



The Flyer

July 2003
Vol. Eleven, No. 7

High Sky Wing of the Commemorative Air Force
Midland, Texas - Hangar: 432-563-5112

On the Web at
HighSkyWing.org

Member Appreciation Evening

Our next Wing meeting, Thursday, July 24th, will be a special High Sky Wing member appreciation gathering, with a chance to get a ride in our newest plane, the PT-19 or our old standby, the SNJ. In addition, there is no need to bring a covered dish to the meeting, as we will be cooking hamburgers for the evening meal.

If the weather permits, and it will probably be just plain hot, the usual pilots will be at the hangar to give rides from about 5 p.m. Col Jim "Scramble" Moore will be on hand to demonstrate his own unusual technique for rapid boarding of the PT-19, just in case we have to scramble the planes to defend Midland! If you want to fly, please remember that climbing into the back seats of both planes is not fun in tight pants or jeans and slippery-soled shoes, so dress appropriately.

In addition to the airplane rides, we will have a number of World War II re-enactors at the meeting, and they will be part of the evenings entertainment, complete with lots of authentic uniforms, weapons and other gear. Be sure to make it out next Thursday. See you there!

Spotlight on Our Members

In this issue, we start a new feature, which will spotlight the background of some of our more interesting Wing members. We begin the series with Col William "Bill" Gates, who many of you may remember as one of our first Maintenance Officers when we were working on the B-23 but who we now learn has had a lot of experience with some other very rare birds.

Thanks to Col Blake Cowart for not only suggesting this new feature but also working with Col Gates to collect the info for this article. Please look inside for the rest of the story.



From the Back Office

by Col Ralph Gillette

It has been a whirlwind month of June. After the two weeks in the north country and another week in Dallas, I finally settled in for some time in Midland. This meant getting out to the hanger and at least standing around and supervising the work in progress. The good news is that there isn't much work that needs to be in progress. We are flying two planes, the SNJ and the PT. There are still some problems with the J2K as you will find outlined in the maintenance or Ops column. The other good thing that is happening is that we now have two more intrepid aviators to drive the planes around the sky.

Speaking of driving around the sky. I must say that it is a lot more fun to be on the ground yelling and screaming as the two SNJs go by on a fly by, than sitting in the back seat dehydrating from the green house effect of the canopy. I made the two hour round trip to Hale Center for the Fourth of July fly by and it was a very long two hours. Sure glad we pay our pilots that big salary so they will gladly spend half a day bumping around the west Texas sky on their way to some unknown location.

I am told we had about 55 at our wing meeting Thursday, June 26th. I do know, looking out at the faces, there seemed to be more in attendance than usual. Very good turnout for this late in the year, especially with the Fourth coming up so quickly. Keep up the good work. The more people we have, the more interest will be generated and the more people will come. It would be nice if we had to move the planes outside to make room for more tables at the meeting. Maybe after air show.

In parting, remember, the meeting for July is going to be on the fourth Thursday, July 24th. Also, remember to bring the checkbook to buy some of those new shirts and caps Ernie made up for us. According to our Exec. Gena, we will have a very interesting meeting with reenactment people and best of all, no potluck, it is hamburger night. See you there and remember, wear something CAF.

From the Flannel Wrench Locker

by Col Bill Coombes

Summertime and the livin' is easy ... unless you are trying to get the Tarbaby airborne! I incorrectly reported last month that all the HSW airplanes were airworthy. NOT QUITE! Naturally, the J2K is being contrary, with brakes being a problem that we think are causing some of the other issues that Randy had noted in his three very short flight attempts. New Wing member and PT pilot Danny DUEWALL has volunteered to take the lead in figuring out the problem (thanks, Danny) and we hope to be able to have it going soon ... defining "soon" might be a week, a month, or???

Elsewhere Randy will talk about our 4th of July adventures to Hale Center and over the city of Midland (and Ernie's house). Thanks to "expert planning and leadership" (a.k.a. blind luck), we arrived over the Hale Center celebration EXACTLY on time. Ditto our fly-over time for the Midland celebration. Wing Leader Gillette was involved with the first flight, as was the former owner of our PT-19, H.D. Butler, who came up and delivered us three Ranger engines for use as spares. H.D. flew the mission to Hale Center. The airplanes performed well, although 101 used considerably more gas than 24. We shall check on that in the next few weeks. The good news is that the Wing received some money for both of these flights.

On the maintenance front, Tony McCarthy has been working diligently on the new tug: it now has new wiring, lights that work, new filters, new plugs, and he has sanded it in preparation for some new paint work. At the Wing meeting please give him an "attaboy." It is vital for the long-term that we encourage and involve younger members like Tony. He is a big help to me at Airsho and he is doing a fine job on the tug project. If you want to help him out, he has some things that need attention. Tony also has the tire-rubbing problem on the German staff car figured out and has a solution...

Jim "Scramble the Alert Fighters!" Moore and our own Tuskegee Airman, Rudy Silas, have almost completed the extensive repairs on Wayne Bissett's Bellanca Scout (a.k.a. Tarbaby II). I believe their next project will be some fabric work on my airplane, or perhaps some wedding dress manufacturing; they haven't figured out which! When the Scout is out of the hangar, we will call for a MASSIVE clean-up and inventory of the hangar in preparation for AIRSHO. I hope that a number of you will turn out for that, in spite

of the heat. Our hangar is still "our hangar" until the new Commemorative Center hangar is built, so we need to clean it up.

Finally, we have several possible fundraising projects in the works. The golf tournament of course, and the cantina during AIRSHO week, but also we probably will be called on to host Seminar Series dinners for BGEN Robin Olds in September and test pilot Dick Rutan in December. Gena Linebarger has graciously consented to help me out with both of these events, and, like the Yeager and Black Sheep dinners, we can make some significant money to help with our ongoing expenses. Please volunteer to help out.

Until next month, righty-tighty, lety-loosey.

Executive Views

by Col Gena Linebarger

DON'T MISS OUT – Wing meeting on July 24th will be a great time for all! Come early, around 5:00, and we'll start the evening with rides in the SNJ, the PT-19 and maybe even a Star Duster (weather permitting). As a special addition, a private collection of WWII memorabilia will be on display for viewing. What about food? DON'T COOK, our own HSW chefs will be cooking and serving hamburgers with all the fixin's. You still get to donate your usual \$5 at the door for food but without the hassle of bringing a dish. Friends and family are welcome. Come out and enjoy a fun filled evening at the High Sky Wing!

New HSW member shirts are now available for \$25 along with hats for \$10.

AIRSHO is just around the corner and our traditional Cantina is always a good moneymaker for the Wing. Needed are someone, or several, to take on the responsibility of organizing and running the Cantina Wed., Thurs., and Fri. of Airsho week.

Looking forward to seeing you soon.

As the Props Turn

by Col Randy Wilson

The 4th of July was a busy day at the HSW hangar, beginning early, while it was still relatively cool, when Col H.D. Butler and I launched in the SNJ for a familiarization ride to qualify Col Butler as our newest Wing SNJ pilot. H.D. is also qualified in the new PT-19, being its former owner. H.D. also flies a Tora Kate and was already rated in the AT-6/SNJ, so the flight was mostly getting used to our SNJ's peculiarities.

Once the temperatures had warmed up enough for serious flying, Col Bill Coombes, followed closely (in the back seat) by Wing Leader Ralph Gillette led in SNJ 24 on a mission to Hale Center, just north of Lubbock, for a fly over in celebration of the 4th. H.D. piloted SNJ 101 with yours truly manning the rear cockpit, for once having enough free time and hands to learn how to use all the features on my new GPS.

Thanks to a combination of the skilled flying of all involved, and perhaps the GPS and more than a bit of luck, we arrived over the town exactly on time at 2:10 p.m., made a couple of passes over the parade and crowd gathered on the main street and then set course back to Midland.

By the time we arrived back at MAF, we all needed a good deal of water and cooling down, and the planes needed a good drink of fuel. After a debrief of that mission, we briefed for the second mission of the day, a fly over of downtown Midland, followed by a fly over of the festivities at Col Ernie Webb's place a Sky West. H.D. decided he had done enough "shake and bake" in the sky for the day, so Bill and I flew this last mission of the day by ourselves and once the planes were again safely hangared, called it a day. The good news is that all the flights went well and we received significant donations for both flights to help keep 'em flying.

See you at the hangar next Thursday for airplane rides and what sounds like a fun Wing meeting.

No, not that Bill Gates!

by Cols Blake Cowart & Randy Wilson

Col William Gates may not be as famous as the similarly named founder of Microsoft, but our own Bill Gates has had a very interesting career working with some very odd birds indeed. Bill's family moved from New York state to Bradenton, Florida, where Bill graduated from high school and with a machinist father, Bill decided to pursue an engineering career. He attended the Curtiss-Wright school in Glendale, Calif. in 1942 and enlisted in the Army Air Forces in January, 1943. Bill was trained as a mechanic on B-17s and B-29s and then sent to the Philippines in June of 1945 as part of the 5th Bombardment Group of the 13th Air Force, which operated B-24s. After the war ended, he reenlisted and was assigned to Pope Field at Fort Bragg, N.C. where he was a crew chief and flight engineer on C-47 and C-82 transports. Bill was discharged in December of 1946 and began looking for engineering work in the civilian aviation world.



In 1948, Bill went to work at Northrup, where he did layout work on the RB-49, the all jet-powered "Flying Wing" (above) which many consider the grandfather of the current B-2 stealth bomber. In 1949, he worked on a very different aircraft design called the "Jupiter" at Jamieson Aircraft in Deland, Florida. The Jupiter was a 3-place light aircraft (next page) that was to cruise at 150 m.p.h. on only 115 horsepower and be not only efficient but safe — it was advertised as a design that could not stall or spin. Since the designer, Charles M. Jamieson had worked at both Culver and Beech before founding his own company, the Jupiter's front half does resemble a Culver Cadet but the "V" tail is clearly reminiscent of the Beech Bonanza.



Our featured Wing member, Bill Gates in 1952, when he was an engineer with Hughes Aircraft.



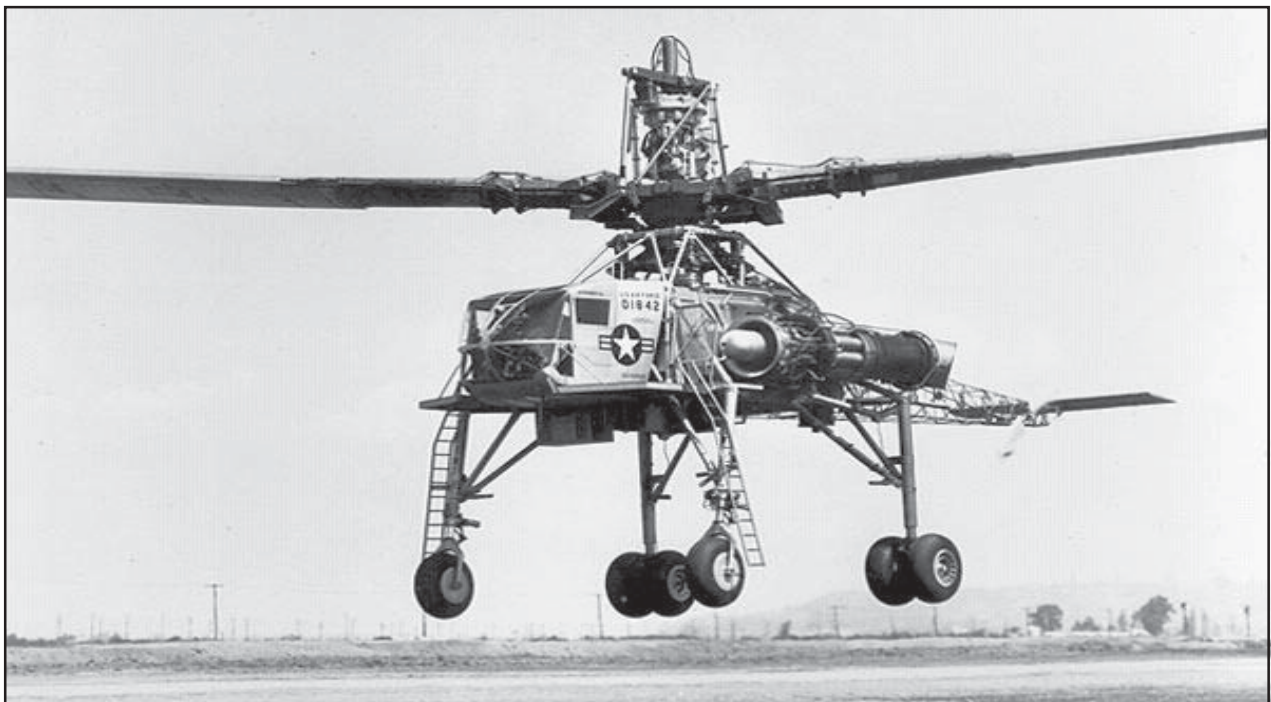
Bill next joined Hughes Aircraft in Culver City, Calif. in 1950, where he worked on two heavy-lift helicopter designs, the XH-17 and XH-28. The XH-17 was a limited flight test design in response to a military proposal for a helicopter that could air lift a tank or similar large and heavy load. The contract for the XH-17 was originally awarded to Kellett Aircraft in Pennsylvania but was sold to Hughes in 1948. As a flying test rig, the XH-17 utilized as many existing parts as possible, including a cockpit from a Waco CG-15 glider, landing gear from both a B-25 and C-54, and a bomb-bay fuel tank from a B-29. A pair of General

Electric J35 were modified to route bleed air into the 130 foot two-blade rotor, where the air was mixed with fuel at the rotor tips in four burners. With the giant rotor turning at only 88 r.p.m. the engines and pressure-jets were expected to produce 3,480 horsepower.

Ground tests of the XH-17 began in December of 1949 and the first flight occurred in October of 1952. Testing continued until late in 1955 after the basic design concept was validated, the aircraft having lifted loads of over 10,000 pounds. Bill also worked on the XH-28 "flying crane" designed to lift military vehicles and load up to 20 tons. Like the XH-17, the XH-28 was designed to use a pressure-jet system to drive a four-bladed rotor, and a full-scale mock-up was completed before the project was cancelled at the end of the Korean War.

In 1955, Bill helped form the Microwave Radiation Co. in Gardena, Calif., where he and five colleagues designed and manufactured antennas for high-speed aircraft, including the T-38 Talon supersonic trainer, and missiles, including the Thor and Titan.

In 1961, Bill returned to Hughes Aircraft where he worked until 1989. While there he worked on a variety of projects, both air, land and space-based, including the first infrared night sight for the TOW antitank missile, an optical rendezvous system for the Apollo space program, a guidance unit for the HIT antiballistic

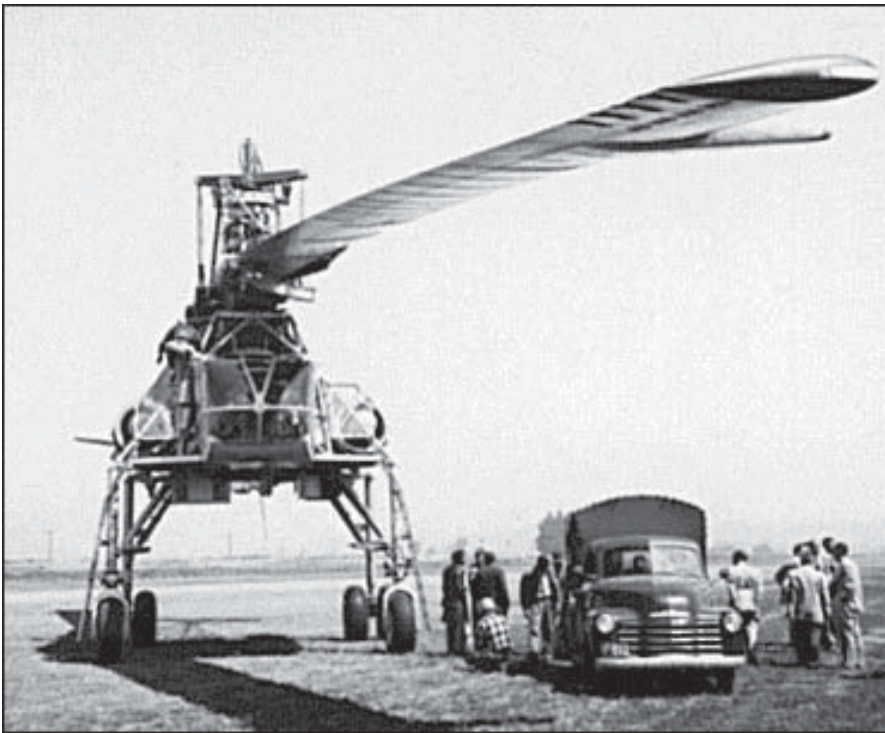


The XH-17 heavy-lift helicopter with its 130-foot diameter rotor driven by pressure-jets in the rotor tips. Bill worked on this project while at Hughes Aircraft from 1950 to 1955.

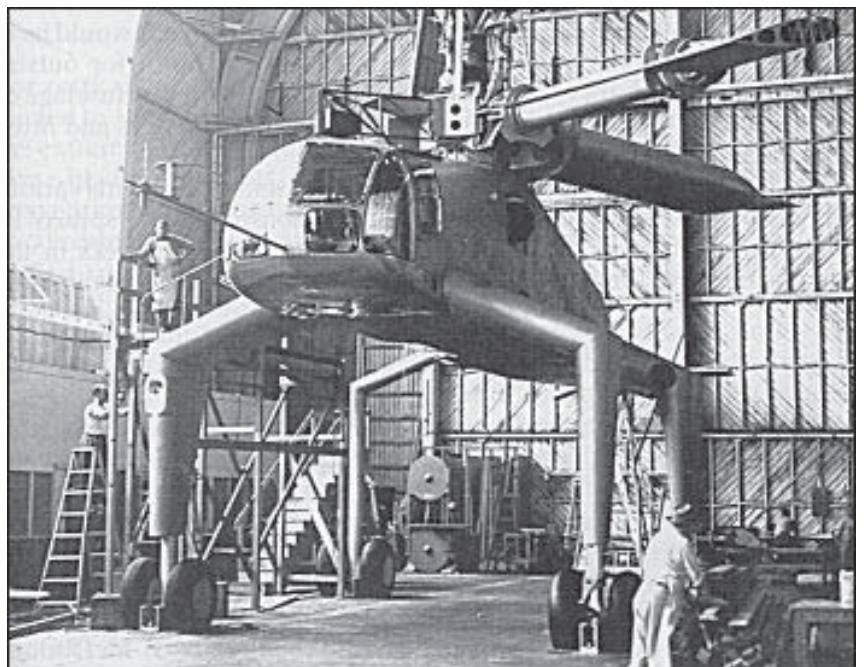
missile program, the multispectral scanner and thematic mapping system for the LANDSAT/ERTS orbital imaging platform and also various designs for the STARWARS program. Bill retired in 1989 and in 1992, he and his wife Jacqueline moved to Midland to be close to their family and escape the Los Angeles traffic. Bill and Jacqueline celebrated their 56th wedding anniversary in June of this year, having been introduced in 1947, while Bill was passing through Colorado

Springs, Colo. to visit a wartime buddy. They have a daughter, who lives in Midland, four grandchildren, three great-grandchildren and son who is now deceased.

Next time you see Bill or Jacqueline at a Wing meeting or around the hangar, be sure to say hello. We hope to talk Bill into speaking at a future meeting on some of his experiences with these odd birds, as it sounds like there are some good stories to be told.



The XH-17 was a flying test-bed and early "flying crane". It was designed to



The XH-28 was built only as a mock-up and never flew.

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More Members' Stories?

by Col Randy Wilson

If you enjoyed the brief look back at Col Bill Gate's interesting career, our first High Sky Wing member spotlight article, why not let us know who else has an interesting story or stories to tell?

Personally, I had no idea of Bill's involvement in the early "flying cranes" or in the development of various optical and multispectral imaging devices. When Blake e-mailed me the draft of Bill's bio, it was only then I learned of his work with LANDSAT and other imaging platforms with whose data I worked while in graduate school.

I'm sure that other members have equally interesting backgrounds and histories that we would all enjoy hearing about. If you have a candidate for such an article, please contact me with either a complete article or just an outline of the member's background and career and we'll consider it for inclusion in future editions of the newsletter. Thanks.

High Sky Wing Elected Officers

Wing Leader: Ralph Gillette - 570-8093 ofc
Executive Officer: Gena Linebarger
Adjutant: Mary Alice Tidwell
Finance: Bob Stine
Operations: Randy Wilson - 352-4258 cell
Maintenance: Bill Coombes - 689-8359 home
Safety - David Linebarger
Hangar Phone: (432) 563-5112
all numbers are Area Code 432 unless indicated

What's Happening & When

July 24 - Wing meeting
July 26 - Summer Advisory Board
Aug 7 - Wing staff meeting
Aug 28 - Wing meeting

Next Wing Meeting is Thursday, July 24th at 7:00pm in the Hangar
