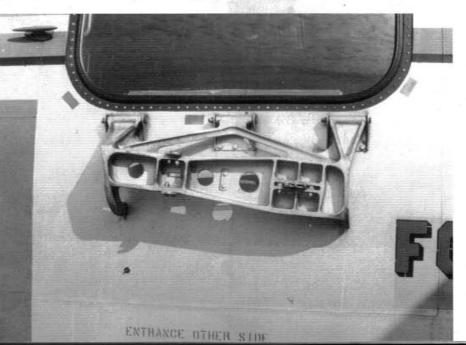
Twin JATO Bottle Installation Port JA Side

JATO Installation Starboard Side





This is the starboard side JATO mounting bracket. It is hinged so that it could be swung up and loaded with a fresh bottle through the open fuselage window.





A Navy UF-1 (BuNo 141270) in overall Seaplane Gray with Yellow floats, wing tips, and fuselage band. The wing leading edge slots are visible just forward of the national insignia. These slots enhanced low speed handling. The "don't walk" areas of the wing and fuselage are marked off with White striping. The Black areas of the wing, horizontal stabilizer and vertical stabilizer leading edges are de-icer boots. (Navy)

An Air Force SA-16A (serial 48-593) from the initial production batch. This aircraft originally carried an underwing radar pod, but was later retrofitted with the nose mounted radome of late production SA-16As. The circular object on the front of the float is a tiedown ring. (Grumman)

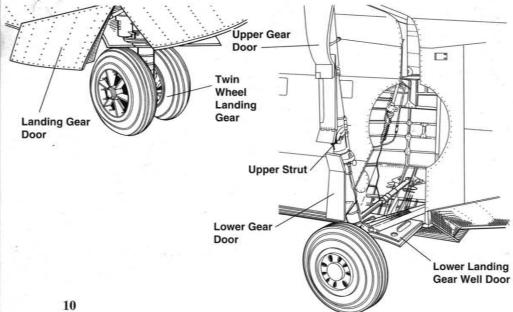




The nose landing gear of an SA-16A. The nose wheel well doors are not watertight, although the wheel well is isolated from the main hull. (J. Narland)

Landing Gear Components

Main Landing Gear Nose Wheel





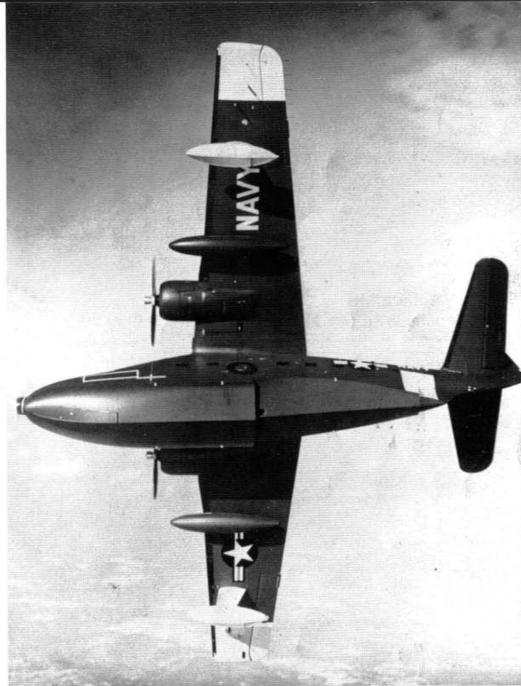
Port main landing gear. According to the flight manual, to lower the gear manually in an emergency, the crew would have to cut through the hull wall to access the landing gear uplocks. (J. Narland)



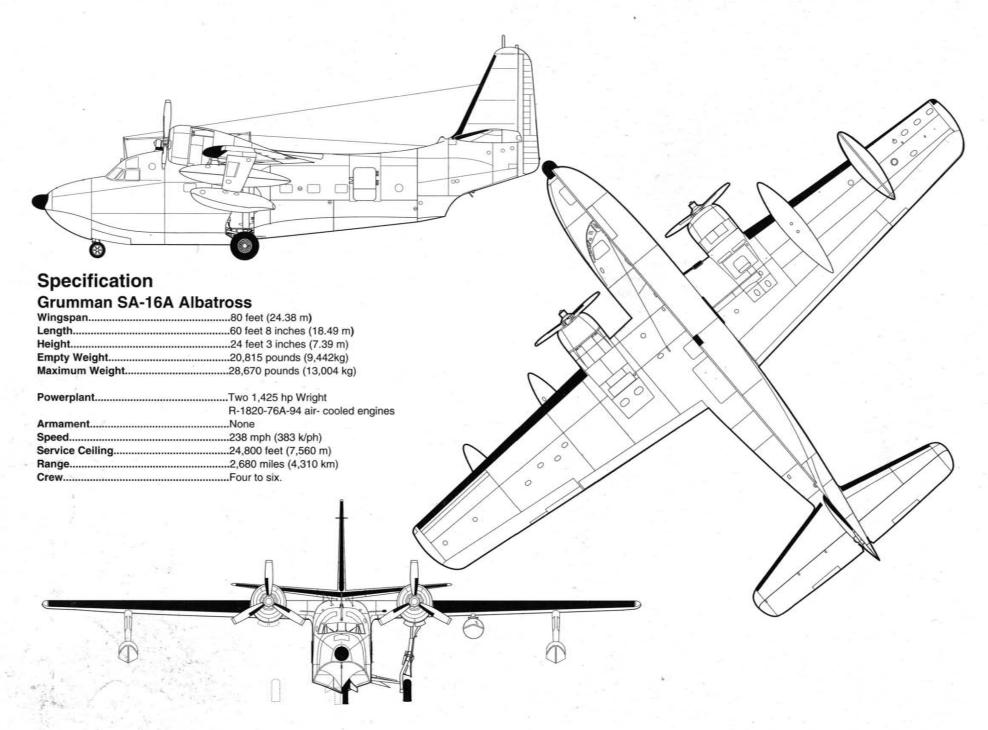
An Air Force SA-16A (serial 51-038) parked on the snow covered ramp at Goose Bay, Labrador. The aircraft carries high visibility Red Arctic markings and a Red arrow on the fuselage side. The serial number was carried on a Silver panel on the Red tail section. The anti-glare panel and nose radome were Black.

This UF-1 (BuNo 141270) is finished in the standard Search and Rescue scheme of Seaplane Gray with Yellow markings. On aircraft painted in dark colors, the "don't step/no walk" areas were in White, while on light colored aircraft they were in Black. (Navy)





A Navy UF-1 (BuN0 141270) banks away revealing the two underwing fuel tanks and floats. The Navy is in White and the floats/wing tips are Yellow. (Navy)

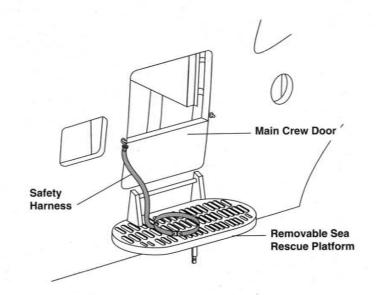




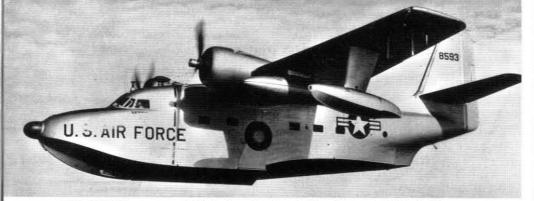
A SA-16A (serial 51-069) of the West Virginia Air National Guard during March of 1963. The aircraft was overall Gloss Black with Red lettering. The wing and stabilizer leading edges were Natural Metal and the control surfaces were White. (Swisher via Ginter)

A SA-16A of the 15 Stormo, Italian Air Force. The aircraft was overall Aluminum Lacquer with a Yellow hull bottom, Yellow fuselage band, Day-glo Orange nose and tail and a Blue fin stripe. The Italian Air Force was a major operator of SA-16s between 1958 and 1979. (Italian Air Force)

Sea Rescue Platform







This SA-16A was one of the first production batch. It was retrofitted with a nose mounted radome and had the underwing radar deleted. (Grumman)

The main cabin of a SA-16 looking back toward the tail. The main crew hatch is visible at the rear of the cabin on the right just ahead of the rear bulkhead. The large recess in the foof is seldom used cargo hatch. (Grumman)





The instrument panel and control wheels of a SA-16A Albatross. The rudder peddles have the Grumman logo imprinted on them. (Grumman)

This is the navigators station on the SA-16A. The circular object on the lower rack is the radar CRT. (Grumman)



HU-16B (SA-16B, UF-2, UF-2G)

Most of the SA-16B aircraft were not really new production aircraft at all, but older model airframes which were rebuilt to SA-16B standards. In April of 1955, Grumman started working on a design proposal intended to "provide significantly improved performance to the Albatross fleet, with the minimum outlay of funds." The first aircraft to be modified, SA-16A 51-7200, made its maiden flight on 15 January 1956.

External changes consisted of an increase in the wing span of 200 inches. A seventy inch addition was inserted immediately outboard each engine nacelle and thirty inch wingtip extensions were also installed. The leading edge slots were deleted, replaced by a leading edge camber to enhance low speed handling and performance. The wing extension was accompanied by an increase in aileron and flap area. The fuselage and rudder support structure was extended by eight inches to the rear. A fiberglass cap added eighteen inches to the vertical fin, and twelve inch tip extensions were added to each of the horizontal stabilizers. Less visible additions included the installation of a control surface gust lock system, new de-icing system and updated onboard avionics.

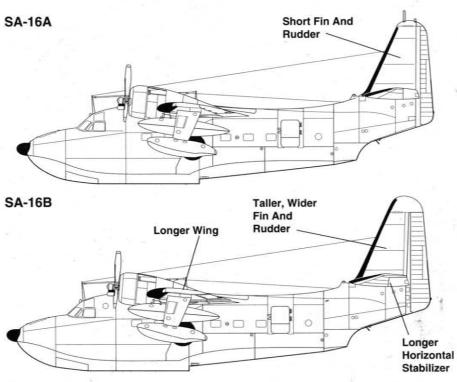
With these modifications the maximum payload, range, endurance, and ceiling were all increased. The stalling speed was lowered and the low speed handling was enhanced. Unfortunately the maximum speed and rate of climb were somewhat degraded. Still, it was considered a very worthwhile trade-off.

The SA-16As started being converted, either under a special modification program, or when

The main external difference between the SA-16A and SA-16B was the longer wing on the SA-16B. Each wing was increased a total of 100 inches in length. The dark area on the float strut is a UHF homing antenna. (J. Narland)



Development



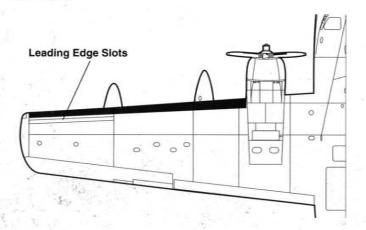
they passed through the Grumman facility as part of the IRAN (Inspect and Repair As Necessary) program. IRAN was a maintenance program in which, after a certain number of airframe hours, aircraft were inspected by Grumman and Department of Defense personnel, given a major overhaul and returned to service as essentially new aircraft. This gave the service a nearly new aircraft at a great saving over the cost of a new aircraft purchase. 241 of the SA-16s that returned to Grumman's Bethpage plant were modified so extensively that the resulting aircraft was given a new designation. The modified aircraft became HU-16Bs (SA-16B, UF-2, UF-2G).

This was the first SA-16A (serial 51-7200) to be converted to SA-16B standards. The aircraft is currently on display at the Chanute Technical Training Center, Rantoul, IL. (J. Riakenberger)

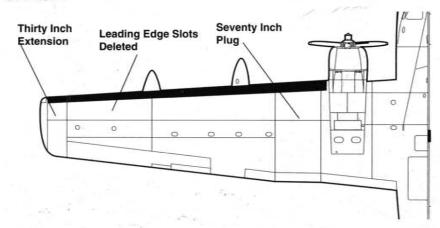




SA-16A



Wing Development SA-16B





7255 lands on the water after a patrol mission. Coast Guard UF-1Gs were used for search and rescue (SAR), customs patrols, and supply missions. (Grumman)

A HU-16E (BuNo 7213) on the ramp of Coast Guard Air Station Cape Cod during October of 1974. This is the later style Coast Guard markings with the large Coast Guard Red band on the forward fuselage. (T. Hildreth)





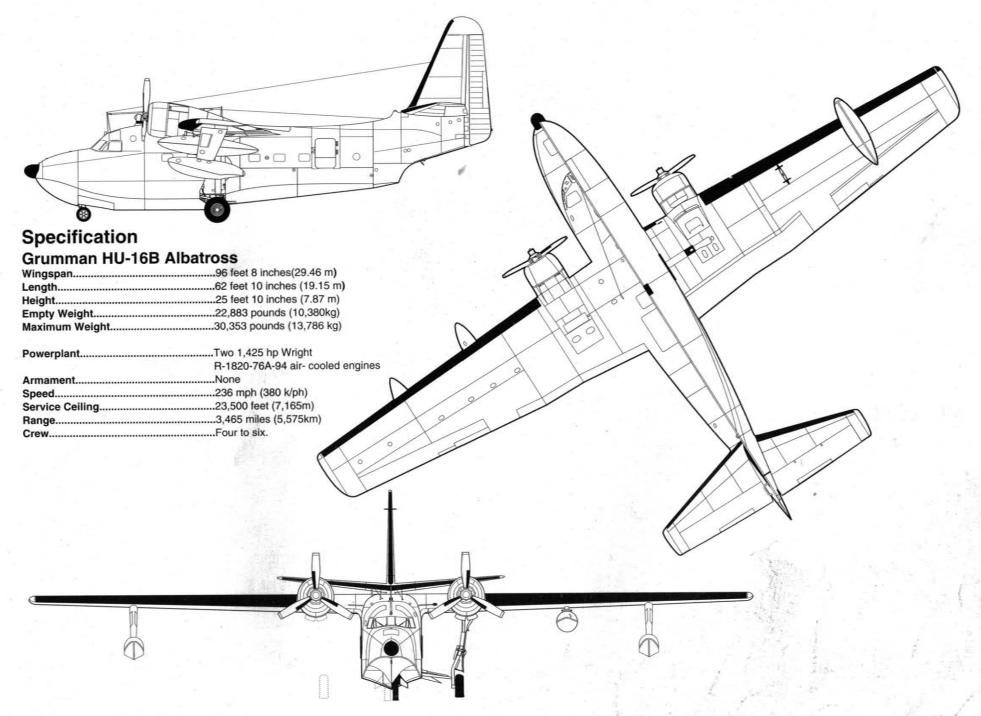
This UF-1G (BuNo 7255) was an ex-USAF aircraft that was transferred to the U.S. Coast Guard. The aircraft was overall White with high visibility Red markings bordered with Black. (Grumman)

A Coast Guard UG-1G taxies out of the water onto the seaplane ramp at a Coast Guard base. The aircraft will receive a fresh water wash-down to remove salt water residue as an anti-corrosion measure. (Grumman)











A SA-16B (serial 51-0071) of the Military Air Transport Service (MATS) "on the step" as it makes a water takeoff. The normal water run for a typically loaded SA-16 was about 1,500 feet without using JATO. With JATO the run was cut to about 900 feet. This aircraft was later lost in combat in Vietnam. (Grumman)

A SA-16B (HU-16B, serial 51-5303) of the 301st ARRS, based at Homestead, Florida on the ramp at Kelly Air Force Base,. Texas during June 0f 1973. The starboard engine has been throwing oil onto the fuselage side. (N. Taylor)







This SA-16B (serial 51-7151) is flying with the upper half of the cabin door open. The last four digits of the serial number is repeated in Black under the nose on a Yellow panel outlined in Black. (N. Taylor)

This HU-16D was assigned to the Commander, Anti-Submarine Warfare Forces, U.S. Atlantic Fleet during June of 1967. It carries the last Navy Albatross color scheme of Gloss Gull Gray with a White upper fuselage. (R. L. Lawson)



A Navy HU-16D based at NAS Kodiak, Alaska moored to a float. The aircraft is Engine Gray with a White upper fuselage and Yellow SAR markings. The side number, 920, was in Black on a Yellow background, and the floats are Yellow with Engine Gray lower surfaces and a White trim line. (Navy)



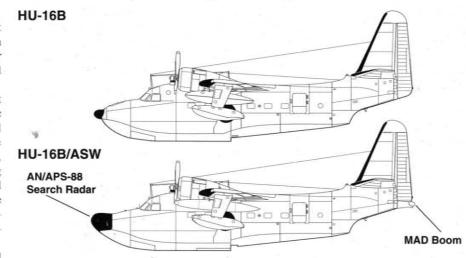
SA-16B/ASW

In May of 1961 Grumman's anti-submarine warfare version of the Albatross made its first flight. The design was initiated during 1960 as part of a Military Defense Aid Program (MDAP) project intended to produce an anti-submarine patrol aircraft suitable for the air forces of friendly smaller nations. Dubbed the SA-16B/ASW, two prototypes were built and it was the most radically different of the Albatross family.

The HU-16B/ASW differs from the HU-16B in a number of ways. It has a bulbous upswept nose radome which houses an AN/APS-88 search radar. An extendable MAD (Magnetic Anomaly Detector) boom is mounted in the tail under the rudder, and there are additional underwing hard points for anti-submarine weapons. The basic ASW equipment included the new radar with longer range and wider sweep angle, the MAD equipment, ECM equipment, sonobuoys, marine markers, and underwater sound signal charges, all with their supporting systems. A remotely controlled 70 million candlepower carbon-arc searchlight was mounted under the starboard wing to aid in target identification at night. The basic anti-submarine armament was the Mk 43 homing torpedo, although the HU-16B/ASW could carry other torpedoes, 5 inch HVAR rockets, Zuni rocket pods, 500 pound depth bombs and mines in various combinations.

After completing acceptance flights, two prototype aircraft were evaluated by Patrol Squadron Thirty-One (VP-31) at NAS North Island, California. Although not purchased by the USAF or Navy, thirty-seven HU-16Bs were rebuilt as ASW versions and supplied to five initial foreign customers, including, Spain (seven), Chile, Peru, Thailand, Greece and Norway, which operated twenty aircraft.

Fuselage Development



51-0070, was the first of two ASW prototypes. The MAD boom is fully extended and the aircraft carries a single Mk 43 ASW homing torpedo and a Mk 54 depth bomb on the port underwing stores stations. A Sonobouy launcher is mounted on the cabin door. The blanked off window to the rear of the wheel well is a door for launching sound signal charges. (Grumman)





ASW Weapons

ASW Homing Torpedo



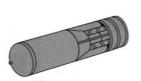
2.75 Inch Rocket Pods



5 Inch Zuni Rocket Pods

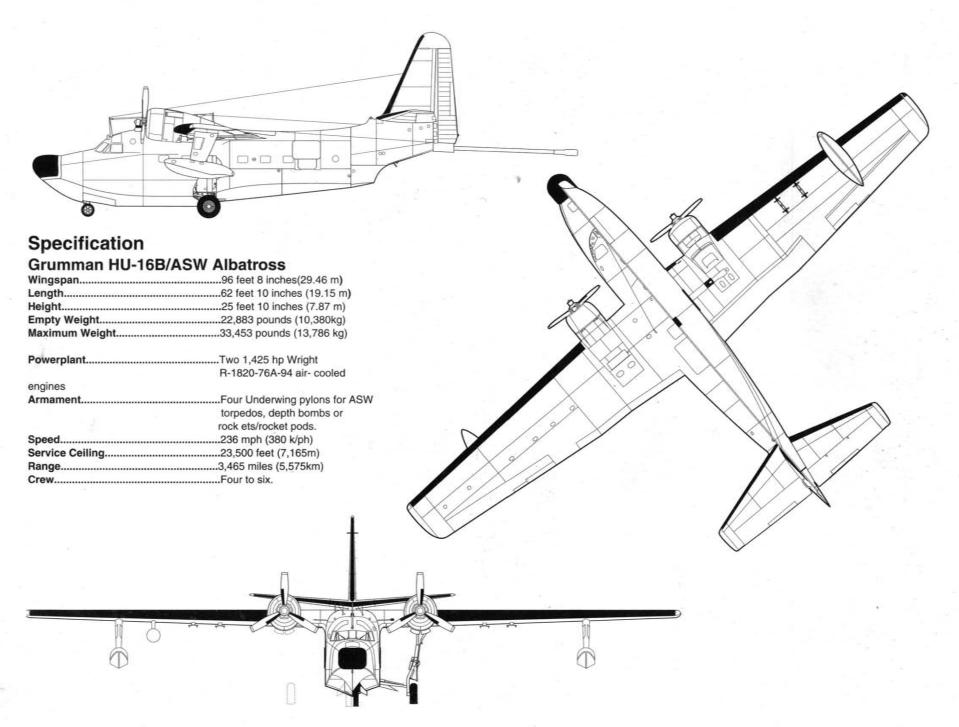


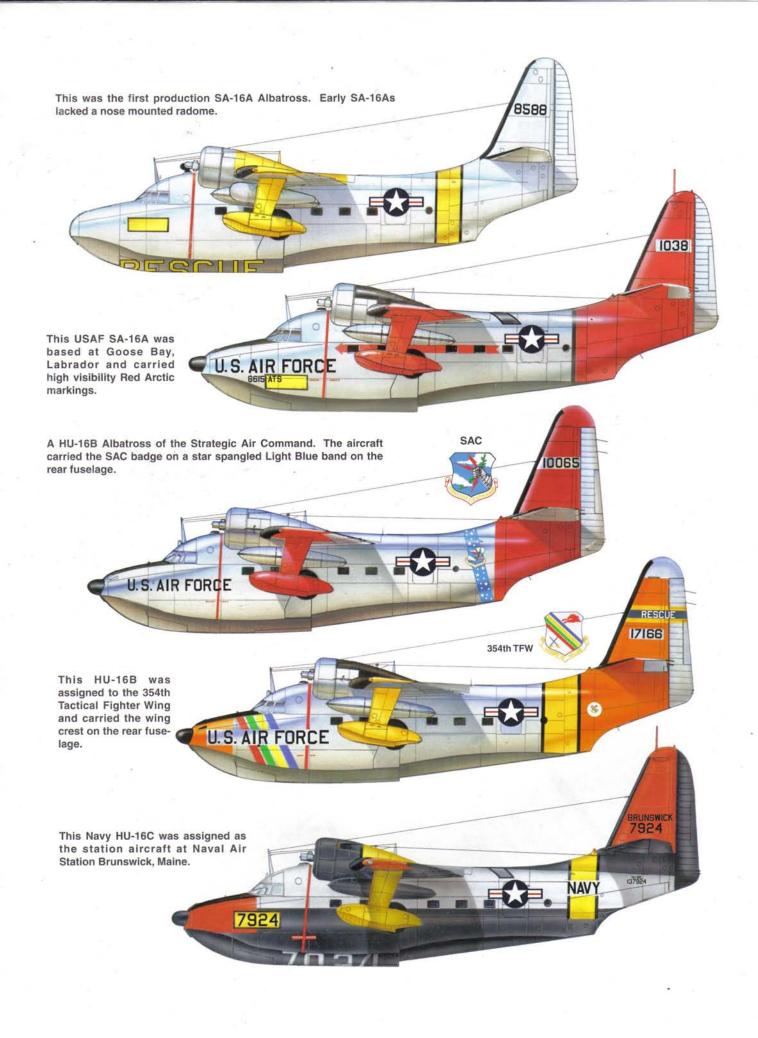
Mk 54 Depth Bomb

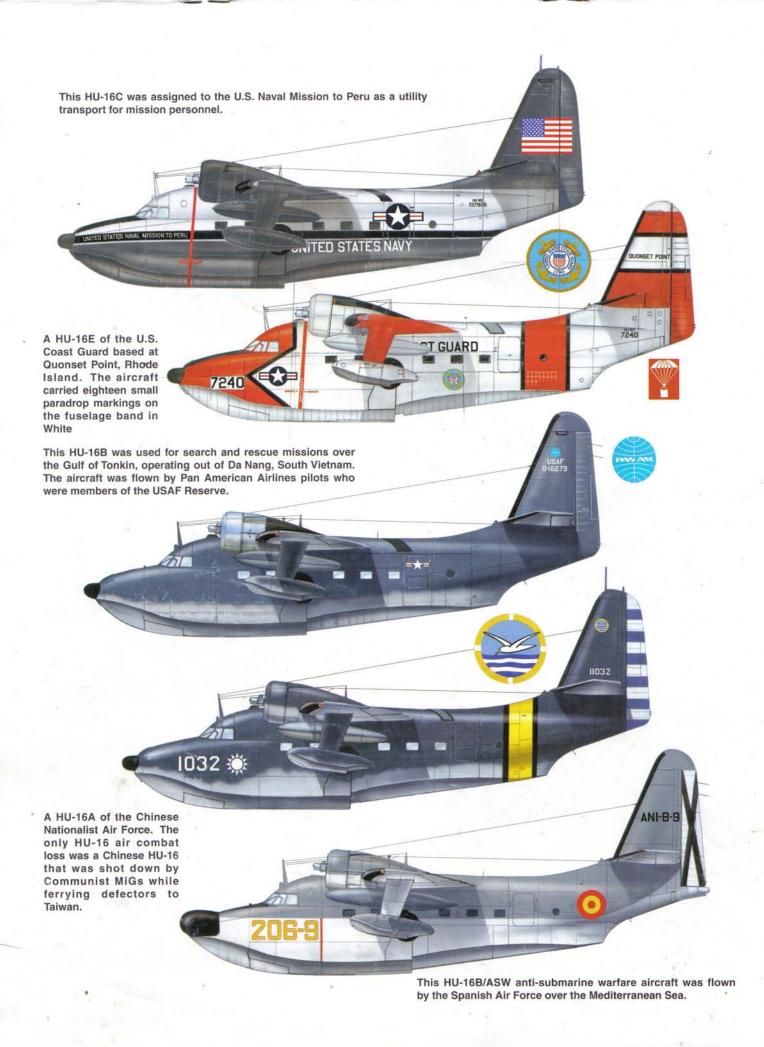


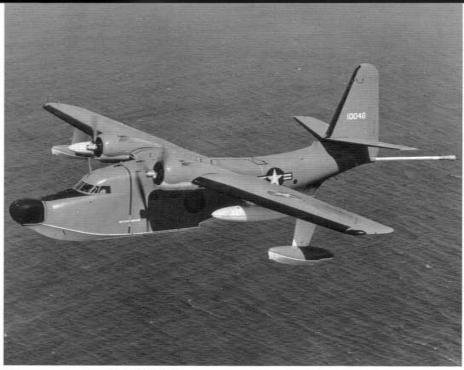
5 Inch HVAR Rocket











This was one of two HU-16B/SAW prototypes evaluated by Navy Patrol Squadron Thirty-One (VP-31) at Naval Air Station North Island, San Diego, California during 1961. (Grumman)

The first HU-16B/ASW prototype was delivered to the Royal Norwegian Air Force for NATO operations over the North Sea. Norway was the largest operator of ASW variants, receiving some twenty aircraft. (B. T. Jorgensen)





The second HU-16B/ASW prototype (serial 51-0048) during its evaluation trials. This aircraft was later delivered to Norway. (Grumman)

After seeing service with Norway, this HU-16B/ASW was transferred to the Hellenic Air Force (Greece) and assigned to No 363 Squadron based at Elefis. The aircraft is carrying a 300 gallon underwing fuel tank next to the searchlight. The warning triangle on the fuselage marks the location of the marine marker ejector tube. (Greek Air Force)



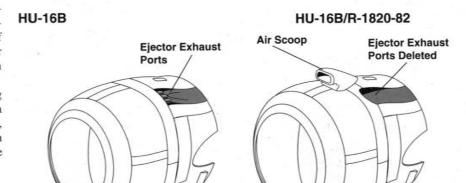
HU-16B/R-1820-82

While a total of 241 HU-16As were converted to HU-16B standards, an additional twenty-one aircraft were produced as new production aircraft. Of the twenty-one aircraft built, sixteen were re-engined with a 1,525 hp Wright R-1820-82 air-cooled radial engines instead of the original 1,425 hp Wright R-1820-76 engines. This engine had a two-speed supercharger and modified ignition system, and was the same engine that was installed in the Grumman Tracker.

The installation of the R-1820-82 made it necessary to modify the engine cowling, resulting in a larger cowling, which was then faired into the existing wing nacelle. This produced a noticeable "lumpy" appearance, which, along with an air intake mounted on top of the nacelle, makes these aircraft easily distinguishable from the rest of the HU-16Bs. During 1960/61 ten aircraft were delivered to Canada, while the remaining six went to the Japanese Maritime Self-Defense Force.

A Royal Canadian Air Force HU-16B "on the step" as it takes off from a lake in Canada. This aircraft is powered by the Wright R-1820-82 engine and had the modified cowlings used with this engine. This differed from the standard cowling in being larger, with an air scoop mounted above the cowling. (CAF)

Cowling Development







A RCAF Albatross slowly taxies up to a life raft during air-sea rescue training. The crewman in the nose hatch is ready with a boat hook and line to pull the raft close to the aircraft. The sea platform has been lowered below the cabin door. (CAF)

A trio of Royal Canadian Air Force HU-16Bs make a formation takeoff from a Canadian lake. All three aircraft are carrying under wing fuel tanks. (CAF)





The port engine has been shut down for safety and the crewman in the nose hatch has attached a line to the life raft. He allows the raft to drift down the port side of the aircraft to the open cabin door. The crewman in the door secures the raft and helps the downed airman into the Albatross. (CAF)

A RCAF Albatross tied up pier-side while the crew deplanes. The cockpit roof hatch is open and the crewman in the nose is standing by with a line, ready to pass it to the crewman jumping down to the dock. (CAF)





The markings carried by this RCAF Albatross makes the time period between 1965 and 1968. The Rescue marking on the nose was in Day-glo Red with a Black outline. (CAF)

The Japanese Maritime Self-Defense Force (JMSDF) also operated the HU-16B/R-1820-82A variant of the Albatross, designating them as UF-2s. The bubble window just behind the landing gear wheel well is an observation window. (I. Miyamoto)





All RCAF HU-16s carried a special landing aid, similar to the *Rebecca* device of the Second World War. Antennas were carried on both sides of the fuselage just below the cockpit. (CAF)

A JMSDF Albatross lifts off for another patrol. The landing gear retracts into the fuselage side and wing root. The wheels can be lowered in the water to allow the aircraft to taxi up seaplane ramps. (I. Miyamoto)



HU-16 Triphibian

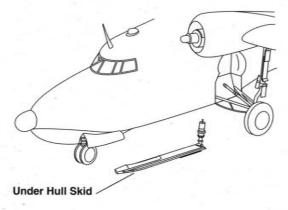
During 1953, Grumman tested an SA-16A (48-0588) which had been modified with triphibian equipment consisting of a hull keel skid and two float skids for operations off of snow and ice. The hull skid was fifteen feet long and twelve inches wide. The rear seven foot section was hinged and had a hydraulically extendible shock strut at the rear of the step. The new keel skid fitted into a recess formed by a modification to the existing hull bottom. The wing float skids were simple shock-absorbing swiveling skids fitted into sockets built into the float nose. The modification kit added some 695 pounds to the overall weight of the HU-16. A total of 154 triphibian modification kits were ordered.

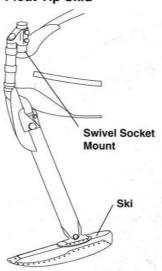
The Triphibian kit could be used on either the HU-16A or Hu-16B, allowing either aircraft to operate effectively from land, water, snow or ice. The wingtip floats incorporating the skid mounting tube on the nose seem to have become the standard float configuration, even on aircraft not modified to full triphibian configuration.

This RCAF HU-16B, modified with the Triphibian kit, landed on a frozen lake in Canada. The use of the skid was determined by snow depth, for snow deeper than six inches, the skid was used. For snow less than six inches, the conventional landing gear was used. (S Goodard)

Triphibian Kit









Operational Service

Throughout its service life the main user of the Albatross was the U.S. Air Force, and primarily the Air Rescue Service (ARS) of the Military Air Transport Service (MATS). Other USAF commands operating the aircraft have been SAC (Strategic Air Commend), TAC (Tactical Air Command), PACAF (Pacific Air Forces), AFRES (Air Force Reserve), and ANG (Air National Guard).

The U.S. Navy never used the Albatross in squadron strength, but rather assigned them to virtually every Naval Air Station as a station aircraft. In this capacity they served as search-and-rescue, utility and hack aircraft. A number of Naval missions assigned to American Embassies around the world also had HU-16s on strength, assigned to the Naval Attache. The last Navy Albatross was retired in 1976. On 13 August 1976, the HU-16B assigned to NAS Guantanamo Bay, Cuba was flown to NAS Pensacola, Florida by Commander Charles

Lavzilere, LCDR Mike Burke and ADRC Joe Saldivar and turned over to the National Museum of Naval Aviation. Later, this aircraft would be loaned to the Smithsonian Institution for marine research.

The U.S. Coast Guard also scattered its Albatross fleet, stationing them at some twenty airports and Coast Guard Stations from Alaska to Puerto Rico. Used primarily for search and rescue, the aircraft would eventually take on additional roles such as maritime surveillance, anti-smuggling patrol, law enforcement and pollution control. The last Coast Guard HU-16 was withdrawn from service on 10 March 1983, when HU-16 number 7250 was retired with honors after a service life of some thirty-two years.

This HU-16B (serial 51-7187), on the ramp at Portland, Oregon, during June of 1969 was assigned to the 304th Aerospace Rescue and Recovery Squadron (ARRS) based at Nome, Alaska. The aircraft number was repeated in Black on a Yellow hexagon on the nose wheel doors, a standard marking on Air Force HU-16s. (N. Taylor)





An overall Black HU-16B (serial (51-0476) of the 143rd Air Commando Squadron, Rhode Island Air National Guard. The lettering was in Red and the propeller warning stripe was White. The aircraft also carried a large Air National Guard badge on the fin. (T. Hildreth)



An overall Gray HU-16B on the ramp at McGuire Air Force Base, New Jersey during the Summer of 1968. The aircraft carries a lion head on the fuselage side along with the name SIMBA in Black.





A HU-16C (BuNo 131911) on the ramp at the Naval Air Test Center, Naval Air Station Patuxent River, Maryland during July of 1967. The aircraft carried the standard Navy Albatross scheme of White over Seaplane Gray and was fitted with a bubble observers window just behind the wheel well. (N. Taylor)

A Coast Guard HU-16E stationed at USCG Air Station Cape Cod (Otis Air Force Base) during August of 1974. The cabin overhead hatches are open for ventilation of the cockpit. The aircraft carries the overall White with Red and Blue trim scheme which was the final scheme carried by Coast Guard HU-16s. (G. Marshall)



This HU-16D was assigned to NAS Bermuda. It carried a map of Bermuda on the fin in White above the station name. (Navy)





This HU-16C stored at the MASDC facility at Davis-Monthan Air Force Base formerly served with the U.S. Naval Mission to Peru. It is unusual to find early model HU-16s in storage, since most were converted to the HU-16B configuration.

A HU-16E (7240) from U.S. Coast Guard Station Quonset Point, Rhode Island during the mid-1960s. This aircraft has nineteen White parachutes painted on the fuselage band, probably a tally of rescue paradrops. (Hugh Muir)





An overall White HU-16E (7243) assigned to Coast Guard Station Sacramento, California during April of 1979.

After it was retired from Coast Guard service, 7240 was placed in storage at the MASDC during 1971. The parachute markings were not carried on this side of the aircraft. (L. Buettner)



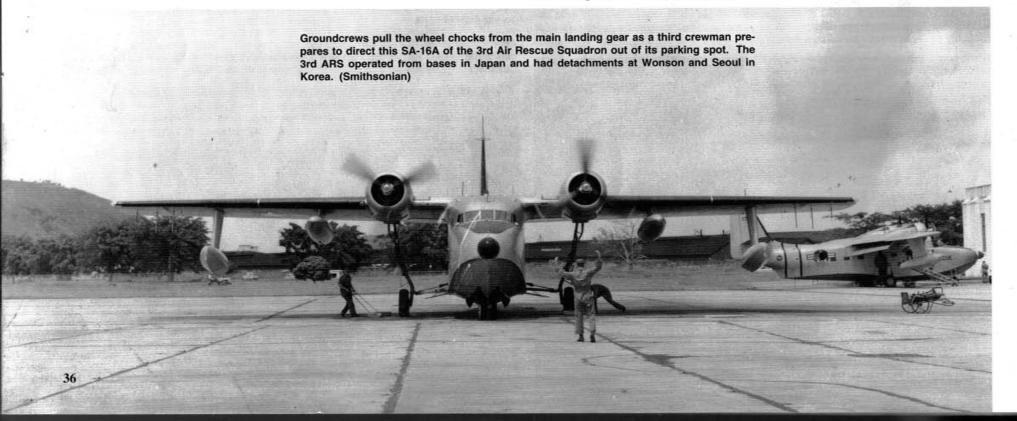
Korea

At the start of the Korean War the standard air-sea rescue aircraft operated by U.S. Air Force rescue squadrons was the SB-17, a rescue version of the venerable Second World War bomber. In July of 1950, the 3rd Air Rescue Squadron (ARS), operating out of Japan, received a detachment of SA-16s. The introduction of the Albatross now enabled aircrew downed over water to actually be picked up, sea conditions permitting. Maintaining continuous daylight patrols over the Tsushima Straits, the aircraft quickly started proving their worth, in some cases plucking downed pilots out of enemy waters after only minutes in the water. In the Autumn of 1950, the 3rd ARS, operating out of Japan, began to station SA-16s on ready alert at Wonson and Seoul airfields in Korea. When friendly aircraft went down off Korea's coast, one of the alert SA-16s was dispatched to recover the crew. In one heroic action on 11 June 1951, Lieutenant John Najarian landed his aircraft on the shallow, debris-filled Taedong River a mile south of Kyomipe, and picked up Captain Kenneth Stewart, who had bailed out of his flak-damaged F-51 Mustang at twilight. Covering flights of F-51s suppressed enemy flak units firing from both banks of the river, and used their landing lights to illuminate the low-hanging power lines which the SA-16 had to avoid. Against all odds, Lieutenant Najarian saved the Mustang pilot.

The SA-16s could not normally chance water landings in waves higher than five feet, and in the harsh Korean winters icing conditions made water landings and take-offs risky. Nevertheless, during that conflict the Albatross is credited with the waterborne rescue of some sixty-six downed aircrew.



A SA-16A makes a water take off from a lake in Japan during the Korean War. The aircraft was assigned to the 3rd ARS which operated the Albatross in the search and rescue role throughout the war. (Smithsonian)



Southeast Asia

During the Vietnam conflict the Albatross was used to a much lesser degree than it had been in Korea, since,by this time, the helicopter had largely taken over the search and rescue role. In June of 1964, the 31st Air Rescue Squadron (ARS) at Clark Air Base, the Philippines deployed three (later five) aircraft to Da Nang Air Base, South Vietnam to provide search and rescue service for airmen downed in the Gulf of Tonkin. Two aircraft of the 33rd Air Rescue Squadron based out of Naha Air Base in Okinawa, and several from the 36th Air Rescue Squadron, based at Tachikawa, Japan, also deployed to Korat Royal Thai Air Force Base, Thailand, to support USAF operations over that country and Laos.

By the end of 1965, all HU-16s in the Southeast Asian theater had been relocated to Da Nang Air Base, under the control of the 37th Air Rescue and Recovery Squadron. Initially, the aircraft retained the standard ARRS colors of Aluminum Lacquer with high visibility markings. A more subdued color scheme was adopted as aircraft began arriving in-country from stateside overhauls. The new colors were Dark Sea Blue uppersurfaces over Light Gray undersurfaces. This camouflage scheme made the aircraft far less conspicuous on the water and far less of a target to enemy shore gunners.

The two 33rd Air Rescue Squadron aircraft served in an unusual role during their wartime service. They were field modified with a large amount of additional communications equipment to serve as airborne rescue commend posts. Operating in this role they coordinated the movements of all rescue facilities in the area and acted as on-scene commander for rescue missions. This lasted until late in 1965, when it became obvious that the jury rigged aircraft could no longer cope with the ever growing amount of air activity, and they were replaced by Douglas HC-54s.

Starting in 1966, the HU-16s were gradually phased out and replaced by Lockheed HC-130s This HU-16B, believed to have been assigned to the 37th ARRS at Danang Air Base, South Vietnam, carries the Southeast Asia camouflage scheme of Dark Sea Blue uppersurfaces over Light Gray undersurfaces. The aircraft did not carry the reduced size national insignia, normally seen on camouflaged aircraft during this time period.





A HU-16B (serial 51-5278) of the 37th Air Rescue and Recovery Squadron (ARRS) on the ramp at Danang Air Base, South Vietnam during December of 1966.

and Sikorsky HH-3 Jolly Green helicopters. The last HU-16 mission was flown on 30 September 1967. Though the Albatross may have been old and slow, and its primary mission was command and control, it was credited with the actual rescue of seventy people, sixty of them combat crew members. This did not come without cost, however, and four aircraft were lost in action.

In one incident, an HU-16B of the 31st ARS rescued a F-105 pilot on 3 July 1965, after his aircraft had been hit my anti-aircraft fire and he ejected over the Gulf of Tonkin. One HU-16 was lost during a rescue attempt near Haiphong Harbor. A McDonnell-Douglas F-4C crew had bailed out over the Gulf and a HU-16B (serial 51-0071) landed to effect a rescue. Before the aircraft could complete the pick-up, it was hit by fire from North Vietnamese shore batteries, with two of the Albatross crew being killed.

Another rescue took place on 12 February 1967. Lieutenant Colonel Alan R. Vette, commander of the 37th ARS was acting as on scene commander of a rescue effort directed at saving the crew of a Navy RA-5C Vigilante down in the surf just off shore. When the rescue helicopters were unable to effect a pick-up, Colonel Vette, landed the Albatross in the rough water and was able to rescue both crewmen.

This SA-16A (serial 51-7143), in storage at Davis-Monthan Air Force Base during 1973, went into the MASDC directly from Vietnam after seeing combat duty in Southeast Asia. All openings and non-metal components have been covered and sealed against the weather.



Foreign Operators

Of all the Albatrosses operated by foreign armed services, relatively few were actually purchased from Grumman. Indonesia was the first export order, acquiring eight UF-ls for the TNI-AU (Indonesian Air Force). These were later augmented by two ex-USN, four ex-German, and one ex-Japanese HU-16Bs. Some of these aircraft were later transferred to the Indonesian naval air arm. West Germany ordered five UF-2 standard models during 1956, which were later augmented by three ex-USAF SA-16As. Ten new HU-16B/R-1820-82 engined aircraft were purchased by Canada in 1960, and Japan received six during 1961.

Meanwhile, in addition to these twenty-nine aircraft, many Albatrosses were either transferred to friendly foreign armed services, or were rebuilt and passed from country to country under the Mutual Defense Aid Program. Eventually Albatrosses were to serve in the armed forces of Argentina, Brazil, Canada, Chile, Greece, Iceland, Indonesia, Italy, Japan, Malaysia, Mexico, Norway, Pakistan, Peru, Philippines, Portugal, Spain, Taiwan, Thailand, Venezuela, and West Germany. Several countries operated more than one version. Spain, in fact, operated all three models, the HU-16A, HU-16B, and HU-16B/ASW version.

Tracking the migration of foreign Albatrosses can be quite a challenge. For example Mexico operated nine ex-USN HU-16Cs, four ex-Canadian CSR-110s, and an ex-Canadian ex-military civil machine. The Philippines had on strength four ex-USAF SA-16As, four ex-USAF HU-16Bs, two ex-USCG HU-16Es, and two ex-USN HU-16Cs. Greece possibly operated the most diverse lot, with one SA-16B/ASW, plus eleven ex-Norwegian SHU-16Bs, plus an ex-Spanish SHU-16B, along with an ex-USN HU-16C and an HU-16D.

In addition to the Search and Rescue, maritime surveillance and ASW roles, some of these foreign machines played rather unusual parts. The two HU-16Cs operated by Iceland were on

An overall Aluminum Lacquer HU-16A of the TNI-AU (Indonesian Air Force). The antiglare panel and all lettering was in Black and the national insignia was Red and White. This Albatross was not fitted with de-icers.





A HU-16B of the Indonesian Air Force on the ramp at Naval Air Station Alamdia, California during 1977. Late in their careers, the HU-16s of the TNI-AU were given a Gray over White color scheme with Day-glo Orange high visibility markings.

lease while they were evaluated as a fisheries patrol aircraft to replace the Icelandic Coast Guard's aging Douglas DC-4s. They were found wanting in required performance and were returned to U.S. stocks. One of the Royal Malaysian Air Force's ex-Canadian machines (which had also served in Chile) was refinished by Grumman's St. Augustine, Florida facility as a VIP transport for the Malaysian Prime Minister. Brazil's Albatrosses were as much at home on the country's vast inland river system as on the open sea, serving as air ambulances and mail trucks. In Argentina, several modified SA-16Bs were operated by *Lineas Aereas del Estado*, a military airline using Air Force flight crews and civilian cabin attendants, for service to Port Stanley in the Falklands. With the current situation in the islands, it is believed that this service has now been suspended. Norway's first of SHU-16Bs were flown by Number 330 Squadron at Sola and Number 333 Squadron at Andoya in northern Norway, at almost 70 degrees North latitude. Their mission was primarily surveillance of Norwegian coastal waters, but they were also used for SAR operations, ambulance flights, arctic mail, supply drops, ice reconnaissance, and polar bear registration.

Nationalist China received its first SA-16As during 1958 and after three decades of service phased out its last HU-16Bs in 1988. The Chinese Nationalist Air Force also has the sad distinction of having the only Albatross lost in air-to-air action. In January of 1966, three defectors from mainland China had arrived on the small Nationalist bland of Matsu. An Albatross was sent to pick them up and fly them to Taiwan, where they were to hold a press conference. While enroute to Taiwan, the aircraft was ambushed by three Peoples Liberation Army Air Force MiG-17s and shot down with the loss of all on board.

Known Albatross Operators:

Argentina: Seven HU-16B Brazil: Fourteen HU-16A

Canada: Ten CSR-10 (HU-16B), four CRS-110

Chile: Six HU-16B/ASW

Nationalist China: Fourteen HU-16A, three HU-16B

Philippines: Four HU-16A, eight HU-16B

Japan: Six UF-2

Greece: Thirteen HU-16B/ASW, two HU-16B Germany: Five HU-16D, three HU-16A Indonesia: Eight HU-16A, seven HU-16B

Italy: Twelve HU-16A

Mexico: Five CRS-110, nine HU-16B Norway: TwentyHU-16B/ASW

Pakistan: Four HU-16A Peru: Five HU-16B/ASW Portugal: Three HU-16A

Spain: Twelve HU-16A/B, thirteen HU-16B/ASW

Thailand: Two HU-16B Venezuela: Six HU-16A

A West German Navy UF-2 (HU-16B) takes off from its home base at Kiel, West Germany. The aircraft was overall Aluminum Lacquer with Black codes and a Day-glo Orange band forward of the fuselage codes. The emblem under the cockpit is the crest of the West German Navy. (German Navy)





A West German UF-2 (HU-16B) of MFG-5 based at Friedrichshagen during 1971. The aircraft was overall Aluminum Lacquer with high visibility markings in Day-glo Red. The SAR lettering on the nose was Blue with a Silver outline. The codes and anti-glare panel were in Black.

A UF-2, 60+04, of the *Marineflieger* on the ramp at Keil-Holtenan during September of 1971. The aircraft is overall Aluminum Lacquer with Day-glo Orange high visibility markings.





This RCAF HU-16A (CRS-110) is in the early Canadian search and rescue scheme of overall Aluminum Lacquer with a Blue bordered Red fuselage band and Black lettering. (CAF)

A RCAF CRS-110 outfitted with a triphibian kit for snow and ice operations. The hull skid is visible beneath the fuselage keel and both float skids are fitted. The aircraft carries the later RCAF scheme with a Red and White lightning bolt on the fuselage and Red, outlined in Black lettering. (CAF)





This ex-Coast Guard HU-16E was being prepared for shipment to the Philippines at Long Beach, California during 1977. The aircraft still had its former Coast Guard high visibility markings with Philippine Air Force insignia . An overpainted U.S. civil registration number is visible just under the Philippine insignia on the rear fuselage.

A Philippine Air Force HU-16D on the ramp at Nichols Air Base, near Manila on 3 June 1976. The darker areas on the fuselage are where the former U.S. Navy markings were painted out. The Navy BuNo was still carried on the rear fuselage and repeated in White on the fin.





This HU-16B of the JMSDF is in the late color scheme of Seaplane Gray with White hull uppersurfaces and Day-glo Red high visibility markings. The upper hull walkways were in Black. (I. Miyamoto)

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A Hu-16B (ex-BuNo 148326) of the JMSDF on final approach for landing during September of 1974. Japan operated the HU-16B in the maritime patrol, search and rescue and customs duties.





This HU-16B of the Japanese Maritime Self-Defense Force was a late production aircraft fitted with R-1820-82 engines. The aircraft was overall Seaplane Gray with White bordered International Orange markings. (I. Miyamoto)

A Japanese Maritime Self-Defense Force HU-16B taxies in toward the seaplane ramp at Konan during July of 1975. This aircraft, side number 9056 was ex-BuNo 148329.





This SHU-16B was flown by Escuadron 221, Spanish Air Force during 1977 The aircraft had Medium Gray uppersurfaces over Pale Gray undersurfaces. The code letters are Gray with a thin Black outline. This aircraft had originally seen service with the Norwegian Air Force before being transferred to Spain.

A Spanish Air Force HU-16B on the ramp at Casablanca, North Africa during July of 1973. Spain also operated the SA-16A and HU-16B/ASW variants of the Albatross.





This Mexican Air Force Albatross was previously operated by the Royal Canadian Air Force. The aircraft was White over Light Gray. (Grumman)

An ambulance meets a Nationalist Chinese SA-16A after a rescue operation. The aircraft was overall Seaplane Gray with a Black bordered Yellow fuselage band. The rudder stripes were Blue and White. (CNAF)





A SHU-16B Albatross of the Fuerza Aérea de Chile. The aircraft carries the service logo, FACH, on the nose wheel doors in White and the aircraft number, 568, on the upper right and lower left wing in White. The propeller warning stripe was Red with the word Peligro in Red on a White background.

This overall Aluminum Lacquer SA-16B of the Argentine Air Force carried the national insignia in an unusual location, high on the fuselage just behind the wing. The Argentine Air Force operated three SA-16Bs and the Argentine Navy flew four.





A SHU-16N of the Fuerza Aérea de Chile on the ramp at Quintero, Chile during January of 1970. The aircraft was overall Gray with White hull uppersurfaces. The rudder was Blue with a White star.

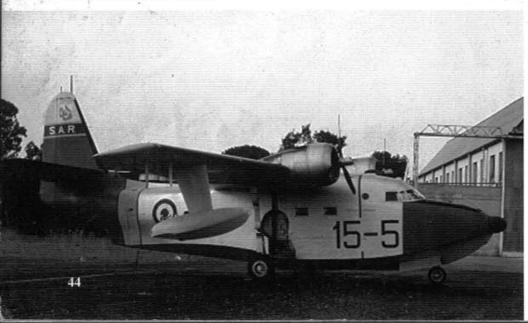
A SA-16A of the Brazilian Air Force. Besides at sea rescues in the South Atlantic, these aircraft were also used for search and rescue on the extensive river systems of Brazil. (via A. Linhares)





A SA-16A of the Brazilian Air Force on the ramp at Galeao during March of 1975. The FAB received a total of thirteen which were flown by the 2nd Squadron of Grupo 10 based at Sao Paulo, Brazil.

A HU-16A of the 15th Stormo, Italian Air Force. The aircraft was overall Aluminum Lacquer with Day-glo Red nose, tail, wing tips and floats. The fin stripe was Dark Blue outlined in Yellow and the bottom of the hull was in Yellow. The aircraft was based at Bari, on the Italian east coast.





Italian Air Force HU-16As carried at least four different color schemes during their operational lives. This HU-16A of the 15th Stormo was resting on Lake Barcciano during 1965. (Giorgio Apostolo via Enzo Maio)

This Italian HU-16A belonged to the 84th Gruppo based at Lake Barcciano during 1961. This aircraft carried three different side codes during its career, 140-22 after 1961 and 15-2 after 1965. The aircraft is now a gate guardian at Biella Airport. (Giorgio Apostolo via Enzo Maio)

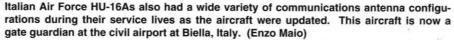




An Italian Air Force HU-16A of the 84th Gruppo on final approach for landing during 1959.. The CS code stood for Centro Soccorso (Help Center). The aircraft was home based at the Vigna di Valle seaplane base on Lake Bracciano. (Giorgio Apostolo via Enzo Maio)



This HU-16A of the 15th Stormo based at Roma-Ciampino Airport was preserved at the Italian Air Force Museum at Vigna di Valle (Rome). (Enzo Maio)



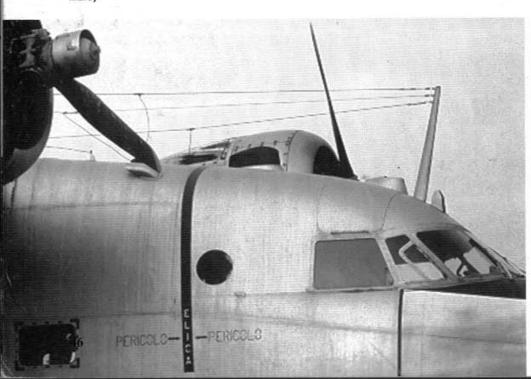


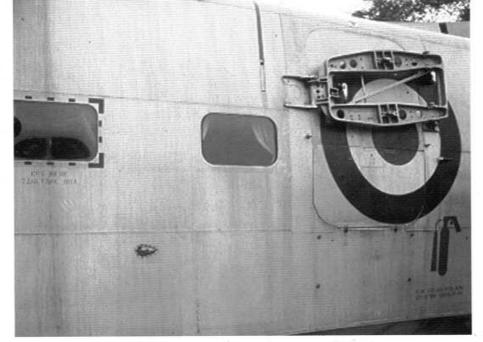
On 1 April 1962, the aircraft assigned to the Vigna di Valle seaplane base on Lake Bracciano were relocated to Roma-Ciampino airport. This aircraft was assigned to the 140th Squadron. (Giorgio Apostolo via Enzo Maio)



15-5 carries the last color scheme used by Italian Air Force HU-16As. The aircraft was Aluminum Lacquer, with a Yellow hull bottom. The nose was Day-glo Red, the float was Yellow and the codes were Black. (Enzo Maio)

The antennas on this HU-16A include the following: Antenna post with three HF antenna wires, DF Loop antenna (behind post) and TACAN blade antenna (in front of post). (Enzo Maio)





This is the JATO mounting brackets on the crew door of an Italian Air Force HU-16A. The Red dashed line around the observation window indicates the area where rescue crews should cut in the event of a crash. The fire extinguisher on the fuselage was in Red. (Enzo Maio)

A SHU-16B Anti-Submarine Warfare aircraft of the Royal Norwegian Air Force, The aircraft carried the squadron badge on the nose. The Albatross was Medium Gray over Light Gray with White codes. (Enzo Maio)



UF-XS

The strangest Albatross variant of all is probably the UF-XS. This was a modification carried out in Japan by Shin Meiwa Industry Ltd. during research and development work on their large four-engined PS-1 patrol amphibian. In December 1960, the U.S. Navy offered a UF-1 to Shin Meiwa for experimental purposes. It was disassembled, studied, modified, and what emerged from the Shin Meiwa hanger two years later was a very odd bird indeed.

In the UF-XS, the wing box beam between the two spars, the main nacelles, floats, upper section of the fuselage and the cockpit interior were standard Albatross. The rest of the aircraft was pure Shin Meiwa. Two additional engines were mounted on the wing, and two smaller engines were housed in a hump above the cockpit to drive compressors supplying air to the boundary layer control system. The hull, with a new spray suppressing design, was lengthened and a T-tail was added. By the end of March 1963, the UF-XS had completed twenty company test flights, and was then used by the Japanese Ministry of Defense and the JMSDF for additional flight testing. Upon completion of the research program, the aircraft was retired to display.

Shin Meiwa Industries highly modified UF-1 was designated the UF-XS and served as a test bed for the PS-1 patrol amphibian. The aircraft had a T tail, two additional engines on the wings and two small engines above the fuselage to drive the boundary layer control system. (Shin Meiwa)



The Shin Meiwa PS-1 patrol amphibian of the Japanese Maritime Self-Defense Force. Tests with the UF-XS greatly assisted in the development of this large seaplane. (Shin Meiwa)



Civil Operators

A number of Albatrosses have made their way onto the world's civil registers over the years. The first began way back during 1955, when three aircraft were transferred from the Air Force to the U.S. Department of the Interior and modified for providing air services in the Caroline, Marianas and Marshall Islands, collectively known as the Pacific Trust Territory. Five years later, Trust Territory Air Services and its three Albatrosses were taken over by Pan American, when the previous contract holder, Transocean Airlines, went bankrupt. Pan Am operated the Albatrosses in the Pacific until 1968, when jet service was introduced to the islands. Pan Am also used the Albatross for scheduled supply flights to the Seychelles satellite tracking station and in support of the Atlantic Missile Range.

The other scheduled Albatross operators were found in the Caribbean. For a brief time in the 1970s, Antilles Air Boats used four civilianized Albatrosses to supplement its fleet of Grumman Goose and Sikorsky VS-44 aircraft. In 1979, these aircraft, along with some others, were flown to Grumman's Stuart, Florida facility for extensive modification into civilian passenger aircraft. The airframe was inspected and returned to zero-time condition. The engines were modified to meet FAA certification and new auto-feathering propellers were installed. Twenty-eight passenger seats were installed in the cabin section, and the cockpit instruments were modernized. The resulting aircraft were designated G-111s.

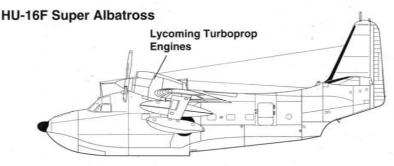
Chalk's International operated the G-111 for only a short time, since it was found to be uneconomical. Pelita Air Services in Indonesia acquired one to service oil platforms in that part of the world. The Government of Malaysia acquired two, as did the Smithsonian Institution. The Smithsonian aircraft aircraft were used on various expeditions in the Caribbean, along the Labrador coast, and on South American river systems. The Aero Union Corporation of Chico, California has developed a fire-fighting version of the Albatross. The aircraft can carry 1,000 gallons of water or fire retardant in two fuselage tanks. These can be refilled at an airfield, or while the aircraft is skimming over the water via two retractable scoops on the hull bottom. In this manner, the tanks can be filled in ten seconds. Today, however, most of the civilianized Albatrosses sit idle in storage yards.

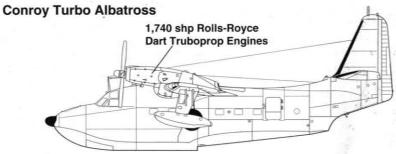
The main reason for the Albatross's failure as a commercial aircraft was that its large radial Pan American's HU-16B was used to provide services to the Atlantic Missile Range. The aircraft retained its former USAF serial number and had the Pan Am logo on the fin.



engines were much too powerful for the role the aircraft was now expected to play. They were uneconomical to operate on an aircraft which hauled only twenty-eight paying passengers - especially after the oil crisis of the mid-1970s. A number of enterprising firms tried to surmount this problem by mating more efficient power plants to the basic Albatross airframe. Actually, Grumman itself, back in 1957, had proposed to the Air Force an SA-16B fitted with Lycoming turboprop engines, and, in 1961, proposed a General Electric powered version to the U.S. Navy. Neither service was interested. Over the years countless other alternative power plant options were proposed by Grumman, none of which got past the drawing board stage.

The only machine which was actually converted to turboprop power was Conroy Aircraft Corporation's Turbo Albatross. Using a surplus SA-16A airframe (ex 51-004), they installed





This overall Aluminum Lacquer Albatross was flown by Pan American Airways for supply flights to the Seychelles Islands satellite tracking station. (N. Taylor)





This Albatross, parked on the ramp of NAF Andrews during October of 1980, was flown by the Smithsonian for survey work in various locations throughout the world. The aircraft was overall White with Blue markings and Black lettering.

two 1,740 shp Rolls Royce Dart R.Da.6 Mk. 510 turboprops (which had come from a Vickers Viscount airliner). The engines were canted some three degrees downward and five degrees outboard to compensate for the increased thrust during single engine operations. The aircraft first flew on 25 February 1970, with the civil registration N16CA, however, no commercial interest was aroused, and the project died.

This G-111 Albatross became widely recognized thanks to the opening credits of the TV show "Miami Vice." The aircraft was operated by Chalk International in the Caribbean, but proved to be uneconomical due mainly to fuel costs. The aircraft was rebuilt at Grumman's Stuart, Florida facility. (Grumman)





This was the Smithsonian's second Albatross, N695S. She was overall White with Medium Blue fuselage stripes, an Off White radome and Black lettering. The aircraft carried the word Smithsonian in large Black letters on the upper wing center section. (Dana Bell)

One of Chalk International's Albatrosses on display. The airline, a division of Resorts International, flew the Albatross from Miami/Fort Lauderdale to the resorts in the Caribbean and to the casino at Paradise Island, Nassau. The G-111 can carry up to twenty-eight passengers and a crew of three. (Enzo Maio)



