



# *Loud and Clear*



## *New Hawthorne Aviators*

### *From the President*

A trip is in order for any member who has not been to the airport recently. A very large sign centered over four large windows on the side of hanger "C" proudly displays the home of the New Hawthorne Aviators. On the inside, the walls have been framed and partitioned to await the wiring and plumbing. Soon the kitchen cabinets and bathroom will be underway.

The work on the clubhouse project has been "driven" by our building chairman, Mr. Paul Fillman. Paul doesn't know when to quit. Any Tuesday work night you will hear someone say, Paul, it's getting late and we have to go". But he doesn't listen.....  
Thank you Paul.

Thanks also to Cecil Bennett who was able to make a connection to WORG, 100.3 FM. As such, we have made a Rose Festival promo at the station for the airport activities. Additionally, the station management has offered free spots for other major events that the club will sponsor, including on-the-air interviews. Cecil has also put us in touch with the people at Hampton, the site of the June Watermelon Festival. The Hampton people are also requesting that we do a live on-the-air interview at the local station on the Thursday of the Festival. Hopefully, through all of this we will make some money on the flights and food, we will continue to promote the EAA/NHA, and have fun flying the tours.

The April NHA club meeting will be the Thursday following the Rose Festival. Please plan to attend and to enjoy the meeting. As president, I would prefer that we use planning meetings for managing the details of the club such that we actually have the time at the monthly club meetings to enjoy the speakers, mini safety lectures, good food, and great fellowship that comes from sharing all those flying stories. See you there.

Volume 2, Issue 4  
April 20, 2004

#### **April Birthdays:**

- 15th Alice Bryan
- 27th Cecil Bennett
- 27th John Rheney

#### **May Birthdays:**

- We have no Birthdays in May

#### ***Inside this issue:***

*The second step; "Moving up to high performance"* 2, 3

*Things to mention* 4

*The clubhouse* 4

*Membership Renewal Form* 5

## TRANSITIONING TO COMPLEX & HIGH PERFORMANCE AIRCRAFT

Most pilots eventually consider moving into something bigger and faster once they have completed their private certificate and gotten some solo hours without an instructor in the trainer aircraft. This can be a rewarding experience. Here are some of the things you will probably be introduced to that are different from the trainer. These ideas are for your consideration and are not to replace or supercede procedures in either the POH, the AFM, or a proper flight training program.

### Constant Speed (CS) Prop

It used to be called a variable pitch prop but is now commonly referred to as constant speed. Both names describe its function. It has the ability to change pitch while the engine is running and to maintain a constant speed while the aircraft speed or throttle setting changes. This makes for lower noise in the cockpit, and allows different settings to produce better cruise speed, better climb, or lower fuel consumption.

It gets confusing because there are two sets of four terms used. The RPM gauge measures propeller speed & is used to set propeller pitch with the prop control. The MP gauge measures manifold pressure & is used to set the engine power with the throttle. Therefore,

<u>Control</u>	<u>What It Controls</u>	<u>Indicated On The</u>
Prop Control =	Propeller Speed/Pitch =	RPM Gauge
Throttle =	Engine Power/Manifold Pressure =	MP Gauge

Since the functions of the two controls, the prop control and the throttle, are inter-related, one must know the proper sequence in which to make changes in the settings of the controls.

When increasing the throttle, set the prop control first, then set the throttle.

When decreasing the throttle, set the throttle first, then set the prop control.

It takes some study of the performance tables and experimentation in the aircraft to arrive at settings that are best. As a general rule, unless the engine is turbo-charged, the manifold pressure in inches should not be greater than the propeller speed in RPM's X 100. In other words, if the RPM is 2400, then the MP should not exceed 24 inches. This is often referred to as "24 square". In turbo-charged engines, the MP routinely exceeds the RPM because of the turbo-charging. Again, you must consult the POH to determine safe settings.

You will need to study the POH to determine the mechanical workings of your CS propeller. However, most use engine oil pressure to change pitch and a governor to maintain speed.

### Retractable Gear

The workings of retractable gear vary from plane to plane. Most work with either electric motors, hydraulic pressure, or a combination of these. Again, you will need to study the POH to learn about each aircraft. This is very necessary, because you will need to understand the design in order to trouble shoot a problem when you have one. Especially important is the procedure for emergency extension of the gear. You must thoroughly understand the procedure and keep the emergency checklist handy in case it is needed.

## Fuel Injection

With fuel injection, there is no carburetor heat. This is great, but fuel injection requires different starting techniques in different aircraft. You must know the recommended starting procedure for the aircraft you are about to fly.

## Generic Take-Off Procedures

Cowl Flaps Open (if so equipped)  
Mixture Forward  
Prop Control Forward  
Throttle Forward (to maximum allowed for take-off)  
Rotation (at recommended speed)  
Best Rate of Climb (with gear down)  
Gear Up (when positive rate of climb established & runway no longer usable for landing)  
Best Rate (with gear up)  
Throttle and Prop Control Reduced to Normal Climb Setting (at 1,000 AGL)  
Level Off (at desired altitude)  
Cowl Flaps Closed (if so equipped)  
Mixture Adjusted (if necessary)

## Generic Landing Procedures

### Prior to Pattern Entry:

Throttle Decreased (to setting that will produce a safe pattern airspeed)

### On Downwind Leg:

Fuel on Fullest Tank  
Fuel Pump On  
Mixture Forward (if below altitude required for learning)  
First Notch of Flaps (at speed no higher than allowed by POH)

### On Base Leg:

Gear Down (at speed no higher than allowed by POH)  
Second Notch of Flaps  
GUMP Check (Gas – Undercarriage – Mixture – Prop)

### On Final Leg:

Third Notch of Flaps  
Prop Control Forward  
Throttle Adjusted (as necessary to maintain proper glidepath)  
GUMP Check Again (Be certain gear is down & locked as indicated by 3 green lights.)

### On Short Final Leg:

Check Gear Again!

### On Ground:

Don't touch anything until you are off the runway (unless you need to raise the flaps for braking)  
Cowl Flaps Open (if so equipped)

---

## *Things to mention!!*

Andrew Black soloed N5342M (C-152) on 4/11/04. He is the 16 year old grandson of B. E. & Ruth Stevenson. He had to wait until he turned sixteen in March, then we had high winds, bad mags, & I was out of town which postponed the event three or more times.

Brad Tarter - also a teenager from Allendale soloed in a C-150 at Allendale and was not my student at the time (although he did start with me) so I don't have the other info.

Tom Smith

## *Congratulations guys!!*

Also we want to thank Philip Lang, a private pilot from Cordova, who has come to the airport three Tuesday evenings to work on the building. He is not yet a member of our club.....

## *Big Thanks!!*

The April meeting should be a great meeting. We will have the Rose Festival behind us and this will give us a time to talk about what we did right and what we can improve on before the next event. Also scheduled for this meeting is Mr. Frank Best who will talk to us about the morse code and it's importance in the aviation world. Try to join us for this meeting and hear what he has to say.....who knows.....we may just learn something.

Next month the speaker is going to be great. I'll leave you in suspense until a little later but I promise it will be well worth making the meeting to hear this guy speak. There may even be some extra perks included so put it on your calendar to attend the May meeting for sure.

## *The Clubhouse*

I'm currently in the process of getting some photo's together for the website of the clubhouse progress. Look for them in the coming days. I'll put a link on the front page taking you directly to the photo album. For those of you who haven't made it to a work party yet, there has been a lot of progress made. We meet every Tuesday night from 6:00 to 8:00 PM to make this happen. Please try to make it out and offer your help so we can all have something to be proud of. There is now the sign in place and windows have been put in proving that we can now "see the light (at least during the day)!"

---

# Rose Festival AVIATION WEEKEND

April 24-25  
at the

ORANGEBURG MUNICIPAL AIRPORT



Air Tours  
& Rides

(Donation \$10 Children \$15 Adults)

82nd Airborne's Living History Display

RC Model Airplanes

Aviation Exhibits



This is the last newsletter you will receive unless your 2004 dues have been paid. We also now have three options for the newsletter. In addition to a printed copy, there is also an electronic copy posted to the website each month and the option to have it e-mailed to you each month as an attached document. If you prefer to have a copy sent to you in the mail, please let me know and I will continue to do this for you. If you prefer to have it sent to your e-mail address, let me know that also and I'll set your membership accordingly. If I don't get a response, I'll mark your membership as a website recipient and the mailed copy will not be sent out.

To the right is a convenient form to fill out for your membership and answer all of the questions asked above. Please help us by mailing it back, giving it to any of the club officers, or bringing it to the next meeting.

One of our big events is the Rose Festival and several of our members have put a lot of effort in making things come together. Hopefully it will be a great success and bring in the general public to let them know just what Orangeburg has to offer in the way of aviation

There have been planning meetings, work meetings, and regular meetings of which quite a few of our members haven't made it to. We do need the support of all of the members to make the Chapter a big success.

This weekend is the grand finale to all the work we have done in the past months. To the left is the flyer Ron made to distribute around Orangeburg and also to hand out to the public during the Festival.

Watch the website ([www.eaa1367.org](http://www.eaa1367.org)) for pictures and highlights from the event. I'll try to get those posted early next week if all goes well.

## Membership renewal form

If you have not renewed your membership, please use this renewal form to do this today. Indicate your membership preference and include a check made out to "Chapter 1367" for the 2004 membership dues. Also to help us keep the records straight, please fill out the name and address box below so that we can get your newsletter and any other important chapter information to you. Include an e-mail address if you have one. If you have any comments or suggestions, please include them below.

Thanks

Please indicate your membership preference:

- ☐ Individual: 20.00  
☐ Family: 25.00

Do you wish to receive a mailed copy of the newsletter or will you access it from the website?

- ☐ Mailed copy  
☐ E-mailed copy  
☐ I will use the Website

Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone \_\_\_\_\_

Comments:

## New Hawthorne Aviators

1811 Airport Rd.  
Orangeburg, SC 29115

Thanks

# Loud and Clear

The newsletter of

*The New Hawthorne Aviators!*

1811 Airport Rd.  
Orangeburg, SC 29115

*New Hawthorne Aviators*

*Loud and Clear*

*122.7 on your avionics dial*

