

On Final

EAA CHAPTER 25

MINNEAPOLIS / ST PAUL, MN

JULY 2014

A High Speed Split-S Over My Cadet Roommate in a T-6

By Lou Martin



In the spring of 1949, I was a twenty-year-old Air Force aviation cadet undergoing basic flight training in Waco, AFB Texas. The aircraft I was flying was a North American AT-6, which during and before WW II was used as an advanced trainer for fighter pilots. However, in 1949 the Air Force had tons of AT-6s left over so they planned to utilize them as basic

(Continued on page 5)

Timing the Corvair Engine

by Pat Hoyt

On Sunday, Chapter 25 members Ned Lebens, John Schmidt, Mary Hoyt, and Patrick Hoyt checked the timing on the Corvair engine installed on N63PZ.

Preparation of the engine (see Photo 1) consisted of removing the front top skin so the rear of the engine

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Photo 1—Preparing the Engine

“Say Intentions”

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"Say Intentions"



-an update from Kim V. (Gudgeon Pin)
Johnson, EAA Chapter 25 President

During this 4th of July season I am reminded how grateful I am to be an American citizen and a member of an organization that values American principles. EAA Ch. 25 is an organization that allows me to participate in and enjoy my love of aviation. It also allows me to contribute back to my community by sponsoring post-high school and

summer camp scholarships and participating in Young Eagles events. I am grateful that I can share these values in common with Ch. 25 friends.

For our chapter meeting on July 16th, Gordon Duke, our Chapter Secretary, will be telling the story of his Rans S-10 project, which is now in the BSAEC hangar for final assembly and flight testing.

EAA Chapter 25 had a Young Eagles rally at Airlake on Saturday, June 21st, 2014. We flew 59 kids. We had a nice summer day for our rides event. There is a lot of interest from kids and parents in this program. **We are looking for more pilots and ground crew to help with our monthly program.** Contact Kris Olson if you can help.

We have a busy month with a Young Eagles event on 7/19, the Pietenpol convention at Broadhead on Thurs. 7/24 – Sun. 7/27 and then Air Venture Sun. 7/28 – Sun. 8/3/2014. Have fun and safe travels to all.

The Ch. 25 banquet will be at the Eagan Community Center again on Sun. 10/5/2014. Put that date on your calendars and start planning your silent auction items. Take your raffle tickets along in your travels and sell your 60 tickets to the aviation enthusiasts you will meet during your travels this summer.

Don't forget to pick up a package of: pre-cooked brats, hot dishes, hot dogs, hamburgers, buns, condiments, deli salads, beans, chili, chips, cookies, plastic utensils, paper plates, cups and paper towels, soft drinks and bottled water and bring them to the Chapter meeting.

We will not have Chapter 25 Pietenpol build sessions on Wed. 7/23 or Wed. 7/30 due to our participation in Pietenpol Convention and Air Venture activities. The next Pietenpol build session will be on Wed. 8/6/2014.

There is no lack of opportunities for involvement in Chapter 25 activities. We are looking for more help with Young Eagles (pilots and ground crew), a Food Coordinator, a BSAEC hangar maintenance task force, newsletter article writers and a librarian. See me if you are interested in serving in any of these capacities.

Four of my goals for Chapter 25 continue to be:

Encourage Chapter 25 membership by young men and women with an interest in aviation.

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ON FINAL



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This Month: Wed Evening July 16th—BSAEC at Airlake

Grill on at 6pm, Meeting starts at 7pm

Please bring something to share: pre-cooked brats, hot dogs, hamburgers, condiments, deli salads, beans, chili, chips, cookies, plastic utensils, paper plates, cups and napkins, soft drinks and water. We also need a couple volunteers to cook!

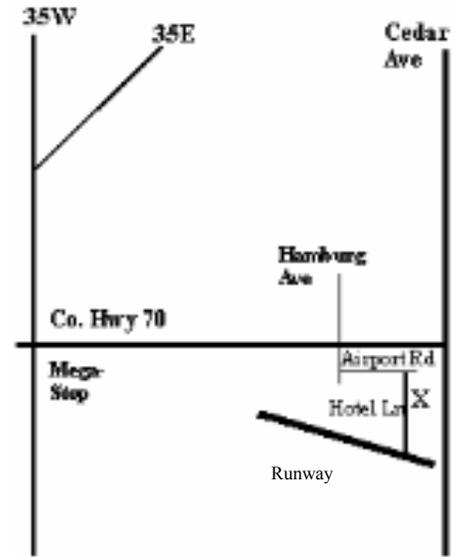
Program: For our chapter meeting on July 16th, Gordon Duke, our Chapter Secretary, will be telling the story of his Rans S-10 project, which is now in the BSAEC hangar for final assembly and flight testing.

Saturday July 19th Young Eagles To volunteer to help with young eagles, contact **Kris Olson:** 651-675-6826 ksimpson2@yahoo.com

Monday Aug 4th—Friday Aug 8th—Aviation Careers Camp at MCTC taught by Peter Denny. More information on page 8.

Sunday Oct 5th—Annual Banquet, Eagan Community Center

Directions to BSAEC (Chapter Hangar at Airlake): South on I-35 to Hwy 70 (Megastop), then East to Hamburg Ave (3rd stop sign.) Right turn and South to airport perimeter road. Left on airport perimeter road then right on Hotel or India Lane. If the surface is firm, please park on space between hangars.



EAA Chapter 25 Meeting Minutes for Wednesday 18 June 2014 Presiding Officer, Kim Johnson, President Bert Sisler Aviation Education Center at Airlake Airport, Minnesota

The meeting was called to order by Kim Johnson, President. Member Lou Martin led the pledge of allegiance. A moment of silence was observed for those who have made the ultimate sacrifice for our country. President Johnson asked that members remember Norm Tesmar and Dick Bylund who are recovering from illnesses.

Members Ron Oehler and Kris Olson were thanked for helping with the food service. Members who contributed to the chapter newsletter were recognized. Special thanks were given to Pete Gavin for organizing the newsletter. Guests were welcomed.

President Johnson spoke about scholarships. (1) A scholarship of \$1250 was given to a UND student and this was matched by the Ken Dahlberg Foundation. (2) A scholarship of \$500 was given to a Minn. State – Mankato Dept. of Aviation student and this was matched by Kevin Gruys and the Aircraft and Marine Ins. Agency contribution. (3) The Chapter also distributed \$1,305 earned in EAA Young Eagle credits and some gas money for EAA Air Academy Camps to: Maranda Magnuson, Connor Senkyr and Blake Schwieger.

Treasurer Pat Hoyt presented a short report on the Chapter finances.

Member Kris Olson reported on the Young Eagles program. The last event was cancelled due to bad weather. The next Young Eagles meeting will be Saturday, June 21, 2014. On Saturday, June 28, 2014, is a special Young Eagles program for children with special needs: “I Can Fly”. To volunteer to help with young eagles, contact Kris Olson: 651-675-6826, ksimpson2@yahoo.com.

Secretary Gordon Duke reported that this Rans S-10 which is housed in the Chapter hanger had passed its annual inspection. Gordon is now looking for a CFI to fly with him for a few hours of dual refresher training – a requirement of the insurance company

Member John Koser reported that he had a large assortment of ANC fasteners; nuts (Continued on page 7)

Final Approach Trivia Quiz from John Schmidt

In WW II, which model of Allied plane shot down a German plane (over German soil), in what is called the last dogfight of the Western Front (European Theatre)?

Answer on page 7

Timing the Corvair Engine

(From Page 1)

could be observed while it was running, and fabricating a sheet metal panel that was temporarily installed to control the flow of cooling air. Clamps were used to hold the temporary panel to the nosebowl and to the side baffles. Timing marks were made on the harmonic balancer and on the engine case. These marks should be seen to "line up" when hit with a timing light when the engine is turning above a particular RPM.

Prior to running the test, the airplane was tied down to a jeep, and everyone involved discussed various roles, hand signals, and safety scenarios (Photo 2). Of particular importance was keeping away from the spinning prop, as the people holding or observing the timing light have to stand between the leading edge of the wing and the prop while the engine is running. Also, a telephoto lens was used for the camera.

The timing was first checked at about 3/4 throttle, and then again at wide-open throttle (Photo 3). The entire test took only a couple of minutes, and went very well. Most of the work was in the preparation that was done ahead of time.



Photo 2—Planning the test strategy



Photo 3—Checking timing at wide-open throttle

Piet Progress

By Pat Halligan

The Pietenpol builders group has been busy working on the airplane at Dale Johnson's workshop. We meet every Wednesday, except the third Wednesday (chapter meeting night) at Dale's house in Burnsville, from 6-9pm. Not only do we have members attend, but we have had their spouse, friends, dads, etc. join us, so head on over, one of these nice summer evenings.

The first picture (right) is the aircraft fuselage, turned upside down. We are working on the main landing gear (Continued on page 6)



High Speed Split-S

(Continued from page 1)

trainers. It was realized that this action may result in a higher pilot wash out rate, but since we were not involved in a shooting war, they figured that could absorb the higher attrition rate. In addition, this enhanced training program, for the pilots that satisfactorily completed it, would be more proficient and safer pilots.

The T-6 Texan is a two-place advanced trainer, built by North American Aviation and has the flight characteristics of a fighter. It is not an easy airplane to master and was an excellent advanced trainer for future fighter pilots. (There is a saying among pilots that states, "When you master the T-6, you are ready to fly the F-51 Mustang, the F-47 Thunderbolt, or other high powered fighters.") It is powered by a 550 or 600 hp engine, is aerobatic, and has a cruise speed of 145 mph and a maximum speed of 205. However, Dick Sykes, in 1983, set a speed record at Reno, Nevada, of 226 mph.) The Texan was affectionately known as the "Pilot Maker" because of its role in training fighter pilots for combat. During WW II, more than 16,000 T-6s were built, with an estimated 500 still flying and others being restored. Due to its high relative engine power, speed and complexity, it was not considered suitable as a primary trainer. However, in 1948, the Air Force had thousands of them in storage and since the country was not at war, a high washout (failure) rate for initial student pilots was not considered a problem. It was phased out of regular Air Force service in 1958. However, more than 500 T-6s are still flown by war bird enthusiasts, and several were modified to resemble Japanese Mitsubishi Zero fighters, or Kate torpedo bombers for the movie, Tora-Tora-Tora. These Japanese replicas are very popular at air shows and put on a very realistic simulated Pearl Harbor Attack, ring low-level flyovers, roaring engines and loud realistic pyrotechnic explosions.

As my cadet colleagues and I gained more experience in the nimble T-6 Texan, we envisioned ourselves as future fighter pilots, ready to do battle with our enemies. However, in the spring of 1949 the U.S. was not engaged in a shooting war, so we would have to be content with testing our superior pilot skills against each other. One exciting activity we employed, to prove we were destined for great aerial feats, was to perform a surprise attack on each other over the Texas prairie. When scheduled for a solo flight, I would check the flight schedule to see if one or more of my classmates were also flying solo.

My roommate, Archie Dulley, had been encountering problems relating to rudder and aileron coordination and to help overcome this deficiency, I sat up with him, after lights out, holding two books to simulate rudder pedals while he



Lou in 1949 with an AT-6

used a toilet plunger to simulate an aircraft control stick. We worked on his "hands-and-feet" coordination problem until he could move both in perfect coordination. Because of this temporary setback, he was slow to solo and behind the rest of us in accomplishing required flight training maneuvers. He was a serious pilot, although a little slow, and not prone to stretching the envelope like many other cadets.

Archie was scheduled to fly solo and perform supervised landings at our auxiliary field Prairie Hill. I walked to my assigned aircraft, performed a preflight, and with an 18-year-old crew chief assisting me, strapped into the cockpit. With the whine from the electric inertia starter and puffs of smoke belching out from the exhaust, I brought the nine cylinders of the 550 hp Wasp engine to life. Hearing, and feeling, this big round engine spring to life always produced a heart-throbbing rush of excitement and I realized how fortunate I was to enjoy such an exhilarating life, at taxpayers' expense. Taxiing out for takeoff I observed a long line of T-6s waiting for departure clearance and fell in line behind them. As I did, I noted that I was positioned directly behind Archie Dulley. He had not seen me and as the line of aircraft slowly moved forward, I positioned my Texan in such a way, that if he turned around he would not recognize who was following him.

Fifteen seconds after Archie took off, I was climbing out (still unobserved) behind him. He leveled off at 3,500 feet and set up a course for Prairie Hill. I continued my climb to 7,000 feet, while keeping the sun at my back so as to hide my position. I closed the canopy, tightened my lap belt and shoulder harness, set the engine power to maximum continuous and started a pursuit dive on Archie's aircraft. I was diving at around 250 mph, which gave me a speed advantage over Archie of around 105 mph. When about 500 feet above him,

(Continued on page 6)

High Speed Split-S

(Continued from page 5)

and closing fast, I rolled inverted and passed over the top of his aircraft by about 200 feet. I observed a startled look on Archie's face as I flashed over him upside down. As soon as I was safely clear of his aircraft, I started a "Split-S" maneuver, but quickly realized that I was too low, and too fast, to recover in a half loop. I rolled the aircraft upright, reduced power and pulled out straight ahead in a 4-G pull-up.

With my aircraft once again heading skyward, I heard several calls on the radio stating, "T-6 diving on Prairie Hill, what is your call sign?" This call was repeated several times. (I felt a sense of fear. It was not a fear of an early encounter with the Grim Reaper, but a fear of being washed out, because of a stupid careless act.) I kept the engine power at maximum continuous and wanted to get as far away from Prairie Hill as possible. When about 50 miles out, and flying in an opposite direction, I called the control tower and requested practice radio steers. (My intent was to get myself on a tape recording, proving that I was no where near Prairie Hill Airport earlier.)

After landing, I went to the barracks, took a shower, and was changing into my Class A uniform in preparation for evening mess when Archie walked in. He was quite excited and started telling me about the stupid S.O.B. that passed over him inverted as he was approaching Prairie Hill. I asked him if he knew who performed such a stupid act. He said, "No, but his instructor and the operations officer are attempting to find out, and when they do his ass is toast." I agreed with Archie's sense of indignation, and told him that I sure hope they catch that stupid idiot!

The next day as we assembled in the briefing room, Captain Beck (the crotchety operations officer) called the group to attention and in a loud authoritative voice barked, "I want the cadet who dove on Mr. Dulley over Prairie Hill Airport yesterday to step forward." Even though my stomach was turning knots, I knew that if he was asking the guilty pilot to step forward, he did not know whom it was. He repeated this command as the assembled cadets, including myself, looked around to see who would step forward, but no one did! Captain Beck left the room, with a grimaced grunt, stating he would find the guilty S.O.B. and when he did, his ass would be history. (Lucky for me he never found the S.O.B.)

Archie and I remained good friends and following graduation from pilot training, I intended to let him know who it was who dove on him inverted over Prairie Hill, but I never got the chance. Unfortunately he was killed flying an F-80 Shooting Star jet fighter during the Korean War and never found out.

The above article is an excerpt from Lou Martin's book 'Close Encounters with the Pilots Grim Reaper.' Lou can be contacted on pilotlou@aol.com



Piet Progress

(Continued from page 4)

legs, bracing wires, etc... and the rear tailwheel. At the same time other members were working on the center section of the wing (first picture below). In the middle of that section will be the gas tank. Probably a 16 gallon tank + or - a gallon. The third picture (second picture below) is the work being done on one of the wings. The aileron has been cut out and re-installed, bracing wires inserted and recently, inspection plates attached. The wing will be a three piece wing. Left, right and center section.

If you want to help build or just visit, stop over at Dale's workshop and join the fun.

—Pat Halligan



Wing Center Section



Wing Outboard Section

Stuff for Sale/Wanted

For Sale: Flightcom Model 403mc Voice Activated Monaural Aviation Intercom.

Four place, panel mount. New in box. Email roehler533@gmail.com

Wanted: Your dusty old VFR instruments for my Pietenpol project. Please contact Ned Lebens 952-567-3329 or nlebens@gmail.com

For Sale: Ellison EFS-2 Throttle Body Injector
don schlais <d.schlais@hotmail.com> 763-479-8228

For Sale: Aviation Books. Oldies, classics, some brand-new, some autographed. Inexpensive! Cutting down my library. I can e-mail a listing. Noel Allard. nallard@unitelc.com.

Meeting Minutes from June (Cont'd from P 3)

and bolts, which he would like to share with Chapter members. Member Hemchan Ramnarine invited the chapter to his high school graduation open house. The announcement was in the newsletter date, time, and place.

The program for the evening was presented by member Mike Tompos who told of his experiences flying VFR in the complex airspace around Los Angeles, California. The theme of his talk was "how to fly over LAX at 3500 feet without talking to anyone and not getting a citation." He told how to navigate the special VFR air ways around LAX.

There being no further old or new business, President Johnson adjourned the business meeting.

Submitted by Gordon Duke, Secretary

Answer to Final Approach Quiz (See page 3)

Lt. Duane M. Francis, pilot, and Lt. William S. Martin, his observer, were scouting ahead for the 5th Armored Division, which was heading northeastward towards Berlin. They were flying along at 800 feet in their Piper L-4 (Cub) "Miss Me" when Francis spotted a motorcycle racing up the road below. He made a descending turn for a closer look when they spotted the German Fieseler Fi-156 Storch hugging the terrain below them.

Giving chase and armed only with .45-caliber pistols, they opened their side door and opened fire on the German observation plane. After trying to evade the L-4 and with holes in his windscreen, the Storch pilot tried to make a hasty landing in a beet field. He lost one wing and cartwheeled the plane into a pile of parts. Francis landed his L-4 in an adjacent field, and then he and Martin captured the two Germans who had survived the crash, in what has been widely recognized as 'the last dogfight of the Western Front.'



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Chapter Events

July 16th Chapter Mtg at BSAEC, 6 pm
(see page 3 for map & directions)

July 19th Young Eagles at Airlake
contact Kris Olson (see p2) if you can volunteer

Aug 4-8 MCTC Aviation Careers Camp
taught by Peter Denny (see below)

Oct 5th Annual Banquet in Eagan CC.

Future meetings 8/20, 9/17, 10/15, 11/19,
1/21, 2/18, 3/18, 4/15, 5/20, 6/17, 7/15

"Say Intentions" from page 2

Encourage younger members to get actively involved in Chapter 25 activities.

Have all members get to know each other better.

Perpetuate the Chapter 25 Mission of furthering interest in building custom aircraft and supporting all with an interest in aviation by sharing our knowledge and experience.

"Much may be done in those little shreds and patches of time which every day produces, and which many people throw away."

--Charles Caleb Colton, British cleric and writer

Looking forward to seeing you at the meeting on 7/16/2014!

MCTC Aviation Careers Camp

Aug 4-8 at Minneapolis Comm. & Tech. College

Take off on an educational adventure in aviation and aeronautics in this action-packed camp! You'll be introduced to a variety of careers in this field, including aircraft mechanic, pilot, air traffic controller and unmanned aircraft system (UAS) technician.

Chapter members, recruit your kids, grandkids and Young Eagles. The cost of the camp is \$199.00 and this includes all transportation and lunches. Kids over the age of 14 can register by calling **MCTC on 612-659-6500**. The number of kids is 15 max. for the camp.

Scholarships are available! For further information and to apply, download our scholarship application and submit it along with your registration and waiver forms. For more information on scholarship applications email: victoria.lauing@minneapolis.edu.

Pilots... I would like to recruit pilots and aircraft for Friday August 8th to fly students, maybe three aircraft and pilots plus ground crew.

Contact Peter Denny at peterthepilot99@gmail.com

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