



# Somerset RC

A Chartered Club of the Academy of Model Aeronautics  
est. 1972, AMA 1002

**Dedicated to the Enjoyment and Promotion of  
Radio Control Model Airplane Flying**

CLUB NEWSLETTER      [www.somersetrc.org](http://www.somersetrc.org)      July-August 2021

*A "Member Helping Member" Club for ALL AGES!*

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*Do you have something for the next issue?*

Send it along to the editor's email above!

Next issue this September



## From the President

I'm grateful to my wife, **Peach Smith**, for filling in for this column for our last issue. I received some nice compliments from you regarding her piece, and I passed them on to her. Thank

you!

### Larry Gray Memorial Warbirds Over North Branch

Coming up on August 28 at North Branch, our club will host its annual warbirds event. By club affirmation this event was renamed in honor and memory of Larry Gray, affectionately known to all as **Warbird Larry** who succumbed to COVID last December.



Larry Gray

If a day at the field can be compared to champagne, when Larry was around, he was its fizz. His love of warbirds was near legendary; his enthusiasm for getting together and putting some laughter back into life even more so. At this event, we will celebrate the romance of the Warbird, and for Larry who brought good times into our lives. Thank you, Larry.

In this issue, **Ernie Evon** shows us how he hinges control surfaces. His method represents the builder/craftsman aspect of our hobby that is all too fast disappearing, and this newsletter is grateful to preserve such traditions. **Ray Garcia**, a new member to our club, is featured in our Member Profile. We welcome Ray to our club, and be sure to introduce yourself to him. We reprint an article by **Duane Wilson**, pattern aircraft historian, on the evolution of pattern airplane design. It's an interesting trip back to the past. We have some funnies for you in the back, and as always a **Mystery Plane** awaits you. It's all here in this issue.

*We are family. We are Somerset RC.*

—**Domecq Smith**, President, Somerset RC

*domecqsmith@msn.com*





*Somerset RC Club  
presents*

# *Larry Gray Memorial Warbirds over North Branch*

*Saturday, August 28th*

*9:00am to 5:00pm*



*Location: 355 Milltown Road  
Bridgewater, N.J. 08807  
North Branch Park*



*Come out and enjoy the day!  
Any kind of Warbird Electric, gas, glow,  
EDF Jets Sorry no Turbines.*

***You can unload by the flightline then park in the  
parking lot.***

*Pilot briefing at 9:30 am. Hangar fee: \$10.00 donation.*

*Current AMA Certificate required.*

*50/50*

*Food and public facilities on site.*



*For information contact:  
Domecq Smith*

*[Domecqsmith@msn.com](mailto:Domecqsmith@msn.com)*

*732-215-8371*

*[www.Somersetrc.org](http://www.Somersetrc.org)*



# This is How I Do It! or How to Install Hinges

by Ernie Evon



Over my many years of kit and scratch building, the number-one job that I always left for last was hinging the control surfaces. There are many ways to make the slots and glue in the hinges. The best tool for this job is when Great Planes came out with the Slot Machine. This makes cutting the slots for any size or type of a flat hinge



quick and easy.

The first step in is to find the center of the control surface you wish to hinge. I usually draw a line down the edge center and then place my slot guide on it to be adjusted.



Then, space out your hinges and transfer the marks onto both surfaces.(pic #3)



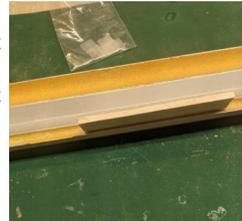
Once you are satisfied with the locations, you now place the centering guide that came with the tool on the surface to be slotted.



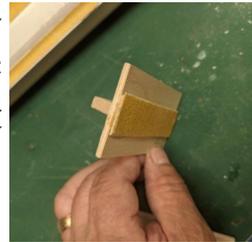
You now insert the tool into the guide and cut to slot. This process is explained in more detail if you already own this tool.



Now that I slotted all my hinges, I use my edge sander to round the edge of the wood.



Once the slots are all cut in, I take a tool that I made to recess the slot on one surface to allow for the hinge center to get close to keep the gap at a minimum.



The next step is to glue in the hinge. This is where I have learned that the best glue to use for this is Zap Canopy Glue #560. This is white glue that is much thinner than the normal white glue but it is formulated to bond plastic to wood. Here is the glue and what you need. I use two methods for inserting the glue into the slots.



The first method is with an irrigation syringe. It can be purchased online or in a drug store. I usually fill the syringe about half way.



You then insert the tip of the syringe into the center of the slot and inject the glue until it comes out of the slot.



I then place a small amount of glue in the holes of the hinge. (Pic#14)



Now, you can insert the hinge into the slot and some glue will squeeze out. I usually use a damp paper towel to remove the excess glue. Once you have completed all the hinges, just leave it sit for about an hour and then come back to it and work the hinge surfaces. It may feel stiff at first but it will loosen up after a few flexings of the hinge.



So what if you don't have the glue syringe? Well that's when you use plastic straws. I take regular plastic drinking straws and cut them in half. Then, I fill one about half way with the glue.



Next, pinch the end of the straw and insert it into the hinge slot about 1/8 of an inch. Next, squeeze the straw from the opposite end to push the glue into the slot until it starts to come out. Remove the straw and wipe away any excess glue. Now, repeat the glue on the hinge as in the picture above, and insert the hinge.



I have been using this method for years and have yet to have a hinge

fail. If you are building a plane that you feel might be subject to higher stress, once the hinges are dry, you can drill a 1/16 hole in about the center of each hinge half and insert a round tooth pick that you dipped in the same glue and pass it through the wood and hinge until it exits out the outside. Once the glue has dried, you cut the tooth pick as close to the wood and then sand it flush to the surface. That is how I do it and maybe you will have the time to try it yourself.

I would like to share another tool that I had made many years ago. Tower Hobbies had a contest to ask for ideas for building. Needless to say, I did not win, but I think my entry had merit and I use it to this day. If you are a kit builder, scratch builder or just want to reinforce your ARF in areas that need some strengthening, you probably need to purchase some triangle stock for that purpose. Buying triangle or stick stock is expensive. That's why I make my own. I first made my own balsa stripper out of aluminum, and added a #11 X-Acto blade and a small scale to the side. This works great. I then designed and made my triangle stock maker. It is capable of making triangle stock from 1/4 inch up to 1/2 inch. Once you have the balsa stripped to the correct square, you then pass it through the triangle cutter and now you have two lengths of stock.



Ernie's Stripping Tool



Ready to strip



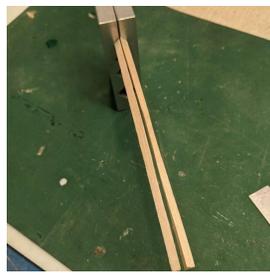
Square stock cut



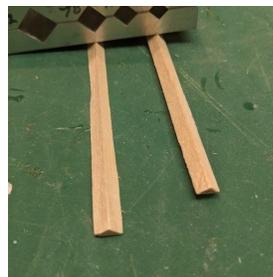
Now, to Ernie's triangle cutter



In one end...



and out the other.



Done!



Until next time!  
—Ernie Evon

# Pattern Plane Evolution—The Early Years

by Duane Wilson



I feel that anyone who flies pattern should have a basic knowledge and appreciation for AMA pattern's rich history. They are missing something if they don't. Consider the fact that precision aerobatic events have been around for nearly sixty years now! One of my prized possessions on the desk in my office is a trophy from the estate of Ed Kazmirski (we'll talk a bit about him later) that he won in 1957. It was presumably his first win. In his honor, the 2015 FAI championships opening ceremonies in Switzerland included a solo flight of a lone Orion, Ed's first design and the plane he used 55 years earlier to win that first event in that same venue.

Starting about that year (1960), when pattern planes first became popular, seemingly slow changes from year to year have led to a huge change in plane design over time. This month, let's talk a little about the evolution of R/C pattern aircraft over the years. I'm sure that some of you know pattern history much better than I do, but read on anyway, if for no other reason than to agree or disagree with what I say. There is so much we could talk about, so I'll confine this first mini-article to pattern's early years.

There are a few basic principles of pattern design that are timeless and apply to all pattern aircraft of any time period. First, all pattern planes, regardless of when they were flown were designed to be aerodynamically neutral, meaning they "go where you point them," and tend to hold whatever position you put them in.

Design is influenced more or less by three factors: 1) the state of technology, 2) the rules in effect, and 3) the maneuvers that are to be performed. The state of technology isn't as important now as it was in the early days when the primitive equipment by present standards (i.e. radio and engine) largely determined what was possible to accomplish. Early technology had a large effect over early designs. For example, when I wrote my Nov 2016 Model Aviation article on Tom Brett and his TBX, his wife Helen told me that Tom would *literally design a plane around the equipment*. The early reed radios (look at the toggle switch transmitter on the ground) were very large, heavy, and bulky. Even the early proportional units were huge compared to modern radios. Look at



Bob Dunham's early version *premium* black-cased Orbit proportional systems. They were generally considered the best, but look at the size! A 2-meter plane would have been nice, but no engines existed then that could lift one.



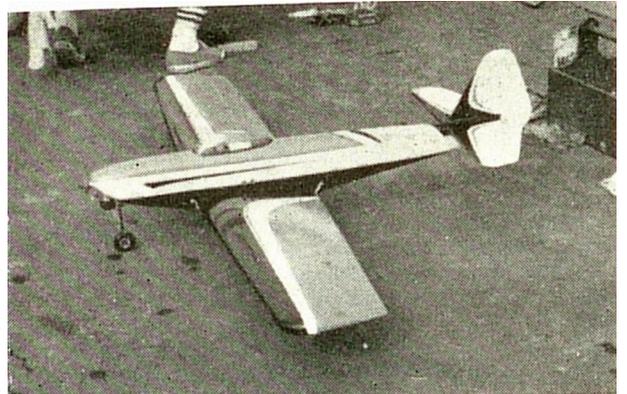
When looking at the maneuvers for the upcoming worlds, Tom created his most famous plane, the Perigee *because* he needed a smaller and more refined version of an existing plane he had. The smaller engines of the times and the maneuvers scheduled for



the 1962 “worlds” *dictated* a slightly smaller aircraft.

Ed Kazmirski was one of the early leaders when pattern was in its infancy. Though he won the 1960 FAI championship with the Orion, his primary contribution to R/C pattern came two years later when he designed what is arguably the most popular and widely flown pattern and sport ship

world-wide ever—his 1962 NATs-winning Taurus. The Taurus series extended over a four-year period. Always experimenting, no two planes were exactly the same. The first Taurus in 1961 had a long nose moment and short tail moment. It crashed at the NATs, and was



interestingly nicknamed “the flop”.

Success came the next year after a major redesign with a winning formula of a *short nose and long tail moment*. This



plane also had a 70” wingspan—large for that time period. Ed’s NATs winning 1962 Taurus can be traced back as *a common ancestor* of nearly everything that has followed based on its huge popularity and effect on future pattern design. You can still buy Taurus kits offered by generic kit-makers. It still flies well as a sport plane.

Pictured together in a rare photo are the NATs-winning Taurus (foreground, which launched a very famous kit by Top Flite in 1963) and Ed's final and less known Taurus from a year later behind it on the runway at Muncie. Notice the near mid-wing placement and the tapered leading edge and straight trailing edge common in more modern designs. Also interesting to note is the decided lack of side area on the fuselage. Knife-Edge flight was not required back then and that affected design. Remember, design for the rules and maneuvers of the time. We will see this again when we later SPA-legal planes and the transition to Turnaround pattern.

The two aircraft were carefully preserved by Ed in a travel crate, and upon his death in December 2007, both were auctioned on eBay. The 1962 NATs Taurus was purchased by the Vintage R/C Society, and a few months later, donated to the AMA Museum in Muncie. If you haven't been to the museum, it is well worth the visit. You can see it displayed there (next to the Perigee and Orion). The photo was taken on the day of the donation and shows both planes together for the last time. Note the excellent condition of the planes even though both were well over forty years old and had numerous flights. Considering the sometimes unreliable nature of the radios of the early 1960s, this is a minor miracle.

The remaining Taurus was purchased by another VR/CS member and myself. Not being a famous plane, we decided to make our Taurus flight worthy, flying it enough to get some nice pictures before retiring the plane before something



“serious” happened to it.

The raked vertical fin and rudder line was common to nearly all pattern planes from the early 1960s (technology again). They were originally designed to fly on reed radios with difficult and unnatural to use toggle switches for each surface control. It was easier to hold up the nose during a turn with that rudder shape. Proportional radios were easier to fly and did away with the need for this, and rudders became vertical for better flight characteristics in later pattern designs.

SPA is an AMA special interest group (SIG) dedicated to competition with vintage aircraft. Planes from this early era (early to mid 1960s) would best qualify for our “Antique” class, which is flown occasionally. Although I’ve been talking primarily about the Taurus, other well known planes from this era would be Jim Kirkland’s Beachcomber, Jim Whitley’s original Daddy Rabbit, and Phil Kraft’s Kwik Fli. These aircraft would not be very competitive against SPA-legal planes designed just a few years later within our legal 1960-1975 range. Next time we’ll discuss the more modern, commonly used SPA-legal planes, and continued pattern plane evolution to the present day. I hope this has been helpful.

—Duane Wilson

*Duane Wilson is a classic pattern enthusiast and is the author of many articles on vintage pattern for Model Aviation Magazine and The K Factor. He is editor of the newsletter for Senior Pattern Association.*

# MYSTERY PLANE CHALLENGE

Here is a blast from the past. This was during the days before ARFs, proportional radio was just appearing with mixed results, nearly all planes were still covered in silk and dope, everyone built, CA was not around—you waited for glue to dry, and many planes were two channel—rudder and elevator—you flew ‘till the tank ran dry or until the cows came home. Send you best guess or answer to [domecqsmith@msn.com](mailto:domecqsmith@msn.com).

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# RADIO CONTROL!"

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Bedford Ave. & Wiley St., Flint, Mich. 48701

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1/2A RC**

Designed with the Beginner in Mind

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IT'S JUST SHEER  
PLEASURE!**



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Wing Span 34"  
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Special features include: one-piece fuselage sides . . . new anti-warp design elevator . . . shock-corded landing gear for extra strength and longer life! Kit includes: forward landing gear, colored decals, silkspan, shaped and sanded parts of motor and propeller, etc.

Complete step-by-step plans included with illustrations and lists.

Please send me reading material, 12 photos, one book, three kits, Model Plans No. 25, Plans, Catalog, List, Parts, & Price Sheet for 1/2A and 1/2B, 1/2C, and 1/2D, and 1/2E of motor, and 1/2 of propeller.

Send me 1/2 of propeller, landing gear motor.

**STERLING MODELS, DEPT. 8849-2**  
Bedford Ave. & Wiley St., Flint, Mich. 48701

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State: \_\_\_\_\_

In our last **Mystery Plane Challenge**, you were to identify features in the picture below. The items were **1**—transmitter; **2**—flight box; **3**—fuel can in box; **4**—plane to the left of box; **5**—person in foreground; **6**—plane as part of the right-center tail group (picture ca. 1977). Before scrolling down for answers below, give it your best shot.



### Answers

- 1: World Engines Expert transmitter
- 2: Carl Goldberg Handi-Tote
- 3: K & B Glow Fuel (metal can) with Du-Bro crank pump
- 4: RCM Trainer (designed by Phil Kraft, creator of the Ugly Stick)
- 5: Paul Audino (Thank you, Paul, for this great photo)
- 6: Airabcobra (the full plane is pictured in Paul's member profile in the last issue)

## Member Profile

# *Ray Garcia*



I'm Ray. I've been in the hobby since 2003.

I got into the hobby because I've always had a passion for aviation like everyone else!

A big thing I like about the hobby for me is our fellow fliers; I love the input and advice I get and also I love to be able to help others. It makes the hobby that much more enjoyable.



I enjoy scale flying, warbirds, scale, civilian, STOL planes and multi-engine planes.

I look forward to many, many seasons of flying at Somerset RC!

Happy flying,  
—Ray Garcia



# Club Event Schedule, 2021

*All events at North Branch Park Flying Field, 355 Milltown Road,  
Bridgewater, New Jersey 08807, unless otherwise noted.*

**April Meeting and Club Expo, Saturday April 24 11:00AM**  
(doors open at 10AM)  
American Legion Post 306  
707 Legion Place  
Middlesex, NJ 08846

**Opening Day, Saturday June 5**

**Big Bird Fly-In, Saturday June 19**

**E-Fly, Saturday July 24**

**Larry Gray Memorial Warbirds Over North Branch,**  
Saturday August 28

**End-of-Season Picnic, Saturday September 25**

**Turkey Fly, Saturday November 13**

*please refer to [SomersetRC.org](http://SomersetRC.org) for event updates*

# Article Index

all newsletters archived at [www.somersetrc.org](http://www.somersetrc.org)

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My Adventures in Scratch Building and Flying	Gene Graber	November 2020
Pica Waco 1/6 Scale YMF-3 Project	Jeff Randolph	September 2020
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Extra 330 LX, Krill—Part 2	Bob Both	September 2019
F-86 Sabre 15 DF ARF, E-flight—Part 1	Tony Rossi	March 2019
F-86 Sabre 15 DF ARF, E-flight—Part 2	Tony Rossi	May 2019
P-47D Razerback Giant Scale, Top Flite	Larry Gray	January 2019
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Waco Wing Attachment	Jeff Randolph	March 2021

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The Survey Says (club statistics)	Dave Szabo	September 2019

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~continued~

## Member Profiles

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Paul Audino	May 2021
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## Shop Articles

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## **Somerset RC Membership Application**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: Home: \_\_\_\_\_ Cell: \_\_\_\_\_

AMA Number: \_\_\_\_\_ Email: \_\_\_\_\_

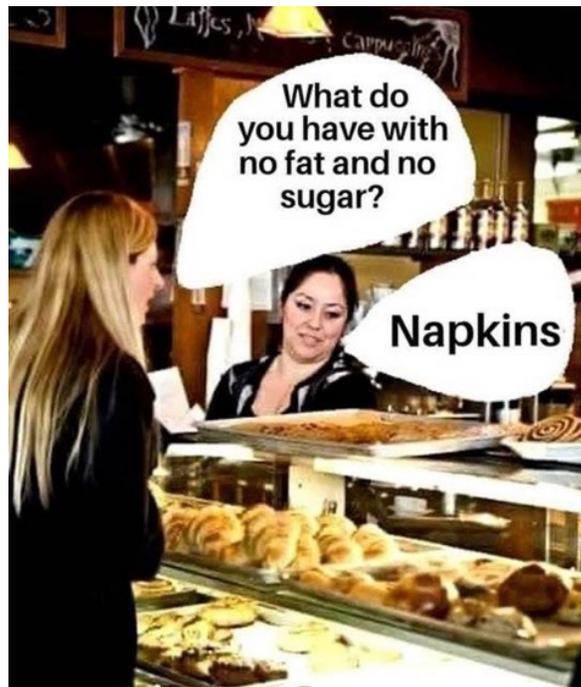
To obtain an AMA Membership go to:  
<http://www.modelaircraft.org/>  
Membership is \$30.00 for adults \$4.00 for  
students up to the age of 21

Mail all applications with check to :  
Dave Szabo  
12 Shoshoni Way  
Branchburg NJ 08876  
Make check out to "Somerset RC Club"

Paying by PayPal send to:  
[Somersetradiocontrol@gmail.com](mailto:Somersetradiocontrol@gmail.com)  
Put your name in the notes and use the":  
"send to a friend option.

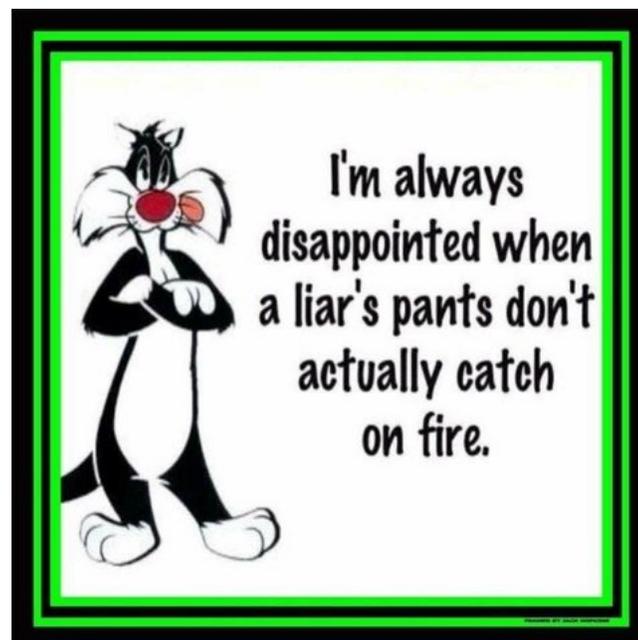
Meetings are 8:00pm every last Tuesday of the month at:  
American Legion Post 306  
707 Legion Place  
Middlesex, NJ 08846  
732-356-9699

For full club information, please visit [SomersetRC.org](http://SomersetRC.org)

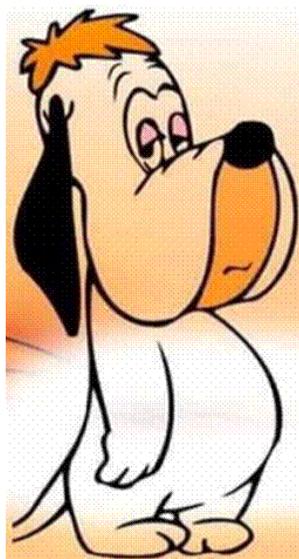


So many people these days are too judgemental.

I can tell just by looking at them.



**I don't always  
go the extra  
mile, but when  
I do it's because  
I missed my  
exit.**



**How did we  
survive?  
Our mothers  
wiped our  
faces with  
spit on a  
hankey not an  
antibacterial  
wipe.**

Facebook.brining humor  
to your day with love

**Apparently we can't  
visit our relatives  
homes but estate  
agents can buy and  
sell houses. So i've  
put my house on the  
market and mum and  
dad are coming for a  
viewing at 3.30 😂😂**

The official sports drink  
when I was a kid...



Like i was saying, the circus is just  
one of my careers. The real money  
comes from frosted flakes



**IF YOU REMEMBER PUMPING GAS  
BEHIND YOUR LICENSE PLATE....  
YOU MUST BE REALLY OLD! 🙌😊**



**I'm on two diets. I wasn't getting enough food on one.**

**Apparently RSVP'ing to a wedding invitation "Maybe next time," isn't the correct response.**

**Don't irritate old people. The older we get, the less "Life in prison" is as a deterrent.**

**Have you ever listened to someone for a minute and thought, "Their cornbread isn't done in the middle."**

**Aliens probably fly by earth and lock their doors.**

**"You will hit every cone on the highway before I let you merge in front of me because you saw that sign two miles ago like I did."**

**I asked my wife if I was the only one she had ever been with. She said yes, all the others were nines and tens. Give it a minute...**

**I really don't mind getting older, but my body is taking it badly.**

**It turns out that being an adult now is mostly just googling how to do stuff.**

**I miss the '90s when bread was still good for you and no one knew what kale was.**

**Do you ever get up in the morning, look in the mirror and think "That can't be accurate."**

**I want to be 14 again and ruin my life differently. I have new ideas.**

**As I watch this new generation try to rewrite our history, one thing I'm sure of.... it will be misspelled and have no punctuation.**

**I told my wife I wanted to be cremated. She made me an appointment for Tuesday.**

**Confuse your doctor by putting on rubber gloves at the same time he does.**

**My wife asked me to take her to one of those restaurants where they make food right in front of you. I took her to Subway. That's when the fight started.**

**I went line dancing last night. OK, it was a roadside sobriety test ... same thing.**