

# Chapter 506 Flight Briefing

Volume 15, Issue 3

March 2009



## [Mark Your Calendars!](#)

### **EAA Chapter 506**

**March 14, 2009**

#### **Meeting Agenda:**

Breakfast 8:30

Business Meeting 9:00

Presentation after the meeting

#### **Location:**

506 Club House

#### **Breakfast Crew:**

Ron and Nancy  
Normark

#### **Presentation:**

Gary Winter

## [From the Tower:](#)

By **Joe Mancusi**

As some know by now our new Web address is [www.EAA506.org](http://www.EAA506.org). Our Chapter receives many benevolent contributions by folks who do not need or want particular recognition. I have mentioned others in the past. Looks like Ron and Nancy Normark, along with Nancy's son Jon Hall get the recognition today for maintaining our web site.

Our Chapter has really pulled together to help each other out. Might be breakfast, might be the presentation, or might be help with aircraft construction or maintenance. Our members pride in the Chapter is increasing. Members make good suggestions and then take action to put them in motion. Don't be hesitant to volunteer for an activity or project you think you can try. The help and support will be there.

Our dues are low but obviously important. The winter electric bill is about \$100 dollars a month less than last year because our folks took action. Let's support that work by getting those dues in to Wayne. Help keep us on a "roll".

Let's help WT with the newsletter by contributing what you've got to [baileypipetool@yahoo.com](mailto:baileypipetool@yahoo.com) Pictures, stories, adventures welcome.

## [From the Editor:](#)

You missed another great meeting if you were not with us. Attendance was down somewhat, Valentines Day I guess. Another wonderful breakfast with lots of hangar flying and a presentation filled with ski flying like you have never seen. Good job Dave.

## **Chapter 506 SitRep:**

February 2009 Meeting Minutes

By **WT Bailey**

### **The Breakfast Report:**

Another great breakfast was prepared by Nancy, Ron, Heidi, Wayne and Helen. Breakfast included scrambled eggs, sausage patties, pancakes and of course lots of good coffee and OJ.

### **Meeting Start:**

In the absence of President Joe Mancusi and Secretary Gary Winter, WT Bailey opened the meeting at 9:05 AM with 21 in attendance.

### **Guests:**

Gary Wells from Dunn, NC. Gary flies a powered parachute and loves every minute of it. Dick Perkins and Danny Freeman from Mid-Atlantic Fly-In took the time to drive up from Lumberton, NC to address our members with some information about the May fly-In and explained some possibilities for our chapter to participate and help the event. The possibility was offered for us to help organize a Young Eagles Rally

### **Treasurer's Report:**

The Treasurers Report shows \$1566 in our account with all bills paid.

### **Old Business:**

There was no Old Business

### **New Business:**

Our web site has a new domain name thanks to Ron and Nancy; [www.eaa506.org](http://www.eaa506.org) will now take you to our chapter's web site.

Some members had difficulty opening or receiving the February newsletter. This was due to the Editor attaching too many photos with a large file size. This has since been corrected.

### **Adjournment:**

As there was no other business, a motion to adjourn and a second was accepted at 9:25 AM.

## **Post Flight Debriefing:**

Dave Johnson prepared a great slide show of aircraft on skies. Dave discussed the many aspects of flying in the winter cold. Dave talked about the many different types of skies, how they are fastened to the aircraft and how to use and maintain them. Informative. Lots of great aircraft photos.

## 2009 Membership

As of 2/24/2009

We would like to thank everyone for their continued support of our Chapter. Below is a list of all current 2009 paid members.

**Mort Altman  
Ken Arnold  
WT Bailey  
Bryon Covey  
MiShelle Devereaux  
Rolf Grandstaff  
Dan Harden  
David Johnson  
Wayne King  
Robert Lee  
John Ludden  
Michael Maltby  
Joe Mancusi  
Chris McClure  
Wayne Milbauer  
Kent Misegades  
Nancy Normark  
Ron Normark  
Jordan Normark  
Ned Nut  
Bob Parker  
Wayne Sawyer  
Jack Schultz  
Bob Scott  
Norman Smit  
Jerry Stein  
James Stephenson  
Gary Winter**

## Crosswind Season

For us it is the spring FLYING season that is just around the corner. We're going to dust off the airplane and get in the air, hopefully after getting current in both the airplane manuals and in the airplane. You'll probably want to get current when the winds aren't strong. After all, you want to get the feel of the airplane again and not fight a gusty crosswind. That is great but we are still in for strong gusty winds in just the next few weeks. Want to know how to handle that strong gusty crosswind? Know the theory but need to put it in practice? There is a way.

We just need to practice the crosswind techniques we all learned All The Time. If there is any wind at all, no matter how insignificant. We must practice the crosswind Technique all the time.

Place the elevator, aileron, and rudder into the wind as taught long ago. As the airplane turns practice moving the controls for the new wind direction. So difficult at first, but so easy later. That is the learning curve - power yourself through that learning curve.

You might study those diagrams you've seen to refresh your memory but try this. Climb into a headwind. Dive away from a tailwind. Wind from the right front, some back elevator, some right aileron, some downwind rudder to stay straight. You have to hold the steady wind and compensate for the gust. How much control deflection? No one can say. You gotta practice.

If you make a taxi back with a tail wind you move the controls to dive away. Funny but you will still have to HOLD that downwind rudder to stay straight.

When your ready for that crosswind takeoff you will already have the crosswind correction built in (Climb into a Headwind)! Just compensate for changing airspeed. Doesn't matter if all three wheels are still on the ground or not, the technique is the same.

When you make that beautiful crosswind touchdown maintain the control pressures that got you there and you'll be all set up for taxi..

With practice you'll find the airplane so much easier to handle in the wind.

jfm

## Enroute PiRep:

### **Bending Metal**

By Roger Cole

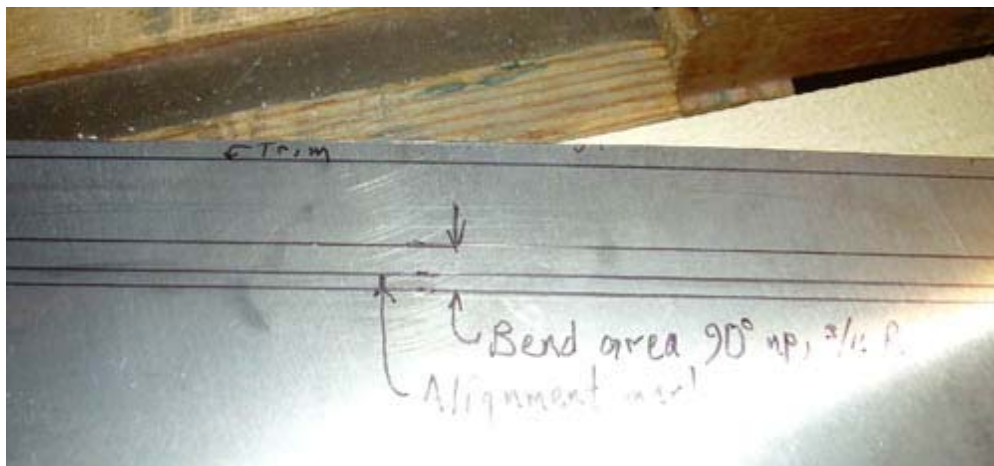
I recently had to bend a piece of 0.063-inch-thick, 6061T6 aluminum that was almost 2 feet long. If you have ever tried to bend that thickness without a brake, you know how much it resists bending. Here is how I did it.

The bend required a 3/16-inch radius to avoid cracking the metal. To make a bending form I routed a notch in the edge of a 2x6. A 3/8-inch diameter aluminum rod with screws at each end fits in the notch. I also cut the edge at an angle to allow for spring-back on a 90° bend. A second 2x6 forms a clamp for the metal.

Next, I marked the area of the bend on the metal. The width of the bend is

$$w = \pi * \text{radius} / 2$$

For a 90° bend. For a 3/16 radius the width is 0.29 inches. I also marked an alignment line 3/16 inch from the beginning of the bend.



I clamped two small pieces of wood to the metal so the edges of the wood were on the alignment line. The pieces of wood are used to align the metal with the bending form and will be removed later.



The metal was set on the bending form so the two pieces of wood rest on the aluminum rod, and the vise was tightened. This procedure ensures that the aluminum rod touches the metal exactly on the line that marks the beginning of the bend.

With the metal clamped tightly in the vise, the two pieces of wood are removed. Two large C-clamps hold the ends of the 2x6s to keep them from spreading under the force of the bending.

A ratchet strap clamped to the top of the metal and running to the back of the workbench starts the bend. A soft-faced, dead-blow mallet does the bending. Hit close to the bend and distribute the blows so the bend is uniform. Thin metal can be bent by hand with the mallet used only enough to wrap the metal tightly around the aluminum rod.



If I were to do this again, I would laminate pieces of plywood together with glue to a thickness of about 2 inches. This would eliminate the tendency of the 2x6s to split along the grain.

## [Enroute PiRep:](#)

### **12/08 - Striving Towards Perfect Landings**

By Steve Krog

All good pilots strive towards perfect landings. However, concluding an otherwise great sunrise or sunset flight with a perfect landing can be the most difficult part of the flight. Why do we, who fly, so heavily stress the art and science of good landings during flight training? Statistics tell us that over 35 percent of all aircraft mishaps occur during the landing portion of flight!

Flying, along with being one of the most challenging yet pleasurable activities you may ever take up, is a life-long pursuit of learning. A good pilot will readily admit they are always learning something new to help them become a better pilot. Good pilots strive toward making perfect landings every time. They're never satisfied with just "good enough."

The study of making a perfect landing is a little like solving a long algebra equation. If all components of the equation for landing are correct, then the landing will *probably* be very good. Note, I said probably. Unlike algebra, landings are also the result of pilot's ability to manipulate a moving machine.

A perfect landing is the end result of applying all proper component parts. Let's take a look at some of the parts influencing our landings.

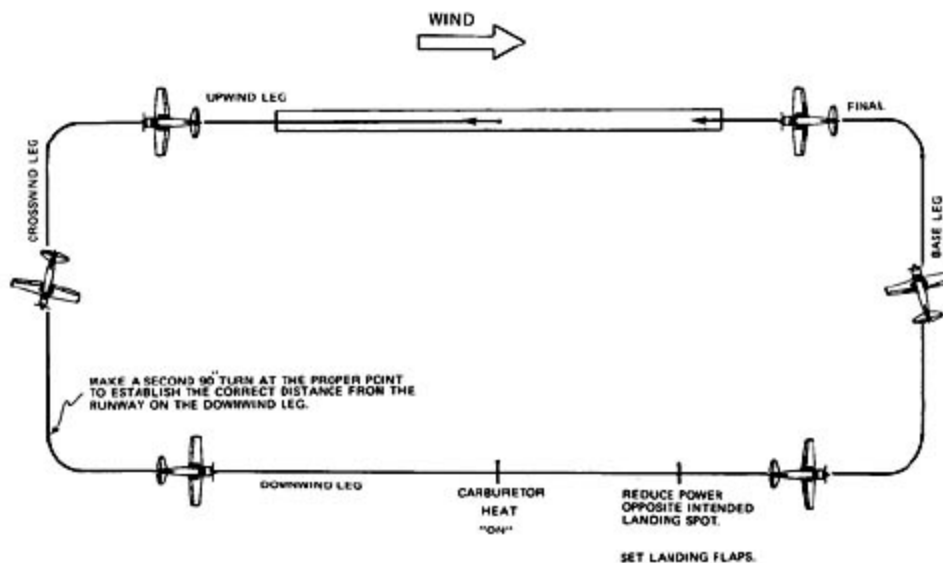
#### **Entering and Flying the Traffic Pattern**

Beginning with your third or fourth flight lesson, your flight instructor will have you fly the entry into the traffic pattern. You've observed the instructor during this phase of previous flights as well as listened to the explanation, and it seemed to be a smooth fluid procedure. It didn't seem difficult.

Now, it's your turn to be the sole manipulator of the controls as your instructor observes and coaches you through the entry. Suddenly it seems like there are ten things happening at once and you only have time to adjust for five of them! Don't get flustered. Just take a deep breath and, most importantly, keep flying the airplane. When you've flown the pattern three or four times, the entry will become more natural.

#### **Have a Plan**

The first thing to do when preparing for the traffic pattern entry is have a plan in mind. When your instructor says, "take me back to the airport and enter downwind for runway 29," think about where you are at relative to the airport, check your altitude determining what you need to do to get to the traffic pattern altitude, and consider your airspeed. You don't want to enter the traffic pattern at the speed of sound. Begin slowing the airplane while descending to pattern altitude. Determine how you want to most safely and correctly enter the traffic pattern. While making your descent and turns to do so, check and complete your pre-landing checklist.



It is vitally important, as you make your downwind entry to the pattern, that you keep your downwind leg consistent. You don't want to be too high or low, nor do you want to be too fast. The horizontal distance between you and the runway should be same every time. If you have a problem judging this distance consistently, have your instructor place a piece of blue masking tape on the leading edge of the wing for a low-wing airplane, or on the strut for a high wing airplane. Then, place the tape on the centerline of the runway each time you are flying the downwind leg.

Make your application of carburetor heat, your initial power reduction, and adjust the trim at the same point of the downwind leg each time. I like to use the mid-point of the runway for carb heat application, the end of the runway for initial power reduction, and trim adjustment just after power reduction.

### **Flying the Approach**

When making your turn to base leg, make it at the same point each time, at an approximate 45-degree angle from the end of the runway, unless you are dealing with either a strong tail or head wind. For our example we'll assume the wind is light and variable.

Once established on base leg, look for traffic! You may have someone in a big hurry making a straight in approach. With the area cleared of traffic, glance at your altimeter. At mid-point of the base leg you should be indicating about 500 feet above the ground. Plan and make your turn onto the final approach, keeping the nose attitude steady to maintain the desired constant approach speed.

Plan and make your turn to final so that you are aligned with the centerline of the runway. A good pilot (and student pilot) will accept nothing less.

Pick a touchdown point on the runway. Many Light Sport Airplanes (LSA) recommend an approach speed of 60-70 MPH. Using these speeds for our example, select a touchdown point about two centerline stripes beyond the runway numbers.

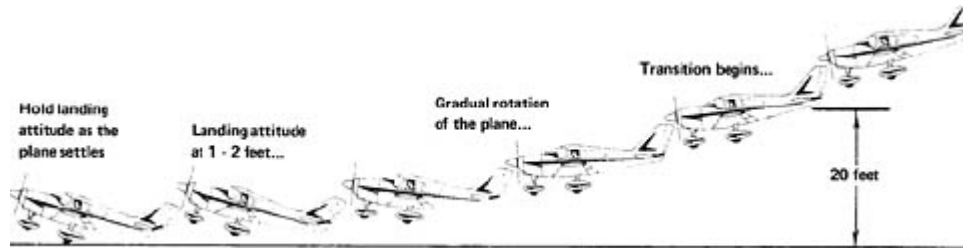
The painted runway numbers can be used to help guide your descent. While on final, look at the runway numbers. If they appear to move toward and below you, you're approach is too high. If the numbers are moving up and away from you, you're approach is low and you'll land well short of the desired touchdown point. Finding yourself in either of these situations requires either adding or reducing power. Fix the situation immediately so that only small power changes are required.

## Landing

Get your mind in the landing mode. Visualize the final approach and think ahead of the airplane. Is the airplane aligned with the centerline? If not, make it go there. The airplane requires your input. It will not perform a perfect centerline landing without your help!

If your approach necessitates some power, remember, the ideal power approach requires power to be slowly and steadily reduced through the entire approach as speed is reduced and a constant descent is maintained.

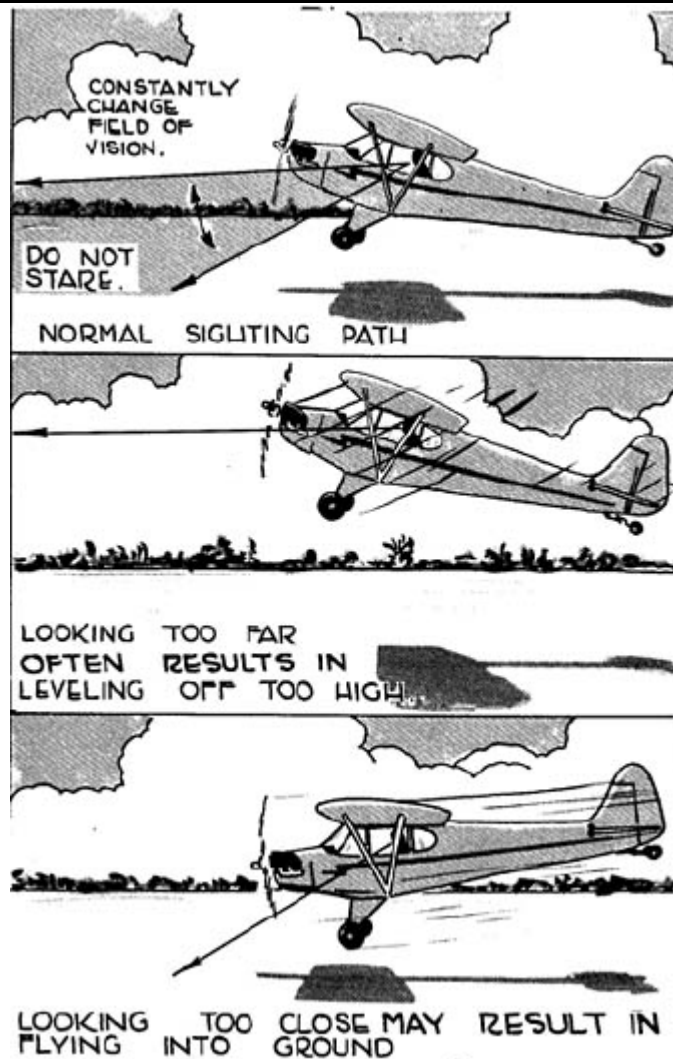
Upon reaching the runway we have a number of things to do—most of them simultaneously—if we are to make a perfect landing. First, reduce power to idle. If we continue to carry power, even slightly, our landing will require significantly more runway and as we float further down the runway as a result, the “urge” to make something happen overtakes us causing either a ‘porpoise’ or ‘bounced’ landing.



Level the airplane at approximately 10-15 feet above the runway surface. Be firm but not overly aggressive. I find that many students are initially too timid and only slow the descent rather than arresting it. Only slowing the descent allows the airplane to touch down faster than desired and we know from reading the last newsletter that this causes the ‘bounce, bounce, bounce’ landing.

Once leveled at 10-15 feet, transition your eyes from looking over the nose and look to either the left or right focusing on the edge of the runway. On a standard 60-75 foot wide runway, look forward of the airplane about two runway lights. Continue looking that far ahead as the airplane slows and begins to settle.

Your peripheral vision detects the loss of altitude while your forward vision tells you if the airplane is remaining straight on the centerline. As the airplane settles, begin applying back pressure for the flare. Thinking ahead of the airplane, remember this: hold the airplane off the runway, don't try to force it onto the runway. Sometimes it helps to count: one-one thousand, two-one thousand, and three-one thousand. If you have continued applying steadily increasing back pressure, the airplane's main gear wheels will lightly touch the runway at about four-one thousand. But hold on here, we have a long way to go yet to finish the perfect landing.



Continue flying the airplane! As the main gear wheels smoothly contacted the runway (on a tricycle gear), continue applying back pressure holding the nose wheel off the runway. Allow the wings to act as your speed brake rapidly slowing the airplane. In a perfect landing with light and variable winds, the nose wheel will contact the runway just as the control yoke has reached full extension. Then, and only then, relax the back pressure you are maintaining and apply light brake pressure if needed. Eye transition from the runway edge to straight forward can now be made.

If you're flying a tail wheel airplane, the procedure is virtually the same except that all three wheels will contact the runway simultaneously. Upon contact, continue applying steady back pressure until the control stick has reached the stop. Continue holding the stick in this position. Remember, in a tail wheel airplane directional control is maintained via the steerable tail wheel. Keep the back pressure applied forcing a positive load on the tail wheel for maximum steering response. Your eyes should continue to be focused forward on the edge of the runway throughout the entire flare, landing, and rollout. In summary, a perfect landing begins long before our wheels contact the pavement. Rather, it begins even prior to entering the traffic pattern. Consistency is key. Consistent: A good pilot will not make perfect landings every time, but a good pilot is always learning and striving toward that perfect landing. I hope these tips will help you, the student pilot, make better landings as you strive for consistent perfect landings. If you have problems with landings, or if you have tips for helping your fellow student pilots, I'd like to hear from you.

## 2009 Flight Crew Schedule

### Meeting Coordinators for 2009

Mtg	Date	Member	Topic
1	January 10, 2009	Bob Parker	Flight Instructors
2	February 14, 2009	Dave Johnson	Ski Plane Flying
3	March 14, 2009	Gary Winter	?
4	April 11, 2009	Ned Nutt	?
5	May 9, 2009	Charlie Taylor	WW II B-24 Pilot
6	June 13, 2009	WT Bailey	Flight Simulation
7	July 11, 2009	Mort Altman	?
8	August 8, 2009	Ken Arnold	?
9	September	Young Eagles	JNX Open House
10	October 10, 2009	WT Bailey	Welding Made Simple
11	November 14, 2009	John Ludden	?
12	December 12, 2009	All Members	Christmas Party

If you are a Meeting Coordinator, please send an email to me at [baileypipetool@yahoo.com](mailto:baileypipetool@yahoo.com) with your topic so the chart can be updated.

A paragraph or two or three or four about your topic is due three weeks before the meeting so that we can "sell" the meeting to the members.

### Breakfast Crews for 2009

Mtg	Date	Crew
1	January 10, 2009	Joe Mancusi
2	February 14, 2009	Gary Winter
3	March 14, 2009	Ron and Nancy Normark
4	April 11, 2009	Jack and Helen Schultz
5	May 9, 2009	WT Bailey
6	June 13, 2009	Mishelle Devereaux
7	July 11, 2009	Monica Normark
8	August 8, 2009	Norman Smit
9	September	No Breakfast- Young Eagles
10	October 10, 2009	Wayne Milbauer
11	November 14, 2009	
12	December 12, 2009	Christmas Party

Helpful hints:

- Plan your breakfast for 30 people.
- Bring your food and receipts.
- Cook and serve / Unpack and serve / Open and serve.
- Clean up and haul trash away.
- Invite helpers.

# Hangar Bulletin Board:

## EAA Monthly Meetings:

<a href="#">EAA 297</a>	7NC1	First Saturday	9:00 am	<a href="#">Burgaw – Stag Airpark</a>
<a href="#">EAA 1047</a>	W03	First Saturday	8:00 am *	<a href="#">Wilson – Wilson Industrial</a>
<a href="#">EAA 506</a>	JNX	Second Saturday	8:30 am **	<a href="#">Smithfield – JNX Clubhouse</a>
<a href="#">EAA 879</a>		Second Saturday	10:00 am	<a href="#">Durham – Lake Ridge FBO</a>
<a href="#">EAA 1114</a>	NC81	Third Saturday	8:00 am	<a href="#">Apex – Bobby Cox field</a>

\* Pancakes at 8:00 am, meeting at 10:00 am.

\*\* Breakfast at 8:30 am, meeting at 9:00 am, presentation to follow

## Miscellaneous:

### **Interesting Web Addresses**

Online sectionals

[www.skyvectors.com](http://www.skyvectors.com)

Cheap auto gas

<http://autos.msn.com/everyday/gasstations.aspx?zip=&src=Netx>

Cheap AV gas

[www.airnav.com/fuel](http://www.airnav.com/fuel)

NC Aviation Museum

[www.ncairmuseum.org](http://www.ncairmuseum.org) (located at the Asheboro Airport)

## Thumbtacked Items:

### Woods Aviation

Specializing in Poly Fiber Products. Also available are FAA DAR services, aircraft maintenance and fabric aircraft restoration. **919-581-0640, 919-581-0690 919-581-0830 (fax)**

### Looking for a partner

IFR capable, flying, experimental Long EZ needs a partner to share cost and flying. Contact Art Armani. **919-818-5631** [akarmani@earthlink.net](mailto:akarmani@earthlink.net)

### CH 601 for sale

Mort Altman has a partially completed Zenith CH 601 for sale. Call or see Mort for particulars.

## EAA 506 Flight Briefing

Send Flight 506 news submissions to WT Bailey, EAA Chapter 506 Newsletter Editor, 7001 Sorrell Lane, Raleigh, NC 27603, or by email to:

[baileypipetool@yahoo.com](mailto:baileypipetool@yahoo.com).

Please put EAA 506 in the subject line. The submission deadline for newsletter articles is generally two weeks before the next meeting. Articles appearing in this Chapter newsletter may be reproduced in full, only if proper credit is given to the author and the Chapter 506 Flight Briefing.

Visit Chapter 506's Website

<http://www.eaa506.org>

# EAA Chapter 506:

**Clubhouse @ 3149 Swift Creek Road, Smithfield, NC 27577**

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<b>Treasurer</b>	Wayne Milbauer	919-302-8928
<b>Facilities Manager</b>	Mike Maltby	919-218-0132
<b>Technical Counselor</b>	Bob Scott	919-359-2865
<b>TC Emeritus</b>	Bob Woods	919-581-0640 or 0690
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To: