'Charlie' and the Lone Star

As Privateer 'Charlie 30' gets close to flight status, Nigel Price tells of progress so far

At the Lone Star Flight Museum, Galveston, Texas, a remarkable restoration is taking place that will return a Consolidated P4Y-2 Privateer to where it belongs – in the air! Known as *Charlie 30*, a reference to its call-sign from its fire-fighter days, the Privateer is fast approaching the end of a refurbishment that will see it resplendent in genuine US Navy colour scheme. The rebuild represents close on a decade's worth of work for the large group of dedicated volunteers of the Lone Star Museum assisted by members of the Commemorative Air Force.

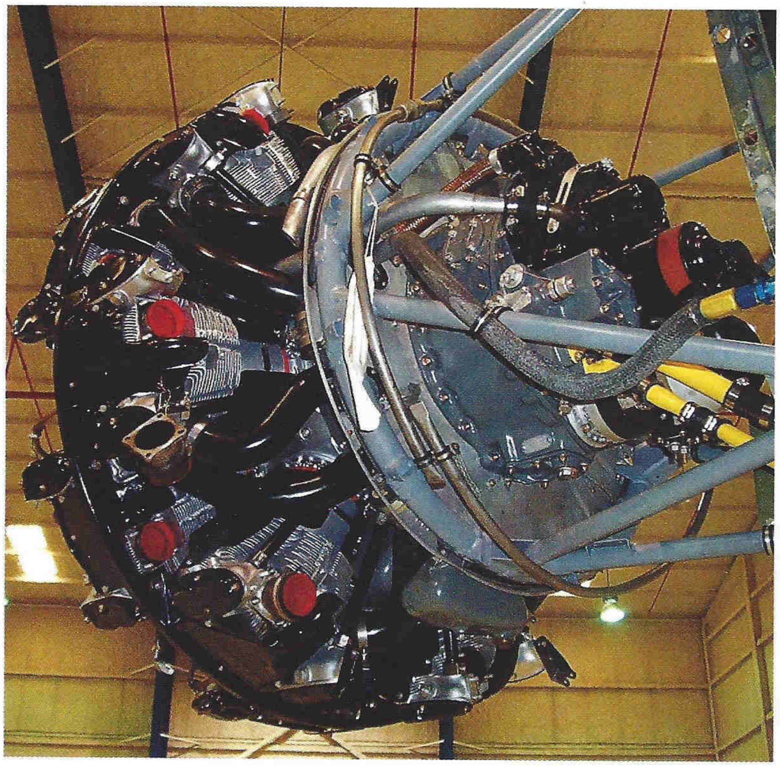
Consolidated originally developed the Privateer from the highly successful B-24 Liberator, in response to the wartime need for a dedicated long-range maritime patrol aircraft. The prototype flew on September 20, 1943, and differed from the Liberator in many ways, most notably by a large single-fin tail.

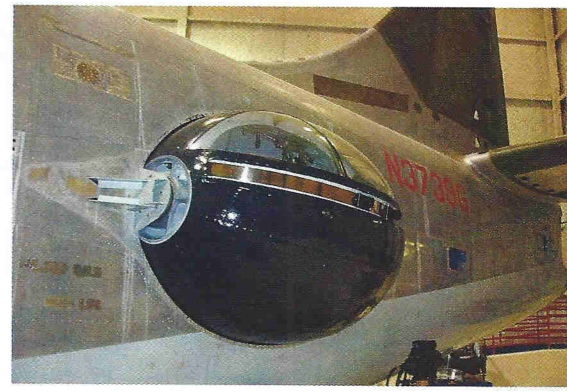
In all, 736 Privateers were produced, with examples serving in the Chinese, Honduran and French Air Forces, in addition to those used by the US Navy and a transport variant employed by the RAF. The final Privateer was retired from US service in 1964 and many were given a new lease of life as 'fire-bombers' with civilian operators.

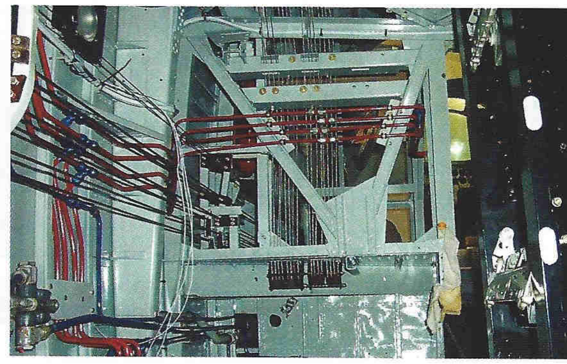
The US Navy accepted what is now the museum's Privateer from the manufacturers on March 28, 1945, and it entered service shortly before the end of World War Two as 59819. It was used by the military for over a decade, being struck off the inventory on June 30, 1957, with 2,040 flying hours to its credit.

Privateer 59819 'Charlie 30' is steadily being brought back to life.

N3739G 'Charlie 30' during its fire-fighting days. KEN ELLIS COLLECTION







ABOVE: *The recently overhauled starboard inner engine.*

TOP RIGHT: *During the summer of 2001, the Privateer's waist turrets were installed.*

ABOVE RIGHT: *The restored fuselage, aft of the cockpit, with just a few of the new pipes and cables on show.* ALL BILL CAMPBELL UNLESS NOTED

During 1959 it passed into civilian ownership, gaining the civil registration N3739G. It was then converted to fire-bomber configuration, which entailed the removal of the gun turrets and other military equipment, along with the fitting of large tanks in the bomb bays. It would fulfil this role for almost three decades.

The museum acquired it on January 15, 1991, from operator T & G Aviation. The six-hour ferry trip from its former home at Phoenix, Arizona, to Galveston two days later was its last pre-restoration flight.

Charlie 30 is being comprehensively rebuilt to original specifications, apart from its engines. In common with other fire-fighting PB4Ys, its four Pratt & Whitney R-1830 Twin Wasps had long since been traded for the more powerful, but thirstier, Wright R-2600 Cyclones. These units have now been overhauled and refitted.

Virtually every part has been stripped, inspected and replaced where necessary. The hydraulics, hoses, control surfaces, oil tanks and electrics have all had considerable time lavished on them. During the summer of 2001, the two side turrets were installed, reinstating the Privateer's portly appearance.

All new instrumentation, including radios and navigation aids, has been fitted, in preparation for its new life. Museum president Ralph Royce explained the reasoning behind this extra work and expenditure: "As the only Privateer in authentic World War Two markings, we expect the aircraft to be in demand on the airshow circuit and to cover over 2,000 miles, so the safety factor was paramount."

Whilst the exterior dimensions are huge, work inside often consists of struggling in dark, confined spaces, with the tail section proving especially difficult amid the labyrinth of wires and control cables, all of which have had to be replaced.

Communication between the cockpit and the tail also proved to be problematical. Occasionally, when a particular cable was pulled in the cockpit, by the time it had rubbed against other cables waiting to be secured along the length of the fuselage, it often looked like a different one was moving in the tail! This caused the rear flying surfaces to be connected back to front. The was quickly discovered during testing, but it still came as a blow to those who had given up so much time to complete the task when they found out they would have to start all over again. It is testament to them that they continue to return weekend after weekend, even after such setbacks.

One of the most daunting tasks involved removing the main spar, getting it x-rayed and refitted – all of which was undertaken by a team of just three. Again, the work involved replacing dozens

CONSOLIDATED PB4Y-2 PRIVATEER

Powerplants:	Four 1,350hp (1,007kW) Pratt & Whitney R-1830-94 Twin Wasp radial piston engines.
Dimensions:	Span 110ft 0in (33.53m). Length 74ft 7in (22.77m). Height 30ft 1in (9.17m). Wing area 1,048ft^2 (97.36m^2).
Weights:	Empty 37,485lb (17,003kg). Max take-off 65,000lb (2,948kg).
Performance:	Max speed 237mph at 13,750ft (381km/h at 4,190m). Range: 3,000 miles (4,828km). Service ceiling 18,300ft (5,578m).
Armament:	12 x 0.50in machine-guns, 12,800lb (5,806kg) of bombs or depth charges.