

1988

President...Richard Ballard
 Vice Pres.....Bill Andes
 Treas.....Richard Ballard
 Sec.....Steve Shumate
 Safety Officers..Darrel Cordle
 Dave Plamann
 Nate Ericson



Editor... Dave Plamann
 HAVE FUN *** FLY SAFE



Meeting Minutes

We had a super turnout on March 19th with 50+ members present. In addition to Bill Andes reminding me I had not yet used some material he provided me, (Got you back Bill !). The following issue's, and appointments were decided upon.

As you all know, Mr. Tom Runge, & Paul Holsten of Ace R/C in Higginsville Mo. were with us and did an incredible job answering questions, and providing up-to-date info. on what face's R/Crs in the years to come. Over 70 transmitters were checked for possible (shoot ya down, bang em up) problems. I hope everyone remembers that the airplane you knock down could be your own. Keep the transmitters at least 25 ft apart. ***** Keep in mind***** Ace Float Fly ***** June 11, 12***** Big Doin's***** AMA Required***** They'll have all the goodie's. Byrans, Sig, Top-Flight, Goldberg, Lanjar, Dave Brown, R/C Report, who reciently picked up a part time writer, who we all know, etc. It'll be a big blowout.

Darrel Cordle passed out copie's of our field rules, and the AMA Safety Code. Read em, & heed em , If you haven't recieved a copy, get hold of me and we'll fix ya up.

The need for a Board of Directors was announced, for tax purposes. * # \$ * & % The motion was made and seconded, to appoint Richard Ballard & Bill Andes to those positions. As if they need something else to do!

Everyone was asked if they had any ideas on how to best place the pit fenceing at the field. After little response it was decided that the club officers would meet at the field the following day to make a final decision.

Danny Callahan reported on the field mowing situation. He has found a fella that has aged to do it for a \$500.00 fee. Sounds like a good deal to me ! The motion to assess each member \$10.00 was made & seconded, and passed unanously.

The dates for Operation Handshake, at Richards-Gebaur AFB are July 16, 17. Again, if you would be interested in setting up a static display, let me know as soon as possible. Remember- No Selling,,, tables are provided,,, bring your own lawn chair and fan. It will probably be a little on the warm side!

Richard again reminded everyone that those who havent yet provided your AMA number, need to do so as soon as they recieve them.

Show and Tell was provided by Richard, with his Cap 21, and me and my King Cobra. I want to encourage folks to bring that " Newest Baby " to the meetings for a little showin off. Its always fun to see what direction people are going with the hobby.

-IMPORTANT-

Reminder - Pay your mowing fee NOW if you haven't already. Everyone should have recieved a letter to be returned to Richard Ballard. We have the responsibility of holding up our end of the deal, (On Contract !). So lets get with the program guy's. We voted it in at our last meeting, there wasn't one hand opposed, and there wasn't an empty seat in the house.

FLIGHT BOX NAMES? A GOOD IDEA!

No, I am not suggesting that you call your flight box "OLD LEAD SLED" or "THE POWER SOURCE"! What with the rapid growth of our club it is becoming more and more difficult to know and remember who everyone is. Several members have ask me about name tags or some other means of getting to know everyone. Personally, I have problems remembering my own name at times so I understand the problem!

What I would like to suggest is that each of us print our name on our flight box in large enough letters to be easily seen in the pit area. This should make it possible for everyone to know everyone elses name without having to ask each time you go flying!

HOW ABOUT IT GUYS? GET OUT THE PAINT AND DO IT TODAY. THE PREZ!

*** REMINDER *** NEW A.M.A. MEMBERS ***

MR. DON LOWE, THE PRESIDENT OF A.M.A., HAS ASK ME TO POLE THE CLUB AND FIND OUT HOW LONG IT IS TAKING TO GET BACK YOUR MEMBERSHIP CARDS. I would like to know the exact date that you sent in for A.M.A. membership and the exact date you receive your card. PLEASE HELP ME ON THIS. It could result in improved service for all of us in the future.

Thank you
Richard Ballard

F.Y.I.

Our next club meeting will be April 16, 7:00 pm, at the Gaslight Village Clubhouse. Dr. Jim Henry, a new club member, will present a talk and video tape of the AMA Museum in Reston Va. Should be very interesting, so mark your calendars.

We have a " Hot Stuff " VHS video tape to loan to club members. It has some great information on the use of fast setting glue's. Contact Richard Ballard if you would like to check it out.

Tom Runge - Ace R/C - 90 min. audio cassette of his talk at our March 19 meeting. A lot of real good info. on radio's, batterie's, etc. Available to club members for loan. (Copie's for 3:00 ea.) Contact the Pres.

Scott Whitley has suggested making copie's of AMA cards for aircraft IDs, and has offered to bring his copier to the April 16th meeting. This sounds like a good way to do it, as long as thats what we use them for. We don't want to see any copie's in the Pin Board. AMA requires that you put your name & address, or AMA number, On the wing, tail, or inside each aircraft you fly. (Just is case). It will be assumed that any color, other than that of the current AMA card, is outdated.

THE NEW PIN BOARD IS IN PLACE AT CLINTON

A 1991, A.M.A. approved, looks alright, might work, frequency pin board is in place at clinton.

It has pins for all "even" 22 legal channels plus two Ham bands.
It has pockets to hold your A.M.A. card while you have a pin.
It will identify the narrow band channels.
It will work well if we all follow these DARN rules.

Don't ever take your pin home, make a replacement pin, or hog the Freq.
Always return your pin when you get done with your flight.

Remember to always use a pin!

Never turn on your transmitter without the proper freq. pin in place.

DARN, that ought to be easy to remember!!!

APRIL NEWS COLUMN
By SLOOF LIRPA

MOWING FEE HOAX EXPOSED

Those of you who have paid the \$10.00 mowing fee have been had! I just found out it was all an elaborate April Fools joke perpetrated by Danny Calahan. When I talked to Danny last week he was busy filling out an order for a Byrons Originals P-51 Mustang. Sorry guys!

U.S. ARMY CORP. OF ENGINEERS MAKES AMENDS

We recently received a letter of apology from the Corp. for the long delays in lease negotiations. To make amends they are going to put in a 400' asphalt runway, Shelter house with BBQ grills, and electricity so we can charge our planes at the field. In addition they also said something about heated and air-conditioned rest rooms if money is still available. We can expect work to begin in a few days at the most. They also said if there is anything else we want all we need to do is ask.

What a great bunch of guys!!!

ANOTHER ENDANGERED SPECIES?

There was conclusive evidence found at the flying field this winter of the existance of another endangered species. Initial reports were a little "Watered Down" but have since proven true. In addition to Crawdads, Mosquitoes, and other little critters we now know for a fact that the "GREAT PLAINS SNOW SNAKE" resides there as well.

"How do you know for sure?" You may ask. Well all one had to do was take note of their numerous "Yellow Tunnels" in the snow this winter! You can't argue with hard evidence like that!

FREE FUEL ** FREE FUEL ** FREE FUEL

Bryan Sorenson and Prop & Wheel Hobbies has ask me to pass along his offer of free fuel to all club members during the month of April. This is really a generous offer and one which I am sure we will all want to take advantage of. Boy, what a great guy that Bryan is!!

WANT ADD == FOR SALE ++++ FOR SALE ++++ FOR SALE

U.S. ARMY SURPLUS R/C TARGET DRONE SYSTEM.

12' wing span, repainted in "Thunderbirds" color scheme. Complete with spare engines, radio systems, and catapult launch/Parachute Retrieval back-up. Radar Tracking can be had also. All for only \$25.00.

Contact Sloof Lirpa by TELEX at "April Fools"

Due to pressing business my next column will not appear until April of next year. I'm a real sorry person about that too! SLOOF LIRPA

A REPORT ON FIELD IMPROVEMENTS FROM THE PRESIDENT

SATURDAY MARCH 26, 1987

Today should go down in our clubs history as a day to be proud of. We got off to a very shaky start late Friday night when we found out that DANNY GUYS dump truck had broken down. A few frantic calls later and Danny & RON GRIFFIN were burning the Mid-Night Oil (Literally) trying to line up another truck for Saturday morning. I went to bed not knowing if I would have half the club at the field with Rakes and Shovels and NO TRUCK AND NO DIRT 5 hours later! I guess I should know better by now!

ANY TIME THE MODEL MASTERS DECIDE TO DO SOMETHING, THEY DO IT RIGHT! We had more Dump Trucks Saturday at 7:00 A.M. then we knew what to do with! MySelf? I took another RolAid and stopped worrying!

STAN TIEMEYER brought his Bob-Cat and shortly after that BILL ELKINS JR. & SR. showed up with a tractor/loader and Box Blade. You should have been there to see the dirt fly! RICK ZARLEY donated the dirt, and after we got done hauling away his Top Soil, is probably looking for a new supply to finish his Bank Building project! (Thanks RICK! Not only for the dirt, but for getting the PVC Pipe for us Wholesale after we had been refused by almost everyone in Lawrence and Topeka as a NON-PROFIT ORGANIZATION!)

While all this was going on DARREL ANDERSON, SCOTT WHITLEY, LARRY WISE, DAVID BORN, CHUCK HARDMAN, DARREL CORDEL, DAVE PLAMANN, BILL ELKINS JR. and other club members were busy digging post holes for the NEW PIT & SPECTATOR SAFETY FENCE.

By 12:00 Noon everything was done. The dirt was hauled, smoothed, seeded, and straw cover in place! (Thanks to ALAN STUS for the straw!) Along with a new Pit Area Fence with Safety Signs by NAT ERICKSON. Another amazing thing was that Your Club President was Not Even Tired when we got done! Why? Because I went to Topeka after more fence and left the field improvements in more VERY CAPABLE HANDS!

A SPECIAL THANKS TO THE FOLLOWING CLUB MEMBERS:

RICK ZARLY - Dirt, Trucking, Help on buying things right!
DANNY GUY - Dump Truck
RON GRIFFIN - A Dump truck on VERY SHORT notice!
STAN TIEMEYER - BobCat work
BILL ELKINS - Box Blade tractor on short notice.

AND A VERY SPECIAL THANKS to the the following Club Members
FOR WORKING SO HARD !

David Born
Scott Whitley
Darrel Anderson
Chuck Hardman
Darrel Codrel
Larry Wise
Dave Plamann
Bill Elkins Jr. & Sr.
and everyone else I missed while I was gone to Topeka!!!

WELL DONE MODEL MASTERS. WELL DONE!
RLB

ADDITION; WE WOULDNT WANT TO FORGET THAT RICHARD BALLARD PUT OVER 200 MILES ON HIS OWN VEHICLE, AND SPEARHEADED THE ENTIRE VENTURE. WHAT MORE COULD ANYONE ASK OF A CLUB PRESIDENT?

BEGINNERS CORNER
(Questions & Answers)

This months questions are mostly related to engines, so lets get started!
(Fun intended)

Q. WHAT ARE THE DIFFERENCES IN GLOWPLUGS AND HOW CAN I TELL WHICH TO USE IN MY O.S. .40?

A. It is true that there are a lot of different glow plugs on the market. In general however, they can be classed into four basic types. These are the STANDARD and R/C (IDLE BAR) type in SHORT and LONG length. It is safe to say that over 90% of all engines used for R/C perform best with a LONG reach IDLE BAR type or R/C LONG plug. Short plugs are generally only used in very small (.15 and smaller) engines and some older R/C engines. Non-idle bar long-reach plugs are used in some racing or high-Nitro engines.

I have had very good luck with both K & B, and Fox "LONG R/C" plugs. The Fox plug is my favorite as it just seems to be of higher overall quality and seems to last forever.

Q. I WANT TO BUY A POWER PANEL BUT I NOTICED THAT A LOT OF PEOPLE USE NI-STARTERS INSTEAD. WHICH IS BEST?

A. I, like most modelers, bought a power panel because I thought I was supposed too. After using it for awhile, I found that I burned out a lot of glow plugs, and often had starting problems in cold weather or when the motorcycle battery was down a little. I finally figured out that the electric starter pulled enough amps to cause the power panel to decrease power while cranking over the engine. I next bought a Ni-Starter and haven't used the power panel since. I also haven't lost more then half a dozen glow plugs and they all died of old age!

As an instructor, I often find the cause of an engine that will not start to be the use of a power panel. I try it once or twice on the students power panel, then get my Ni-Starter and start his engine!

I would recommend that you forget the power panel and buy a Ni-Starter type glow plug lighter. That is what you will end up with sooner or later anyway.

Q. MY INSTRUCTOR WAS HELPING ME HAND START MY ENGINE BUT EVERY TIME IT STARTED, HE SHUT IT OFF. HE SAID IT WAS STARTING BACKWARDS! WAS HE PULLING MY LEG OR WHAT?

A. No, he wasn't. Almost any 2-cycle engine, from a Cox .010, all the way up to a Detroit diesel, can and will start and run backwards! Some are more prone to do this then others due to different port timing, etc.

This is a good place to mention the importance of REALLY holding onto a plane when starting the engine. You can always expect the plane to move forward when the engine starts, but every once and awhile it might try to back up!

Q. WHAT DOES THE IDLE BAR ON A GLOW PLUG DO?

A. In theory, it protects the glow element from fuel spray at idle speed. This prevents the cold fuel/air mixture from cooling off the glow element, which would cause the engine to die. In actual practice, I don't know if it works or not, But I almost always use them!

Q. I WANT TO START OUT WITH A 4-CYCLE ENGINE ON MY TRAINER. DO YOU THINK THIS IS A GOOD CHOICE?

A. No, I don't. Personally, I feel that a person with no modeling background should start with a low to medium price range 2-cycle engine. Untill you learn more about operating a model engine and learn to fly, you can destroy an engine just from setting the needle valve wrong, or of course from crashing! 4-cycle engines are harder to ajust properly, have more expensive parts exposed to damage, and in general, take more skill and knowledge to operate. Better to wait awhile and learn on a 2-cycle! RLB

HOW IT WORKS

Dihedral

Di-he-dral: The angle formed by two wing surfaces.

Most of us fly a plane with dihedral in the wing. Why is it necessary? What does it do? How does it work? All very good questions, but not easy ones to answer. Dihedral performs several functions on an aircraft such as:

A. converts yaw into roll. Without dihedral, we would just skid around a rudder turn without banking. Dihedral is the poor mans aileron.

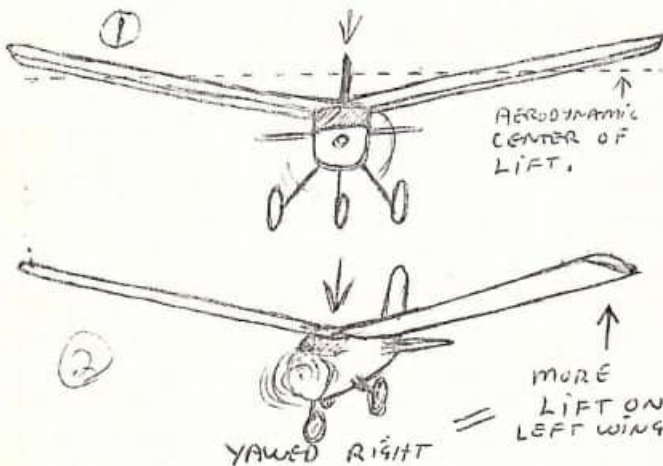
B. Dihedral prevents spiral instability. (The tendency of an aircraft to roll out of a shallow dive into an ever increasing spiral dive.)

C. Provides a measure of self-leveling correction.

D. Counter-acts Rudder induced roll couple in an aerobatic or pattern design.

E. Provides a high degree of visual impact.

Lets take a look at each of these points in more detail. Did you ever stop to wonder what makes a 3-channel plane or glider bank into a turn? (No ailerons, remember?) If you look at DRAWING #1 you see a head-on view of a plane



in flight. As you can see, both wings are level and meeting the air at the same angle of attack. In DRAWING #2 the aircraft has been yawed to the right with rudder. This forces the left wing out ahead of the right wing and also increases the angle of attack of the left wing. This in turn increases the lift of the left wing and causes the plane to bank to the right in the direction the rudder was applied. The result is a banked right turn without ailerons!

Without dihedral, this would not have occurred. The plane would simply skid sideways, or roll to the left due to rudder induced roll couple! Items B and C are related so lets look at them together.

If we assume a straight wing (No taper) with 4" total dihedral (2" under each tip) then we can also assume the span-wise aerodynamic center to be at the 1/4 span point or 1/2 way out to the wing tip on each wing. This then places the center of lift half way out to each wing tip, or 1" above the center section of the wing. The weight of the plane is then seen to be suspended from a point 1" above the center section, plus the thickness of the wing, above the center section. In effect we have a pendulum. Once a control input that caused a bank has been removed, the weight of the plane tends to want to swing back to a vertical position beneath the point of suspension, which in this case is the lift produced by the wing. It really isn't this simple, but this will give you a place to start from in understanding the self-stablizing effect of dihedral.

Item D, or rudder induced roll couple, is an evil demon that lurks in the heart of every pattern plane. Ideally, any control input would only have an effect on that control axis acted upon by that control. Thus, to fly knife-edge, it should only be necessary to roll over on your side with aileron and kick in enough rudder to hold the nose up and maintain altitude. It seldom works that way! Say you roll left onto your side and give right rudder. Dihedral tries to roll the plane back to the right, while rudder is still trying to roll the plane on over on its back to the left. The trick is to design a plane with just enough dihedral to balance out the rudder force. Believe me, its hard to do!

The reason is that "effective Dihedral" is not a constant. It changes with flight speed, wing shape, wing location, and wing-tip shape! As a matter of fact, I am not even sure that there is a scientific way to predict how much dihedral is needed! Then how much dihedral should I put in my new airplane? Well, I usually find that two paperbacks and a comic book under each wing-tip is usually within an inch or two of being perfect!

FLY SAFE!

RLB

-EMERGENCY-

Has anyone seen Crawford this year? His mother would like to know!

Safety Tip

Sharing experience's which may be embarrassing to us, may make us uncomfortable. But it could save someone else some real problems later on. So its with this in mind that I own up to having done the ultimate NO-NO on my first trip to the field with my new King Cobra.

Richard Ballard accompanied me on this first outing with my newest charge. Final field check of looking for anything I may have forgotten, (not me) proved uneventful. Soon after having completed a good distance check, I started the engine. (Oh Boy, Time At Last) Standing behind the plane, I fiddled with the controls to make sure they all worked right, and ask. Hey Richard,...Ailerons look OK? " That looks looks like a left hand turn to me," he said. The problem was I had the stick pushed to the right! I could have swore I had that plane set up right!

Embarrassing?...Yes, but not near as embarrassing as it could have been, had I crashed that Cobra! And I would have,,,,soon after take-off. The Cobra is not a rudder airplane! As it turned out though, the Cobra flew like it was on a rail, due to my second pair of eye's, and reversing the servo on the ailerons.

The moral of the story is; It's always a good idea to take an experienced friend along on that first flight, no matter how experienced you feel you are.

Thanks Richard!

DP

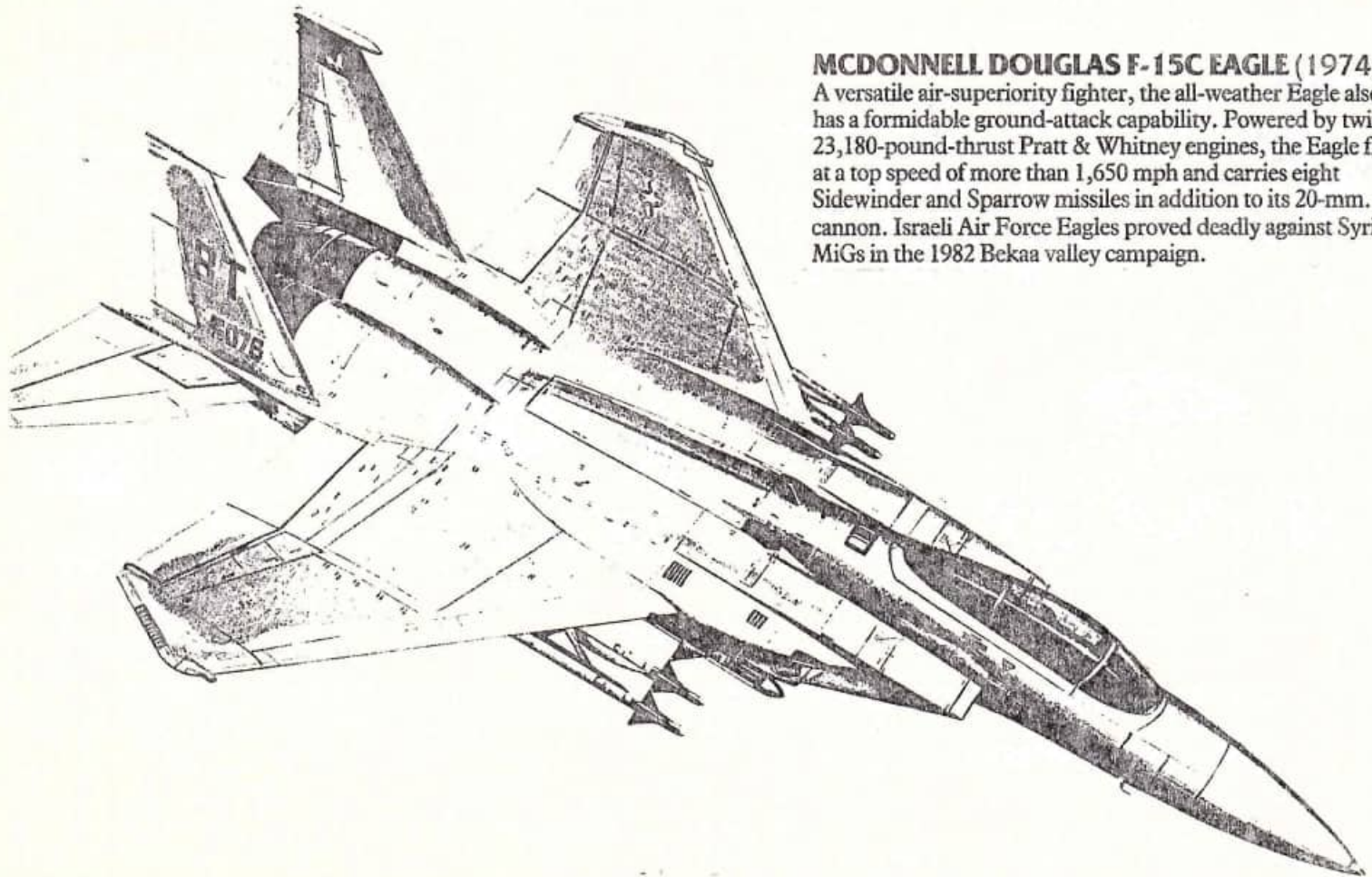
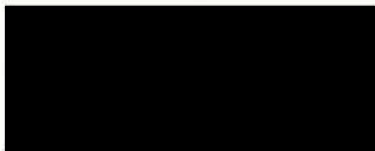
FOUND

A large hammer, & 1 roll of string were found following our work day, Sat. 3-26-88. Owner may claim by contacting Richard Ballard at 843-8623.



REMEMBER

OUR NEXT MEETING IS APRIL 16th AT 7:00 PM, GASLIGHT VILLAGE CLUBHOUSE. PLEASE MAKE PLANS TO ATTEND!



MCDONNELL DOUGLAS F-15C EAGLE (1974)

A versatile air-superiority fighter, the all-weather Eagle also has a formidable ground-attack capability. Powered by twin 23,180-pound-thrust Pratt & Whitney engines, the Eagle flies at a top speed of more than 1,650 mph and carries eight Sidewinder and Sparrow missiles in addition to its 20-mm. cannon. Israeli Air Force Eagles proved deadly against Syrian MiGs in the 1982 Bekaa valley campaign.