

# THE KNIGHT FLYER



April - May - June Editors:

2000 Jim Devlin - Tim Ellis

# **McKinley Mall Show**

The Flying Knights McKinley Mall Show went over smoother than ever before, with complete cooperation from the mall management, as well as advertising coverage on both our own and the mall's websites. 37 models - including a boat and a helicopter - put in appearances, and drew large crowds each day of the show.

Another large draw was the flight simulator, which proved quite popular. The simulator was a Great Planes Real Flight Deluxe R/C Simulator, and entertained adults, kids and Knights members for several hours each day.

The Delta Darts proved every bit as successful as hoped. Over 125 of the little planes were constructed and given away over the course of the show.

The annual raffle of an airplane did well at the show, generating 190 ticket sales at the mall, and a further 62 tickets were sold at Fields. The aircraft - a Zero model - will be raffled during our Scale Rally

The show also generated interest in our club and our hobby, prompting several people to take flyers or sign up for our mailing list. The 2000 Mall Show was clearly a huge success for the mall, the Knights, and the spectators, and all involved look forward to the show next year.



## **Chinese Auction**

During this quarter, the club held its annual Chinese auction. This event has become a tradition over the years as a way for members to get rid of some of the junk that clutters their basement.

The beneficiary, of course, is our North Collins Flying field. Each year we have been able to make improvements to the field. The Chinese Auction helps to defray some of the cost of these improvements. Some of the things that we have implemented in recent years are a new drainage field to help the field to dry out earlier in spring and some changes in the parking and access to the field.

Those knights who use the North Collins field are very appreciative of the many changes that have been made at the field over the years.

# Recent Sightings

## Meeting Happenings

# Bill Eberhard makes connection with soldering review

In March, Bill Eberhard gave us a demonstration of the techniques of soldering.

Many times in our hobby, it is necessary to join two pieces of metal or one reason or another.

Bill's example was the fairly common one of constructing a landing gear. When we find that the gear is not delivered in its final shape, (curses) then it becomes necessary to take the work by the horns and set it to the torch.

For large items such as struts where a great deal of abuse is expected, the metal area can be quite large. An ordinary iron simply can't get the work hot enough.

Bill then tightly wrapped ordinary small gauge copper wire tightly around the pieces he planned to join. This served to hold them as well as conduct heat to the area. The most important thing was to make sure that the flux thoroughly reached the entire joint.

Flux is an acid which prepares the surface of the work so that the solder can flow easily. Acid flux is used on metals, whereas rosin flux is used whenever electrical circuits are involved. Two dissimilar metals in an acid is known as a battery.

Bill used a small torch in order to apply enough heat to the work. the rule for successful soldering is that the work must melt the solder, not the iron.

After soldering the wheel strut, Bill passed the finished work around. It looked great. Bill next took on the common but necessary task of soldering clevises to control wires. Here the iron was sufficient, but he emphasized the

importance of flux in ensuring a good solid union.

Bill mentioned one of his pet peeves, giant Z-bends in control rods. Many a crash has been traced to this practice.

When setting up the control horns, the correct method is to maintain a straight line all the way from the horn location through the fuselage to the servo.

A dramatic demonstration using a piece of wire with a z-bend and a straight piece of wire quickly made the point. Bill took a hammer and pounded the wire into a block of wood. The straight wire went through the wood but no matter how hard you hit the bent wire it never penetrated.

This was a very informative presentation and people learned to appreciate the finer points of the soldering process.

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# Finding your way in days gone by

In January we were pleased to have Hugh Spears describe how navigation was done in the days of bolts and bailing wire.

After the war he ferried planes from the manufacturer to the customer. This was before the days of Nav Aids such as DME (Distance Measurement Equipment) or Tacan, so finding the course involved the tried and true methods of Dead-reckoning, basically, a compass and a map.

These techniques are still used by pilots of small aircraft at country airports.

Much of the advance in navigational aids was tied to the weight of the

# PRE - FLIGHT CHECKLIST

### General:

Does plane balance correctly, slightly nose heavy? Do control surfaces move in the correct direction? No visible tears or cracks. No pinched radio wires. Does aircraft have proper identification?

## Wing:

Are wing bolts secure?
Are Aileron hinges pinned?
Is the Aileron linkage tight?
Is covering tight with no visible tears?

#### **Rudder/ Elevator**

Are control horns secure?
Are hinges pinned.
Is covering secure with no tears or cracks?

## **Engine:**

Prop nut or spinner is required, are they tight?
Are the engine and engine mount securely attached to fuselage?
Is cowl secure? Is prop correctly attached?
Does throttle operate over full range? Idle to Maximum.

## Landing gear:

Gear firmly attached to fuselage. Wheel collars secure?

#### **Controls:**

Are control horns secure? Are clevises in good shape? Does each clevis have a keeper?

### Radio:

All components securely mounted? Are all screws tightened.
Are all connectors attached and secure?
Are electronics shock mounted and fuel protected.
Are batteries fully charged?
Has radio been fully charged?
Has radio been range checked?
Are both receiving and transmitter antenna properly extended?

# OFFICIAL AMA SAFETY CODE

#### General.

I will not fly my model aircraft in competition or in the presence of spectators until it has been proven to be airworthy by having been previously, successfully flight tested.

I will not fly my model higher that approximately 400 feet within 3 miles of an airport without notifying the airport operator.

I will give right-of - way and avoid flying in the proximity of full-scale aircraft. Where necessary, an observer shall be utilized

to supervise flying to avoid having models fly in the proximity of

full scale aircraft.

Where established, I will abide by the safety rules for the flying site I use, and I will not willfully and deliberately fly my models in a careless, reckless and/ or dangerous manner.

I will not fly my model unless it is identified with my name and address or AMA number, on or in the model.

#### Radio Control.

I will have completed a successful radio equipment ground range check before the first flight of a new or repaired model.

I will not fly my model aircraft in the presence of spectators until I become a qualified flier, unless assisted by an experienced helper.

I will perform my initial turn after takeoff away from the pit or spectator areas, and I will not thereafter fly over the pit or

spectator areas, unless beyond my control.

I will operate my model using only radio control frequencies currently allowed by the FCC.

## **Boulevard Mall Show Fizzles**

Early in January, the club decided to get involved in the Boulevard Mall Show. This has been a great show and the Knights have placed a gallery of pictures on their web site for last years event.

On Monday before the show, Paul Schwartz of the Wing and Rotors, was surprised by the mall personnel who suddenly informed him that there would be a limit of ten tables which they would supply. Even worse, they told him that there would be a financial commitment for vinyl covers for the tables to the tune of \$400 each.

The Mall refused to back down, so there was really no recourse but to cancel the entire event. Paul called Ron who then activated the phone tree to inform all of the Knights of the cancellation.

Our flying clubs are non-profit. They exist for the recreation and enjoyment of the members. A Mall show is an opportunity to generate good will in the neighborhood, show off our handiwork and perhaps spark an interest in aviation among young people or touch a memory in the older people who remember when.

No one seems to know exactly what the mall was thinking of or whether there will ever again be a model airplane show at the Boulevard Mall.

## **Aircraft Spotted**

## Stealth fighter

The stealth fighter on the model table appeared poised for an imminent strike. Except for the prop on the front, which brought the usual comment, it was a fine looking specimen.

Another comment that popped up was that it might be invisible to the radio signal. But Jim Pravel sloughed off all the envy generated patter and described how he built it from scratch plans. Definitely a superb job.

#### **Electric Shock**

Don Chudyk showed off his green and yellow Electric pseudo Glider. This baby is fast! As Don explained, it sports a brushless motor, (the pricey kind) along with a 4:1 gear box.

Eyebrows went up when Don mentioned that the motor turned at 28,000. He quickly pointed out that with a 4:1 gear ratio the prop actually turned over at a leisurely 7000 rpm.

#### **Continued from Page 2**

pieces of equipment.

As the aircraft industry grew, it became necessary to know precisely where one was flying and how long it would take to get to their destination.

He mentioned how the pilots when they finished delivering the plane, were responsible for their own way back to the factory.

Their salary didn't cover all of their expenses. If they made a mistake while going, they ended up paying for it on the way back.



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