The cover photo this issue is of Paul Grice's immaculately restored T-34B. Paul's airplane is not the product of one of the T-34 specialty shops, but is the result of his own long hard labor. The photo above was taken in November by Charlie Nogle over central Illinois. Paul earned the BEST T-34 award at Oshkosh 1990!

You have no doubt already found your "surprise gift" in your newsletter envelope. As you probably already know, Lou Drendel has written many of the In Action series and other books for Squadron/Signal Publications. Some of his titles include: ...AND KILL MIGS, AIR WAR Over Southeast Asia (Volumes 1 & 2), USAF PHANTOMS in Combat, CENTURY SERIES, F-15 EAGLE, F-16 Fighting Falcon in Action, F-5 in Action, F-106 DELTA DART in Action, B-52 Stratofortress in Action, A-10 Warthog in Action, F-104 STARFIGHTER in Action, C-130 Hercules in Action, F-14 TOMCAT in Action, and SR-71 Blackbird in Action—these are his titles on my shelf, anyway. Gladly, we can add the T-34 MENTOR in Action to his list of publications.

I know you will find the book interesting and informative. Lou spent a lot of time writing and illustrating it, and he is especially proud of the information he was able to collect from Japan. The Japanese are very sensitive about any publicity regarding their military and try to keep things as quiet and low key as possible. We have made inquiries there before, working through Allison Gas Engine Division of General Motors (who should have good access since they provide them with Turbo-prop engines for their T-34s), and still ended up empty handed.

As I have emphasized in past issues, I no longer have the time necessary to perform all of the duties of the editor of this newsletter. With a young family and rapidly growing business responsibilities, there just isn't the time. However, Linda Durbano contacted me and has offered the services of her company which specializes in newsletter production. Linda's husband, Dave, is one of our members and read of my plea for help. So, if you notice anything different about this issue, it might be because of this new change.

I will still serve as editor and point of contact, but I will forward articles and submissions to Linda's company. She will handle typing, layout and graphics, then send everything back to me for printing and mailing. I will still maintain the mailing list, stamp, address, and mail the envelopes, so I will still be deeply involved. Linda will also be in contact with the continued on page 23
Good News! Dan Blackwell is flying again. He is flying a Beech T-34B which was imported from Portugal and he has put in many months of work restoring it. Since Dan sold his award winning T-34A a few years ago he has not been flying, merely burning a lot of gas and making a lot of noise in the T-28A money pit that soaked up the profit of his T-34A sale. Dan, if you divide 60 by 12, you find the number of flying hours you can get in the T-34 for each hour of T-28 noise, and then you add in more time when you factor out the oil burn. Heck, you might even be able to put dessert back in the evening meal at the "HOME." (Editor's Note: For those of you who don't know Dan Blackwell, he funds his flying with his job of running a large nursing home somewhere in or around Pittsburgh, Pennsylvania.) Dan says this new '34 is for his boys, but I hope we see him in it, too!

Civilian Fleet Population: From the activity my telephone has been getting the past six months, there are a bunch of new T-34 owners out there banging away on project T-34s. The imports from Chile and Indonesia, plus others from various foreign lands like Portugal and the Philippines, and the museum releases within the U.S. has made a dramatic increase in the T-34 population. I think that the 300th flying privately owned T-34 will take to the air in late 1991 or certainly during 1992. It is going to be hard to pinpoint the exact 300th ship, but I will attempt to take a census late this year and give a report of T-34 demographics. If everyone is careful and we don't break anymore, we might just hit 350 by the beginning of the new century.

T-34C Demonstrator: Beech has sold their T-34C demonstrator to a private owner in the Atlanta, Georgia area. This happened recently and I do not have the name of the new owner, but we hope to have a story on this for the next newsletter. The T-34C production is now history, the last order of 19 having been delivered two years ago to the Navy. What is in store for the Navy fleet of T-34Cs must be only conjecture at this time. If they ever do come on the market, a long line will form up quickly.

FAA Memorandum on 360 Degree Overhead Approach: We are including a copy of a recent FAA Memorandum and we suggest that you keep a copy of this in your aircraft. Over the years, many towers and airport managers have argued that the 360 degree overhead approach was either reserved for the use of military aircraft or that it required maneuvers that were considered aerobatic, and on this basis, denied approval when a request was received. Some airports have filed violations for its use.

We are not advocating that you demand the approach, but we do suggest that when on the ground, you pull this copy out of your aircraft and educate the folks who have denied or questioned the legality of this useful approach. Hopefully the next time you or any other pilot requests this option, there won't be a problem.

This MEMO will appear in the next copy of the EAA-Warbirds magazine. This is another example of EAA working for Sport and General Aviation interests. I urge you to support the EAA and AOPA, as these organizations are the only ones fighting the bureaucracy to protect our use of the Nation's airspace and airports.

Emile Mouhot Memorial: Last November I received a letter from Dick (Mac) Maguire outlining a plan to place a memorial at the new VAC building at Tico, Florida to honor the memory of Emile Mouhot. (Editor's Note: A copy of this letter can be found in the "Letters to the Editors" section of this newsletter.) The loss of Emile, one and a half years ago, was certainly a tragic one to his family and many friends. It was especially so to the T-34 folks who flew with him and enjoyed his enthusiastic company at the many fly-ins he attended. Emile was lost flying his T-34, a ship which he owned for almost 20 years.

The idea to have a memorial is certainly appropriate but it is very difficult to make work. We have lost about fifteen members over the years, mostly in accidents. To my recollection, our record on fund raising for these lost members has not been very outstanding. I hope others who knew Emile will join in and make this a success. For Emile Mouhot pictured in the cockpit of his aircraft
information contact Dick Maguire at 813-749-1228. By making your check payable to the VAC, the gift becomes tax deductible. If you are wondering, the T-34 Association did send a flower tribute to the service on behalf of all the members.

- Continental IO-550 Dipstick Warning: Operators of Continental IO-550B engines, please take note of what recently happened to a T-34 owner. This is a case of Murphy's law at work and it could happen to anyone. In this instance, just the act of checking the engine oil level, ruined a brand new IO-550 engine (if you consider 2 hours brand new!).

It seems that when Continental designed the new IO-550 engine, they opted to install an additional hold down point between the middle cylinders and the outside cylinders. This cylinder hold down feature created a conflict with the oil dipstick tube for space, so the old reliable IO-520 dipstick tube was redesigned below the upper casting which receives the dipstick cap. The redesign resulted in a tube which is reduced in diameter by about 50%. Furthermore, the tube is no longer straight, but it is bent twice to jog around the new cylinder tie down fitting. All of this makes the insertion of the dipstick more difficult and you literally need to force it into the tube.

The early IO-550s were furnished with a dipstick made of a slim straight piece of spring steel. This stick has the ability to snake down the narrow bending tube to reach the oil pan. But, it also has the capability of being mis-routed into the breather opening which leads to the opposite side of the engine. Here, the spring steel stick gets caught up in the crankshaft and connecting rods and is torn to destructive shreds of metal.

This mistake is surprisingly easy to make. If you angle this stick towards the breather opening during insertion, it can easily slip, taking the wrong route. It takes about the same amount of push to force the stick in the wrong direction as it does to insert it properly. The feel is also about the same.

Continental discovered this problem and, in order to correct it, they designed a new dipstick. The new stick carries the part number 652171-4, and it is a MUST for every IO-550. The new stick is thicker and is no longer made of spring type steel. It incorporates a 90 degree bend 3/4 of the way down from the cap. The new heavier and stiffer stick, plus the bend, makes it much more difficult to insert into its proper position (which will make you think you are doing something wrong, if you are used to the spring steel stick) but it should preclude forcing it into the breather opening (but it can still be done so be careful, know what you are doing).

Editor's Note: Because this section of Charlie's letter has lasting maintenance relevance, it is also printed separately as a maintenance insert.

—Best Regards, Charlie Nogle

T-34B, N6VY

Below is a photograph of Stan Pinsler's T-34B, N6VY. Stan purchased this airplane from the late Walter Mayer.
After the dissatisfaction and discouragement of Oshkosh '89, there was a lot of nervous anticipation about Oshkosh '90. Would we really get to put up our big formation again? Would enough guys show up to get the big formation up? Would we all remember how to do it after a two year layoff? Yes, yes, and yes, and we had fun doing it!

Five Lima Lima airplanes, plus Dean Spencer, showed up at Fon du Lac on Wednesday morning to begin putting together practices. The Lima Limas were flown by Gene Martin, Rick Gretz, Ted Adams, George Kubal and Lou Drendel. Before noon we were joined by Bill Beitler, Frank Schmitt, Gordy Drysdale, Dick Tews, Ed Messick, Terry Brennan and Ed Lovejoy. Our flight (call sign: "Wednesday Flight") that day consisted of three diamonds in a Vee, and the experience of all pilots showed in a smooth and picture-perfect formation.

Our "Thursday Flight" consisted of fifteen airplanes which we arranged in our traditional "vies." The two newcomers were Bob Livingston and Gene Grengs. Gene Martin turned over his airplane to son, Jim Huck, a precocious 18-year-old who has earned his Wingman's Patch and is headed for Embry Riddle this fall, pursuing a career as a professional pilot. That was Thursday morning. President Charlie and I had to miss the afternoon flight because of a pre-airshow meeting called by Air Bosses John Ellis and Dave Schlingman. We were apprehensive. Ellis had appointed T-34s to T-28 turncoat Rick Hegenberger as administrative officer and had instructed him to make sure all pilots had the proper credentials before allowing them to fly. This was a new wrinkle in the Oshkosh routine and seemed to bode more bureaucratic red tape in the future.

Before the dissatisfaction and discouragement of Oshkosh '89, there was a lot of nervous anticipation about Oshkosh '90. Would we really get to put up our big formation again? Would enough guys show up to get the big formation up? Would we all remember how to do it after a two year layoff? Yes, yes, and yes, and we had fun doing it!

Unfortunately the weather did not cooperate. We actually got into our cockpits on Friday, started our engines, and were about to taxi when the rains came and washed out the show. The weather on Saturday was not much better, but we did manage to get up a formation of six, with Drendel leading Spencer, Livingston, Morse, Beitler and Gretz. (Ellis had reduced the number of allowable airplanes because of restricted ceiling and visibility at briefing time.) It was a nervous flight, as a level 800 thunderstorm (it sure
looked that way, anyway!) raged one mile west of the airport. The flight was two passes, during which the wind switched from 190 at 20 to 260 at 9.

Well Sunday was to be the big one and we were still nervous about the weather, and with good cause. The rains came at noon, then stopped for our 1300 briefing. The show was set for 1500 and as we climbed into the airplanes at 1440, the rains came again—in earnest. Ellis had said we would not fly in the rain but this was the big show and the crowds had come to see warbirds fly. Showtime was postponed an hour, and at 1540, frontal passage occurred. The rains stopped, visibility improved, and we started engines. The show went on as planned—with an exception. There were a lot of post-frontal clouds which alternated between scattered and broken, with bases at 700 AGL and tops about 1500 AGL. Now if you were paying attention before, you know this was right in our faces!

As I led our formation of 20 airplanes off runway 18, and it became evident the clouds were too low to avoid without changing the plan, I wondered what the T-6s, which had preceded us, would do. It didn't take long to find out—they disappeared into the clouds! Well, the clouds were scattered to broken, varying between 4/10s and 7/10s coverage, so up we went through them to our assigned altitude of 1400 feet—which was not quite high enough to top all of the clouds. We did manage to catch glimpses of the (ragged) T-6 formation which remained across the circle from us as we circled the airfield. Before the T-28s could punch up through, Airboss Schlingman thought better of it and had them stay low and orbit to the north. Then he hurried the fighters and bombers through their routines, then asked us to descend to get under the clouds. A couple of more circles, followed by two parade passes, and we landed in our three ship vics. The three ship formation once again allowed us to steal a lot of thunder from the tail-wheel warbirds, who had to land singly and make individual breaks to land. We just dragged the whole formation overhead, then went to flight in trail on downwind for landing—and since the T-6s stretched their downwind out to Appleton, we had plenty of time to get it in shape.

The Sunday formation was made up of Lou Drendel, Bill Beitler, Bob Livingston, Gordy Drysdale, Dick Tews, Chris Rounds, Gene Martin, Charlie Nogle, Terry Brennan, Ted Adams, Rick Gretz, Gene Grengs, Bill Cherwin, Earl Arrowood, Ed Hicks, Bob Morse, Jim Nogle and Jud Nogle, with Bill Foster and Willis Webb flying their VAC Fujis in trail. The entire airshow went off without a hitch, despite some potential weather problems, and best of all, the Airbosses were happy with it and will probably choreograph another exciting event for next year.

I spent Tuesday morning in the EAA Warbirds of America board meeting, which President Charlie also attended, and have reported on this meeting elsewhere in this issue. Our Tuesday airshow was flown by Bill Cherwin, Bill Lueck, Jim Huck, Gene Martin, Dave Miller, Chris Rounds, Gene Gibbs and Lou Drendel. Tuesday night's activities included the annual meeting of the EAA Warbirds of America, followed by a contributor's recognition night at the Eagle Hangar—then the much vaunted, dreaded, and looked-forward-to "Talent Night" by the warbirds. This put-on of the members is staged every year in the bar and gets wilder as the hour gets later. Fortunately for us, the parody of the Lima Lima Bean Team took place early in the program and was more hilarious than it was biting. It was a fun finale (for me) to another great convention. I had to be in the air the next morning at 0600 for the flight back to work.
"SCREWING THE POOCH"

One of the big topics at Oshkosh this year was safety. It is a topic every year, of course, but this year it was even bigger because of the very bad year we are having in the airshow arena. As of this writing, there have been ten deaths in airshows, including the one at Oshkosh. None of these occurred as a result of formation flying, and I am not on the safety committee, but I still want to get my two cents in, so consider the safety question from this angle.

At last year's annual T-34 Association meeting we talked about accidents and the relationship that peer pressure may have on accident causes. So think about this—if you are not afraid to die for the sake of your macho image, I suggest you go back and re-read the passages in Tom Wolfe's Classic, The Right Stuff, which deal with how you are perceived after you have bought the farm. (If you haven't read The Right Stuff, you are missing out on some great pop psychology, especially as it pertains to pilots.) Are you revered by your colleagues after you pile it in? Absolutely not! You could be the absolute "Ace of the Base" in every respect, but if you kill yourself in an airplane, the chances are your pals are going to be sitting around next week talking about how you "screwed the pooch." They will be saying that you were a great pilot, but you just didn't have what it takes to hang it out over the edge and survive. The implication in all this is clear. It will never happen to them because they are much better pilots than you were, and how can you

THE 'RIGHT STUFF' TO FLY FORMATION

What does it take to be a good formation pilot? In my opinion, three qualities; first, you must be a good pilot. You do not have to be a "Lindbergh," but you must be above average. Second, you must conquer the "psychology" of formation flying. Finally, you must be disciplined.

A good pilot can handle his airplane in all situations with good stick and rudder coordination. He can fly his airplane well through its full operating envelope if necessary. He has good judgment and a cool head. The formation pilot must know his airplane so well that he can operate any switch or control by feel. Some aerobatic experience is also desirable.

As for the "psychology" of formation: Most general aviation formation pilots get introduced to flying when we obtain or buy into a warbird. We have lots of flying time (I had close to 15,000 hours when I started) and have learned to make decisions as the pilot in command. We are alive today, for the most part, due to our skill, cunning and decisiveness. We have had some good luck along the way, but we long ago learned to look out for our own ass. Military pilots learned to fly formation early in their flying careers, so their command posture is not so deeply rooted. We have all heard the one about the leader briefing his wingman with, "All I want to hear out of you is 'Two' or 'Lead, you're on fire!'"

Most of us are in vocations where we are "in charge." We have above average egos and are generally "the boss." Now we want to become formation pilots and the first thing we are told is that we have to give up this hard-earned autonomy. When you become a wingman, you must be prepared to give up most of your command authority. You never give it all up, but certainly you give up 99%. If you try to retain too much by second-guessing the leader, or concentrating on things other than "holding station," your formation flying suffers. Like a computer trying to multi-task, your brain cannot do two things well at the same time.

Experienced formation pilots can remain oriented to the world, but only because their formation flying skills are so honed that they have occasional fleeting milliseconds to ponder their attitude and speed. Believe me when I say that seasoned formation pilots still concentrate 110%! They have learned that formation flying is so much easier when you concentrate.

Finally, the third aspect of formation flying, equal in importance to the first two, is discipline. Discipline starts with a thorough knowledge of the formation manual, standard operating procedures, and hand signals. Discipline is holding station with a high level of precision. Discipline is accepting a subordinate role as wingman, and not trying to second-guess the leader. Discipline is radio silence.

Items of an emergency nature are always appropriate over the radio, but inane chatter is not unless it is approved and encouraged by the leader. New wingmen are always second-guessing the leader and making their ideas or suggestions known. Disciplined wingmen know that inserting their ideas into the leader's train of thought is counterproductive to a smooth flight.

The leader is (or should be) constantly thinking and planning ahead, and does not need any unsolicited advice from his wingmen. In fact, pressure from a flight member could cause an accident. A formation flight is not a democratic body. It is a dictatorship run by the flight leader, whose qualifications should have been determined before the flight ever left the ground. Do not volunteer information over the radio unless it is of an emergency nature!

In summary, to fly formation, a pilot must be a good stick, be prepared to give up 99% of his authority and exercise discipline in holding his position in the formation—and in holding his tongue!
argue? You did bash the airplane and you are dead!

Wolfe was talking about test pilots and astronauts, but we all know that the same rules apply to all pilots, whether it is the 150 pilot who dies while scud running, or a transport pilot who forgets a critical item on a checklist. Even if a wing comes off the airplane, you are going to be perceived as having "screwed the pooch!" It looks to me like the only way to protect your reputation as a pilot is to die with your boots off—or at least not in your flying boots!

Now that I have gotten my two cents worth of say on safety, I guess it is only fair that Bill Cherwin gets his say on formation flying. Be sure to read "The 'Right Stuff to Fly Formation," his contribution.

**SOME RANDOM NOTES ON TECHNIQUE**

As you all know, we get a chance to fly formation every week. This results in a fairly high degree of competence, but it also results in a "taking-for-granted" of some pretty basic formation flying principles. When you get in a formation of novices (We are always recruiting and training "new guys."), the importance of basic technique is once again brought home.

The number one principle is: Don't look at the whole airplane you are flying on. Concentrate on those two magic points—the aileron/flap junction and the last cowl latch. The key to pinpoint accuracy (and moderate throttle/control movement) in station keeping is correction as soon as those points diverge. When you look at the whole airplane, the divergence can progress rapidly to the point that you need gross throttle/control movement to correct. More often than not, this leads to a pilot induced oscillation (PIO), which is almost impossible to correct. We rediscovered the importance of this principle when we started doing formation loops. There is a great deal of difference in throttle position between the wingmen and leader in this maneuver, and concentration on the two points is an absolute necessity in order to maintain position, even though the transition through all attitudes tempts you to look at the whole airplane you are flying on. The point is, you should maintain that same sight picture no matter what attitude the leader assumes, and no matter where you are in relation to the ground.

Equally important is the need to "damp out" some of the relative motion associated with rough air and exaggerated by rough technique. The importance of this can be demonstrated by trying to fly echelon when you have a rough number two. Try flying perfect position on him, while still trying to line up his head with that of the leader—can't be done! Now, try ignoring him (without running into him, of course!) while you fly on the lead airplane. Notice how much easier it gets. The same thing applies in a multi-plane echelon—in fact, especially in a multi-plane echelon! You may have two, three or four guys playing "crack the whip" on the leader, while you—out on the end of the echelon—are rock-steady, just because you are flying on the leader and damping out the occasional bump caused by rough air.

Rough technique is most often demonstrated by exaggerated use of the elevator. Two possible ways to combat this tendency are: 1) roll in some nose-down elevator trim which will give you more stick "feel," (It will also give you a sore arm!) or; 2) continually trim the elevator for as little pressure as possible, and use a very light grip on the stick. Another more extreme remedy for you A model pilots is to trade up to a B model. The B model has a heavier elevator feel due to springs installed for that purpose, and its one degree more of wing dihedral makes it inherently more stable.

**DUES—PAST DUE!**

It is time to remind everyone that dues for 1990 to 1991 are now past due. We operate on a fiscal year of June 1st to May 31st. Dues are still only $25 per year—new members pay an additional $10 for their first year, however.

If you aren't sure of your status, all you need to do is look at the mailing label on the envelope in which this newsletter was mailed. You should find a two-digit code in the upper right corner. This will indicate the year you are paid up to. If it reads "90" then it is time to ante up for another year. If it reads "89" then you owe the Association $25 for the past year and another $25 for the current for the 1990-1991 year. And if your label shows a "99," you are a lifetime member.

We try to operate on the honor system, and we refrain from billing as long as we can. Postage and supply expenses are quite expensive and it requires a lot of time to prepare and mail bills. So, we would appreciate your prompt dues submission—before we have to break down and send out bills!
FUJI LM-II (SUPERNIKKO) ———— by N.H. "SPADE" McDADE

Pictured are photographs of my highly modified T-34, which is called a FUJI LM-II (Supernikko). As you may know, the FUJIs LM-I and LM-IIs were built by the Japanese company, Fuji Heavy Industries in Japan during the late 1950s. This company built some standard T-34s, some of which are in the United States.

The Valiant Air Command (VAC) obtained ten FUJI LM-I and LM-IIs from the Japanese through our Department of Defense in 1983. They were placed with qualified VAC members for a long-term sponsorship (lease) arrangement. Last year, the VAC decided to sell the aircraft outright to the sponsors. Five of us, including T-34 members, Willis Webb and Jack Healan (with partner Billy Foster), have completed our purchases.

The FUJIs came to the VAC without any radios and with the original flight and engine instruments. The engines were in various states of maintenance and engine time. The airframes were in excellent shape, free of corrosion, but needing a paint job. Over the last few years we have made many improvements in our machines. I put a King radio package, loran, smoke system, new paint job, new interior, some new flight instruments, Cleveland brakes, and a few other whistles and bells on mine. The VAC required, in the original sponsorship (lease) agreement, that the FUJIs be kept in the authentic Japanese paint scheme for airshow purposes. I see no need to change mine now.

One of the FUJI LM-I owners just put a major update on his: new paint job, radios, auto pilot, loran, and a IO 520 Continental engine. I don't know what we will call this FUJI. It certainly isn't an LM-I anymore, and it is as fast at lower altitudes as my LM-II.

Most east coast T-34 pilots have flown with (or against) the FUJIs at the VAC airshows and other fly-ins. "Dawg" Howell has "shot" me down so many times that he has a FUJI painted on the side of his aircraft. Judd Deakins, Jon Stephenson (T-34 owners and association members), and myself do formation and aerobatic work just about every weekend down here in sunny South Florida. We have a "routine" which we use in airshows and fly-ins. For some reason I am always the designated loser. Since we are the only active formation team in the local area, we get plenty of attention.

I thoroughly enjoy The Mentor Monitor and depend on it for maintenance information.

THE FUJI MODEL LM-II SUPERNIKKO

Power Plant—One 340 hp Lycoming GSO-480-B1A6 six-cylinder horizontally opposed air-cooled supercharged engine, driving a Hartzell type HC-83X20-1B/9333C-3 three-blade constant-speed airscrew. Fuel in two bladder-type tanks in wings with total capacity of 189 litres (41.5 Imp. gallons). Provision for two auxiliary fuel tanks in wings, each with capacity of 38 litres (8.4 Imp. gallons). Oil capacity 11.4 litres (2.5 Imp. gallons).
IT WAS A YT-34!  
By Bruce Lamont

On a recent trip to California to get parts for my T-34, I stopped by Castle AFB in Atwater, California. All of their aircraft are on outside display. As I walked down the path past the B-17, B-29 and B-50, I wondered if they had a T-34. Then I saw it, past the F-86 and next to the 02a. I studied it from a distance as I approached. It looked complete but something was different. The first thing I noticed was the tail number: 0735. That couldn’t be the correct tail number, I thought. 0735 would be 1950. And yet, that tail number seemed familiar but I could not understand why. As I walked around to the front of the aircraft, I began to understand. The low sloping cowling that hinged in the middle, the absence of several of the normal access panels—this was not a T-34—it was a YT-34!

I didn’t have any idea what had ever happened to the YT-3s, and to actually see one up close was not something I had anticipated. I walked around the plane making notes and taking photos. After going over it several times, I headed for the museum office to find out what I could about this very rare airplane. I was greeted by Warren Hoffman, who told me that 0735 had been purchased by Mr. Robert W. Uecker on January 28, 1976. The aircraft was donated to the Castle Air Museum Foundation on December 12, 1981. On January 26, 1982, the aircraft was donated to the Castle Air Museum USAF by the Castle Foundation. The aircraft was eventually flown to Castle AFB and put on display on March 7, 1983.

Beech built three model 45s and turned them over to the Air Force for evaluation. The Air Force designated them YT-34s, and assigned them tail numbers: 50-735, 50-736 and 50-737. 0735, serial number G-4, was built in May, 1950 and delivered to the Air Force for testing on August 4, 1950. It was delivered to the 3510th Primary Training Wing (Training Command), Randolph AFB, Texas, as 0736. 0737 was delivered to Randolph on August 15, 1950. All three YT-3s were transferred to 3565th Primary Training Wing, Goodfellow AFB, Texas on September 27, 1950.

On February 6, 1951, 0735 was transferred to Wichita Air Material Center (Air Material Command), Wichita, Kansas. 0736 and 0737 were first sent to 3585th Primary Training Wing, San Marcos AFB, Texas, then on to Wichita. All three aircraft were sent to 3545th Primary Training Wing, Goodfellow AFB, Texas. 0736 arrived on August 8, 1951, with 0735 arriving the next day on the 9th. 0737 arrived on September 2nd. 0735 and 0737 were declared surplus and disposed of on July 20, 1954. 0736 was surplus on August 26, 1954. After it was retired from service, 0735 became N2073A. I have no information on its location from July, 1954 to January, 1976. I don’t have any information on 0736 or 0737 after they left the military.

Several nights after I arrived home from my trip, I noticed that the tail number on the picture hanging above my desk was 0735. This is the picture drawn by Joe Milch of Colorado. I also noticed that 0735 is pictured many times in the T-34A shop manual.

Although Beech built three YT-3s, only 0735 is known to exist. It is known that one of the YT-3s was destroyed. The location of the third plane is unknown.

If you’re in central California, stop by Castle AFB in Atwater (near Merced) and see 0735. It’s worth the trip!

I would like to thank Warren Hoffman, Castle AFB Museum, and Captain George W. Cully, Headquarters, USAF Historical Research Center, Maxwell AFB, Alabama, for supplying information for this article.
MENTOR MAINTENANCE ________________________ BY FRANK SCHMITT

Editor's Note: The maintenance section of The Mentor Monitor is always printed separately, in a loose leaf, 3 hole punched configuration, so that our members can collect them for later reference. The concept here is that the Association can keep an inventory of the maintenance material for later sale and distribution much easier than it can inventory back issues of the newsletter.

BRAKE PROBLEMS IN A T-34B

After several months of frustration, tool throwing and some newly found obscenities, we have stumbled onto a very rare phenomenon in aircraft problems.

THE PROBLEM: Left brake seems to grab and turn the airplane to the left and I am unable to turn it back toward the right. If I stop the plane or get out to rock it to check wheel freeness, everything is normal!! Sometimes when the problem appears, going around in a few left turns seems to stop the unwanted left braking action. During takeoff roll, aircraft wants to go left, so using right rudder and brake straightens it out, but there is a loss of acceleration and it sometimes causes an abort.

TROUBLE SHOOTING: All brake linings were replaced (Cleveland). I found left linings worn considerably more than right. Wheel bearings were inspected and replaced. Wheels were switched to opposite sides, nose gear was rebushed, "knuckle" replaced, and shimmy damper inspected. No help!

THE ANSWER: When the rear rudder pedals are adjusted rearward, toward the pilot approximately 27 turns (or 21 turns from full rearward), displacing the RIGHT rudder pedal forward causes the LEFT brake cylinder to actuate, thereby applying left brake and turning the a/c to the left. Applying right brake is not strong enough to overcome the left brake and caster the nose gear back to the right. This is also true if you push the left rudder—the right brake cylinder actuates, however, possibly due to rigging, the left deflection is predominant 99% of the time. If both pedals are held in the neutral position and not deflected, taxi is normal using differential braking.

SOLUTION(?): Keep REAR pedals forward, approximately half way or more. The front pedals cause the same problem except brake actuation does not occur unless adjustment is approximately 12 turns within the full rearward position.

This weekend Dan Blackwell will see if this problem is true with his newly acquired B model. I have heard of a B model for sale in Rhode Island that may have the same problem.

Editor’s Note: Jud Nogle suggests that the problem may be related to the adjustment of the clevis on top of the brake master cylinders (there are four of them in the airplane). If the wrong cylinders are installed, the clevis may be too long and proper adjustment is not possible. Jud suggests checking to see if the proper cylinder is installed before attempting clevis adjustments. To adjust, Jud suggests to crank the pedals to the full extreme leg adjustments and then push full travel on each side and watch the brake cylinder for activation. Adjust clevis so that activation does not occur unless toe pressure is exerted. If you have anything you would like to share with Frank on this problem, please contact him at 412-747-5682 (office) or 412-846-7604 (home) or 814-563-7041. (Frank is an instructor pilot for U.S. Air.)

January 14, 1991

Dear Jim:

I hope all is well with you and your family. I am sorry to have been out of touch for so long but I have had some difficult problems these past few months.

As you forewarned me, the input from the T-34 Association membership for the Safety column has been non-existant. Except for the initial three replies that I received over a year ago, there has been no input whatsoever. I know that there are a lot of stories out there waiting to be told and I have personally contacted several members for their input, but all to no avail. Due to the above, I see no alternative but to discontinue the "Mentor Mishap" column for the present.

Also at this time, due to some pressing personal problems, I do not presently have the time available to chair the "Safety Committee" effectively, and would like to pass this on to someone more able to do it justice. Even though the climate within the general membership at the present time does not strongly support the "Safety Committee" concept, I firmly believe that it still is an extremely important tool to help keep down the accident/incident rate in the T-34.

I also stand ready to relinquish my seat on the Board of Directors if you feel this would be beneficial to the "Association." I must tell you that my participation in Association affairs during 1991 will be very limited. I do not reasonably foresee attending "Sun and Fun" or "Oshkosh" in 1991.

I have given considerable thought to the above and again, I am sorry that I cannot continue to be a viable part of the T-34 Association at this time.

Sincerely—Robert (Bob) Russell
The Monterey Navy Flying Club (MNFC) has been flying T34s for over twenty years. The club is run out of a mobile trailer for administrative work, flight crew briefings and aviation reading. There is one 40 ft. x 30 ft. hanger to maintain the three T-34s, one Baron and eleven Cessnas that the club flies. There are about 300 active members. Membership is limited to active duty, reservists, civil service, retired military personnel and their dependents. There is a large military community near Monterey with Fort Ord, the Naval Postgraduate School, the Presidio of Monterey, and a Coast Guard station, all within a few miles.

The Monterey Navy Flying Club has three T-34Bs currently flying. There is also one under renovation. Of the three flying T-34s, only one was delivered in flyable condition. The other two were rescued and restored at MNFC, both requiring major rebuilding. The three flying T-34s were built in 1955, 1956 and 1957, and have 10,000 to 12,000 total airframe hours. No airframe cracks have been discovered. There is a corrosion problem on the magnesium surfaces, such as the elevators, which requires constant attention, particularly at the Monterey airport, which is only three miles from the ocean, with a predominant onshore breeze. One of the planes has fuel injection and the other two are carbureted.

A fifty hours check, a one hundred hour check, and an annual are done on the birds which each fly an average of 500 to 600 hours per year. Two are painted in the blue and white scheme of the recruiters, and one is all yellow of the early Navy training command.

About one hundred T-34s have been assigned to Navy recruiters in towns across the U.S.A. Maintenance is done at a local FBO on contract. The Navy also supplies the parts for the recruiter T-34s. The planes are flown by Navy pilot recruiters to take up prospective pilots and flight crews.

Up until a few years ago, the Navy would exchange old engines for overhauled engines for flying clubs, but now the clubs must pay the $10,000 to $12,000 for overhauling the O-470 225 hp Continentals.

Of the $38 per hour rental rate, sixteen goes for fuel at $1.35 a gallon for 100LL, and fifteen goes for insurance and maintenance, including engine reserve. The avionics are standard issue and getting harder and harder to fix. Replacement with civilian gear is in progress.

Relative to the Cessnas, the T-34s are a high maintenance plane. Inverters have given some trouble to power the electric gyros and two planes have been converted to vacuum gyros and one still has the electric gyros.

The T-34s are well used and enhance membership in the club. Members of other military flying clubs may get checked out in the planes and fly them by using reciprocal privileges with the Monterey Navy Flying Club. Consequently, there are about thirty pilots who routinely travel from as far as Norfolk, Virginia, and as near as Moffett to get T-34 time. The T-34 is beloved by pilots because of its military style, light control forces, a stick instead of yoke, the open canopy, the tandem seating, the noise and the power.

Overnight trips or longer are possible with permission. There is a minimum two hours a day utilization rate. The planes may go as far as a "reasonable retrieval distance," which means Seattle or Phoenix. One T-34 stays at the club each weekend to ensure availability.

The Navy has loaned the planes to the flying club and makes the rules on their use. No formation flying is authorized. The T-34B was never certified by the FAA for aerobatics, so no aerobatics either. VFR minimums are higher than FAA required, 1500 foot ceiling and three miles visibility. The T-34s are VFR only. Strict NATOPS procedures are followed using the NATOP manual and checklists.

The current club manager is a retired Navy pilot, Tom Woolcock. The chief of maintenance is a retired Navy mechanic and crew chief in PB-2Ws (B-17), Frank Schultz.

On Christmas Day, we experienced a nose gear failure on our pride and joy, N134LC, a 225 hp T-34A, which we have dubbed "Spot," in reference to its desert camo paint scheme. Since this wasn't the first T-34 to slide down a runway on its nose, and probably won't be the last, we thought we could pass along some lessons learned to the rest of the membership.

Lynn was flying. She is a 7000 hr. U.S. Air BAE-146 First Officer, currently "called-up" to active duty as a C-5 Instructor Pilot with the 301 MAS at Travis AFB, California, for "Operation Desert Shield." I was in the aft pit. I'm a 3000 CFII, an A & P, retired from the USAF after 23 years as a bomb disposal specialist, and have been spending my time lately in cancer research—unfortunately as a patient. We had a lot going for us, experience and familiarity with the aircraft, good VFR weather, light winds, lots of daylight left, three hours of fuel, and the heavy person in the aft pit.

The gear failed when the HM-5 rod end at the forward end of the forward retract rod broke, thus separating the nose gear from its operating mechanism. It broke during the first takeoff, in the final moment of the retract cycle. I was watching the gear indicators and the nose gear actually indicated UP for an instant. We hear and felt...
a "BANG," loud and violent, and the nose gear indication went to unsafe. There was little doubt that we had something more serious than an indicator problem. We decided to head for Stockton airport, about 20 minutes away, and use the time to review checklist procedures and discuss the situation. Stockton had two runways, a control tower, crash crews, and is home to deGrassi & Associates, where Milo maintains "Spot." For some reason, Milo had decided not to work Christmas and we had to get along without his expertise.

Lynn lowered the rear, and after a normal cycle, the mains indicated down, but the nose still unsafe. On our first fly-by, Stockton tower said all wheels were down and nose rear doors appeared normal, but the nose gear might not be fully forward. On the second fly-by, Lynn porpoised the plane and the controller said, "Yeah, when you do that, the nose gear swings back and forth." Having the luxury of plenty of gas and good weather, we climbed away from Stockton to work on our problem. We once had the airplane leased to the Travis AFB Aero Club, and had been forced to provide comprehensive checklists for Emergency Procedures:

**NOSE GEAR MALFUNCTION**

1. REDUCE AIRSPEED, LOWER GEAR AND FLAPS.
2. ASSUME SLOW FLIGHT - 70 KNOTS.
3. MAKE GENTLE PITCHING OSCILLATIONS (USE CENTRIFUGAL FORCE TO SWING NOSE GEAR INTO DOWN POSITION).

That was extracted from the T-34B checklist, but we couldn't get it to work on our "A" model. We tried for a full hour, starting gently, as the book said, and getting downright violent towards the end. No, we didn't try a loop, but most everything else, and we got a lot slower than 70 knots to reduce the air load on the nose gear. We found it fairly easy to get the nose gear to swing to the fully retracted position (it would bump the UP indicator microswitch) but never got it forward enough to go over center and lock.

Eventually we decided to land. Lynn told Stockton tower what we were going to do. They rolled the crash trucks. She flew a high pattern, shut the engine off with the mixture, bumped the prop horizontal with the starter, touched down gently on the mains and held the nose off as long as possible. After the nose gear collapsed, we skidded about 210 feet. We hopped out, the crash trucks arrived from ahead and behind, and a friend who had observed our predicament was waiting with a fork lift and had us off the runway in ten minutes.

A surprising number of people have told me they would have stayed away from a big airport, afraid to talk with ATC, embarrassed to be chased by the crash trucks, afraid of being billed for the emergency
response, and thinking there would be less paperwork and FAA involvement at a small, uncontrolled field. Well, we'll do it the same way next time. All those folks did what the taxpayers pay them for; they helped us. I've spent a lot of time in the hospital, and having those crash crews just might have made the difference—after all, this wasn't a normal landing. The Oakland FSDO investigated our "accident" and it appears that there really is a kinder, gentler FAA.

For those of you who might have to do this sometime, if you're going to try and save the engine/propeller by turning it off in the air, it will take longer than you may believe for the prop to stop. It is not like feathering an engine on a multi, it just keeps turning. I would allow myself 2000 feet above pattern altitude to shut it down, slow down enough to stop it, get the prop into the best position and turn off the switches. Remember, to get the prop control to the FULL DECREASE position, back PAST THE DETENT.

Both AF and Navy checklists call for full nose down trim. Yes, NOSE DOWN. This gives you more effective UP elevator and allows you to hold the nose off longer, although it increases the stick force. Lynn waited until we were rolling along on the mains before rolling in full nose down trim and she had no problem (all 120 pounds of her) with the stick force. The AF checklist calls for CANOPIES OPEN, while the Navy says to jettison them. We would like some new glass, but decided not to go about it this way. When the nose does fall to the runway, it goes a long way down. The angle is extreme (especially if you have the main struts pumped up to make it look like a big airplane). You will surely think for a second that you're going over on your back. The effect from the aft seat is spectacular, since you actually go UP.

Finally, having come this far in such a professional manner, don't fall as you exit the airplane. You step onto a wing which is at a steep angel just waiting to dump you onto the runway, and the normal route aft is now an awkward, impossibly high step.

Well, the adjuster has looked at the plane, Milo is determining the damage and checking the parts availability, and Lynn and I are looking forward to the day we can bring "Spot" home.

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EDITORS NOTE: Drake submitted this article on January 15, 1991, the eve of the Iraqi deadline and a day before he entered the hospital for a second round of highly experimental cancer treatment. Drake reported that he will be isolated in a lead lined room for many days during the intravenous radiation therapy. His wife, Lynn, is now on leave from U.S. Air to fly C-5s around the world in support of the Desert Shield operation. (As you may remember from a previous issue of The Mentor Monitor, Lynn is a C-5 Aircraft Commander, Instructor Pilot, and Refueling Instructor Pilot for the Military Airlift Command.) Her commanding officer, in spite of the impending war, has arranged personal leave for her so that she can be with Drake during his therapy, but then it's back to our efforts in the Gulf. Our thoughts and prayers are with both Drake and Lynn.

WARBIRD INSURANCE UPDATE

BY GLEN TRAVERS

Pricing
Aviation insurance pricing for the T-34s, T-6s and T-28s has been level for the past few years and we expect 1991 to remain level, or possibly, we could see a 5 to 10% increase—we do not expect to see the 30 to 40% increases we saw in the mid-1980s.

Liability
Higher limits of liability insurance are still available, although above one million dollars we have seen increases compared to last year.

Airline Insurance
The insurers who write your aircraft policies are usually involved in Airline Insurance, ie:

<table>
<thead>
<tr>
<th>World Wide Airline Premiums</th>
<th>$500 Million (during a 12 month period)</th>
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<tbody>
<tr>
<td>Claims Paid</td>
<td>$1 Billion</td>
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This, of course, is putting pressure on these underwriters to make up for their losses. Again, we don't see major changes in 1991, but beyond that, it may become more difficult to purchase Warbird Insurance.

Hull Value
Try to insure your aircraft for a value that is close to the market value or Blue Book value. Don't insure your $100,000 aircraft for $50,000. It may be a problem in a partial loss and will be a problem for you in a total loss.

Travers & Associates is an Aviation Insurance Broker in business since 1950. Call 1-800-888-9859 for further information.
ANNUAL MEETING

JULY 29, 1990
HOLIDAY INN - FON DU LAC, WISCONSIN


President Charlie called the meeting to order at 2018 local, noting that a quorum of Directors was not present. On a motion by Gordy Drysdale, seconded by Gene Martin, the minutes of the 1989 annual meeting were approved without being read.

Jim Nogle presented the Treasurer’s Report. On a motion by Brennan, seconded by Drysdale, the Treasurer’s Report was accepted as presented.

Jim Nogle reported that Ken Williamson had turned over all merchandise to Jud Nogle, who is currently handling the post of Merchandise Officer. Jud reported over $900 in sales since taking over for Ken. He also reported that we were out of several items, especially in large sizes. Gordy Drysdale provided a quick shipment of shirts, jackets and hats, which were delivered to Jud in Fon du Lac. Several new products have been added to the merchandise line, including yellow, blue and white shirts with larger wings, new hats with and without “scrambled eggs” (eggs are available in silver or gold), and a new style blue jacket. It was noted that Allen Smith is advertising in The Mentor Monitor, and has several new T-34 products available. (See the latest issue of The Mentor Monitor for a complete list.) Jim noted that Allen pays the Association a royalty on everything he sells. He also reported that Allen had volunteered to handle all merchandise sales. "A discussion of who should do merchandise and where the money should go followed. It was suggested that all profits from merchandise should go to the Association and that we should have a merchandise who would go along with that. Jim noted that there has been some criticism that the T-34 Association is a Nogle Enterprise, and that he would like to spread the authority around to deflect the criticism. He noted that Ken Williamson had done a great job as the merchandise officer, and that he had, in fact, put a lot of his own money into the job. Chris Rounds volunteered to do this job but noted that he would probably not be as good as it has in the past because he is gone a lot. Chris also volunteered to take over the job of Membership Chairman. It was noted that Julie Clark is now on the airshow circuit full time with a big sponsor, and is still flying for the airlines,所以 she is very busy and the membership job has probably become very difficult to keep up with. It was noted that Julie, and her husband Mark, have done a terrific job and we really owe them a great big “thank you,” but that they would probably be thrilled to give up the job. It was noted that Don and Mary Rounds have been long-time participants in the T-34 Association, and that they would help Chris in this dual role. Consensus opinion was to turn over the merchandise duties to Chris Rounds and the membership job if Julie and Mark want to give it up.

Mary Rounds suggested that we should have some kind of an Association hand-out to give to the many people we meet at the airshows, or talk to on the telephone who are interested in T-34s. Charlie noted that the Association Buyers Guide is almost done, and that Lou Drendel’s book on the T-34 would be published within a month. (T-34 in Action, Squadron/Signal Publications, due out in September, 1990.) Terry Brennan suggested that we produce a one page mailer to insert in the newsletter, suggesting that members make photocopies to carry in their airplanes. These could be passed out at airshows or wherever we get inquiries. It was also suggested that Charlie embodies the Association and that despite Jim’s discomfort with having the Association labeled a “Nogle Enterprise,” Charlie’s willingness to help and to talk to all these people will keep them in the forefront.

Lou Drendel reported that the Formation Committee has had no meetings this year, but that the principle activity of the committee has been promoting Oshkosh formations, which are now back in favor with the Air Boss. They were flown this week successfully and will be flown in the future. Drendel reported that Gordy Drysdale and Ed Messick have been asked to join the committee to generate more West Coast interest. They report more than 25 actively flown 34s in California. Drendel suggested that we try to put together a fly-in halfway between here and there to get more of the Californians involved, and perhaps entice them to make the long annual trek to Oshkosh.

Messick suggested that we develop a procedure for qualifying Oshkosh leaders. He outlined a plan that would provide for a lead, a deputy lead, and the immediate past lead on the Oshkosh formation lead committee. This committee would develop formation configurations, procedures, and qualifications prior to our pre-Oshkosh practices at Fon du Lac. The Formation Committee will polish this plan and publish it well in advance in order to promote maximum participation at Oshkosh.

Jim Nogle noted that it was time for the annual election, but that he did not have the list of directors who were up for election. This prompted a discussion of the notable absence of directors at this meeting. It was noted that directors who do not participate make it very tough to do business. The long-running absence of Earle Parks was particularly noted. Though it was generally agreed that Earle is a force in the T-34 community, there is some question about his willingness or eagerness to serve on the Board. Bob Morse agreed to ask Earle directly what his intentions are. It was generally agreed that if he wants to serve on the Board, his knowledge and expertise would be a valuable addition. Also mentioned as a possible “reluctant director” was Ed Lovejoy, whose “Red Dog” letter caused so much embarrassment in the T-34 Association last year. It was noted that Ed was at Oshkosh early in the week but he went home Saturday morning without flying in any of the Oshkosh airshows. Hopefully, any director who is unable to serve effectively will voluntarily resign his position. Morse again suggested than any director who is up for election should be polled to determine his willingness to serve, prior to publishing his name as a candidate. Jim will publish a list of directors up for election after determining their willingness to serve another term. Nominations of directorial
positions were solicited, and Drendel nominated Gordy Drysdale to serve on the Board. Gordy stated that he would be willing to serve.

Charlie reported that the T-34 seminar was well attended and that all comments on its content had been positive.

Bob Russell reported that he was unable to attend Oshkosh because of airline commitments, but that he will continue to promote safety through articles in the newsletter. Frank Schmitt and Bill Cherwin will join Bob on the Safety Committee.

Speaking of safety, the lack of adequate tie-downs in the Oshkosh warbird area was noted. The tie-downs currently in use will not hold anything down in a real thunderstorm and could result in a disaster. Charlie suggested that we should take the lead in asking EAA to invest in permanent tie-downs in the warbird area. After discussion, it was agreed that the T-34 Association would make a sizeable donation to this effort. ($500 to $1,000.)

Under old business, Jim Nogle reported that the committee appointed at last year's annual meeting to develop a financial plan for the Association had not met, nor had they begun work on a plan, though Chairman Tracy Nugent did write a letter to the committee members outlining the proposed objectives of the committee.

Many favorable comments were received on the ramp signs produced by Charlie which gave the history of the T-34 and its current use. Charlie reported that the T-34 Association has been asked to produce similar signs for the T-6, T-28 and P-51 groups.

Jim noted that he was badly in need of help on the newsletter. He stated that he can continue to handle the duties of Editor, but that he has to have more submissions for the newsletter if we want to see more issues. Two columns that really need support are the "Details" column, which illustrates innovative or well-restored features of the T-34 and "Tails of our Members," which gives capsule biographies of our members. It was noted that we have many interesting members, and that those of you who are aware of these members should report on them. Jim also solicited maintenance and operating articles. For those of you who have a difficult time writing articles, the newsletter could use photographic contributions. Jim noted that the cover photo for the current issue was not received until the day before the newsletter went to press.

On a motion by Garrison, seconded by Cherwin, the meeting was adjourned at 2240 local.

—Lou Drendel, Secretary
Like most of you, we were rained out of Gastro's and New Philly, so the summer airshow season did not get started in earnest until our appearance at the 31st annual Chicago Air & Water Show (now called the Budweiser Air & Water Show since the advent of corporate sponsorship). This was the third consecutive year we performed, and it was looked forward to with the expectation that we would have as much fun as we had had the first two years.

The Chicago Park District was the original sponsor of the show and it is still produced by Al Benedict, the former Park District employee whose idea the whole thing was originally, way back in 1959. Al has assembled a staff of real professionals, including Lee Berndt (founder of ICAS), Captain Jim Mahoney, USN (ret), (organizer and leader of the former Naval Reserve demo team "The Air Barons"), Ray Cullerton (former chief of O'Hare tower), Herb Hunter (UAL pilot and USAFR KC-135 pilot), and a host of hard working Park District employees who really know how to make the whole thing click. This is no mean feat, considering the fact that a working Park District employee whose idea the whole thing was originally, way back in 1959.

We are selected solely for their journalistic abilities. Not that they aren't competent journalists, but they could also put on their own Miss America contest! Our only chance at fame came when we were invited by the Sun Times! Our only chance at fame came when we were assigned seats. After being assured of major print coverage, he assigned the Sun Times photographer to his own back seat, and he saw to it that the guy had the best photo opportunities as he buzzed around our formation while we droned up and down the lakefront. Rick got the photographer from the Sun Times and I got the guy from the Tribune. So guess who ended up on the front page of Friday's newspaper? Two out of three—but not the Sun Times!

Weather turned out to be a major player in this airshow too, as the forecast of clear skies and light winds turned sour as the weekend progressed. On Friday, the only consequence was cancellation of some of the acts which had to come a long way. This was not so bad since Friday's show is a "dress rehearsal," performed on the show site for the benefit of several public agencies which specialize in the care of handicapped children. The show site is along two miles of Chicago beaches, just north of the loop, and the performances are over the water from 500 to 1500 feet offshore. This ordinarily makes for smooth air, except when the wind blows hard from the southwest and whistles around, over and between a variety of skyscrapers. But Friday's 22 knot wind was from the northeast, so all we had to worry about was being blown past the deadline, and coming up with an extra ten minutes of performance to fill in for a missing C-130 from an Air Force Reserve outfit that was unable to get there. No problem in either respect, and the extra time gave us a chance to impress ourselves with our formation loop, performed for the first time in front of a crowd, at low level.

The show has grown in size and in duration. Our first event was a fly-by of Navy Pier on Wednesday evening, where a kick-off party for the corporate sponsors was being held. As most of you know, our act is performed with six airplanes, ala Blue Angels and Thunderbirds. (We used the basic four-ship diamond with opposing solos.) With eight airplanes in the Lima Lima squadron, we can avoid most maintenance cancellations. Good thing too, since Rick Gretz' airplane was "trapped" in Tuscola by nasty weather. We had hoped to pick it up before our Wednesday fly-by, but we weren't willing to penetrate thunderstorms to do so! Rick and I planned to fly down to Tuscola early Thursday morning, pick up Charlie, and be back to Meigs Field on the Chicago lakefront in time for our 0800 briefing for the Thursday airshow at Meigs. The weather was not bad in Chicago and we blasted off at 0600, heading south. The weather in the Champaign area was—well, we paid really close attention to the location of radio towers the last 40 miles to Tuscola, and we did get back to Meigs in time for the briefing.

The Thursday show is an abbreviated affair, put on for the benefit of the press. This is where the local radio and television reporters get their footage and interviews for pre-show publicity. We did our routine, then ogled all the good-looking TV news anchorwomen who were interviewing selected celebrities. (Our ogling must have convinced them that we were not worthy celebrities so we were not interviewed.) At the risk of sounding like the chauvanist that I probably am, I have to tell you that I don't think these newswomen are selected solely for their journalistic abilities. Not that they aren't competent journalists, but they could also put on their own Miss America contest! Our only chance at fame came when we were asked to give rides to the media people. Bob Morse took charge of assigning seats. After being assured of major print coverage, he assigned the Sun Times photographer to his own back seat, and he saw to it that the guy had the best photo opportunities as he buzzed around our formation while we droned up and down the lakefront. Rick got the photographer from the Southtown Economist and I got the guy from the Tribune. So guess who ended up on the front page of Friday's newspaper? Two out of three—but not the Sun Times!
Our showtimes consisted of a fly-by during the national anthem, then a six minute routine later in the show. For the fly-by we planned to use all seven airplanes on Saturday and Sunday, flying what we call the double arrowhead with slot, which looks like this:

![Double Arrowhead Diagram](image)

Given the time, we planned to have the first three airplanes perform the loop, while the last four continued on through. Our chance to do this was on Saturday, when one of the other lead-in acts cancelled.

![Lima Lima Double Arrowhead Formation](image)

Saturday dawned dark and gloomy. The tops of several buildings were in the clouds, indicating ceilings of less than a thousand feet. Visibility was good underneath though, and the weather guessers were hopeful that the ceiling would come up by showtime. As the lead-in act, we got a chance to test their prognosis. The tower at Meigs was calling 800 and 12 when we started up and taxied out, with Bob Morse in the lead, me on right wing, Rick on left wing, and Gene Martin leading the diamond in back, with Ted Adams, Ed Hicks and Bill Cherwin.

I guess it would be appropriate to say that the tower guys at Meigs were wildly expansive in their estimate of the ceiling, as we quickly discovered when we ran into the clouds at 400 feet! Well, the viz was still really good underneath and we were going to be over water the whole time, so the only thing we had to worry about was avoiding boat masts. Well, almost the only thing—we also quickly discovered that seagulls do not fly IFR, and we were contending for airspace with flocks of these potentially destructive missiles as we circled over the lake. The hundreds of boaters who had assembled offshore to watch the airshow sure got their money’s worth of close-up views of our formation as we circled at 200 feet. Bob finally spotted the Coast Guard helicopter we were to follow through on our parade pass and lined up behind him. One pass at 100 feet and we headed back to Meigs to wait for our time slot to perform the regular routine. In spite of low ceilings, I had put the visor down on my helmet as I caught momentary glimpses of panicky seagulls whizzing past our formation. I must have had a premonition, because one hapless gull smacked into my windshield as we were landing. Fortunately, we were down to 60 knots, and though the collision was fatal for the gull, the only marks on my plane were some minute scratches caused by his landing gear.

We didn’t wait long, as the Air Boss huddled with the weather people and decided that it was not going to get a whole lot better any time soon and they would have to cancel the airshow. The water show was pretty well washed out by the strong onshore winds, so we all retired to the Hyatt Regency to drink beer and tell lies. Ah, the tough life of an airshow pilot!

Sunday morning did not look a whole lot better than Saturday. When we arrived at Meigs, Bob and I climbed into the tower cab to get a more informed picture of the weather. The tower guys were very cooperative, calling all the local towers to get their weather observations and the radar picture. A heavy rain shower moved across the area an hour before the show was to start, but then it started to improve. By the time we opened the show, it was 900 and 4, and by the time we were due on stage for our routine, it was 2000 and 6. We did our six minute contribution to the four hour show and headed back to Naper Aero, ducking under some 700 foot clouds enroute. We didn’t get to see any of the show on the lakefront, but an hour after I put the airplane away, I looked out my back window and saw the Thunderbirds flying past at low level, evidently doing a little recruiting while they waited for their show slot. Our next big event was Oshkosh (reported on pages four and five of this publication).
After Oshkosh, our next scheduled show was the K.I. Sawyer AFB Open House in the peninsula of Michigan. Ted Adams, Rick Gretz, Jim Smith and I got an early start on the morning of August 5th. Bill Cherwin and Jim had left their T-34 at Oshkosh, so we were going to stop there just long enough to pick it up, then be on our way. We stopped at Basler Aviation to check the weather and discovered that we were not going much farther north for awhile, anyway. Strong north winds were blowing off Lake Superior, creating low ceilings and light rain showers at our destination. For the next three hours we engaged in the familiar aviation routine of sitting around the airport, alternately checking the weather and retelling flying stories. The weather was finally reported marginal enough at Sawyer for us to blast off, hoping for the best.

The Lima Limas were in exotic company at the K.I. Sawyer AFB Open House.

Enroute visibility was 50+ miles, and I kept wondering where the bad weather was. When we got within 20 miles, the ceiling came down, just like they were advertised. Fortunately, Sawyer has so much concrete that it was easy to spot from a long way off. In fact, they have so much concrete, we made a pass down the runway that must have lasted a minute! We stayed in the finger four in the pattern and landed that way on the 300 foot wide runway.

K.I. Sawyer AFB is home to the 410th Bomb Wing of SAC. The huge ramp was loaded with B-52s, KC-135s, a stray KC-10, C-5A and guest airplanes which included a pair of F-14s, F-16s, an FB-111, OV-10A, T-37, a Canadian CF-5 and Avro Tutor. It was a very impressive lineup of military hardware in various shades of camouflage. Against this backdrop, our bright yellow Mentors really stood out. It also helped that they parked us stage center, and the delay in our arrival meant that most of the pretty impressive (for the northern end of the world) crowd was already on hand. We were greeted by Wing Commander Colonel Ed Grillo, along with his Director of Operations and Major Tim McClenny, who had been responsible for putting the airshow together.

Just because you go to a military base, it does not mean you escape the scrutiny of the FAA, and the predictable examination of documents, along with admonitions about showlines, etc., were part of the airshow briefing. We were the only civilian representatives and when the briefer started throwing "low performance" barbs at the pilots of a pair of T-37s, it was all we could do to keep from hiding in the corner. The advertised highlights of the show were demonstration pilots from the USAF F-16 team and the US Navy F-14 team. How were we going to compete with their 500+ knot passes and 8 G turns? Especially when we were shivering! (The cold wind continued to blow off Lake Superior at 25 knots.)

We took six airplanes to Decatur on August 19, lead once again by Ted Adams. The wingmen were Jim Smith, George Kubal, Rick Gretz, Bob Morse, and Lou Drendel. In contrast to a very chilly K.I. Sawyer, Decatur was red hot. The temperature was advertised at 96 degrees with a heat index of well over 100, but I would bet that it was a lot hotter than that on the ramp. The military was represented by some static displays, including a C-9, F-16, A-37, and UH-1, but this was a civilian deal all the way. In addition to the Lima Lima, they had Joe Frasca in his special-built-for-him aerobatic wonder plane, which actually hurt to watch, because we knew how many Gs he was pulling. They also had a Cub comedy act, Pete Myers in his Decathalon, a Pitts, the requisite skydiving opener, an aerobatic sailplane and Bill Leff in his T-6.

Kubal, Smith, Adams and Morse sought the shade of a wing at Decatur.

The air was surprisingly smooth for such a hot day and we were able to perform our routine without a hitch. The organizers could not have been nicer, but the heat is much more of a crowd killer than the cold, and I am sure they had about one third the crowd that we saw at K.I. Sawyer. (As a promoter, you know you are in trouble when
CONTINUED

you see people plastered up against the walls of tin hangars, trying to take advantage of a couple of feet of shade, instead of walking around gawking at airplanes.)

We had a two-week hiatus before our next show, which turned out to be the best of this or any other summer. Rear Admiral Don Boecker and I went to grammar school together, back in the days when Naperville had a population less than 5,000, and just about everyone knew everyone else. (Naperville's population is 90,000 today, and its popularity as a stopping off place for frequent transerees means that you don't get a chance to know too many people—for very long.) Don has had a distinguished career as a Naval Aviator, including combat in the A-6 and a stint as a test pilot. We have maintained our friendship over the years, through my avocation of military aviation journalism, and his willingness to cooperate with my requests for information and assistance.

In fact, the "Warthog" appellation is so popular that the Warthog pilots wore rubber pig snouts to the daily airshow briefings!), and an F/A-18 from VFA-106 out of NAS Cecil Field, Florida. The civilian performers were headlined by the Holiday Inn Aerobatic Team in their Pitts S-2 biplanes, Julie Clark in her MOPAR T-34, Elliot Cross in his Great Lakes, Jim Parker in a solo Pitts routine, Steve Oliver in his Chipmunk, Steve Powell in his aerobatic sailplane, Hall Goff in a Cub comedy routine, the Navy's own skydiving team, the Leapfrogs, and of course, the Lima Lima Flight. We felt privileged to be included in this very professional group of aviators and we were looking forward to the show.

We were airborne on Thursday morning at 0800. Bill Cherwin, with GIB Kim Currier, was leading us, with Ted Adams, Ed Hicks and wife, Leslie; Rick Gretz with John Russell, and Lou Drendel with wife, Carol, on the wing. Bob Morse, with intrepid wife Bunny, was to rendezvous with us in the air. (Bob says that Bunny is the bravest person he knows. There is no way he would ever get into one of these airplanes if he thought he was going to die. Bunny is sure she is going to die, but she still goes with him!) Bill had filed an IFR flight plan for the trip and he was sincerely hoping for some IFR weather to test his wingmen. (Bill's enthusiasm sometimes outpaces that of his wingmen, and the rest of us were quite happy with the CAVU forecast for the entire trip.) Morse was later than usual, which resulted in some extra handling by ATC while they tried to control the rendezvous. Chicago Center was probably not too unhappy to hand us off to Chicago Center was probably not too unhappy to hand us off to Pax River.

How many Navy flightline personnel does it take to put smoke oil in a T-34? Answer: More fingers than you have on one hand!

Two years ago Don was assigned as Commanding Officer of the Naval Air Test Center at NAS Patuxent River, Maryland. This may just be the best assignment in the military. NATC is charged with testing every operational airplane in the Navy's active inventory, from the oldest to the newest, which means they have at least one example of every type. This adds up to 147 airplanes. When you are dealing with that many different types of airplanes, and you are testing the limits of their performance envelope, you need consistency from everyone who is involved. This means that only the best Naval Aviators and Naval Flight Officers work at NATC. It also means that a lot of civilians are working the flightline and the maintenance and engineering billets. Pax River is one of the most interesting military bases because of the diversity of effort, but it also is one of the more beautiful bases. It is situated at the confluence of the Patuxent River and Chesapeake Bay in southern Maryland, about 60 miles south of Washington, D.C.

NAS Patuxent River and NATC host an open house, dubbed "Air Expo," each Labor Day weekend. Air Expo '90 featured a variety of top name civilian aerobatic performers, as well as military demonstration teams from the 355th TFW, Davis Monthan AFB, flying the A-10 Thunderbolt II (more popularly known as the "Warthog."

Do Warthog drivers assume the personality of their airplanes? You bet!

Julie and Mark discuss the airshow plan with Bill Cherwin, John Russell and Rick Gretz at NAS Patuxent River.
Indianapolis Center. We made one stop for fuel enroute, at Zanesville, Ohio, arriving at Pax River about 1430 local. (Fuel stops with six airplanes always takes at least an hour, especially when you run the fuel truck out of gas.) The Navy parked us at the Test Pilot School, and we were immediately swarmed by ground crew which chocked and tied the airplanes down. In fact, throughout the entire weekend, we were treated to the military flight line work ethic. Whenever we flew they were there to see us off, to direct us to parking, and replenish fuel and smoke oil upon our return. And, their hospitality did not end there. We were give four cars to get us around the base and environs, and put up in a motel just outside the main gate.

The airshow lasted nearly four hours. Friday was billed as a "practice show." None of the local civilians was allowed on the base, so this show was largely for the benefit of base personnel. Static displays of the many different types of aircraft on the base were pleasantly deserted, allowing photographers unimpeded views of the airplanes. It was also a perfect day. Clear skies, temperatures in the low 80s, low humidity—just perfect. In the evening, there was a "Meet the Performers" party at the Cedar Point Officer's Club, hosted by Admiral Boecker. In addition to giving the performers a chance to meet and really get to know each other, there was a never ending supply of great buffet hors d'oeuvres. The highlight of the party was a night performance by the Leap Frogs and Steve Powell, who attached flares to his sailplane and did a spectacular show which seemed to last longer than it was possible for the sailplane to stay airborne.

Don is one of the most popular commanders in the Navy and always has been. (Throughout the years I have visited him in various commands, and the most consistent comment from those working with him has been their respect and admiration for his treatment of those under his command.) Don has the rare, but necessary, command ability to relate to his fellow sailors, whether they are Seamen or Admirals. Don's wife, Gay, has the nobless oblige of landed gentry, and she comes by it honestly, being a direct descendent of both Pocahontas and George Washington. (How's THAT for lineage?) Being entertained in their home was just about the crowning highlight of what was a fantastic trip. Oh yes, the airshow that day went off without a hitch, and we got enough honest kudos to feel like we were not masquerading as professionals.

The trip back was another IFR filed flight, but this time it was just for real! Ted Adams was leading us this time and he filed for 6,000 feet. The CAVU weather of Thursday had deteriorated to marginal visibility in haze and scattered to broken cloud layers. There were no major weather events forecast for the return flight, so we were not particularly worried. Ted filed as a flight of seven, and Julie Clark accompanied us as far as Zanesville. (Julie, who is a Northwest Airline Captain, as well as a professional airshow pilot, had a new domicile assignment and was headed for Detroit.) At 6,000 feet there was literally no forward visibility, so we really were IFR though you could see the ground—straight down! Cloud layers above made for some interesting sensations while flying wing, and we had to ask for a higher altitude to keep from boring into clouds with the formation. But it all worked out, and halfway between Zanesville and Naperville, we punched through the front and enjoyed 20 mile plus visibility for the last couple of hundred miles. A fitting finale for a great weekend—and the last airshow of the summer.
Dear Jim:

Enclosed is a $25 check for my dues. I really enjoy the newsletter and appreciate your good work in the association. If you come this way, call me and I will offer you some southern hospitality.

A status report on my little craft (T34A-N88056E): Still in pristine condition—now has 2800 hours on airframe and 300 hours on firewall forward. I keep it hangared and covered 100% of the time. Get occasional call to buy (tire kickers).

Best Regard,
Paul Wm. Bennett
Biloxi, Mississippi

Dear Jim:

Have only been a member for a little over one year and in reading over some past newsletters I realized my annual dues are due. Enclosed please find my check.

My only claim to fame in T-34s is flying a CAP aircraft out of San Carlos, 110FA. Like everyone that is hooked on one, my desire is to have one of my own. About to turn 68 years, so time is running out. In the meantime, "Foxy Alpha" helps. Harry Hadley is a member of our squadron and is a big help to the group.

We moved to Oregon a couple of years ago but I still go down to SQL on a regular basis. Ex UAL helps with free transportation.

I do a lot of flying here out of Ashland. Got a call today that a T-34 was in town so I drove over. Turned out it was Kris Cox and his wife on their way back to Pine Mountain Lake from a trip to Alaska and points north. I had not met him before but we have several mutual friends, it seems. We used to live in Redondo Beach, which is next to Torrance, his old stamping grounds. His airplane is beautiful.

Lived in your neck of the woods also. Spent sixteen years at ORD with UAL before heading back west. We lived in Crystal Lake, not exactly your neighbor, but close. Hadn't become involved in the T-34 then—didn't know what I was missing.

Looking forward to the next newsletter and information.

Sincerely,
Bud Nobbs

Dear Jim:

They say time heals all wounds, however in my case, it usually takes a little longer.

My plans for some time have been to organize a memorial for our pal Emile, and I have been waiting for the proper means. I have had a lengthy discussion with Bill Noriega at the Valiant Air Command about the new museum and the memorial wall that is presently being organized.

My proposal is to place a 22" x 28" color photo, framed in bronze, of Emile on the memorial wall. (See picture on page two of this publication.) The cost of the picture and framing has been covered. What I am asking for are donations to cover the cost of the memorial wall, which will be approximately $1,500 to $1,800. This will be a lasting tribute to our dear friend, and hopefully we can put together some type of dedication at the next VAC Air Show which Emile's family could attend.

Thanks in advance, and if you choose, make your check payable to the VAC and return it to me. The picture and frame have been ordered and I hope to have the project completed by the end of 1990. If needed, you can contact me at 813-749-1228. My address for donations is: Richard H. Maguire/VAC, P.O. Box 9669, Bradenton, Florida 34206.

Happy Flying,
Mac Maguire

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**MY T-34 STORY**

*BY BRUCE LAMONT*

When I was growing up I would go flying with my Dad every chance I could. I can remember several trips in "7021D," Dad's Tripacer. (I also remember the day Dad got the phone call that 21D had been flipped over in a landing accident by his partner.) I wasn't big enough to see over the nose, so Dad taught me to fly using basic instruments. "Keep your wings level, hold your altitude and fly this heading," he used to tell me.

My formal flight training started when I was in high school, and I soloed my senior year. Then I quit flying. I was 18-years-old, and chasing girls and building cars seemed more important at the time.

As time went on I would fly with Dad on occasion in his 182 and then in his T-210. I kept thinking, "One of these days I am going to start flying again." Well, I renewed my interest in aviation three years ago when I became involved with the Oregon Air & Space Museum. I soon found myself spending more time working on airplanes and less time working on old cars. I figured if I was going to spend my time at the airport, it was time to start flying again. I enrolled in ground school and started looking for an airplane. What I wanted was a T-34, what I needed was a Champ or a 150. What I bought, nine weeks later when I got out of ground school, was a 1947 Piper PA-12.
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My hangar was directly across from a T-34. I was always talking to the owner and admiring his plane. Every time I would see it, it would remind me of what I wanted. In the sixteen years I had been away from aviation, I had been restoring old Corvettes. I think a lot of my interest in the T-34s is because, to me, a T-34 represents in an airplane what a Corvette is to other automobiles. "The all-American sport machine." Room for two and a small suitcase. "Yep, if a Corvette had wings, it would be a T-34!"

The more I thought about buying a T-34, the faster the prices seemed to escalate. I decided if I didn't find a plane soon, I may as well forget it. I was looking at one particular plane when I found out Dad was looking at the same T-34. I told him what I had in mind and he decided it was time for another partner. I contacted the T-34 owner in April, 1989. He stated that he was working a deal to get an A model out of the southeast. It was going to be a trade and could take up to six months to complete. He gave us a price and we told him we would purchase the plane when it became available. To make a long story short, we waited six months just to have him sell the plane to someone else without even telling us until it was all done.

Well after the smoke had stopped coming out of my ears, I started looking again. After chasing down several ads and talking to a number of people, I finally located an airplane. It was early November when I spotted this ad. I got on the phone and after several phone calls, I was sending a fax to the Philippines, which I followed up with a phone call the next day. The seller, "Bill," said he already had a deposit on the plane by the time the ad had come out, but that my fax had come in first, so if for some reason the buyer backed out, I would be next in line. He had agreed to hold the plane until the buyer could arrive and inspect it.

I figured the plane was sold and I had missed out again, but I sent Bill another fax a week later to remind him that I was still interested in case his first buyer backed out. On December 23rd I received a large packet in the mail with photos and information on the T-34. (It was Saturday, and Dad and I had just returned from looking at a J-2 Cub in pieces that was stored in the proverbial barn.) I opened the packet and spread the photos on my desk. After about five minutes I said, "I am going to buy it." Dad said, "Okay, count me in!"

I sent a fax stating that I wanted the plane. Bill was gone for the holidays so it took several days for him to get my message. In the meantime, I checked him out with several people in the Association who had done business with him before. When I finally reached Bill on the phone several days later, I committed to the purchase, sight unseen, and promptly mailed a deposit.

Over the next few weeks all of the details were worked out, and the 40-foot container with the T-34 inside left the Philippines on February 3rd, arriving in Seattle around February 26th. For nearly three months I had waited patiently for this thing to arrive. Now it was only 250 miles away and I felt like a kid the week before Christmas—and couldn't wait for it to get here.

It was finally trucked to Portland, Oregon on March 5th. I received a call on the 6th from U.S. Customs saying they expected to get it the next day—but that was not to be the case. The shipping company would not release the container because they claimed they had not been paid. It seemed as though the freight forwarding company in Manila had collected the money but had not passed it
on to the shipping company. After a quick fax and two phone calls, Bill had everything worked out on his end and the container was released on Friday, March 9th. It went to Customs the following Monday. On Wednesday, March 14th, the container was trucked the last 100 miles to Eugene, Oregon. The T-34 now resides in the corner of my small hangar with the PA-12. A tight fit! This winter we will be busy looking for a bigger hangar, and buying and trading parts for our Mentor restoration.

The only thing we haven't been able to agree on is paint. Dad wants to paint it Navy and I want to go with Air Force colors. I took a lot of pictures at Oshkosh and Madera to give us something to think about. I enjoyed meeting a number of T-34 Association members there, and I appreciate the time many of you took to educate a newcomer and make him feel welcome.

This is my first experience with getting an airplane shipped in from another country. My best advice to someone thinking of trying it would be to know with whom you are dealing. Take the time to check them out. You are sending your money to a foreign country, and getting it back will be next to impossible. Try and work with a broker who has imported aircraft before, it will speed up the process. I did my homework and I am very pleased with the results!

So what's next? Well after we get a bigger hangar, I think a Meyers OTW or a Culver PQ-14 would look good sitting in the hangar next to the T-34 and the PA-12.
A copy of the new publication, *T-34 Mentor in action*, is enclosed to every member, compliments of the T-34 Association, Inc. The soft-bound publication is the thirty-eighth book written by Lou Drendel for Squadron/Signal Publication. The book's 49 pages are packed with historical background and photographs on the T-34 Mentor. Although the majority of photographs are in black and white, there is a centerfold which depicts many of the T-34 aircraft color schemes used around the world.

Additional copies of *T-34 Mentor in action* can be purchased through our Association Merchandise Sales Officer, Chris Rounds, at 802 Lowry Street, Manchester, Tennessee 37355, or call 615-782-2095. You can also receive additional books by calling Jud Nogle at 217-253-4342, fax 217-253-2611 or T-34 Merchandise Sales, R.R. 2, Box 199, Tuscola, IL 61953. Each book is only $7.95.

Lou Drendel has many of his original illustrations for sale. These were used in many of the books published by Squadron/Signal Publications and include most modern military aircraft. They range in price from $100 for vignettes, to $1,000 for full illustrations. Lou is also available for commission work. Contact Lou Drendel at 98155 Chandelle Drive, Naperville, IL 60540 or call 708-904-5440.

Also, the Association is still planning to publish the *T-34 Buyer's Guide*, however it is still in a manuscript stage. We have received many photo contributions for this publication, which will concentrate on the aircraft's civil use (whereas Drendel's book emphasizes its government services history), and a lot of those pictures will be used.
Sky Warriors

On Monday, November 12, 1990, Atlanta, Georgia became home to the nation's second fighter pilot fantasy camp. Sky Warriors, headquartered at Fulton County Airport, has moved the game of laser tag into a pair of T-34A cockpits and for three to four hours and $490, just about anyone can find out if they have the "right stuff."

"I've done aerobatics, skydiving, you name it—and this is more exciting and more challenging than any of them," says Michael J. Brady, chief executive of Northwest Airlink and co-owner of Sky Warriors. "Our goal is to make the experience as realistic as we can, but we also try to make it as much fun as we can and as safe as we can."

Mr. Brady estimates that it took approximately $500,000 to get Sky Warriors ready for its Veteran's Day debut when two members of the famed World War II Flying Tigers unit staged an inaugural dogfight. $300,000 of the money went towards the purchase of the two 1950s era planes which have been souped up with new, 300 hp engines and military paint schemes.

Every lesson begins with a 90-minute briefing in an elaborately re-created squadron "ready room." Instructors (there are 18 total) clad in khaki flight suits twirl miniature model airplanes to demonstrate the gut-wrenching maneuvers used to slip behind opponents. They also explain the rules which require pilots to keep planes at least 500 feet apart during dogfights, maintain radio contact and stay at least 3,000 feet above the ground.

Pilots then swagger to their airplanes in identical Top Gun helmets—appearance is very important because the entire dogfight is videotaped from the time they are strapped into the cockpit. Three video cameras mounted in each plane peer out the gunsight, forward from the top of the tail and at the pilot from the instrument panel. At the end of each flight the videos are reviewed and edited, then a copy is given to the pilot.

Instructor pilots take off from the backseats and fly in tight formation for about 15 minutes until they are over an unpopulated area northwest of Atlanta. Then the pilot takes over trying to pin laser beams on each other's tail. When a red firing button on the joystick is pushed, a rat-a-tat machinegun sound rattles through the earphones. A column of white smoke automatically billows from the loser's plane when the laser system scores a direct hit.

Instructors give advice over an intercom and keep their hands and feet on dual controls while the planes climb, roll and dive. When student pilots start going astray, instructors nudge them back. "When I'm up there," says instructor David Waldrop, an airline captain and former F-15 pilot who shot down two enemy fighters over North Vietnam in 1967, "I want to win and I want whoever I'm flying with to win." Co-owner and chief instructor, Earl "Stinger" Arrowood describes his fellow instructors as "overgrown kids playing with overgrown kids" toys.

Arrowood and Brady started their aerial laser tag business a year ago after visiting a similar operation, California-based Air Combat USA, which proved there are enough aspiring Chuck Yeagers out there to run a profitable business. Most customers are pilots, but anyone 16 or older in good physical condition is eligible.

Brady said customers have been coming from across the United States and Europe to shoot each other down, and an aviation tour group in England is arranging three- and five day packages. Most customers come in pairs—friendly rivals who want to see who could obliterate whom if the guns were loaded.

If you are interested in dogfighting, contact Sky Warriors, Inc., 3996 Aviation Circle, Hangar B, Fulton County-Brown Field, Atlanta, Georgia 30336, or call 404-699-7000; fax 404-699-7200. Reservations must be confirmed with full payment of $490 two weeks in advance of mission flight date. They accept personal checks, money orders, or VISA or MasterCard.
DAVID L. DURBANO
OGDEN, UTAH
Several months ago my husband Dave, a T-34 Association member, mentioned that Jim Nogle had put out a plea for someone to help him with this publication. Since that is basically my occupation—producing over 350,000 newsletters each year for over 28 companies nationwide—I responded and voila!

When Jim sent me all the data he had collected for this issue he included a cover letter, which in part read: "Regretfully, what have been two regular columns in past issues of The Mentor Monitor, Details and Tails of Our Members, will not appear in this issue due to lack of such contributions. However, Linda, how about an article, written by you, on your husband for our 'Tails' column?" And so there you have it folks, how could I refuse the first request by my new boss?

I spoke with Dave on the subject and, being the modest person he is—thinking his story is boring—but trying to keep marital bliss, he reluctantly agreed to a story about him. Besides, I don't think he's boring at all—you judge for yourself!

Dave is a full-blooded Italian-American with Italian heritage in mining and farming. His grandparents immigrated to the United States and settled in the Chicago, Illinois area. In pursuit of the American dream of freedom and wealth, both his paternal and maternal grandfathers ventured west—one on his way to California and a prosperous macaroni endeavor, the other to settle down, own land and raise crops in Utah. Fortunately, the macaroni entrepreneur was sidetracked in Utah, working in the mining industry.

Mother met father, and three sons, Ernie, Vic and David, followed. Dave's modest roots were in farming—potato and onion farming to be exact—but Dave's aspirations strayed far from the fields. When his father thought he should be home hoeing spuds, David was either on a baseball diamond, football field or flying. When he wasn't there, his entrepreneurial nature led him to seek several after-school jobs so he could afford luxuries not common to most teenagers with limited resources.

When Dave, now 49, was in high school, he used to study constantly about airplanes and flying. He joined the CAPs, he hitched rides in airplanes every chance he could, and at age 16, he soloed. The first plane he flew was a 65 hp Aeronaca Champ which belonged to the Sky Haven Airport in Bountiful, Utah. Over the last 33 years, he has owned or been partners in several aircraft including a multitude of Super Cubs, a Cessna 206 and a Cessna 182. He presently owns a Piper Super Cub (3959Z), and is partners in a Cessna Conquest, but his current love is his T-34A (84KW).

Dave wouldn't tell you, but I will—he has a very successful business career—not in airplanes—in railroads. He presently has a railroad construction and maintenance business, and also owns various shortline railroads, with approximately 700 miles of track in Texas, Oklahoma, New Mexico, Wyoming, Arizona, Oregon and Idaho—not Utah. A half dozen children, grandchildren, family and close friends tie us to Utah. The proximities of these sometimes remote railroad lines from Utah necessitate personal aircraft. Many of the railroads are not accessible by commercial flight and too costly even if they are, so between the three airplanes, Dave and other members of his Company are able to visit job sites and railroads across the West. If he needs to fly the line, very low and slowly, researching the condition of the track, he'll fly the Super Cub. If he needs to get there in a hurry and take quite a few people with him, he flies in the Conquest. (In November Dave made his first left-seat cross-country flight from Ogden to Cottonwood, Arizona in the Conquest.) When he's out for a leisurely trip, a lot of scenery along the way and the thrill of flying, he takes the T-34.

He is, however, very particular about when and where this "baby" flies. It never sees bad weather, and if there is even a remote chance that a storm is brewing, the T-34 stays home, tucked snugly in a hangar located at the Ogden Municipal Airport in Ogden, Utah. When he purchased the plane from Walter Mayer in the mid-80s, it had an Air Force trainer color scheme. Following a destructive hangar accident (which he will report on at a later date under another heading), he had it rebuilt by Earle Parks and had the new yellow and white, with black trim, color scheme applied. He also replaced the engine with a new IO550-B Continental, 300 hp; he also added a three blade prop and a new cockpit and instrument panel. He's determined that neither hail, snow, sleet or ice is going to damage this "work of art." I've tried on several occasions to get him to fly us to
West Yellowstone (we keep a boat at Yellowstone Lake in the summer) or Jackson Hole and then drive to the lake, but he won't leave the plane out in the mountain weather where clouds can accumulate and devastate in a twinkling. Plus, the airplane draws such attention, he is worried about vandalism while it is unattended.

Dave has always had a love of warbirds. He first was drawn to the T-34 in the early 60s when the Civil Air Patrol brought two of them to Ogden. A friend, the late Don Patterson, used to take Dave flying in one of the T-34s. He always thought he wanted to own a P-51, but when he saw an advertisement in Trade-a-Plane, he answered, and the next thing he knew, Walter was flying the T-34 to Utah from Texas to meet its new owner. Dave's hard work and dedication to his work had paid off. He could really own a T-34.

The plane, as Dave knows it, was originally manufactured in 1955 from parts. In the mid-70s it was owned by Victor Landau, then owned by Walter Mayer. Dave purchased the plane in September, 1984.

Dave is the only T-34 owner in Utah so he spends much of his time chasing T-28s through the air. His oldest brother, Ernie, has a T-28A and T-28B, and the three planes make the local airshow circuit every season. Dave likes to fly formation but Ernie enjoys the thrill of leaving the T-34 behind. It doesn't really bother Dave because on the ground, the showy T-34 gets much more attention than the T-28s. (Proverbial sibling rivalry at its best.) It never ceases to amaze Dave, or myself, how much people know about the T-34 and its history. At every airshow it seems someone comes up and tells you about their association—and fondness—with the T-34. It makes one very proud to be associated with such a prestigious aircraft which has played such an important role in the military history of aviation.

Dave also has been practicing aerobatic maneuvers—and quite often flies with his 20-year-old son, David Jr., who soloed at age eighteen in the Super Cub. Dave's dream is to add another aircraft to his collection—I said add, he'll never replace the T-34. He would like to see David Jr. develop the fondness he has for the T-34 while he pursues another ultimate flight experience in a PC-7 Pilatus. (It makes me very proud to know that he works hard enough to be able to achieve his goals.)

About me, I don't get to too many airshows and I've only been in the T-34 twice. The first time I was with Walter and the second time I flew home from Arizona with Dave's Conquest pilot, John Gardner. Some of our friends think I need to keep the embers burning by diving head first into Dave's hobby, but he doesn't see it that way, and besides, he always has a waiting line to fly in the T-34 so I'll just wait my turn. Our age difference puts us at different levels of life, and we're also fortunate enough to have a relationship which doesn't require us both to have a fierce love of flying—in fact, everyone that knows me knows it's my number one fear! Right now I'm a workaholic and spend my limited free time on the golf course (even in the winter we follow the sun). I would like to make it to Oshkosh one year though, and I also hope our retirement years will see us speeding off into a lot more sunsets—quite possibly in the T-34!

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**FOR SALE**

CONTINENTAL 0-470-13: 2383.1 hours total time on engine. 70.4 hours since major overhaul. Includes all accessories but no propeller. Contact Steve at 316-636-9700 or fax 316-636-9718.

T-34C DESKTOP MODELS: New T-34C desktop models in Navy colors. 1/48 scale; 7 1/4 inches long with a wingspan of 8 1/2 inches. I only have two left. Retail $79.95. Special T-34 Association price $59.95 plus $4.00 U.P.S. 

T-34C LAPEL PINS: $4.00 each (or 3 for $10.00). Special deal—receive a free lapel pin when you buy a model! Contact Bruce Lamont, P.O. Box 8130, Coburg, Oregon 97401. Telephone 503-484-6511, days or 503-995-8356, evenings. Fax 503-484-0255.

FUEL: Frederick Aviation, Inc. will give any warbird 20 cents off the retail fuel price for 100LL and Jet A. They are located at the Frederick, Maryland Municipal Airport. 301-662-8156.

AIRCRAFT JACKS: Don Alderson, Rosamond, CA, reports that he has manufactured approximately 100 elbow style jacks for the T-34. These jacks will fit most Beech aircraft up through a Duke. The construction is heavy duty and is very stable. The jacks lift one wheel at a time, nose or main, and sell for $75 each. Contact Don Alderson Enterprises, 4440 Knox Avenue, Rosamond, CA 93560, 805-256-4623.

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0-470-13A ENGINE AND PROP: Only 76 hours on a zero time overhaul and only 96 hours since overhaul on the prop. It is a smooth runner, burns no oil and has Ceramicrome cylinders. $10,000. Contact Earl Arrowood, 404-534-6829.

0-470-13A ENGINE-firewall forward: Includes prop, all accessories less oil tank, exhaust and tach generator. Approximately 780 hours since overhaul. Runs well. Lowest cylinder is 75/80. Contact Noel Hops, 415-493-3526 or Jud Nogle, 217-253-4342.

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**WANTED**

T34A: Solid airframe. No damage history. Engine type not important. Call Earl Arrowood, 404-532-1640 or Mike Brady, 404-461-8188.
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