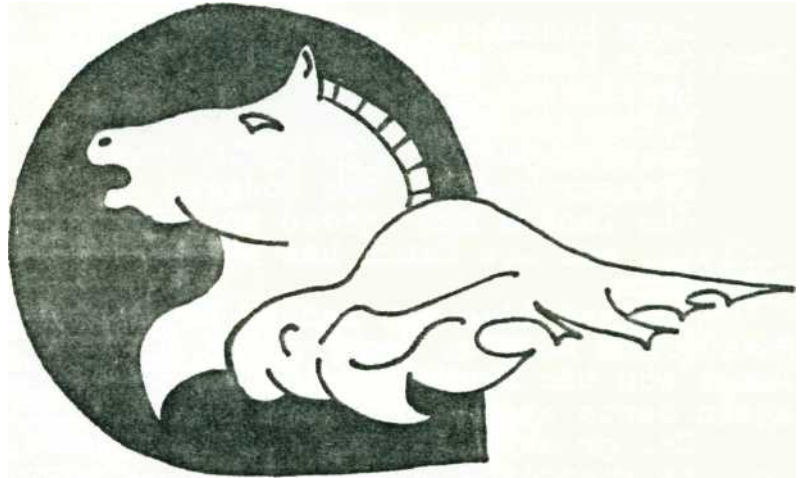


THE KNIGHT FLYER



Spring Issue - March 19 85

Contributing Editors -

Les Hanks Adam
Garbacz Bob
Sendor

ATTENTION ! ! ! !

I hate to be the one to tell this, but if you haven't already heard, listen good.

Last Sunday afternoon, one of our members, with total disregard for himself or anyone else, decided to bend the field rules and fly where ever he damn pleased. As a result, the following disaster took place.

While flying his monster model, with no ID in it I might add, way back behind the flight line and down over the road and houses, his Radio malfunctioned and the model struck the windshield of an auto traveling along Lakeview Rd. at nearly 50 MPH. The driver, being completely blinded by the crash, lost control and veered into an oncoming car head on. The driver, his wife and 2 year old daughter were killed instantly and the 2 occupants in the other car were critically injured. Yes, we are-all shocked, to say the least.

The irresponsible pilot is free on \$100,000.00 bail. The Town has put a chain across the driveway to our field and not only our club, but every club in the area is grounded pending a big investigation.

I have been in touch with the AMA almost daily and we stand a very good chance of losing our Club Charter and insurance. I certainly would-not want to be the idiot that was flying that model.

Needless to say, if this tragedy had actually happened, you and everyone in the country would have heard about it by now. Just stop and think about it for a minute, and you will see, as I do how easily it could have actually happened. The point I'm trying to convey to you is this- All these rules and regulations we have before us, weather they are from the AI.1A or field rules posted by the mutual agreement of landowners and clubs that utilize these fields, are guidelines that were meant to be strickly adherred to and obeyed, not only at home fields but every field we may be visiting. They are for everyone's safety, including the so called "hot shot" pilots and pilots who think that nothing can ever happen to them.

We are all in this together. We either enjoy our hobby happily together, or we go down the tube together.

ACCIDENTS DON'THAPEEN, THEY'RE CAUSED!

Your Acting Editor
Gil Lange

HOT OFF THE PREZ

Last December, The Flying Knights held their annual election and Christmas Party and here are the results.

President- --- Gil Lange
V. President--- Randy Bittinger
Secretary--- Leo Lewek
Treasurer - --- Bob Rodgers

Jim Landes has *agreed*, to. stay on as Field Marshall and Safety Officer, and Les Hanks has retained, once again, the position of Club Librarian.

A great time was had by all present, with lots of Pizza, wings, Pop Sweets and coffee. Lucky Larry Scaglione won the Radio Raffle and Mary Lange won the Music Box, beautifully handcrafted by Pam Bittinger. Once again Santa appeared and presented everyone there with a nice gift.

The greatest gift of all came when, as a total surprise, The Flying Knights awarded my loving and hard working wife, Mary and me, Honorary Membership Forever. It was certainly a memorable night for us and we thank you again for your kind consideration in bestowing this honor upon us. It makes our job a lot easier when we know that our hard work is appreciated. (A note from Mare, we really knew it was appreciated, its nice to know that it is appreciated that much) Many more members are getting involed and helping to make our club grow and become a useful organization in a fine community. When a volunteer is needed to take on a certain job, a voice is heard from the ranks and the position is underway. The Board of Directors is made up of 10 very dedicated members who take their jobs serious, but still can act with a happy attitude in the performance of their duties of guiding the club in the direction of a respectable family oriented organization. With people like these as leaders and the rest made up of fun loving Americans, how can a club like ours not prosper and grew and be organized. We can all be proud of the Flying Knights, so please get behind your leaders and show Western New York who we are.

This past January, at sno-fest, the Knights put on a Static Display with many beautiful airplane models. The road Show Team put on 2 shows on the ice with their R/C jeeps and cars and thrilled thousands of spectators. We also did well with our refreshment stand again this year, thanks to several of our wives and especially my wife Mary, who, as usual did a bang up job of putting it all together. Many thanks to all you members and wives who donated their time and effort to make this annual affair another sucess.

The annual club auction was a lot more exciting than last year, but still needs more to stimulate it. Any ideas would be greatly appreciated. Anyway, we all had a lot of fun.

So far this year, The Flying Knights Airshow Team has put on 3 static talk shows and is very busy building the surprises and acts for this years performances. If all goes well and according to schedule, we will have about 12 new models to add to our show.

Within the next 2 weeks or so, our flying season should just about be underway and the next big question will again face a lot of us the first time we go to the field. Will I still have the old knack, or will I go home broken hearted! Well, either way you go, your going to be nervous, and a nervous pilot can be very dangerous to himself. Here's a couple of hints on how to get thru that first flight of the year. 1) Check your pride and joy over very carefully at home in your own familiar atmosphere. You might miss something if you wait til you get to the field in your nervous condition. Have a thorough check list and don't skip anything.

- 2) Pick a somewhat calm day (if that's possible anymore)
- 3) Call a couple of buddies and make a date and time to meet at the field.
(we never fly alone, right!)
- 4) Charge up your batteries the night before and check them to be sure they survived the winter.(the expandable volt meter)
- 5) Load up the equipment and the wife and the kids and head on out. (have you got your transmitter?)
- 6) Once at the field, brouse around and shoot the bull with your buddies that you haven't soon since last season. This will put you at ease and settle you down and before you know it, you will feel like you have been flying right along and that first flight will seem almost like normal and you will see that you've still got the old zing.
- 7) The big thing to remember, is to concentrate on what you are doing at all times and above all, observe all the safety habits that you were taught by your instructors.
- 8) Get one of your buddies to help you get started. Don't try to do it alone.
- 9) Start your engine, check all your controls for right direction one more time, then take off and have a ball.

This year we have adopted a more formal program for processing new members into the club. Thanks to Elmer Gross, our new member committee chairman and his 3 committee men, Les Hanks, Jim Pravel and Randy Bittinger, this program was initiated on the first of the year and seems to be working very well. The program not only brings only the serious minded modelers into the club, but gives him honest information and facts(prices, etc.) about all aspects of our hobby before even gets involved. All in all it gives us both a fair shake so to speak.

The other new program being put into motion this year is our Pilot Proficiency Program, where we have 4 grades or plateaus to work for. When a pilot passes a grade he is formally awarded at a regular meeting by the membership. The program was set up to give pilots initiative to better their flying and thereby making our club a more efficient and safer organization. This of course is strictly voluntary and can be approached at the pilots own pace.

On behalf of the Officers and Board, I would like to wish you all a great year and many happy flights.

Gil Lange

NEXT MEETING— April 5
Video Tape at 7:00 — meeting at 8:00 —
Film Covering Demo. following meeting

other meeting til next newsletter as follows—
April 26
May 17
June 7
June 28

DC-3 Dakota built by Douglas Aircraft

A plane that is still in use today, spanning a half century since 1935, the year of it's conception.

An outstanding figure of 13,641 of these planes have been built, from which 2000 to 3000 are still in service today.

The DC-3 has a landing speed of 60 MPH, similar to a small private airplane. This allows landing in a small and unprepared landing area.

In 1960, an owner, Southern Airlines found a cracked wing bolt, with alarm, it was sent back to Douglas Aircraft. 'The engineers responded to Southern Airways, Congratulations!!! For you see, the wing bolt was designed to last 16,000 hours. However this very same bolt had been in use for 64,879 hours. So, we will have to say, the plane's strenght is lengendary.

After World War II, the Civil Aeronautics Board tried to ban the use of the DC-3. But, there were so many in service and it's popularity, made them file their plans in the waste basket.

The DC-3 has had more than ten affectionate names and nicknames. Starring with DC-3 (Douglas Commerical No. 3) Sky trooper, Skytrain, C-47 (the Military designation), Dakota or Dak (by British during World War II), The Three or Dizzy Three (DC-3), Gooney Bird or oust plain Gooney (a slightly goofy bird which, aerodynamically, is claimed to be incapable of flight, but since the bird doesn't know this, it flies any way). Spooky (Viet Nam), Grand Old Lady, Fatso and The Beast (French Navy; . Some additional military designations were: C-38, C-53, C-117, R4D (U.S. Navy). Today, it is more widely known as the DC-3 and C-47.

The airline customers of the 1930's flew in but did not enjoy the Ford, Fokker and Stimson trimotors or the Curtiss Condor biplane. IN 1931, along came the revolution of passenger aircraft, th Boeing 247. This low aerodynamic silouette, and clean, smooth shape bimotor monoplane was built of metal. It was equipped with retractable landing gear, variable-pitch metal propellor, pneumatic de-icer boots, to take away pilot fear of ice build up on wing leading edges. It was powered by two Pratt and Whitney Wasp 550 H.P. engines. It could carry 10 passengers with unequalled conditions of luxury, at 185 MPH !! It out-dated all previously built planes.

United Airlines let be known, that they would be satisfying their customers with the comfort and speed of the Boeing 247. This put the airlines - Braniff and TWA at a disadvantage, for they were still using the Ford, Fokker and Stinson trimotors or Curtiss Condor biplane.

Jack Frye, at 29 years of age and Vice President of TWA, saw the handwriting on the wall. He had to see to it that his airline update their quality of planes for customer travel. He soon found out that, not a one of Boeing 247's was able to be purchased. The waiting list of this plane's purchase was due to United Airlines being a subsidiary of Boeing.

Jack knew he had to come up with a better plane than the Boeing 247. So he sent questionnaires to 60 of his company's pilots and mechanics and 30 customers, wanting to know what their idea of a better quality plane would be. He put together all information gathered from these Sources and drew up the specifications that his new plane should have.

Jack Frye then sent a package of these specs to Douglas Aircraft, Curtiss Wright, Glenn Martin, Consolidated and General Aviation.

Donald Douglas really went to work on this, along with his top engineers. Douglas was already known for his building and producing the Cloudster, DT (torpedo seaplane), DWC (Douglas World Cruiser), D-2 (military observation) and the Dolphin.

Along came the DC-1, by Douglas. This plane was heavier, bigger, stringer and more advanced than the Boeing competition. It had a com-

partmental wing, which proved to be extremely strong. To test it, they put one section on the ground and rolled a steam roller over it. The wing did not bend.

The TWA employee that was the hardest to please was Charles Lindberg (known as Slim). Lindberg was technical advisor to TWA.

The contract between TWA and Douglas Aviation was signed for purchasing a DC-1 prototype for \$125,000. and 60 additional planes at \$58,000.00 each without engines. Even though the contract was signed in secrecy, the news leaked out and Douglas stock jumped from \$7.12 to \$16.00 a share.

The fight went on for the engines to be used on the DC-1, It was to be either a Wright "Cyclone" radical. 9 cylinder or a Pratt and Whitney "Hornet" radical 14 cylinder engine, each being about 700 H.P.

Douglas decided very quickly the engine would be the Wright "Cyclone" at 30% cheaper than its rival and out as good at that time.

Even though the DC-1 had a strange cabin and some others thought it was too big and won't fly, a great celebration was about to take place on July 1, 1933. On the same day, the Thirteenth National Air Races was to be held at Los Angeles. But only seven miles away at a private airfield of the Douglas factory, the DC-1 was to make its maiden flight at noon time, so the 800 dedicated factory workers could watch too. Test pilot, Carl Cover, taxied it onto the airstrip, gunned the engines and the plane became airborne. But one engine quit and then the other. Carl would drop the nose of the plane and the engine would restart, only to stop again. He kept going through this cycle of dropping the nose and restarting the engines until he reached an altitude of 1500 feet, high enough to make a landing approach. Landing safely, they later found out that the carburetor floats were installed incorrectly.

On July 7th, a second test flight was made. The plane in flight, wiggled like a fish. The engines corrected this with a rudder modification. The only other episode that made Douglas unhappy, was when pilot Allen landed the DC-1 with the landing gear up, proving the body strength as good as needed.

The DC-1 brought five world records and nine American records to Douglas. One of these was crossing the United States in eleven hours and five minutes in the month of April 1935. Just before this, the plane was tested for a one engine take-off and flight successfully.

The DC-1 made its final flight, when full of passengers from Malaga, Spain; one engine failed and the pilot force landed the plane in an open field. So be it for the DC-1.

Then came the DC-2. It was two foot longer and carried fourteen passengers instead of twelve. It had one more window on each side of the fuselage (one for each passenger), seats were reclinable and reversible, two large landing lights and larger 875 H.P. engines with a speed of 200 M.P.H. It also weighted a half ton more. The plane was also outfitted with flaps and wheel brakes. One pilot just after landing and coasting the plane almost to a stop, applied the brakes with all his might (he couldn't believe they could work so easy). The tail came up and the propellers showered sparks off the runway.

TWA purchased this plane and set time records between New York and Chicago, putting all other airlines in the background, envying Douglas Airlines for their accomplishments. There were 211 DC-2's manufactured

Douglas sold a license for manufacturing and selling DC-2's in Europe to Anthony Fokker.

American Airlines had to advance from their Curtiss Condor Sleeper to a more advanced plane like the DC-2, just to stay in business.

In 1934, American Airlines president, Cyrus Smith and vice president William Littlewood faced this problem, which also plagued some other airlines, Cyrus and William got their heads together and got out the plans of the DC-2 plane. For customer night flights the plane needed eight berths, one of which would be a small, enclosed private compartment for VP's or newly weds. For day flights - three rows of seven seats each. The fuselage 2 foot, 2 inches longer, height seven and a half in. higher and the same Wright engines with increased horsepower to 1000. This would make the plane 85% DC-2 and 15% of new forms and ideas.

So a telephone call went out to reluctant Donald Douglas. An agreement of a firm order of twenty examples of the new plane was made. They would be named DST-Douglas Sleeper Transport and the twenty one passenger version would be called the DC-3. It should be noted, that their agreement was made on the telephone, with no signed papers involved at this time, to a tune of \$4.5 million at stake. Douglas gave the project his all, right away. He put 400 of his engineers and draftsman to work on some 3,600 drawings. The twelve months project extended to two years. Each change required another, for example, a new wing five foot longer and new landing gears. Also new brakes-pedal operated and new vertical stabilizer and rudder. It needed two sets of instruments - one for each pilot, instrument panel illuminated for night flying and also an automatic pilot installed (called George)

On December 17, 1935, test pilot Carl Cover, made the first flight of the DC-3, a very successful one with no problems. During one of the later tests, another test pilot landed the DC-3, only to have one wheel lock up, spinning the plane around and around out of control and coming to a stop just a few feet short of the hanger.

The Japanese and Russians, each bought a license to manufacture the DC-3.

The DC-3 was a perfect piece of equipment. For military use, it is hard to imagine a better flying truck. It was called the C-47 in military form. It was used for evacuating wounded men from Burma, carrying cargo over the "Hump", parachuted reinforcements to Guadalcanal and re-supplying the Chinese twelve hours a day. General Arnold and Eisenhower ordered the C-47 for use in the D-Day invasion, carrying troops, weapons, munitions and medicine. The C-47 became known as the Dakota by the British.

At the end of the hostilities, thousands of Dakotas were sold. Many ex-GI's bought them for a song - from \$5,000.00 to \$8,000.00. They were used for passenger service.

The Air Force used the DC-3 in the Berlin airlift and the French in Indochina. They were also used in the wars of Korea, Algeria and Vietnam.

If it is flying in Alaska, England, Germany, France and Pearl Harbor as the Dak, or for airlines carrying passengers as a DC-3, or even perched in a Museum, or the fuselage as a recreational vehicle - the DC-3 will never be forgotten.

OK Western New York, let's watch the Flying Knights Show Team fly and demonstrate their DC-3 scale plane this year. Many thoughts of days relived and new sights seen, when this marvelous plane will present its one of a kind characteristics to the eyes of Air Show people.

See you then -

Les Hanks

A BEGINNER'S STORY

For those new to the club and to this great hobby I'd like to share my experiences in learning to fly RC Aircraft. My approach to learning has changed since I first joined the club and listening to the experience of the club's veteran fliers is something that may be hard for the anxious beginner to follow.

I became interested in RC at the Snowfest of 1983 and built a Sig Kadet for my trainer. I worked second shift at the time and could not make the club meetings to ask questions, but the Kadet did turn out well. Unfortunately on its third flight it developed a radio problem and was damaged. The radio was sent in for repair but the next flight proved I still had a radio problem and the plane almost went in again. I traded in this new radio for another brand which has been troublefree.

At this point, the flying season was coming into its last month or so and I became impatient since it was tough getting flying time during the week as I worked nights. So I made the foolish choice of trying to SOLO.

I picked a somewhat less than ideal day at the Collins field as the wind was a steady 8 - 10 MPH. I felt a steady wind would not be too much of a problem. Well I taxied for awhile and then fueled up for my SOLO flight. Everything checked out so I pointed the nose into the wind and advanced the throttle. I watched my groundspeed and gave the Kadet a bit of up elevator to help her off the ground. Well up she went nice and easy, wings level. Wow I thought, this is easy! About one-hundred feet up I turned right, trimmed out and really thought I had it made; until I tried to turn into the wind. Being a typical Kadet and a very low time pilot, she ballooned over inverted. I corrected but again I was going full bore with the wind. Trying again to turn, I could not penetrate the wind. So I made the mistake of fighting it until my Kadet was getting pretty "small" and I decided to put her in. Well I looked around the Jennings's Road area for four days reminding myself the whole time of how long it took to build the Kadet and one SOLO flight was not really worth the price I paid. I could not find the plane! I even looked from the air in Bob Schultz's J-3 Cub. What a great experience! Well I gave up the search for winter was upon us.

That winter I built a scratch plane and still wondered where my poor Kadet was. This scratch plane seemed forever to finish and I became somewhat discouraged. One afternoon I received a phone call from the chicken farmer near our field in Collins, saying he had found my plane in his cornfield near Jennings Road. Luckily he saw it before his combine would have eaten it. Needless to say I was excited and wondered what kind of shape it was in. The farmer stopped by the house and after introducing ourselves he pulled the Kadet from his trunk. It was not badly damaged but severely waterlogged. I thanked him for returning the plane and gave him a reward for his trouble. I'm glad we have a good neighbor at our field.

Well the radio being wrapped in plastic survived the winter and after an overnight charge everything worked fine, but the engine was rusted solid. I can rebuild the engine and gain some valuable experience in engine rebuilding, but what is the moral of this story? Mainly don't try to fly something as "hot" as a Kadet by yourself when you're not ready.

I have tried another route in my quest to learn to fly and this

is a powered glider. A Sig Riser with a power pod mounted 049 was chosen and I found the glider can easily be built in about a month. I used a Baby Bee 049 with a 6 by 3.5 prop, which has worked out well for me.

The first flights were made at the Hamburg field being just hand launches but gave me a good idea of the gliders flight characteristics. A few weeks later I decided to try a solo at our Collins field. I like the absence of trees at this field. Trees seem to attract model aircraft. Well I attached the power pod, checked out my radio and the moment of truth arrived. The 049 was fired up and controls checked again just to be sure. With a toss into the wind she slowly climbed. I reached about 200 feet before the engine stopped and my glider training began. I felt very much at ease with this glider and made ten beautiful flights that day. There was something special about being in control of its movements and seeing the glider flying about fifty feet overhead and hearing it swoosh through the air. Great!

It sure was a thrill to solo and taking the plane home intact wasn't bad either, but the confidence I gained in myself was immeasurable. I feel this is a great way to start RC.

With two other planes in my fleet, a three channel and a four channel for aileron training I plan on flying the glider on my own to make the control reactions automatic and have help with the more advanced trainers I have. By using this variety of planes I can prevent getting used to flying only one type of plane and hopefully progressing more rapidly. Even a glider offers the chance to practice those landing approaches and of course bringing in a "dead stick".

So for those of you who think a glider is for you, there is still enough time to build one before the flying season starts. Don't forget the club training program and don't try even a glider on your own if you have no prior experience.

For some information on glider or sailplane setup see Model Aviation, February 1985, Pg, 54

GOOD LUCK!

Bob Sendor

BEQUEST** from Don Parks, Davison Aviator News, Maine

Our club has been searching in vain for a sound meter (25-150db) of reasonable cost. We have been doing so in an attempt to write a muffler rule for our field.

Radio Shack used to market one a couple years ago, but they are no longer available. The only thing we can find available now are expensive ones that are OSHA and EPA approved.

If you know anyone who has one of the old Radio Shack types for sale or anyone who has a source for one of that type, Mr. Parks would be happy to hear from you. His address and phone numbers follow-

11402 Potter Hd., Davison, Mi., 48423 --- 313-653-4156 (office)
313-653-4443 (home)

LASER 200

The Laser 200 is one of the model R/C airplanes that the Flying Knights Show Team has selected for their 1985 air shows that they will perform through out the summer and fall.

I had the pleasure to fly the Laser one evening last year. The plane responds beautifully to ones commands on the transmitter. It is smooth and precise flying, giving you a relaxed feeling of enjoyment once again in this R/C hobby.

A quick rundown on the full size Laser 200 is as follows.

The Laser 200 is modified from the Stephens Acro airplane. These modifications were made by the champion pilot Leo Loudenslager, who is a six times national winner and former world champion of aerobatic competitions. His aerobatic style is distinct with sharp lines of flight. The Laser and Leo, can without an inkling, go into a inside snap roll half way and then exit into a three quarter outside snap. Unlike routine show time manuevers, he will initiate this surprise when you least expect it.

His competition routines are so finely inked in the air, that it's as if he pasted his Arestic card in the sky to follow the lines exactly.

Leo's Laser 200 is the greatest in power to weight radio, for performing all the vertical maneuvers. For instance, Twelve pounds of weight was ground off engine extra casting flash and unneeded metal.

Home builders can buy the Laser 200 kit as well as the Pitts special S-1 and S-2 and Christen Eagle kits from Christen Industries in Hollister, Calif. The Laser 200 being the plane of unlimited elegance and grace and if you so desire, it really groves through a maneuver with silky and controllable rolls. Unlike the Pitts Special, the Laser 200 landings are smooth. One can do a terrific side slip on approach to lower the landing speed.

Scaling down into one third scale for R/C modeling, the Flying Knights Show Team finds the Laser to fly just as elegant and docile as the full Scale plane. The Team also finds that the R/C model Laser can perform all the maneuvers equally well, as the full scale can. See you at the Team Shows.

Les Hanks

USE SAFETY WHEN STARTING **YOUR PLANE**- *

1. Keep your MIND and **EYES** on your HANDS.
2. Use a STARTER or **CHICKEN** STICK to start your engine,
3. Adjust engine fron **BEHIND** the aircraft.
4. **Don't** fly ALONE - make sure somoonc is with you that is capable of driving your vehicle in case of an emergency.
5. Know where the nearest **Medical Facility** is or a Fire Station **with** hopefully a Paramedic on duty.
6. Have a few bandages and a cleanser in your flight box.
7. If you are ALLERGIC to some insect bites, carry appropriate medication **with** you.

AMA Nat. **N/L**

Helpful Hints for R/C Flyers

1. To form Balsa for cowling, simply by soaking Balsa until pliable, wrap around a bottle, jar or a pipe, anything near diameter required, hold in place with rubber bands and place aside and continue working on your model while cowling is drying.
2. Need a flat work area for wing construction or fuselage? Try 3/8" or 1/2" thick plate glass on top of your plans. Excellent for wing construction.
3. To bend tubing without crushing, slip coiled spring on outside of tube and proceed to bend. Remove spring when finished.
4. For pushrod ends, try bicycle spokes.
5. Is the sandpaper you have too coarse? A few strokes with a wire brush on the sand paper will make the sandpaper a little finer.
6. Slices of fuel line or neoprene hose make good gaskets for carburetor needle valve.
7. A hacksaw cut in a piece of steel will help you make a Z for a pushrod.
6. Used Dentist drills work good in your rotary tool to make slots for aileron and rubber hinges.

Adam Garbacz

BEFORE PUTTING YOUR PLANS UP --

- 1* Ground check entire plane before each time you fly.
2. Range check your radio before each time you fly.

WHILE YOUR AIRCRAFT IS IN THE AIR--

Closely observe your plane during flights, watching for any signs of problems. This makes for safer flying and maybe a longer life for the plane.

AMA Nat. N/L

MORE ON SAFETY--

1. Do you have proper ventilation and good lighting?
2. Do you always wear safety glasses when drilling, sanding or doing any hazardous work?
3. Do you keep tools, etc. out of reach of children?
4. Are paint, thinners, solvents, etc. stored in metal cans and away from heat sources?
5. Are all power tools disconnected or unplugged when you are thru with them? And are they properly stored?
6. Are power tools properly grounded if necessary?
7. Are you careful in not overloading electric outlets and extension cords?

AMA Nat. N/L