



August

# Radio Control Club of Rochester



President TREVOR EWELL 716-225-9530 Secretary GREG PSZYK 716-659-8374 Treasurer PETE DURANTE 716-225-7394 VP Membership PHIL SLATER 716-392-4208

VP Programs JERRY JOSEPH 716-244-1981 Editor BOB MCCLURE 716-548-2248



AMA Charter 465

The purpose of the Radio Control Club of Rochester is to aid and encourage the interest of the members in design, construction and safe operation of model aircraft, boats, and cars, -- in particular, radio-controlled models so we can all enjoy the pleasures and satisfaction these hobbies bring.

All Visitors are always welcome at the field and at regular meetings RCCR meetings are held every second and fourth Wednesday of the month

Every Tuesday evening (4:30 pm til sunset) training has priority at the flying fields. Be there and make safety your choice.

> FOR THE LATEST INFO CHECK THE RCCR HOTLINE

**FIX-RCCR** 349-7227

AUGUST MEETINGS

Wednesday, August 12, 7:30 p.m. at the Salem church,

60 Bittner St., just east of the Inner Loop exit at St. Paul Street.

Wednesday, August 26, 7:30 p.m. at Bolling Field, behind 2295 Redman Road. Flying before and after meeting.



R.C.C.R. 1998 Schedule

Annual Banquet & Roast Ides of March Picnic (Knollwood Lodge) Mall Show (Greece Ridge Center)

March 15 March 28-29 April 3-4-5 May 16-17 " 16-17

Toledo Expo Greenwood Park Spring Float Fly (Endicott, NY)

Greenwood Park Spring Probat Ply (Endicott, NY) Honeoye Float Ply (Sandy Sottom Park) Burlington Spring Float Fly (Ontarlo, Canda) Ray Edmunds Memorial Alf Show & Fun Fly (NorthamptonPark) BARKS Air Show & Fun Fly (Bath, NY) RCCR International Precision Aerobatics Contest (Northampton Park)

RCCR International Precision Aerobatics Contest (
RCCR Combat (Redman Rd.)
Stump Jumpers Air Show (Hiddlebury Center, PA)
RCCR Pichic (Northampton Ski Lodge)
STARS Scale Rally (Olean, NY)
SKyrovers Air Show (Phelps, NY)
RCCR Combat (Redman Rd.)
RCCR Combat (Redman Rd.)
RY)
Flying Knights Scale Rally (Hamburg, NY)
Flying Knights Scale Rally (Hamburg, Rd.)
Glen Curbas Scale Rally (Hammondsport, NY)
RCCR Combat (Redman Rd.)
Inter-club Pan Fly (Honeove, Host)

RCCR Combat (Redman Rd.)
Inter-cub Fun Fly (Honeoye, Host)
Flying Dutchman's Scale Rally (Ricchener, Ontario)
Burlington Fall Float Fly (Ontario, Canada)
Greenwood Fall Float Fly (Endicott, NY)
RCCR Combat (Redman Rd.)
Stump Jumpers Air Show (Biddlebury Center, PA)
RCCR Fall Plette, events are subject to channe.

These events are subject to change, watch the RCCR newsletter "Airflow" for updates

Aug. 29 Sep. 6 Sep. 6 Sep, 12-13 " 12-13 Sep. 19-20 Sep. 26-27 Sep. 26 4 Oct. 11

Feb.21

May 30-31

June 13-14 June 20-21

June 6-7

June 27 June 28 July 4 July 4 July 11-12 July 18-19 July 25 July 25-26 Aug. 15 Aug 22-23

R.C.C.R. Meeting Minutes: 7/08/98 At Salem Church (Minutes courtesy of Tom Vay)
Officers Present: Trevor Ewell, Jerry Joseph, Pete Durante, and Phil Slater

First Time Visitors: None Second Time Visitors: None Membership Update: 116 Treasurer's Report: None

Old Business: Precision Aerobatics meet report - Todd Sheehan, CD. June 21, 22 had great weather. Five rounds completed on Saturday, and final round was completed Sunday morning. Twenty-two contestants participated, and even though plans were made for 25 contestants, the event was successful, thanks to club members participation. Combat meet report - George Hartman, CD. Ten contestants. (Details will be in August newsletter)

Northampton Noise - Parks Department reported 15 to 20 audio observations with no objectionable noise noted. Fourth of July Picnic - Northampton Park had approximately 20 people attending.

New Business: Bolling Field, George Hartman reports that Dust Zone signs are on the entrance road to remind members to slow down and not spread dust on our neighbors.

Bolling Field - establishment of second NorthSouth runway, east of the main runway, is being considered. Don Ogren and Greg Kesel are heading the committee to study the project.

Datable Complete report Jim Warner, 13 constants, 20 planes, 3 minor mid-airs, 1 crash. (Details in August newsletter)

Detroit Combat report, Jim Warner. 13 contestants, 20 planes, 3 minor mid-airs, 1 crash. (Details in August newsletter) Glider meet is set for August 15. Club participation is needed. Signup sheet is available.

Show & Tell: Jack Franz - fuel tank showing years of carbon buildup. Don Ogren - magazine on U-Control stunt flying.

Jerry Joseph - scratch built Corsair.

Scott Miller - Great Planes Extra 300s

Stan Teachman - showed prototypes of sign he designed for June Fun-Fly

Todd Sheehan - SwitchBlade electric pylon racer.

## CLUB VIDEOS by Jerry Joseph

Here is a list of the videos that are available in the RCCR Library. If you desire to checkout a video, give Jerry a call at 244-1981, and he will make arrangements to get it to you.

211 1301, and no will make arrangements to	900 10 00
Air Show 6/2/90 Attack Carrier Trilogy Aviation Heritage, Part I Aviation Heritage, Part II B29, A Plane for a Mission	NA 6 NF 683 NF 696 BA 29
Battle of Britain	
Clancy Aviation Speedy Bee - Lazy Bee Down to the Wire, Wings of Eagles/Gold Flying the AH-IG Cobra Gunship	NA 34
Fun &Float Fly; RCCR & Glider & Combat Kamikaze	1995 CB 12
Mighty Warbirds	
Naval Aviation Action, Part 1&2	BA 62
Proficient Flying, Volume 1	
Proficient Flying, Volume 2	
P/C Video Magazine Volume 3	

Proficient Flying, Volume 1 Proficient Flying, Volume 2 R/C Video Magazine Volume 3 R/C Video Magazine Volume 4 R/C Video Magazine Volume 5

R/C Video Magazine Volume 6 RCCR Scale Rally & Fun Fly S-T-A-R-S Meet 7/11/92	1988
Shoot to Live Rear Gunner	BA 18
Story of Naval Aviation, Attack Carrier	NA 27
Striking Back, Byron Air Show	
Tailspin Tommy, "Stunt Pilot"	
The Navy Flies On	NA57
Threshold, The Blue Angels	
Vintage Wings	
Warbird Checkout Series	RS 7
Warbird Checkout Series	RS 9
Warbird Checkout Series	RS 17
Warbird Checkout Series B 17	RS 10
Warbird Checkout Series T-6/SNJ	RS 14
Warbird Checkout Series T-6/SNJ	RS 15
Wide World of Flying	

## RCCR ONLINE

Richard Brook rfbrook@frontiernet.net Phil Evans evansatotc@aol.com Peter Fiorentino peterjosephf@worldnet.att.net georgehartman@sprintmail.com George Hartman David Hoffmann hoffmann@netacc.net Bob Kesel kzl@aol.com Greg Kesel rcthumbs@aol.com RCMAN4250@aol.com Matt Mair Bob McClure airflow@frontiernet.net DonOgren@aol.com Don Ogren Stephen Pajek spajek@rochester.rr.com gpszyk@aol.com Grea Pszyk warzonemodels@msn.com Lawrence Root Al Sertl shal@frontiernet.net Todd Sheehan bluetoad@juno.com Stan Teachman models.prints@juno.com Paul and Matthew Weigand weigand@frontiernet.net

RCCR WEB PAGE http://www.frontiernet.net/~airflow
AMA District II Web Site http://www.amadistrictii.org
WEIGAND HOME PAGE
http://students.dwc.edu/users/mmair/

When once you have tasted flight, you will forever walk the earth with your eyes turned skyward, for there you have been

and there you will always long to return-- Leonardo Di Vinci Airflow's cover picture is the One Design obtained from:
Minnesota Airways http://home.sprynet.com/sprynet/ptasz/homepage.htm

The picture was supplied in electronic form by the Sport Aerobatics January '94 magazine, Editor Karen Diamond.

The International Aerobatic Club, Inc is a Division of the Experimental Aircraft Association, Inc. All IAC members are required to be members of the purent organization, the EAA. Membership is open to all who are interested in aviation. The IAC is also a Division of the National Aeronautics Association and is responsible for the administration, management, and responsible for the administration, management, and responsible for the administration and Earonautics and the Company of the IAC is also a Division of the Federation Aeronautique Internationale; Paris, France, FAI is the world governing body for all sport aviation competitions and record attempts. IAC represents the United States at meetings of the FAI's CIVA committee which establishes rules worldwise for aerobatics competitions.

#### Radio Control Club of Rochester 1998

## COMBAT schedule

\* June 27 \* July 25 \* August 29 \* September 26\*

Insulting

LOCATION: Bolling Field, Brockport, NY (behind 2295 Redman Road)

704 Scale combat
 Modified rules and score

Modified rules and sco

For information and directions or

George Hartman (CD) | Jim Warner (CD) 145 Eden Lane | 342 Willowbreck Driv Rochester, NY 14626 | Brackport, NY 14421

16) 227-3506 1 (716) 537-7599

Registration begins at 900 um. Curebat begins at 10:00 u

#### ound

Thermos bottle after June 24 meeting at Bolling Field. Don Ogren 889-9255

#### r Sale

Field box, Ultimate bipe, FlightStar 40, Concept 30 helicopter, OS MAX FS40 (nib), 4 electric boats (nib), RC Car & radio... just a whole bunch of goodles. Dave Parsons 964-9322

#### For Sale

JR pcm receiver, 10-channel, top-of-the-line unit. Model NER-910XZ. Virtually new and in excellent condition. 72.590 frequency but can be changed with plug-in crystal. New list price: \$239.95. Will sell for \$140. Greg Kesel 225-6461

Airflow 8/98 2

HIGH WINGS versus LOW WINGS by Clay Ramskill From Clay's Newsletter Editor Helper http://www.startext.net/homes/cramskill/inkclay.htm

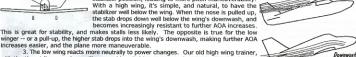
We finally master our high wing trainer -- or trash it, whichever comes first. Maybe then we build a shoulder wing plane. Only after we are somewhat competent at flying do we try flying a low wing plane, and then with white knuckles and shaky knees. WHY? Just what is it about low wingers that make them "tougher" to fly? Are they faster? No! All other things being equal, there's virtually no difference in drag, or therefore top speed. The illusion comes from designers' choice -- they tend to put faster airfoil sections and lower aspect ratios on low wing planes, making them speedier. Low wing planes do have several characteristics, compared to high wingers that make them more suitable for higher performance aircraft.



1. "Nicer" (and quicker) roll response. This comes from the relative placement of the Center of Gravity, being closer to the natural roll center of the wing. The CG will be at or only slightly above the roll center of a low wing, but well below that of a high wing. Assuming at least a little dihedral, the roll center of the wing will be slightly above the center of the wing. In a roll, the wing (providing the "power") wants to roll about its own roll center. The rest of the plane (the "resistance") wants to roll about the CG. The wider the distance between roll center and

CG, the funnier-looking is the roll (i.e., "non-axial").

2. The low wing lends itself to a less stable stabilizer position, leading to more pitch maneuverability. With a high wing, it's simple, and natural, to have the stabilizer well below the wing. When the nose is pulled up, the stab drops down well below the wing's downwash, and



and Stabilizar Position

increases easier, and the plane more maneuverable. 3. The low wing reacts more neutrally to power changes. Our old high wing trainer, with the thrust line very low, will respond by pitching nose up when power is added, nose down if power is reduced. This contributes to stability, with the nose going the way we want it to on a trainer. On the other hand, the low winger will be more neutrally stable, without

much pitch reaction to power changes. The low winger will also be more wind "resistant" on the ground, a function of wing height above the wheels. The high winger will naturally be more "tipsy," reacting to wind while taxiing and during takeoff and landing. We must all understand that we're only talking of tendencies here. There are many other variables that have an impact on the characteristics involved -- the designer can juggle these around to get the desired handling. But wing placement is definitely one of the biggies when it comes to establishing how a plane is going to handle.

thanks to Clay Ramskill, Arlington, TX Seven Towers RC Club, for the article.
thanks to Glenn Crocker, Editor of GVAM's Balsa Dust, for leading the Airflow to this fine source of RC information

WHAT'S THE DIFFERENCE Written by Dr. Guenther Eichhorn gei@head-cfa.harvard.edu Information for this article is from the web site http://acro.harvard.edu/IAC/fag aerobatics.html

#### ROLLS

Aileron rolls are flown with the rudder and elevator in the neutral position during the roll. The aileron is fully deflected in the direction of the roll. This is the easiest of the rolls to fly. The aileron roll is started by pulling the nose up to 20 - 30 degrees above the horizon. The elevator is then neutralized and the aileron fully deflected in the direction of the roll.

The controls are maintained in that position till the roll is completed. After the roll is completed the nose is usually 20 30 degrees below the horizon. The aileron roll is not a competition maneuver.

Slow rolls have to be flown normally on a straight line (exception is the avalanche). The roll rate has to be constant and the longitudinal axis of the plane has to go straight. This requires constantly changing rudder and elevator control inputs throughout the roll. Hesitation or point rolls include stops at certain roll angles. The number on the base of the roll symbol describes the number of points the roll would have if it were a 360 degree roll. Allowed are 2 point, 4 point and 8 point rolls. The fraction on the arrow of the roll symbol describes what fraction of a full roll is to be executed. If no points are specified, rolling is done without hesitations. If no fraction is specified, a roll symbol that starts at the line specifies a half roll (see description of the Immelman). A roll symbol that crosses the line specifies a full roll (first figure). The second figure shows the symbol for 2 points of a 4 point roll (adding up to half a roll) from upright to inverted flight. Snap or flick rolls also have to be flown normally on a straight line. A snap roll is similar to a horizontal spin. It is an autorotation with one wing stalled. In the regular snap, the plane has to be stalled by applying positive g forces. In an outside snap, the plane is stalled by applying negative q. In both cases rudder is then used to start autorotation just like

Barrel Roll is a not competition maneuver. The barrel roll is a combination between a loop and a roll. You complete one loop while completing one roll at the same time. The flight path during a barrel roll has the shape of a horizontal cork screw. Imagine a big barrel, with the airplanes wheels rolling along the inside of the barrel in a cork screw path. During a barrel roll, the pilot experiences always positive G's. The maximum is about 2.5 to 3 G, the minimum about 0.5 G.

## WING-OVER OF HAMMERHEAD

Wing-Over is a competition maneuver in glider aerobatics. You pull up and at the same time bank the plane. When the bank increases past 45 degrees, the nose will start to drop while the bank keeps increasing and the plane keeps turning. Halfway through the maneuver, the plane has turned 90 degrees, the fuselage is level with the horizon and the bank is 90 degrees. The plane is above the original flight path. The nose then keeps dropping below the horizon and the plane keeps turning, while the bank is shallowed. When the bank drops below 45 degrees, the nose is pulled up towards the horizon and the plane reaches horizontal flight with wings level after 180 degrees of turn. At the completion of the maneuver, the plane is at the same altitude as on entry and flying in the opposite direction.

Hammerhead starts with a quarter loop into a vertical climb. When the plane stops climbing, it pivots around its vertical axis (which is now horizontal). The nose moves in a vertical circle from pointing up through the horizon to pointing down. After moving vertically down to pick up speed again, the maneuver is finished with the last quarter of a loop to horizontal flight. This figure can have optionally rolls on both the up-line and the down-line. The quarter loop is flown just like the first part of a loop. When the plane is vertical, the elevator backpressure is released completely. During the vertical line up, some right aileron and right rudder is needed to maintain the vertical attitude because of the engine torque and p-factor. When the plane has slowed enough, full rudder initiates the turnaround. It is followed by right-forward stick (right aileron and forward elevator) to keep the plane from torquing off. The pivot is stopped with opposite rudder when the nose points straight down. When the pivot is completed, the ailerons and rudder are neutralized. Elevator and rudder are used to keep the nose pointing straight down. The pivot must be completed within one wingspan. Rolls on the downline require only alleron input if the plane is trimmed correctly. This maneuver is sometimes called a hammerhead stall. This is not an accurate name because the airplane never stalls. The airspeed may be very low, close to zero, but since there is now wingloading during the turn-around, there is no stall (at zero g wing loading, a wing does not stall). The plane is flying throughout the maneuver with all the control surfaces effective (even sometimes only marginally so). The previous paragraph is true even for gliders that don't have the support of the propeller slip stream. The missing slip stream makes it much more difficult to keep some flow over the control surfaces during the turn-around in a glider.

## World War II Scale Combat Contest

June 27, 1998

by George Hartman

It was a cool gray dawn at Bolling Field, the fighter pilots gathered slowly, their good natured nonchalance not quite hiding the steely eyed look of the aggressive hunters that they were.

By briefing time ten pilots were ready for combat with an assortment of planes. After a briefing by CD George Hartman and comments by Jim Wagner Chief Judge and Don Steeb Safety Officer, the first mission was launched with five planes. Pilots; Rodney Boatman (Corsair), Phil Slater (P-47), Jim Warner (Spitfire), Mike Daley (ME 109) and Joe Somers (Zero). The second mission was flown by Bob McMillan (Corsair), Jerry Joseph (P-47), George Hartman (P-51), Greg Kesel (P-51) and Ron Monroe(P-51). No cuts no mid airs, Boatman, Daley and Monroe lost streamers and Warner and Kesel scored carrier landings. McMillan crashed for unknown reasons and was out since he didn't have a back up plane.

The second round matched up Hartman, Monroe, Slater, and Warner in the first mission and Boatman, Daley, Somers, Joseph and Kesel in the second mission. Hartman scored a cut, Carrier Landings were scored by Hartman and Warner, Slater crashed for unknown reasons, Somers and Daley mid aired putting both planes out. Kesel crashed with apparent radio troubles.

The third round started with the six remaining competitors. Boatman, Hartman, Joseph, Monroe, Warner, and Daley who switched to his back up plane the "Pretty Pink Spitfire" .Boatman and Daley scored cuts and Hartman and Warner scored Carrier Landings.

All the third round flyers survived for the final round. Warner switched to his backup Frank, all other pilots flew their third round planes. Cuts were scored by Boatman, Daley, and Hartman. Carrier Landings by Hartman and Monroe.

Final Scores:

the second of the second	Three		Four
	Round	Final	Round
Pilot	Total	Round	Total
Hartman	410	220	630
Daley (RAMS)	190	170	360
Boatman	120	160	280
Monroe (RAMS)	80	120	200
Warner	300	26	326
Joseph	80	16	96
Somers	120	two rounds	
Kesel	110	two rounds	
Slater	110	two rounds	
McMillan (RAMS)	40	one round	

WAR ZONE MODELS The Compat Connection



Lawrence Root

Prizes were provided by War Zone Models (a kit for first prize) RCCR (cash second prize), Tri J (fuel and props third prize) and RCCR (goody bags for forth and fifth prize).

3177 Latta Road #144 (716) 227-0592 Rochester, New York 14612 warzonemodels@man.com

The competition was intense and the spectators, though few in number saw a good show. The July 25 meet promises to be a good one with several flyers who did not make this contest planning to participate.

I really appreciated Phil Evans and Jim Warner coming out Friday morning to mow and set up in the rain. Jim Wagner did a great job organizing the judges and over seeing the scoring. Phil Slater managed the food concession, appreciated by all and Don Steeb stepped in and managed safety when Ed Dickenson called in ill. Nearly everyone who was there was pressed into service as a judge or food service helper and contributed to the success of the event. It wouldn't happen without the participation of all of those people and their contribution is really appreciated by the pilots and the CD.

Radio Control Club of Detroit Meet July 4, 1998 by Combat Ace Reporter Fran Reese Boatman



Winner was Dave Wagenson, Detroit, RCCD - 930 points, 6 cuts 2nd was Greg Wagenson, Chicago, IL brother of Dave and Paul, 615 points, 2 cuts

3rd - Rodney Boatman, RCCR, Rochester, NY 509 points, 1 cut, first blood cut

4th - George Hartman, RCCR, Rochester - 505 points, 1 cut, 1 midair -

managed to land, but got off late in last heat 5th - Jim Warner, RCCR - 480 points, 2 cuts but tail lost in 3rd heat

Total of 13 contestants. Well fought. Nice field

For your info, I have photos and info on most of the models flown at this meet. Anyone who wants a pic or info on models, e-mail: bigred14@IX.NETCOM.COM



## "WEATHER" TO FLY by Greg Kesel

Ah summer! The season in which REAL quality of life issues become all-encompassing. Like the price of fuel, or how many other RC'ers want "your" frequency pin at the flying field. And, yes, what's the weather going to be like for flying. If you will indulge me I have some thoughts on these issues that Td like to share, Fuel. It's a basic modeler's necessity of life so if you need it, buy it now and in quantity. You thus avoid that panic feeling we all hate like when we run out of ice cream or bathroom tissue.

Frequency pins. Spread the word that your frequency is experiencing "glitches". In a week you'll have it all to yourself!

Weather. This is more complicated because we cannot control it. But we can evaluate it by knowing what tools are available and how to apply the information. Basically, we need to know about wind, rain {snow?}, clouds and temperature. AND- you need to know your limitations. How much wind or crosswind can you and your model safely handle? No need to tell anyone else but 'fess-up to yourself and live by it.

A most obvious tool is the forecast and it is available from multiple sources. The radio, newspaper and local and cable TV provide good information. Also, NOAA and the boaters forecasts are good. The Internet, like MOL, can clarify the forecast with various maps that I use a lot to look at the overall picture. A good aviation weather site is www.

\(\{\text{ed.note: also check the weather links on the RCCR web page: www.frontiernet.net/\(\text{-airflow}\)\)\)

Detailed forecasts used by all these sources are generally issued for 12, 24, and 36 hour periods and emanate from the National Weather Service in Kansas city. Local meteorologists will add their expertise of the local areas to fine tune the end product. When reading forecast text look for the time of issue. If it's, say 10 hours old and doesn't match the current conditions go look at a different source for another projection. The first one blew lift.

Of course current conditions dictate if we even venture out of the basement workshop so we need to gather realtime data. The easiest way is to LOOKUP! If your face stays dry and your hair stays in place {for those with hair} it's lookin' good to fly. Specifics of wind, clouds, etc. are available from the radio and tv but there is another source available to the aviation community that is very useful. It's called ASOS, or the Automated Surface Observation System.

Most large airports have an automated weather station that actually takes measurements and continuously broadcasts them to both pilots and ground observers. In Rochester call 235-7322 and listen to the tape. This is instant, real time weather at the airport. And if you are going to a meet in another city it may have an ASOS too. Here are several in Western NY:

Buffalo- 716/635-0532 Elmira- 607/796-0065 Jamestown- 716/664-6005 Syracuse- 315/454-3350 Binghamton- 607/729-8335

# Here's what you get:

- 1}Wind in Knots. Add 15% for mph.
- 2) Temperature in Celsius. Double the figure, subtract 10% and add 32 for Fahrenheit.
- 3) The ceiling of the cloud bases in feet.
- 4 )The type of precipitation, if any.
- 5 )Visibility in miles or fractions thereof
  6) Density altitude.
- Here's how to use the information.
- Besides the wind speed note the direction and consider the crosswind factor at the flying field, remembering that we have N-S and E-W runways.
- If it's hot take liquids to drink. If it's cold take a wife or girlfriend.
- 3 )A cloudy overcast can tell you that you may only see the silhouette of your plane.
- If it's precipitating on you and your open-gimble transmitter- GO HOME.
- 5) How little visibility to fly in is a judgement call but I don't recommend less than 3/4 mile in all directions. If the ASOS reports visibility as an "RVR" (or Runway Visual Range) then it's so bad that they are reporting in feet. This usually accompanies bad weather so we've already been grounded.
- 6 )Density altitude is probably the least understood factor of weather that affects RC'ers. When air heats it expands and takes up less space, when your model flies through any given "chunk" of airspace there will be fewer air molecules in that chunk of airspace if the air is warmer vs cooler. And fewer air molecules means poorer performance from your engine, prop and airframe. Air is also less dense at higher altitude fields like Olean so we get hit twice up there on a hot day. When the ASOS says "density altitude 2,500 feet" it means that your model will feel as though you launched it almost half a mile above the actual runway! And at places like Olean which is at 2,100 feet to start with, your model will think it's up at 3,000 to 4,000 feet on a warm day! In these conditions your plane will not gilde as well and it will need be flown a little faster to make up for the loss of lift and thrust. You may also need to lean the engine slightly for peak performance. This is because you must maintain the same fuel-to-air ratio that it likes (about 1 to 15). If the air is thinner then the fuel needs to be "thinner" too. The kicker is that less fuel means less power overalls go performance will suffer.

I hope the ASOS proves to be a useful addition to your box of weather tools. It's a lot of fun to use all the tools at our disposal and see how they can really improve our "weather sense".



August 1 Endless Mountain R/C Flying Club Fly-In, Montrose, PA.

August 7,8,9 Empire State Freeflight Championships, Fayette, NY.

August 8,9 Precision Aerobatics Contest, R/C Aircrafters, Hamburg Model Park, Hamburg, NY,

August 8,9 Binghamton Aeros Giant Scale Fly-In, Chenango Bridge Airport, Chenango Bridge, NY.

August 14-16 18th Annual Wings of Eagles Air Show, Elmira Corning Regional Airport, Horse Heads, NY, One of the biggest and best warbird airshows in the world. Sponsored by the National Warplane Museum, this year's show will feature over 150 WWII and Korean era warbirds plus modern air power demonstrations from the U.S., Canada, Great Britain, and Germany including the United States Air Force Thunderbirds. Info: (607) 739-8200

August 15 R/C Aircrafters Float Fly August 16 Lockport Public Demo

August 22 - 30 AMA EXPO-98 San Jose, CA

August 22,23 Rochester International Airshow. Featuring the F15 Eagle, the F-117A Stealth and the F-16 Fighting Falcon.

Rochester, NY. For more info call Cherie Bevona (716) 256-4960.......Stan Teachman (716) 388-0546 August 23 Niagara Falls Pylon Races

September 11,12 AMA Celebration of Pioneers, Muncie, IN.

SUPPORT THE RCCR SAILPLANE MEET SATURDAY AUGUST 15 - CD JERRY JOSEPH - 716 244-1981 Check the front page "1998 Schedule" for other area events.

Southern Tier Aero Radio Society's 21st Annual Scale Rally - Olean, NY July 11 & 12,1998. Thanks to Mike Gosson and Wes De Cou for these shots.





Skyrovers Air Show - Phelps, New York - July 18, '98































Avoid flying Low, Slow, and Downwind. It flies better with airflow..!!