



FLIGHTLINES

Newsletter of the Texins Flying Club

October, 1999

CALENDAR OF EVENTS

16 September (Thursday): Fall VFR Ground School Registration, Forest Lane South Lobby Conference Rooms. Contact Chuck Chase for details.

21 September through 18 November (Tuesdays and Thursdays): Fall VFR Ground School Forest Lane South Lobby Conference Rooms.

25 September (Saturday): PACE Program, contact Jim Burrows for details or to schedule FAA flights call 800-759-4684.

6 October (Wednesday): TFC Board Meeting. 6:30 PM, TKI's terminal. All members are welcome.

9 October (Saturday): Member/New Member meeting, donuts at 8:30am, meeting at 9:30am.

3 November (Wednesday): TFC Board Meeting. 6:30 PM, TKI's terminal. All members are welcome.

13 November (Saturday): Member/New Member meeting, donuts at 8:30am, meeting at 9:30am.

Congratulations on these Member Achievements!

Member	Event	Date	Instructor
Doug Peysha	1 st Solo	7/31/99	Richard Klein
Robert Fishell	1 st Solo	8/17/99	Bob Niedwiecki
John Randall	1 st Solo	8/18/99	Art Jones
Al Bradford	1 st Solo	8/19/99	Bob Niedwiecki
Calvin Coffey	COMMEL	8/24/99	Chuck Chase
Dwayne Hope	1 st Solo	9/02/99	Jim Lewis

Highlights from September Board Meeting

Board Members in attendance: Micah Koons, Bob Moran, Don Essenpreis, Jim Burrows, Art Jones, Dick Sandlin and Steve Aughinbaugh

Club Members: Ash Collins, Mark Seglem and Mike Hance

Mike Wood of ATC Trainer Simulators spoke to the board about updating the ATC 610J simulator. For \$500 he could reprogram ATC 610 simulator to be the updated DFW area with the new VORs and include TKI. For another \$500 he could add a digital DME. This would more realistic approaches to be flow for the local area. The board directed Art Jones to discuss this idea with the CFIs and report back if there is any interest and if this would improve the utilization of the simulator. Mike Wood can be reach at 1-800-SIX-TENJ if we decide to

go ahead with this. He said that he would need to have access to the simulator for about an hour to install the changes.

The board discussed general insurance issues and concerns. We have recently renewed our insurance on the aircraft and it was felt that a review is in order. The has also been concern about TFC board member liability and that perhaps TFC should purchase Board Liability insurance. It has also been stated that since TFC does not really exist as a separate from Texins Association legal entity, that this may be unnecessary. An Aircraft, Liability and Board Liability Insurance committee of Bob Moran, Robert Jolly, Ash Collins and Dick Sandlin was created to review this and report back to the board. Dick Sandlin will chair the committee.

The owner of 5682T will be removing the airplane from the club on 9/30/99. The board decided that with the current pilot loading that we need to secure another 172 or equivalent. If anyone knows of a candidate airplane please contact Don Essenpreis. He is currently looking at a replacement 172 that may be acceptable.

Officer Reports:

Safety Officer: The PACE program is a go for 9/25. All TFC owned aircraft will be reserved on the morning of 9/25/99 for the PACE inspections and flights. Any member that wishes to fly with the FAA can reserve an airplane over top of the PACE reservation for that morning. As part of the inspection it is important that the club owned aircraft be washed. We will have an aircraft washing party on 9/18/99. Everyone that can should come out on the 18th and help with the washing.

Also, due to Jim leaving Raytheon and other reasons, he announced that he will resign as Safety Officer but will remain a club member. So we will need to appoint a new Safety Officer soon. →

Our Airplanes Need a Bath!

On 9/18/1999 there will be a TFC Aircraft washing party! We need to get the airplanes cleaned up in preparation for the PACE inspections on the 25th. If you have any questions contact Jim Burrows. Please come out to the airport on Saturday the 18th and help wash an airplane or two! →

AirVenture '99 Part 1

By Steve Aughinbaugh

Waking-up and the First Leg

The trip to Oshkosh went very well this year. There was a little bit of concern among the group about having to get up at 4:00 AM so that we could leave by 5:30 AM, but we all made it OK. It was not much of a problem for me because I don't sleep much the night before leaving for OSH since I am so keyed-up waiting to go. Monday night I believe that I saw every hour on the clock from 10 PM when I laid down to go to sleep until 4 AM. I still got my rest, just not a lot of sleep. So we loaded the airplane at 5:00 AM and the wheels left the runway right at 5:30 like we planned. It was still dark with a clear sky. I had checked the weather before we left and the weather in the DFW area was crystal clear. There was the traditional (for this time of year) front across the middle of the country, but we would not see it until after we left Oklahoma. Our first stop was Jones Riverside in Tulsa (RVS) just across the river from Oral Roberts University. We thought we would get to see a pretty sunrise but were disappointed by its lack of color. It just gradually got brighter as the sun rose over the right wing.

I was sitting in the front left seat. This is the normal seat for the PIC (pilot in command). Mike was in the front right seat. A pretty normal location for him since he is a flight instructor. Cindy was behind me and Sallye (not a misspelling, Sallye's mom was creative) was behind Mike. Cindy enjoys following along with the charts. So she and Sallye were busy doing that most of the flight. Sallye is an air traffic controller at the McKinney airport where I did most of my flight training so she was able to explain some of the chart information to Cindy that she had not already figured out or that I had neglected to tell her about. Cindy has become very good at reading the chart, so I was certain that we would not get lost. Besides, both Mike and I had our GPSes mounted on the yokes in front of us. We would have had to try very, very hard to get lost.

Cindy and Sallye had the job of keeping up with the charts to make sure Mike and I were going where we expected to. Mike's job was radio communication. He contacted all of the controllers that we needed to talk to and would call the in-flight weather service or flight-watch as it is know. After landing at RVS in Tulsa and refueling we left there for Cedar Rapids, Iowa. We had left Aero Country with 40 gallons of fuel and this was the first time that we would have a full 50 gallons and 300 pounds of fuel. This would put us right at the gross weight of 2400 pounds for my 63 Cherokee 180. Not a problem, but the airplane does handle a little differently and does not climb as well at this weight. We had tried to limit everyone on how much luggage to pack. For the most part everyone did real well. Cindy and I were able to get all that we needed into one carry-on size bag and my nap sack.

The Long Leg

Taking off from Jones Riverside, Mike asked the controller if we could make a left turn so that we could fly over Oral Roberts. The tower controller cleared us for the left-hand turn and we were able to see the praying-hands statue in the morning sun light. The next controller directed us to climb to the north and then turned us so that we crossed over the north end of Tulsa International giving us a great view of Tulsa and its major airport. This leg was the long leg on the trip up. We had landed at RVS at 7:05, just over one and half-hours after leaving Aero Country (TX05). It would take us almost 4 hours to get to Cedar Rapids. Near Kansas City, Mike talked to Flight-watch and we deviated a bit to the north to miss some isolated thunderstorms. We were cruising at 5,500 feet with a pretty solid overcast above us and scattered clouds below us. On the whole trip we never flew into any rain even though we knew there were areas where there was or had been some rain. As we neared Cedar Rapids, Mike decided to file an instrument flight plan mostly so that I could practice descending through the clouds. The clouds were scattered enough that we could have conducted the whole flight under visual flight rules or VFR. The controller managed our flight into Cedar Rapids and I handled the flying on the instruments very well with a little bit of encouragement and advice from Mike. We came out of the clouds at about 2,000 feet. We were actually in and out of them all the way down from 5,000 feet. Cedar Rapids is a fair sized airport in the middle of cornfields. We landed uneventfully at 11:20 just a bit ahead of schedule and 3.9 hours after leaving Tulsa.

At Cedar Rapids, we had the airplane refueled and borrowed a very nice courtesy car to go into town for lunch. None of us were interested in a heavy lunch, so we stopped at a Subway shop. With a bit of rest and lunch out of the way it was back into N642RJ at 12:30 and on to Oshkosh. The clouds that had been present when we landed were now gone for the most part. We had a great view of the city and rolling farmland as we climbed to 5,500 over eastern Iowa.

The Approach to OSH

About an hour and a half later we were approaching the beginning of the VFR arrival at OSH over the small town of Ripon. It was only at this point that we began to see any other airplanes. Using good cockpit resource management (CRM, that is an FAA term that means that everyone knows what their role is in an airplane), the four of us divided up the sky. My responsibility was first, fly the airplane (always job number one!) and scan for airplanes from the front center to just in front of the left wing. Mike scanned from front center to just in front of the right wing. Sallye had from the right wing back and Cindy had from the left wing back.

I descended to the required 1800 feet and slowed to 90 knots crossing over Ripon and lining up over the railroad tracks going northeast. There were a couple of airplanes in the distance nearer to OSH. Sallye called out the first airplane. A twin passing us at 2300 feet and going

faster. That is the procedure for airplanes that can not slow to 90, stay at 2300 and maintain 135 knots. There was a bit of excitement in Sallye's voice. Partly because of the closeness of the twin and partly because we were about to land at the busiest airport in the world. All of us were excited to be flying into OSH.

As we approached Ripon I had turned on every light that the N642RJ has. She has a lot of them. The rotating beacon above the tail was on. The nose landing light was on. The 3 recognition lights were on. The wing tip and tail strobes were flashing. And of course the wing tip landing lights were flashing back and forth. You can imagine that we could be seen by anyone looking in our direction. As confirmation of that we were indeed identifiable the controller over the second waypoint at Fisk radioed "Cherokee with flashing lights, acknowledge by rocking wings". I smiled and gave them a solid wing rock or two. We were now directed to switch over from the approach frequency to the runway 27 tower frequency and proceed to a right downwind entry for 27.

Landing at the World's Busiest Airport!

The other airplanes in front of us were taking the long route to the runway with a very wide downwind and a base leg a mile or so out over the lake. Being a veteran now and with Mike guidance (actually it was more like his insistence) we stayed in close on downwind and began our descent. Just abeam of the numbers we began our base leg merging in with other traffic but well ahead of the airplanes that were on the wide patterns. We were rewarded with a "great job Cherokee!, land on the green dot" from the tower controller. It is always a good feeling to get a compliment from the controllers that volunteer for Oshkosh. The Green dot was the middle of the three touchdown spots on 27. I believe that a Cessna was landing on the orange dot 1500 feet in front of us at the same time. We touched down smoothly and were directed to exit the runway to the right.

We had arrived at Oshkosh! As I touched down nicely and slowing the airplane to exit the runway to the right this year, we displayed our GAP sign as requested in the arrival procedures stating that we wanted to park in the General Aviation Parking area. GAC for the General Aviation Camping area would have been our other choice since we are not flying a classic, homebuilt and N642RJ could never be mistaken for a warbird! We were able to park very close to where we parked last year. This is a good spot since it is near an area where we can park the car for unloading and loading the airplane. I shut the engine down at 2:30, 25 minutes ahead of what I had flight planned.

We all piled out of the airplane and smiled at each other as we were hearing and seeing the swarm of activity and airplanes moving and landing around us. I tied down the airplane as the rest stretched their legs and gathered the few things that we wanted to take with us to get the car. The sun was shining bright, if not a bit too warm, with a nice breeze. Sallye, our personal air traffic controller, had as big a smile on her face as I had after my first

approach and landing at OSH. It was a great flight, but the fun was just beginning. Next month the convention and airshows. →

178 Seconds to Live

by Verdon Kleimenhagen, Ron Keones, and James Szajkovic of FAA and Ken Patz of MN/DOT Office of Aeronautics

Editors note: This was originally published in 1993 in FAA Aviation News/January February issue. I have not published this to scare anyone but only to cause us VFR or rusty IFR pilots to think about this before launching into or pushing ahead into weather that is questionable relative to your personal limits. You can refer to the original article at <http://www.aviation.uiuc.edu/178SecondstoLive.html>.

How long can a pilot, with or without a current instrument rating, expect to live after experiencing SPATIAL DISORIENTATION? Researchers at the University of Illinois found the answer to this question. Twenty student "Guinea pigs" in ground trainers flew into simulated instrument weather, and all went into graveyard spirals or rollercoaster-like oscillations. The outcomes differed in only one respect: The time required until control was lost. The interval ranged from 20 seconds to 480 seconds. The average time was 178 seconds—just two seconds short of three minutes!!! Here is the fatal scenario...

The sky is overcast and the visibility poor. That reported five-mile visibility looks more like two, and you cannot judge the height of the overcast. Your altimeter says you are at 1,500 feet, but your chart tells you there is terrain as high as 1,200 feet in this sector. There might be a tower nearby because you are not sure how far off course you are. But you have flown in weather worse than this, so you press on. You find yourself unconsciously easing back just a bit on the controls to clear those none-too-imaginary towers. With no warning, you are in the soup. You peer so hard into the milky white mist that your eyes hurt. You fight the feeling in your stomach. You swallow only to find your mouth dry. Now you realize you should have waited for better weather. The appointment was important but not that important. Somewhere a voice is saying, "You've had it. It's all over."

You Now Have 178 Seconds To Live!

Your aircraft feels on an even keel, but your compass turns slowly. You push a little rudder and add a little pressure on the controls to stop the turn, but this feels unnatural and you return the controls to their original position. This feels better, but your compass is now turning a little faster and your airspeed is increasing slightly.

You scan your instrument panel for help, but what you see looks unfamiliar. You are sure this is just a bad spot. You will break out in a few minutes (but you do not have few minutes left...).

You Now Have 100 Seconds To Live!

You glance at your altimeter and are shocked to see it unwinding. You are already down to 1,200 feet. Instinctively you pull back on the controls, but the altimeter still unwinds. The engine RPM is into the red and the airspeed nearly so.

You Now have 45 Seconds To Live!

Suddenly you see the ground. The trees rush up at you. You can see the horizon if you turn your head far enough, but it is at an unusual angle—you are almost inverted. You open your mouth to scream but...

You No Have No Seconds Left!!

You have just become a victim of Spatial Disorientation.

UNDERSTANDING SPATIAL DISORIENTATION

Pilots have taken the subject of Spatial Disorientation far too lightly. If you look at the material presented on the test preparation for the Private Certificate and Instrument Ratings and the questions on the FAA examinations, this subject is the easiest to respond accurately to and yet the least understood.

Recent statistics from the National Transportation Safety Board indicate that Spatial Disorientation is the number one cause of fatal accidents. Most pilots think "Pilot Error" and "Weather" were the most common causes. Therefore efforts have been concentrated on adding better weather information systems. Example: FSS' computer briefing formats, DUAT, Kavouras, Pan Am, and a host of others that are now available. We promote courses in cockpit resource management and decision making—all of these new information systems and training methodologies are great and have reduced the accident rates of the last 10 to 20 years. We do not emphasize the limitations of the human anatomy.

Pilots need to experience spatial disorientation in a controlled setting. Why? Because we have to dispel some common misconceptions and illustrate why flying aircraft is different than other two dimensional modes of transportation.

1. Myth: "Just Believe Your Instruments."

Truth: Many pilots have no idea that some types of spatial disorientation are so incapacitating. Though the pilot know something is wrong, the sensory conflict is so great that the thinking process breaks down and the pilot is unable to recover the aircraft. This may be compounded by the inability to obtain visual information due to blurring of vision (nystagmus).

2. Myth: "I'm an instrument-rated pilot, all of this spatial disorientation information doesn't really apply to me because I've already demonstrated my ability to fly in instruments."

Truth: FAA Accident Reports tend to contradict this statement. Many instrument pilots experience spatial disorientation every year with fatal consequences.

3. Myth: "Continued flight into adverse weather, or flying VFR into IMC conditions are the real causes of many of the aviation accidents."

Truth: What really caused the accident was spatial disorientation. Maybe this sounds a little like who came first, the "chicken or the egg." The pilot wouldn't have experienced spatial disorientation if it wasn't for the weather. However, again statistics still seem to indicate that just because we improve our weather information systems we still don't prevent this kind of accident. What pilots often don't understand is that weather, especially poor visibility, leads to spatial disorientation. Because pilots have never experience spatial disorientation in a controlled situation, they do not know how incapacitating it can be, or how to avoid it.

THE INNER EAR

Most problems related to disorientation can be traced to the inner ear, a sensory organ about the size of a pencil eraser. It may well be the most well protected organ in the human body, and for good reason. It is the key to our ability to balance when on the ground or to remain oriented in space when we fly.

The inner ear is similar to a three-axis gyro. It detects movement in the roll, pitch, and yaw axes that pilots know so well. When the sensory outputs of the inner ear are integrated with appropriate visual references and spatial cues from our bodies, there is little chance to experience disorientation.

The inner ear consists of an auditory and non-auditory portion. The latter, primarily associated with equilibrium, contains the three semicircular canals. The semicircular canals are filled with fluid and are located at approximately right angles to each other. One end of each canal is enlarged and in this area is found a mound of sensory hair cells. Movement or rotation of the body tends to move the fluid of the semicircular canal, thereby causing displacement of the hair cells. The hairs, or cilia, which project into the fluid are extremely fine and light and bend with the fluid's movement. The cilia transmit messages to your brain, telling it which way they are displaced, and your brain figures out the direction of your rotation. Since each canal lies in a different plane, the semicircular canals can report on rotation in three dimensions.

The problem occurs when the outside visual input is obscured, and the seat of the pants input is ambiguous. Then you are down to just the output from the inner ear. That is when trouble can start because fluid in the inner ear reacts only to rate of change not a sustained change.

For example, when you initiate a banking left turn, your inner ear will detect the roll into the turn. This system works fine for short turns, but if you hold the turn constant, you inner ear will compensate and rather quickly, although inaccurately, sense that it has returned to level flight. Therefore, if a constant rate turn continues for more than 15 seconds, the motion of the fluid in the canals catches up with the canal walls (stabilizes in the

canals), the hairs are no longer bent, and your brain receives false impression that the turning has stopped. Thus, after a few seconds, it is impossible for your semicircular canals to detect that you are in a turn, especially if it is a gentle turn.

As a result, when you finally level the wings, that new change will cause your inner ear to produce signals that make you believe you are banking to the right. This is the crux of the problem you have when flying without instruments in low visibility weather.

Even the best pilots will quickly become disoriented if they attempt to fly without instruments when there are no outside visual references. That is because vision provides the predominant and coordinating sense we rely upon for stability.

Perhaps the most treacherous thing under such conditions is that the signals the inner ear produces—incorrect though they may be—feel right! These sensory illusions occur because flight is an unnatural environment our senses are not capable of providing reliable signals that we can interpret and relate to our position in three dimensions without visual reference.

As to "risky weather decisions," all pilots should understand that, unless they are thoroughly trained and CURRENT in instrument flying techniques, they are basically incapable of safely operating in reduced visibility. The accident statistics attest to this. Unless understanding is brought to the consciousness of every pilot, no substantial reduction in fatal weather accidents is likely to be achieved in the foreseeable future.

In addition, a change of bank, pitch or yaw may be too slow to be perceived by a pilot. In other words, acceleration may be below the threshold of perception. In the course of normal cockpit duties a pilot may be surprised to look up and find the airplane in a bank when it was not previously in a bank.

Although the problem of spatial disorientation is as old as aviation itself, its significance in flight safety is clearly underplayed. For example, in flight training and throughout general aviation a great deal of attention is given to weather and the movement of weather fronts. But little or no mention is made about the connection between weather and spatial disorientation. In the Pilot's Handbook of Aeronautical Knowledge (AC 61-23B) the student pilot can obtain a wealth of information on weather. We have made tremendous progress with improving aircraft design, power plants, radio aids and navigational techniques. Safety in flight however, is still subject to conditions of limited visibility. An NTSB study of fatal weather-involved general aviation accidents shows spatial disorientation as a frequent cause. Many of the fatal, weather-involved general aviation accidents are caused by the pilot's mistaken idea of his or her ability to cope with flight in reduced visibility.

The FAA's Aviation Instructor's Handbook (AC 60-14) discusses the desirability of "integrated flight instruction" from the first time each maneuver is introduced. When this training technique is used, instruction in the control of an airplane by outside visual references is integrated with instruction in the use of flight instrument indications for the same maneuver. This handbook states that such instruction

"provides the student with the ability to control an airplane in flight for limited periods if outside references are lost. This ability could save the pilot's life or those of the passengers in an actual emergency."

The real hazard of loss of visual references, i.e., spatial disorientation, is not specifically identified and such identification is important if both pilots and flight instructors are to more successfully deal with this flight hazard. Another source of information is chapter 13 of the Flight Training Handbook entitled "Emergency Flight by Reference to Instruments."

REMEMBER !

A flight in to reduced visibility or Instrument Meteorologic Conditions (IMC) may be...LETHAL !!!

For the opportunity to experience Spatial Disorientation for yourself and learn what your limitations are, contact the Accident Prevention Program Manager at your local Flight Standards District Office for a Spatial Spinner (Barony Chair) demonstration in your area. Find out why you CANNOT fly "by the seat of your pants." →

Fleet Usage Statistics

	Hours	Member	Total
Month	Flown	Flights	Flights
July	322.9	130.0	274.0
August	314.4	140.0	269.0
September	209.6	120.0	172.0
October	191.1	110.0	175.0
November	140.1	91.0	132.0
December	142.6	71.0	112.0
January	161.5	93.0	150.0
February	224.2	109.0	201.0
March	155.1	96.0	155.0
April	175.8	98.0	167.0
May	272.3	125.0	237.0
June	285.7	124.0	251.0
Average	216.27	108.92	191.25

These statistics are collected by the Controller and will run a month or two behind. The Member Hours column is the total number of billable hours flown by all club members. The member flight column is the number of different members that have flown at least once during the month. The Total Flights is the total number of flight log entries for the month. →

TEXINS FLYING CLUB OFFICERS

Office	Board Member	Office Phone	Home Phone	Email
President	Dick Sandlin	(800) 817-7752	(214) 350-6426	d_sandlin@email.com
Ops VP	Don Essenpreis	(972) 575-4905	(972) 530-8648	esse@ti.com
Train Main	Cory Stewart	(972) 480-1841	(972) 398-8477	CoryStewart@ti.com
X-C Maint	Micah Koons	(972) 575-6042	(972) 509-5773	mkoons@raytheon.com
Mbrshp VP	Scott Mitchell	(972) 480-1776	(972) 596-0288	s-mitchell1@ti.com
Comm	Steve Aughinbaugh	(972) 927-5593	(972) 517-0067	saughinbaugh@ti.com
Treasurer	Bob Moran	(972) 575-2210	(972) 612-1402	rmoran@ti.com
Controller	Harold Morgan	(972) 927-0100	(972) 495-0220	HMOR@ti.com
Chief Instr	Art Jones	(972) 346-2646	(972) 346-2646	ADJ@msg.ti.com
Safety	Jim Burrows	(972) 247-0777	(940) 321-6180	JBurr3161@aol.com

TEXINS FLYING CLUB INSTRUCTORS

Instructor	Tier	CFII	MEI	Conv	SES	CFI	ATP	Office Phone	Home Phone	Email
Mike Baulch	R	✓	✓	✓	✓			None	843-2208	mbfi@ti.com
Chuck Chase	Y			✓				(972) 575-2070	867-0624	cwc@ti.com
Calvin Coffey	Y	✓		✓	✓			(972) 462-3926	(972) 315-2216	cfly@airmail.net
Gerhard Deffner	Y			✓	✓	✓		(972) 562-5533	(972) 562-5533	gdeffner@aol.com
Mike Hance	N	✓	✓	✓	✓	✓		(972) 839-8933	(972) 346-3346	mwhance@juno.com
Jim Evans	R	✓		✓	✓			--N/A--	(972) 390-9950	J4E@worldnet.att.net
Art Jones	R	✓	✓	✓				(972) 346-2646	(972) 346-2646	ADJ@msg.ti.com
Jim Lewis	Y							(972) 952-2817		jlewis@ti.com
Richard Klein	Y	✓	✓	✓				(972) 344-3356	424-2307	r-klein1@raytheon.com
Bruce Miller	N	✓	✓	✓	✓	✓		(972) 284-3015	517-5926	brucemiller@lucent.com
Bob Niedwiecki	N	✓	✓			✓		(972) 390-5210	681-2974	bniedwiecki@home.com
Bryan O'Neill	Y			✓				(972) 952-2971	(972) 562-4241	ofly@ti.com
Betsy Parrott	N	✓	✓					N/A	(972) 219-9361	pistola52@aol.com
Sherman Ratliff	N	✓						(214) 965-6063	(972) 660-4480	sherman@airmail.net
Mark Seglem	N	✓	✓	✓		✓		(972) 801-6421	(972) 727-3465	mark_seglem@sterling.com
Dick Stephens	R	✓	✓					(972) 517-1647	(972) 517-1647	Stephens6@pulse.net

Tier - Employed by TI; **CFII** - Certificated Flight Instructor, Instruments; **MEI** - Multi-Engine Instructor; **Conv** - Conventional gear (taildragger) instructor; **SES** - Single-Engine Sea; **CFI** - Certificated Flight Instructor, Glider; **ATP** - Airline Transport Pilot-rated. **Note:** All instructors are assigned by TFC's Chief Flight Instructor, (Art Jones).

ABOUT THIS NEWSLETTER: Input is encouraged! Of particular interest are flying experiences that others can learn from. Forward inputs to Steve Aughinbaugh. PC Drop **PVPD**, email saughinbaugh@ti.com. →

TFC AIRCRAFT AND RATES

Tail No.	Make	Model		Rate/hr
Simulator	ATC	610J		\$0.00
N150TM	Cessna	150M	Commuter	\$35.00
N6368K	Cessna	150M	Commuter	\$35.00
N45023	Cessna	150M	Commuter	\$35.00
N7929U	Cessna	150M	Commuter	\$35.00
N733NB	Cessna	172N (180)	Superhawk	\$49.00
N5682T	Cessna	172 (145)	Skyhawk	\$49.00
N8142H	Piper	PA-28-161	Warrior	\$52.00
N7508J	Piper	PA-28R-180	Arrow	\$62.00
N5636Q	Mooney	M20E		\$62.00

- Detailed aircraft features are listed in the Club Handbook.
- Instruction: Primary: \$17.00; Advanced: \$19.00 (\$0.50 of each goes to TFC for billing admin; rest to instructor).
- TFC measures aircraft rental rate using tachometer hour.
- Rate includes cost of fuel; does not include tax (8.25%); Instruction flights endorsed as training are tax exempt.

KEY PHONE NUMBERS

McKinney & TFC

Aircraft Status Recorder	(972) 995-8333
Aircraft & Sim Scheduling	(972) 562-8359 (562-TFLY)
TKI ASOS land line	(972) 542-9659
TKI Control Tower	(972) 562-6651
Airport Manager	(972) 562-6080 ext 7512
ExecAir at McKinney	(972) 562-5555
Monarch Air (TKI)	(972) 562-0717
Mark Schulty, N45023 Owner	(972) 494-9488
Garry Ackerman, N8142H Owner	(972) 867-8713
Liam Gartside, N5682T Owner	(214)-792-7980

General

DUAT	(800) 345-3828 or www.duats.com Or www.duat.com
Dallas FAA/FSDO	(214) 902-1800
Ft. Worth Center	(817) 858-7300 (ZFW ARTCC)
FlightCom, Inc.	(800) 432-4342 (Josh Pruzek)
Southwest Soaring	(972) 251-5079 Metro
Monarch Air (ADS)	(972) 931-0345
DE: TM Smith	(972) 661-8086
DE: Richard Caldwell	(903) 885-4911
DE: Kendall Haley	(940) 321-2849

TFC COMMUNICATIONS & INFO

WWW	http://www.texins.org/flyingclub
FlightCom Prices	http://www.texins.org/flyingclub/flightcom.html
Mailing list	tfly@list.ti.com
TFC Board Email	tflyboard@list.ti.com

HINT ABOUT THIS PAGE: This page is designed to be torn off and then kept in your flight bag. This will ensure that you away have all of the club contact information with you. →

This newsletter is copyright Texins Flying Club, except for by-lined articles, which are copyright their authors. →