The Sunday crew has welcomed Lonnie Prather as their Day Captain. Receiving his captain’s bars in a recent ceremony, he now leads the group he has been a part of for the past few years.

Lonnie is a Viet Nam veteran, having flown Huey helicopters as a part of the 101st Airborne Division. During his Viet Nam tour he logged over 4200 combat hours and received 42 air medals.

Prior to being elected Day Captain, Lonnie had been lead 1st lieutenant in the Space Museum. Day Captain Riley Sanders suggested that Lonnie apply for his position. “I was honored that he would ask me to apply, but I told him that he would be hard to replace,” Lonnie told us.

Lonnie has set his sights on an ambitious program of cross training and new docent recruiting to meet the needs of the Sunday crew. “The crew is running very smoothly,” he says, “but at times we are short of people in the Goose, B-17, and membership. By cross training the docents, we will be able to do more with the people that we have, both in the Aviation and Space Museums.”

Lonnie looks forward to many years of providing an informative, rewarding, educational experience for the Museum guests.

Submitted by Bud Varty
Our Mission~

To inspire
and educate
To promote and
preserve aviation
and space history
To honor the
patriotic service of
our veterans

If your Birthday is missing from the list, please send an email to Katha Lilley, tootiekat@live.com  thanks..

JUNE BIRTHDAYS

3- Gordon Gilbert
4- Stanley Klimczak
5- Floyd Forster
5- Boyd Yaden
6- Jerry Angle
6- Robert Carlos
7- Kent Stuart
8- Gladys Pyne
10- Mick Dehart
10- Tom Maloney
11- Melba Smith
12- Dale Cochran
12- Kurt Peters
12- Walter Shippy
13- Don Edwards
14- Don Bowie
14- Chris Bell
14- Sheldon Scarrott
15- Aaron Peterson
15- Dwaine Smith
16- Richard Stannard
17- Donna Moon
17- Frederick Schwoch
20- Richard Anderson
20- Julian (Jef) Finch
21- Bob Dean
22- Ed Morehead
23- Don Van Etten
25- Jean Herkamp
27- Mary Brillas
28- Lester Herring
30- Bob Anderson
30- Ryan Harter
HELLCAT vs. CORSAIR

This piece is from the May 1946 issue of Our Navy magazine.

During my ten years as a docent at the Evergreen Air Museum, I’ve heard a lot of conjecture about which of these great aircraft is best. This fine piece takes us closer to an answer. Remember -- this was written very close to the end of WWII and was close to pilots’ memories.

It starts out .... "A Controversy That Has Ended Many a Beautiful Friendship"

Almost as bitter in the Navy as the famous feud between the carrier and battleship is the competition between two fighter planes, the F6F Grumman Hellcat and the F4U Vought Corsair. The author leans heavily toward the former, and will presently present his arguments—but in fairness will attempt to give both sides of the quarrel. Such a public and good-natured airing of this controversy is offered for two reasons: first to show that both aircraft rank among the finest planes of the late war; and the second to enumerate those basic qualities that our American fighters all have, which have given our nation superiority in the air.

It is not uncommon to see two naval aviators, otherwise good friends, come to a parting of the ways on the subject of the Hellcat versus the Corsair. The F4U pilot will thumb his nose at the barreled-shaped “Six—and the Hellcat pilot in return will spit and declare the “U” is only “a formation of flying parts.” How did this feud start? Perhaps it was born when the U.S. Marines adopted the Corsair, and tried to chase the Navy out of the sky—or perhaps it commenced some time ago, when the Navy, looking for a fighter-bomber, selected the Corsair for carrier work. However the contest started, it fanned itself into a blistering intensity that the end of the war left unsettled, and a quarrel which seems destined to remain so.

It is only fair to state that the F4U entered the race at a decided disadvantage. The Corsair commenced its naval career many years ago. Because of its phaeton and gull-winged appearance and 2,000-hp engine, it soon came to be regarded as a “hot” airplane with a personality as fickle as fate—an undeserved reputation, since the Corsair was as easy to fly as any other fighter. However, the first model did have a tendency to spin rather abruptly, and the low tail wheel made beginners’ landings sometimes hair-raising. Somehow the Corsair got the reputation of being “tricky”: as a consequence, a pilot climbing into her cockpit for his first ride was apt to be jittery.

The Grumman Hellcat, however, started its career with a solid gold background. Perhaps no plane manufacturer has enjoyed finer relations with the government than Grumman—as I have heard many pilots say:

“Anything he puts his name on, I’ll fly!” and so, the Hellcat was born with confidence and respect -- even before it was flown. No one doubted its ability---but that Corsair----

Part two, July issue Flightplan.

Submitted by: Bob Osborn

Questions and or comments: osbornrlawrence@frontier.com

F6F Grumman Hellcat

F4U Vought Corsair.
SIX TURNIN’,
FOUR BURNIN’

Part Two of Six

Prologue: Work on the Convair B-36 comprised nearly all of my six-year Air Force experience. The B-36 was initially powered by six P&W R-4360 engines, each driving a thirteen-foot, three-bladed pusher propeller, hence the term “Six Turnin’.” The B-36A and B-36B models were powered by just the six R-4360s, but from the B-36D model, and on, four jets were added.

After completing the USAF Aircraft and Engine School, two buddies and I signed up for B-36 Specialist School. This put us into the program about the time the six-engine B-36A models were all being returned to Convair for conversion into ten-engine RB-36Es. My first assignment was to join the ground crew of 047, followed by 069, both B-36B models, then on to 054 a recent B-36B-to-B-36D conversion.

Aircraft 047 had “old” engines when I arrived. Engine life between overhauls was set at 600 flight hours. The six on 047 had over 500 flight hours. Other B-36s may have a few high-time engines, but no other B-36 in any unit had all six of its original engines after 500 flight hours. We had great pride in those six engines and worked our butts off keeping 047 and her six engines going strong. But in truth we could not wait until we hit the magic 600 hours and got six brand new engines.

One particular problem on 047 was that the old engines would frequently blow a push rod packing and the resulting oil leak would terminate a mission. Red, our crew chief, maintained that the source of the problem was P&W not providing a large enough crankcase breather. The P&W representative maintained that Red’s young crew just did not know how to properly pack push rods.

One day the P&W rep hailed Red with, “I’ve been checking the records and I see you’ve finally got your crew packing those rods correctly.” “Come here, you SOB Private, uncowl that engine.” Forcing the rep’s face into the engine nacelle, Red continued, “Look there you donkey’s ass, see all those holes we drilled in this crankcase to relieve the pressure, that’s why our oil consumption has gone down.” The next month mod kits for the crankcase breathers were made available to all B-36s, Bees and Dees alike.

Oh! And when 047 final hit 600 flight hours, our sad old engines were declared service-test engines to see how many more hours were possible. Somebody else got our six new engines, and I was assigned to flesh out the ground crew of 069.

Aircraft 069 was a bone-yard queen. Her original ground crew had been given a brand-new-from-the-factory B-36D (082), and without anyone to care for her, 069 had been cannibalized for spare parts. If your plane had a bad magneto, or a frozen flap jack, swap it for one on 069. By the time a new crew chief was located and ground crew assigned 069 was a shadow of her former self. She aborted most missions for the first six months. Other crews delighted in calling us the Leper Colony, as in the movie “Twelve O’Clock High.” But the really good news was that 069 was chosen to be the first B-36 to have an airborne engine analyzer.

During those first months we built a brand new 069… one part at a time. Then during a maximum-effort exercise, 069 was the first to take off, leading the remaining fleet of B-36Bs, made all mission goals (timing, altitude & distance), and returned with all “six turnin’.” Even some of the newer B-36Ds could not say that. In this particular exercise all B-36s had to be airborne again within 24 hours and 069 made that goal also. Some aircraft were unable to fix all their problems and made five-engine takeoffs, having removed the sixth propeller.

Aircraft 054 next time.

Earl Scott
In caseAnyone Asks –

The Tillamook Air Museum is in the process of moving roughly 25 World War II-era planes to the site of a yet-to-be completed museum at the Madras airport. The collection belongs to aviation entrepreneur, Jack Erickson who announced last year plans to move the planes to Madras. They’ll be housed in a nearly 70,000 square foot hangar near the headquarters of Erickson Aero Tanker, a company that converts commercial airliners into planes that can be used to fight wildfires.

One plane already in Madras is “Chuckie” - the Museum’s B-17 Flying Fortress. Museum manager Mike Oliver says the aircraft will soon be renamed - “The Madras Maiden”. Oliver says that’s meant to honor not just the city, but also the history of the Madras airport. During World War II, it served as a training base for B-17 crews.

It’s not clear when the museum itself will be open to the public.

Home School Days: Waterpark Fun Day
Date: June 20 2014
Time: From 10:00 AM to 8:00 PM
Cost: Swimmers: $22 per person. Non-Swimmers: $12 per person

For more information on current events go to:
http://evergreenmuseum.org/upcoming-events/
The Department of Veterans Affairs (VA) recently announced the phased roll out of newly designed, more secure Veteran Health Identification Cards. The new cards are distinguished by additional security features and will have a different look and feel. In addition to being more secure, the card has been transformed into a Veterans Health Identification Card (VHIC).

Enrolled veterans can get more information about the VHIC by visiting their VA medical facility enrollment coordinator or the website, [www.va.gov/healthbenefits/vhic](http://www.va.gov/healthbenefits/vhic), calling 877-222-8387 or visiting their local VA health care facility.

Veterans who are not enrolled can apply by visiting [www.va.gov/healthbenefits/enroll](http://www.va.gov/healthbenefits/enroll), calling 877-222-8387 or visiting their local VA health care facility.
Friday, June 6 – 11AM ~ 70th Anniversary of D-Day Commemoration

The 70th Anniversary of D-Day will be observed in a special ceremony at the National D-Day Memorial in Bedford, Virginia. During this special event the Bedford Boys "Homage" sculpture by the late artist, Jim Brothers will be dedicated.

D-Day—6 June 1944—A huge airborne armada, nine planes wide and 100 miles long, carried American and British troops across the English Channel for the invasion of Europe Allied aircraft flew approximately 15,000 sorties.

As full darkness came to the Normandy coast, at about 10:00 P.M., unloading at the beaches ceased. In a single day over 150,000 American, British, Canadian, and French troops had entered France by air and sea, at a cost of nearly 5,000 casualties. From the American airborne on the far right to the British airborne on the far left, the invasion front stretched over 50 miles.
Membership Director Sandra Rodriguez reported that the Open Cockpit weekend was a great success. Thanks to all the volunteers who helped.

Staff members are having a Friday “Jean Day”. If wearing jeans, the staff member must contribute $5 to the O-2 aircraft. Volunteers may contribute to the fund, but they must remain in their “uniforms” – no jeans.

Stewart Bailey reported that the AF paperwork came through for the O-2. The AF wants the Museum to get the F-86D out of New Mexico by the end of May. He is working on one trip for both the O-2 and the F-86. The Tri-Motor is still targeted to leave in June.

The Tom Brokaw documentary “D-Day” will become part of the movie schedule beginning May 23.

Five dollars per showing.

Phil Jaeger reminds volunteers to turn the lights on in the morning in the Old Store area and turn them off in the evening.

Lonnie Prather was selected as the new Sunday Day Captain.

The Board of Captain officers will remain in place for another year: President, Paul Gelinas; Vice-President Malcolm Tabor; Secretary, Jim Lilley.

Jim Lilley
THE TITAN II

Standing proudly in the front display window of our Space Museum is a Titan-II, serial number 66-4319, configured as a satellite boosting Space Launch Vehicle (SLV). It is the only one on display in any museum anywhere. This article, however, will focus on the Titan-II in its initial use as an Intercontinental Ballistic Missile (ICBM). The Titan-II, on operational alert from 1962 to 1987, was the longest serving ICBM in the U.S. Air Force strategic arsenal. For most of its nearly 25 years of operation, Titan-II was the largest and most powerful American nuclear-armed missile. The Titan-II was less vulnerable to enemy attack because it carried its own self-contained, independent, internal **Inertial Navigation System** (INS)! The INS (black box) is a navigation device that uses a computer, motion sensors, and rotation sensors to continuously calculate, using dead reckoning, the position, direction, and speed of the rocket without the need for external references or ground computers. Having an INS allowed silos to be several miles apart, thus enhancing survivability in the event of a potential nuclear attack.

Titan-II is a two-stage rocket with a Mark 6, 9 megaton, W53 thermo-nuclear warhead, the largest single nuclear device ever mounted on an American missile. It could launch from its silo within 60 seconds of a command-to-launch and carry the warhead over 5,500 miles! Titan-II used new room temperature propellants consisting of Nitrogen Tetroxide (NTO) replacing cryogenic liquid oxygen and 50-Aerozine (50-percent Hydrazine and 50-percent unsymmetrical dimethyl hydrazine (UDMH)) replacing kerosene for the fuel. Having an overall length of 110 feet in ICBM configuration, a diameter of 10 feet, and a liftoff weight of about 340,000 pounds, it lifted off the launch pad with two independent rocket engines generating a combined thrust of 430,000 pounds. Each engine independently gimbaled (moved) for thrust vector and roll control to steer the vehicle. Stage 2 had a single gimbaled engine for pitch and yaw control but had to use the turbine exhaust for roll control. The two independent rocket engine turbo pumps were each driven by a generator operating at a fuel-rich condition to hold down the temperature of the hot gas at the inlet to the turbines. The oxidizer tank was pressurized by evaporated NTO which was heated in a heat exchanger by turbine exhaust gas. The fuel tank was pressurized by a bleed from the fuel-rich gas from the turbine discharge and cooled with fuel in a heat exchanger. This saved weight over the normal pressurization of a helium gas pressurizing system with its associated heavy tanks.

John Jennings

Next month we will continue a discussion of our Titan II missile.

Ref: Titan-II.com, History of Liquid Propellant Rocket Engines
(George P. Sutton)
As Rodgers and Hammerstein wrote for their 1945 musical *Carousel* "June is Bustin Out All Over." The song not only references the events occurring along the Maine coastline but also events in the world of aviation. Let's look at some examples.

**June 1, 1949** — A survey conducted by a firm of New York aviation consultants shows that for the first time in history air travel volume is greater than first class rail travel. Revenue passenger-miles for domestic airlines totals 603 million compared to 582 million for Pullman trains.

**June 7, 1912** — Capt. Charles Chandler of the United States Army Signal Corps test fires a Lewis gun fitted to a Wright “Model B” biplane flown by Lieutenant Thomas Milling in Maryland. It is the first time a machine gun has been fired from an airplane in the United States.

**June 8, 1995** *(Bosnia)* — Capt. Scott O’Grady, USAF General Dynamics F-16 “Fighting Falcon” pilot rescued in Bosnia after six days in hostile territory and lots of ants later.

**June 10, 1989** *(USA)* — Capt. Jacquelyn S. Parker becomes the first female pilot to graduate from the Air Force Test Pilot School.

**June 11, 1926** — The first flight of the Ford "Trimotor," an all-metal monoplane which competes with the three-engine Fokker and becomes a pioneer American airliner. It is known affectionately as the "Tin Goose."

**June 17, 1985** — NASA launched space shuttle Discovery (STS-51G) from Kennedy Space Center, Florida. The crew included Sultan Al-Saud from Saudi Arabia – the first person of Arabic descent in space. Three communications satellites were deployed during this mission.

**June 20, 1540** — Joao Torto, in Viseu, Portugal, builds two pairs of cloth-covered wings, an upper and lower, which are connected by iron hoops. While preparing to jump from the town’s cathedral to the nearby St. Matthew’s fields, he is killed when his elaborate helmet slips over his eyes and he falls onto a roof.

**June 20, 1941** *(USA)* — The United States Army Air Forces are established.

**June 26, 1909** *(USA)* — The first commercial sale of an airplane in the United States is made as Glenn H. Curtiss sells one of his planes to the Aeronautic Society of New York for $7,500. This action spurs the Wright brothers to begin a patent suit to prevent him from selling airplanes.

**June 26, 1946** *(USA)* — The United States Army Air Force and Navy adopt the “knot” and “nautical mile” as standard aeronautical units for speed and distance. A nautical mile is about 6,080 ft. (1,853 m), and 1 knot is the equivalent of one nautical mile per hour.

**June 27, 1995** — NASA launched space shuttle Atlantis (STS-71) on its way to dock with the Russian Mir Space Station. This mission was the first cooperative effort between the United States and Russia since the Apollo-Soyuz Test Project during the summer of 1975.

**June 28, 1960** — The Smithsonian Institution awarded the Langley Medal to Robert H. Goddard, 15 years after his death. Goddard was one of the most notable pioneers of rocket and space flight science.

**June 29, 1937** — Amelia Earhart and Frank Noonan arrived at Lae, New Guinea. At this stage about 22,000 miles (35,000 km) of their journey had been completed. The remaining 7,000 miles (11,000 km) would be over the Pacific. More on that next month.

Spencer Vale
OREGON’S WW II MEMORIAL

It took a super crane, nearly four hours and the expertise of a rigger and a granite finisher from Vermont to raise the 33-foot-tall, 15-ton obelisk that is the centerpiece of Oregon's World War II Memorial which is being constructed at Wilson Park at the Oregon State Capitol in Salem.

Beneath a 33-feet-high obelisk (because Oregon is the 33rd state in the union), a world map will take shape with markers for major battles and theaters of operation. On a low wall along the corner bordering Cottage and Court streets, the names of the Oregon service members who died in WWII will be engraved. Two black granite benches will invite visitors to sit and reflect on Oregonians' shared sacrifice during wartime. Nearly 1,500 granite pavers need to be placed on the concrete surface of the memorial.

It will honor not just members of the armed services, but everyone on the home front who demonstrated support through their work in the shipyards, in hospitals and on the farms. Even schoolchildren, who held scrap metal drives and hauled wagons full of tin cans to make their small but significant contributions, will be acknowledged in a series of storyboards that highlight individual Oregonians.

The memorial is scheduled to be dedicated on June 6th, the 70th anniversary of D-Day.
With the departure of the TBM-3 Avenger that was on display at the Museum, I know there is a deep sense of sadness and loss amongst the docent corps and all aircraft enthusiasts. As I was named for an Avenger pilot (Lt. Stewart Ostrander, who flew aboard the USS Boxer), I too feel the loss as it was one of my favorite aircraft. However, as one aircraft departs, three more are in-bound, which will become favorites over time. Each one has a unique story; together they help tell the bigger story of aviation which we communicate to our visitors.

The Cessna O-2A Skymaster has been featured in the last two issues of the newsletter. It has a wonderful combat history in Southeast Asia and has been a real pleasure to research its story through the material that has been shared by the men who flew her. By the time you read this, the O-2A will have made it to McMinnville -- ready to begin restoration and eventual public display. Financial support has been received from the volunteers, staff, and public to acquire and move this little bird, but the need is not over. She'll require a number of new parts as well as volunteer TLC to make her shine again; we all appreciate your continuing support on this project.

Joining the O-2A is a North American F-86H Sabre, on loan from the National Museum of the US Air Force. This aircraft has spent the last 20-30 years on display at Cannon AFB in Clovis, New Mexico, but was determined to be surplus to their needs and was offered to Evergreen. A crew made up of David and Richard Martinez, and volunteer Thom VanWormer went to New Mexico to disassemble it and load it on a flatbed truck. When done with that, they will proceed to AMARG to get the O-2A in the same load. The F-86H’s history is not as well-known as O-2’s but we’re working to try and change that. It’s known that it did fly with the 198th Fighter Squadron of the Puerto Rican Air National Guard before being turned over to the US Navy for missile test work. Unlike a number of other F-86Hs she was not destroyed as an aerial target, but rather returned to the “boneyard” before going to Cannon AFB to be part of their “Heritage Circle.” The F-86H will make a great addition to the Museum’s collection and will, I’m sure, find a legion of fans among those who love the “Nifty Fifties” jets.

Last but not least, we have plans afoot to do a little trading to acquire a Beechcraft C-45H Expeditor. Given many names over the years (some nice, others not so), the C-45 was also known as the “Twin Beech,” the SNB, or in less polite circles as the “Bug Smasher.” This particular aircraft was built in 1942 as an AT-7 navigation trainer and was later modified as a passenger / VIP aircraft. Many C-45Hs flew as squadron support aircraft with the Air National Guard during the 1950s and 60s; this one is no exception. (The 142nd Fighter Wing of the Oregon ANG at Portland had at least one, although not this particular bird.) The trade deal is being worked out with Mr. Taigh Raimey of Stockton, California, one of the world’s foremost restorers of Beech D-18/C-45 type aircraft. While it will not be flyable, the C-45 is complete and will need only cosmetic restoration to make it display ready. (FYI, we’re trading him the Cletrac tow tractor and an excess Jeep Trailer.)

These “new” aircraft may not have the glamour of the warbirds that fought World War II like the Avenger, but these machines impart important aspects to the history of flight, and together, they help to inspire and educate those who come through our doors every day.

Please feel free to contact me at stewart.bailey@sprucegoose.org if you would like to donate and help with these aircraft, or have stories about them that you’d like to pass on.