



## CHAPTER 613

October 2003

[www.eaa-chapter613.org](http://www.eaa-chapter613.org)



### Don Taylor and a TBF Avenger

**TBF Avenger History:** First flown on 1 August 1941, the three-seat Grumman *TBF-1* Avenger torpedo-bomber entered US Navy service just in time to participate in the Battle of Midway in June 1942. During its World War II lifespan, the Avenger design changed very little, and this allowed it to be built in huge quantities. Demand for the airplane was so great that the General Motors Company was also contracted to build it, under the designation *TBM-1*, beginning in September 1942.

# Views and News

By Bill Morelli

**On The Cover** – Photo taken at Adirondack Regional Airport. Read about Don Taylors first airplane ride starting on page 3.

**Hobie Tomlinson** continues his Flight Advisor column this month with the ever important topic “Emergency Landings” Starting on Page 4.

**Don Taylor** has logged over 1000 Young Eagles flights. Way to go Don!!!

**Bill Yendrzski** put together a nice article about his trip to the 2003 Reno Air Races. Check it out starting on page 7.

**Dan Marcotte** – For those of you who do not know Dan, he works for Cliff at FSO keeping those YAK’s going among other things. He is an outstanding welder and has a shop in Bakersfield. If you need any work done, give him a call at FSO. I put a small tribute to Dan together on page 9 showing his trophy, a couple of his race photos and his race results (He also won \$4000). How about his coming in 4<sup>th</sup> place in Formula I on his first trip to Reno. Have you tried flying at 170 mph fifty feet off the ground making tight turns with several other aircraft in close proximity???

Congratulations Dan !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

FAA medical examiner **Finley Seagle** passed away recently. I’m sure he performed most if not all of your FAA medicals and will be missed.

**Josh Schwartzberg** will be performing second and third class FAA medicals at North Ramp Aviation on at least one day a month to start. If you are interested you should call 518-963-4007. Josh will be flying in from Essex, New York so he would like at least two appointments to make his trip worthwhile.



## YOUNG EAGLES

by  
Donald Taylor

We have 14 pilots reporting Young Eagle flights so far this year for a total of 449. We have surpassed our goal for 2003 by 132. As Pete LaFramboise said, maybe we can make it 400 by Dec. 17<sup>th</sup>. Well, we have surpassed that and maybe we can make it 500!

Walter Houton	1
Peter LaFramboise	42
Gorge Godin	11
Donald Taylor	207
George Coy	4
John Butterfield	35
Mike Pecue	20
John McNerney	10
Bill Yendrzski	42
Chuck Robitaille	3
Frank Gibney	5
Bill Morelli	5
Steve Couzelis	32
Loren Shaw	32

Chapter 613 pilots have flown 449 Young Eagles but we have to subtract 17 flights that went to the Bennington, Chapter 1375. So we have a total of 432 flights.

I went to Morrisville on September 20<sup>th</sup> and flew 22 Young Eagles.

A couple of years ago I set a goal to fly 1000 Young Eagles by December 17<sup>th</sup> 2003. That has been surpassed, I now have 1020!!!



Our goal for Chapter 613 was to fly 300 Young Eagles in 2003. We have surpassed that, we now have 432.

Now comes the big one!. The goal is to fly 1,000,000 Young Eagles by Dec. 17<sup>th</sup>, 2003. Young Eagles registered thru August was 962,083, we have 37,917 to go.

Our August registration target was 17,000 Young Eagle flights. In August we registered only 15,704. We were 1296 short!

We have five Chapter 613 Young eagle pilots that are half way to 10 or more for 2003. We also have a few that have not flown any. Like General Chuck Yeager said, if all Young Eagle pilots would fly 10 or more Young Eagles, we would have no trouble making our 1,000,000 flights by Dec 17<sup>th</sup>. We should still have some good weather left for more Young Eagle flights before Dec 17<sup>th</sup>.

When I was at Oshkosh, I stopped by the Young Eagles pavilion each day to see the people and sign up for the daily prize. On the last day, I won a case of Phillips 66 oil which is worth about \$40.00 plus that is the oil I use in both of my planes.

The Young Eagle flights on Saturday, Sept. 27 at Montpelier were scrubbed. Three pilots were on the way but the wind near the mountains was so bad they had to turn back.

I was supposed to fly the Young Eagles at Morrisville on Saturday, Oct. 4 but that was rained out.

## Safety Tip

### It's that time of the year again!!!!

Birds and planes can be a deadly combination. The mismatch is almost comical but it has been known that gulls, geese and hawks can bring down an airplane. No time of year is more perilous than autumn when migrating birds (especially geese) head south at high and low altitudes. So be on the lookout for our feathered friends.

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## Did You Know

The human body has an excellent system of balance to keep us from falling down all the time. The problem is that that system was designed to work when we have both feet planted firmly on the ground.

Since pilots spend as much time as possible in the air, this system does not work as well. So how can we work within our limitations?

First we must understand that we have three systems that keep us oriented. Eyesight is the most predominant and accounts for 75 to 80% of the information our mind processes. Next the vestibular system is the inner ear telling us if we are upright, turning, accelerating or decelerating. Finally the kinesthetic sense which is commonly called "Seat Of The pants", is your joints and body tissue feeling gravity's forces.

When all three of these systems are synchronous, you feel comfortable with your attitude.

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## My First Airplane Ride!

By Don Taylor

I bet you think that my first airplane ride was in a Champ, J-3 Cub or a 150 Cessna!!

I went in the Navy when I was seventeen years old in 1944. After boot camp, I was shipped to Norfolk, VA. One beautiful day I decided on going to the Naval Air Station and see if I could get an airplane ride.

I asked the pilot if I could have a ride and he said "sure". As we walked toward the airplane, boy did it look big. It was a TBF Avenger. He said that the only room we have is where the radio operator sits in the bottom of the airplane. As you can see by me standing by the door, it had a seat and windows on both sides so it was not that bad. But for my first airplane ride, what can I say.

The picture on the front cover was taken at the Adirondack Regional Airport, Saranac Lake, NY on August 30 when they had their Fly-In. Maybe we have other members that could tell us about their first airplane ride??

## New Member

Joseph Gardner  
46 Gardner Rd.  
Milton, VT 05488

Has soled in a 150 Cessna

## Chapter 613 Potluck

Shelburne Airport  
October 26<sup>th</sup> at 13:30

Bring a dish to share with others

Come and enjoy good food and company for the Chapters first get together of the season.

# Flight Advisor Corner

by Hobie Tomlinson

## Emergency Landings!

Last month we completed a series of articles on the first flight of a newly completed aircraft. In the "*First Flight*" article we stated that poor engine cooling and/or outright engine failure due to fuel starvation are primary problems, which may be encountered. That being said, it seems logical to spend some time discussing emergency landings.

The types of landing areas for general aviation aircraft are as follows:

**Destination Airport** . . . . . Desired flight termination point

**Alternate Airport** . . . . . Backup airport if destination becomes unusable

**Nearest Suitable Airport** . . . . . Closest adequate & useable airport (Precautionary Ldg)

**Nearest Available** . . . . . Closest airport – **Period** (Emergency Ldg)

**Off Airport Landing** . . . . . Dire Emergency Ldg

Dire emergencies would be such things as uncontrolled fire, structural failure, midair collision, unflyable weather (i.e. instrument weather with unequipped aircraft/unrated pilot) and of course inadequate power to sustain level flight (i.e. partial/complete engine failure.

For the purpose of this month's article, we will assume that we were successful in the first takeoff in our new aircraft and have kept the departure airport within the glide cone during our flight. In later articles we will discuss enroute problems, but for now I would like to concentrate on making a successful power off landing when we have an airport within the glide cone of our aircraft.

Just to review for a moment, we said that the "glide cone" was an inverted cone of airspace with the point at our aircraft and the open end on the ground. Its dimensions are defined by the gliding performance of our

aircraft and the cone always tilts into the prevailing wind. The amount of tilt, or lean, of the cone is dependent on the ratio of the wind velocity to our glide speed. For example, gliding at 60 kts into a 60 kt wind means our upwind ground speed is zero and the entire glide cone lies downwind of the aircraft. Gliding the same aircraft into a 30 kt wind means our upwind ground speed is 30 and our downwind ground speed is 90, hence 3/4ths of the glide cone is downwind.

We also said that the typical light aircraft would glide approximately 1.5 N.M. per 1000 feet of altitude lost, meaning the glide cone base would have a maximum radius of 1.5 N.M. times our altitude. We mentioned this could be best observed from the cockpit by looking at the area within an arc described by a line descending at an angle of 45 degrees up from vertical.

Given all of the above, we will pick up the maneuver at the point of complete engine failure at our 5000 foot flight test altitude and the departure airport within the glide cone for our aircraft.

The first issues, which we will have to deal with, will be physiological. These will probably be *denial, economic and fear*. None of these factors exist during practice forced landings due to lack of surprise and the knowledge that we are playing emergency with power available. Thus, this will be a completely new experience! Denial is common to all emergencies and is usually of short duration. Training "kicks in" to end this stage. Lack of training or proficiency can extend the problem. The economic issue is an overriding desire to "save the plane". This can be especially prevalent when no suitable landing areas are available. Suffice to say that **aircraft are replaceable, people aren't!** The last issue is fear. Again, knowledge & proficiency best combat this. Fear only becomes a problem when uncontrolled fear blocks action (panic).

The first actions after engine failure should be: (1) configure the aircraft for optimum glide

performance, (2) obtain best glide speed and (3) establish aircraft ground track toward the desired landing area. The optimum gliding configuration for a complex aircraft will be flaps "UP", gear "UP" and propeller set to "High Pitch/ Low RPM" (to lessen the drag of the windmilling propeller). Airspeed should be established at recommended best glide speed or 1.4vso. In windy conditions, better results may be gained with a slightly faster speed, as higher ground speeds can be obtained with only a slightly greater sink rate (best penetration speed to you glider guys).

Once these steps are taken, its time to attend to the cockpit procedures. The first of these is a restart attempt/engine failure checklist. Fuel to fullest tank, mixture "RICH", carb. Heat, "ON", boost pump. "ON", mags, "BOTH". If the engine does not restart, try unlocking the primer and pulling it out to allow fuel to be drawn into the engine through the primer. If a restart is unsuccessful declare an emergency on the existing frequency, or if none is being used on 121.5 MHz. State the nature of the emergency, your position, your intentions & the number of souls on board. Set the transponder to squawk 7700. A common mistake is to reverse this process, allowing the aircraft to wander out of reach of the desirable landing area while the pilot is enmeshed in secondary cockpit procedures!

The aircraft should be flown directly over the desired landing area and a gliding turn about a point entered from inside the circle. This allows the circle to be established with minimum altitude loss and gives better control over the circle diameter. The battle now is station keeping, or staying in position over the desired landing area. The second common error is not being able to maintain the gliding turn about a point and allowing the wind to drift the aircraft away from the landing area. The knowledge area now is to know what our altitude loss is per turn. This allows us to recognize the last turn and to adjust its radius so that we reach "key point" at the correct altitude. The altitude loss for a

standard rate 360-degree turn will be double our sink rate. Steeper turns, up to 45 degrees of bank, lose less altitude, shallower turns lose more. This is because the rate of turn changes faster than the sink rate. If no visible wind indicators can be observed on the ground, approximate wind direction can be determined by observing the aircraft drift during the gliding turns.

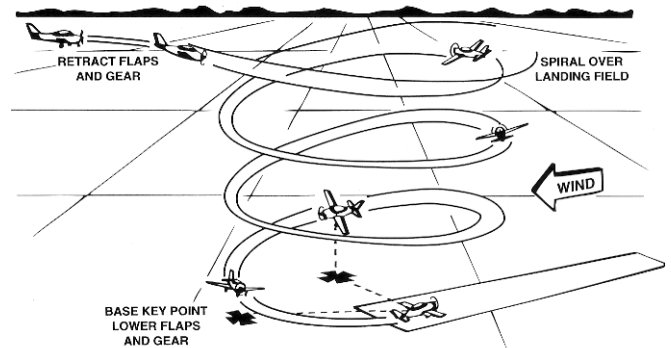
The “key point” is the window we must fly the airplane through to complete the maneuver successfully. A knowledge of the general terrain elevation is important here (remember situational awareness?) We want to arrive downwind opposite the desired touchdown point at approximately 1000 AGL. At this point we will secure the engine and reconfigure the aircraft. Fuel selector should be turned “OFF, mixture to “Idle cutoff” and the mags “OFF”. Complex aircraft should be reconfigured to flaps “first notch”, gear “DOWN” and Propeller to “Low pitch/High rpm. This will give us a steeper final approach and a constant drag configuration, both of which make the touchdown point easier to judge. The approach I prefer to use for this segment is a modified 360-degree overhead. The constant turn to final is easier to judge than the “square corners” of the traditional 180-degree approach. As the wind picks up widen the base & shorten the final, making it an oval with the long axis crosswind. This is because we can go out & back the same distance crosswind, while downwind/upwind distances are very hard to judge.

Plan the touchdown point midway down the landing area, then steepen the approach with landing flaps and/or slip once the landing area is assured. It is far better to go off the far end at slow speed than to hit obstructions airborne short of the landing area. The common error now is to “rush” the approach, becoming high and building excess speed attempting to get down. Remember you are not committed to the final segment until you turn inbound. If you find yourself high extend the base leg and “S” turn back into final. Prior to touchdown unlatch

a cabin to insure egress in case of fuselage damage during landing.

Having a plan & procedure for power loss will improve the chances of success dramatically. Instructing experience says that without a plan the odds for success are not good. Fortunately I have only had to do this for real once & it worked! It was a brand new Grumman tiger that I picked up from the factory. The lesson was that a “dual pack” mag with a single drive is not a true dual ignition system. If your thinking this is only for the little guys – B767/Canada – fuel exhaustion due to misfueling and F16/BTV – intention fuel exhaustion due to throttle control failure. Both successful I might add!

As the Good Book says, “Hear instruction, and be wise, and refuse it not.” So until next month, **Think Right to FLIRITE!**



### Remain over intended landing area!

Diagram from FAA-H-8083-3  
Airplane Flying Handbook



## RENO AIR RACES 2003

by *Bill Yendrzeski*

I was fortunate enough to be able to go to the Reno Air Races again this year. This year was especially great because we had a Vermonter in the races in the Formula One class.

Our own Dan Marcotte was entered in the race this year. This in itself is outstanding, because Dan just received his private license last year. So, this story will cover him and some of the sites and things that I saw.

I arrived Friday morning at 7 AM to try and get our good seats in our Section 3 area. At 8 AM, the Formula One's were taking to the air. I tried to capture a few shots of Dan with my digital camera, but just did not have the zoom to get good shots. I used my telephoto lens the next day and got some shots of him. Unfortunately, I mistakenly put in 800 speed film instead of the 400 speed and the shots are somewhat grainy. Sorry.



Dan and his Cassutt III M No. # 15

This is Dan in the hanger after his fourth place finish in the Friday heat race. I told Dan he needed a hotter prop to get more speed. He said he could, but his engine would not take the extra rpms to handle it. Dan said he would only gain about 10 mph. To over take the really fast guys he would need at least 30 mph more so it was not worth it.



This is Dan and his pit crew. I did not get there names and Dan is not back yet from the races.

On Saturday the finals for the formal One race was held in the early morning again. They do this because these small planes do not handle cross winds very well. Dan said once you get in front of someone it is hard to pass because of the turbulence from the plane in front. He said it is a real hand full. The pictures below show Dan leading the race which he did on Friday for about two laps and then the big boys got their toys wound up and passed him. Dan took the lead in the mass start again this Saturday morning but after a lap he was being passed again. Dan finished fifth overall today if I got the story straight. He was 3rd for a long time and then fell back. Not sure why. He may have been having engine problems. I did not find Dan again after the race. When I got to the pits to see him he was not around and we have not had a chance to talk.



Dan leading the race at the start finish.



Dan being caught by the eventual winner.



Rare Bear.



This is where Dan feel to 3rd place.



Dago Red

I do not know about the rest of us, but I'm super proud of this guy. I know Dan, speaking for myself I'm sure I would not be out of place in giving you a great big **CONGRATULATIONS** from the entire EAA Chapter # 613. We are all very proud of your accomplishments in this event. Continued goo luck in your racing future and flying. Well, done.

We all had a great time again this year. The weather was perfect again. We had the Thunderbirds again this year. They were great. We heard one of them went down on Sunday at another event. Heard the pilot got out, but no other details. Dago Red won the finals this year. Rare Bear was back. This was great. Dago is highly modified P-51 Mustang and Rare Bear is an F-8 Bearcat highly modified. Bear qualified over 500 mph. But on Saturday lost two cylinders and could only muster 2nd place in the finals on Sunday. Dago on Saturday won the heat with an unheard of 511 mph lap with an average of 507 mph. Needless to say he won on Sunday.



Our Section 3 group.

I hope you all get a chance to get out to Reno for one of these races. You will have a ball. Especially if you join our Section 3 group. We have a ball. Until next year keep'em flying.

**Bill Yendrzski**

# Dan Marcotte places 4<sup>th</sup> at Reno



Below are the official results from the Reno Air Race web site

<b>Qualifying, 1 Lap(s)</b>	<b>Date:</b> 2003-09-10	<b>Distance:</b> 3.19 miles
<b>Pilot Name:</b> Marcotte, Daniel	<b>Aircraft:</b> Race 15	<b>Type:</b> Cassutt IIIM
<b>Time:</b> 1:04.41	<b>Speed:</b> 178.156	<b>Place:</b> 18

<b>Race:</b> Heat 1C, 8 Lap(s)	<b>Date:</b> 2003-09-11	<b>Distance:</b> 25.50 miles
<b>Pilot Name:</b> Marcotte, Daniel	<b>Aircraft:</b> Race 15	<b>Type:</b> Cassutt IIIM
<b>Time:</b> 8:51.38	<b>Speed:</b> 172.758	<b>Place:</b> 4

<b>Race:</b> Heat 2C, 8 Lap(s)	<b>Date:</b> 2003-09-12	<b>Distance:</b> 25.50 miles
<b>Pilot Name:</b> Marcotte, Daniel	<b>Aircraft:</b> Race 15	<b>Type:</b> Cassutt IIIM
<b>Time:</b> 9:05.26	<b>Speed:</b> 168.360	<b>Place:</b> 4
<b>Penalties:</b> Cut Pylon 6, lap 3 - 16-second penalty.		

<b>Race:</b> Bronze, 8 Lap(s)	<b>Date:</b> 2003-09-13	<b>Distance:</b> 25.50 miles
<b>Pilot Name:</b> Marcotte, Daniel	<b>Aircraft:</b> Race 15	<b>Type:</b> Cassutt IIIM
<b>Time:</b> 7:52.97	<b>Speed:</b> 169.831	<b>Place:</b> 4
<b>Notes:</b> Speed computed on 7 laps completed.		

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FIRST CLASS MAIL



October 2003

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