

Syracuse Thunderbirds Aero Radio Society

Plane Propwash

January 2013

Charter 473

The General Meeting will be February 13th at 7:00 at Walt's

2013 Officers

Chuck LeVine, President
Herb Moore, Vice President
Bob Rowe, Treasurer
Jeff Wolsley, Secretary
Peter Seiffert, Safety Officer

Directors:
Peter Seiffert, 2007-08
Dan Williams
Bill Orr

Volunteer Staff:
Jeff Wolsley, Propwash Editor
Michael Graham, SYG Administrator
Chuck LeVine, Webmaster
Herb Moore, Field Committee

The next STARS meeting will be at Walt's February 13th, at 7:00. As a reminder, the meeting is always the second Wednesday of the month.

2013

President's Perspective

Another great start to the year. Our annual auction was held on the 18th with good attendance and spirited bidding. The Model Aircraft Forum was on January 26th and had a good turn out with some interesting presentations. Additionally Phil Morgan is putting together a bus trip on the 23rd of February to the WRAM Show – if you wish to go let Phil know. These are fun things to do during our dreary winter days. Next up will be our Annual Snow Fly on March 3rd.

As we start the year, I look forward to hearing from you, our members, on what we can do to improve our club. One of our first priorities is the repair of the club house windows. Phil Morgan has graciously offered his equipment to re-size and hopefully we

can coordinate this project with the field workday. We are also in the process of working on ways to stabilize the web cam server to provide more continuous coverage. If you have any ideas or thoughts for club improvement, please let me or the other officers what your thoughts might be.

And as we start our flying season and flight schools we are always in need of your volunteer support. Bob Fisk has taken on the responsibility for running HeliJam 5 and is off to a great start, please offer your help and support to him in making this another great STARS event.

As our annual reminder, club dues are due as are the dues for AMA.

Chuck

The 2013 Airshow date is September 1st. The reported date on the website has been corrected.

Please get your 2013 dues in. They can be mailed directly to:

**Bob Rowe
211 Sedgwick Drive
Syracuse, NY. 13213.**

Or pay them at the February meeting. Late fees apply after the January meeting.

\$20.00 Late fees after the February Meeting

Secretary's Report: Jeff Wolsley

The January 2013 STARS regular meeting was called to order at 7:00pm. There were 14 Open Members, 3 Associate, 1 guest, and 1 youth members in attendance.

Secretary's Report:

The Secretary's Report from the November 2012 meeting was submitted. Correction reported by Peter Seiffert for the presenter at the last meeting. Brian Morse displayed the jet at the last meeting, not Peter Bronson. The November Propwash will be updated to reflect the change. Motion to approve by Peter Seiffert and 2nd by Gary Natali. Carried.

Treasurer's Report: Chuck LeVine.

The roll of "Bob Rowe" is played by Chuck LeVine for the January meeting. Dues are almost all paid up. The field share payout is continuing as planned. 2nd level payouts were completed in 2012. 3rd level payouts will be completed by the end of the first quarter in 2013. Motion to approve the treasurers report from 2012 by Mike Graham and 2nd by Dave Jewell. Carried.

Committee Reports:

Field Committee: Herb Moore

The lock codes will be changed shortly. The new codes are on the back of the membership cards.

AMA: Peter Seiffert, AMA District II, AVP

The AMA is accepting donations for those modelers affected by hurricane Sandy. The donations will help provide relief for the clubs in the areas devastated by the hurricane. Please donate.

The next MoST date is February 2nd. Remember the date is the first Saturday of the month. Please volunteer and help promote the hobby and attract new members. Please contact [Peter Seiffert](#) to volunteer.

The Model Aircraft Forum (MAF) is January 26th. The swap shop is unattended this year. The customary 10% club donation is waved on all sales. This means if you bring it, you sell it.

Safety Report: Peter Seiffert

No safety issues to report at this time.

To repeat from November's Propwash- Make sure that you are aware of your transmitter failsafe functions. A recent incident at the field involved a transmitter being turned off before the receiver. The receiver interpreted this as a LOS (Loss of Signal) and went into failsafe mode. The electric aircraft involved immediately went to high throttle and crashed into the pit fence. Fortunately the only damage was to the aircraft. If you have any questions regarding the failsafe function or how to set it up, please contact [Peter Seiffert](#) or bring it along to the next meeting for help.

Flight School: Chuck LeVine

The flight school format will be the same for 2013. Heli and Fixed Wing will run the same nights and times as last year. **Special Note- All fixed wing pilots will need their own aircraft this year. The club trainer is no longer available.**

If you have suggestions for the flight schools, please let us know.

STARS Web Site: Chuck LeVine

Enjoy the web cam while you can. As the weather turns colder, the electronics will need to be put away until warmer weather returns.

Please view the field cam at <http://www.amadistrictiistars.org/>
<http://www.amadistrictiistars.org/scam.html>

This is an infrared cam so you can see some activity at night.

Old Business:

STARS Club Hats and Shirts: Bob Rowe

Bob has more hats! The price is \$ 15.00 Please see/contact Bob if you are interested in a STARS shirt. Bob has a catalog with the shirt styles, with the STARS logo embroidered on it. The price varies from 10.00-40.00 dollars. These are **nice** shirts.

New Business:

WRAM Show:

The WRAM show trip is February 23rd. We will meet at Northern Lights parking lot at 0600, between the K-Mart Garden Center and Zebbs. Please contact [Phil Morgan](#) if you would like to go.

STARS Auction:

The STARS Auction is January 18th. Set up starts at 5:00pm. The bidding starts at 6:00.

New Members:

No new members were submitted for vote at the November meeting

FIRST AID- The First Aid Box is there for everyone's use. If you use something from the box, please report it to one of the club officers so that it can be promptly replaced. It does no one any good if you need a band-aid, gauze and tape, or worse, and it's not there.

Adjournment:

The January regular monthly meeting of the STARS was adjourned at 7:18pm.

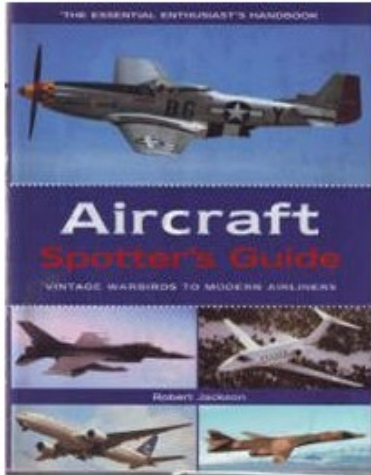
Secretary, Jeff Wolsley

After the Meeting Show and Tell

Gary Natali presented the AMA plane spotters guide. It is quite informative with excellent pictures for around \$16.00 w/ shipping.. It is available from the AMA website- [Shop AMA](#)

Book - Aircraft Spotter's Guide 3061

add to cart



To enthusiastic aircraft spotters, each airplane has a unique profile and presence in the sky. Here is a handy spotting guide suitable for beginners, but with plenty of fascinating facts and drawings for the more experienced. In the Aircraft Spotter's Guide, aircraft entry includes the development history, a full-color photograph, and a 3-view scale drawing illustrating key recognition features that will enable the reader to spot the subtle differences between similar aircraft types. More than 200 currently flying aircraft are featured from warplanes to airliners to executive jets to vintage biplanes.

\$12.95

Safety Officer Report: Peter Seiffert

Make sure that you are aware of your transmitter failsafe functions. A recent incident at the field involved a transmitter being turned off before the receiver. The receiver interpreted this as a LOS (Loss of Signal) and went into failsafe mode. The electric aircraft involved immediately went to high throttle and crashed into the pit fence. Fortunately the only damage was to the aircraft. If you have any questions regarding this function or how to set it up, please contact [Peter Seiffert](#).

PLEASE remember to RANGE CHECK all aircraft before flight- GOOD! Range checking during flight-NOT so good!

2013 STARS Board of Directors Meeting

The STARS Board of directors meeting was called to order following the STARS regular January monthly meeting. The following were in attendance:

Bill Orr Chuck LeVine
Mike Graham Dan Williams
Herb Moore Jeff Wolsley
Peter Seiffert

Many topics were discussed. These topics were the highlights.

2012 Review:

Events:

Heli JAM- Bob Fisk will be the show coordinator for 2013.
Air Show- Break in a new coordinator to eventually replace Bob Rowe. Not that Bob is going anywhere. He has been planning and running the show for several years (Decade(s)?) now.
Snow Fly- No changes discussed.
Other Events for 2013?

Flight Schools:

Heli- Make this more organized with a field marshal. Better time management. Use all available time for flying. Spread out the eating instead of everyone eating at once. Eliminate dead air time.

Fixed Wing- The club trainer was sold off at the Airshow Swap Shop last fall. All new students will need their own **flyable** airplane. Please have them show up for pre-flight inspection night.

Jim Coleman and Dennis Gerber will continue to man the grills on school nights.

Financials:

OPEN/FULL club members are eligible to discuss any particulars with the Club Treasure at any time.

Long Range Projects:

Tree maintenance
Fix the club house windows
More stone for the driveway
Remove old shed- Conduct an inventory of the content, storage, and disposal.
New flag strings for the shows
New speakers/sound system for the shows- starting with new wire, then new speakers, then new amp.
New PTO shaft guard for tractor
Get the First Aid Box Updated.

Jeff Wolsley, STARS Secretary

If you have any suggestions that may help with any of the topics discussed here, please feel free to contribute.

Calendar of Events for August-September (and beyond) **Events:** *Editor's Note- Also watch your e-mail for sudden changes to events like cancellations or re-scheduling due to weather.*

January 18 STARS Auction- Walt's Hobby
January 26 CNY Model Aircraft Forum- Syracuse Academy
February 16 RCCR Swap Meet, Rochester
February 23 WRAM Show Trip
April 13 FLAPS Swap Meet and Auction

Indoor helicopter flying at Walt's is open again for the 2012-2013 season. Wednesday and Thursday, 5:30 to close.
For any additional information contact Walt's Hobby 453-2291

Look for updates to indoor flying schedules!

Flight Schools- 2013 STARS Fixed Wing Flight School starts May 9th. Heli Flight school starts April 23rd. Please plan on attending the pre-flight workshop at Walt's April 25th.

MoST Volunteer Schedule- Please contact Peter Seiffert to volunteer. The MoST program is back. The next session is on February 2nd. Please contact [Peter Seiffert](#) if you wish to volunteer.

Please visit the AMA DistrictII website or the Event Section in the back of Model Aviation for additional information on these and other event

Advertisements:

FOR SALE:



Bridi UFO Pattern Plane. Fiberglass fuse. Epoxy finish. Includes Rhom Air Retracts and air tank with all fittings as well as push-rods. Set up for .60- 2 cycle engine. Qualifies for Vintage R/C Class. Joe Bridi Design circa 1970's. If Interested we can arrange delivery.
Asking \$ 175. Contact [Dan Luchaco](#). 570-888-1856

*If you want to list modeling items for sale, R/C services offered, or a really neat R/C web site, this would be a good spot. Free for members. Send your advertisement by e-mail to jwolsley@ix.netcom.com. Please put **STARS ADVERTISEMENT** in the subject line.*

Links-

how to build a rc jet B-1 Bomber # 173 pt 1

[hornitpilot](#) 404 videos



A REALLY COOL WEBSITE- *Thanks to former STARS member Rick Colvin for pointing this out at the June 2009 meeting-* For those of you who ever wanted to learn how to make a fiberglass plug and molds, this is the guy to check out. Even if the plane in the project doesn't interest you, the education from the process may. Bob Moore (B1 Bob) takes you through each process step by step, including the "Bob-o-neered" parts. He shows you how to make professional looking parts in his garage workshop. This includes carbon fiber composite parts as well as the use of light weight foam to produce so really impressive light weight but very strong parts. He shows all- the good and the bad, so you get to learn right along with him. He's showing plug and mold modification in the most recent videos. He recently launched BAM R/C products. If the YouTube hyperlink doesn't work, copy the following URL into your browser line and click go.

It's over 2600 videos. Six kits have been sold. Bob is working diligently on the 2nd ready to fly Thud. The original B-1 is for sale on RC Universe. Bob will be starting on the improved B-1 next year. How To Build A B-1 Bomber 10 Minutes At a Time.

http://www.youtube.com/watch?v=HqTKJU6PlkA&feature=channel_page

This is the link to the web site- <http://www.b1modelproject.com>

Mike Graham posted a really neat video from the 2012 Airshow. Thanks Mike! It takes a little while to load but it's worth the wait. <http://dl.dropbox.com/u/73545639/STARS%20Airshow%202012.wmv>

Howard Blair found an interesting video from YouTube on micro flight

<http://www.youtube.com/watch?v=fuoFA2fKjEo&feature=fvst>

Tom Catalino pointed out this site recently. An excellent site for Lipo battery info-

<http://sites.google.com/site/tjinguytech/charging-how-tos/balance-connectors>

Peter Seiffert sent along the following web site- www.servodatabase.com/servos/all

Mike Graham has a torque conversion chart-



Arming Switch Information-

AMP'D- Arming The Big Boys, by Greg Covey November 2007

http://www.rcuniverse.com/magazine/article_display.cfm?article_id=950

RunRyder- How To Make A Spark Arrestor for an ESC by Lucien Miller <http://www.helifreak.com/archive/index.php/t-289393.html> look down to the post from gidwell from 4-24-2011 0601am. That's the exact article that I have from RunRyder.

Note- Many of the newer ESC's have a built in spark arrestor. If you still see and hear the spark, this is a good idea to save the plugs.

The Link for the AMA is:

<http://www.modelaircraft.org/>

The link for the AMA DII Calendar is:

http://www.amadistrictii.org/amajoom/index.php?option=com_events&Itemid=56&task=view_month&month=9&year=2012

The link for the club yahoo users group is:

http://groups.yahoo.com/grjwoup/stars_club_members/ (Don't forget to sign in)

The link for the STARS club home page at DII is

<http://www.amadistrictiistars.org/>

The link for the STARS club web cam is:

<http://www.amadistrictiistars.org/scam.html>

The Propwash News Letter is also available at YAHOO GROUPS. The current news letter and previous years/months are viewable and printable from there.

Please contact Mike Graham tanjmg82@aol.com to join the STARS Yahoo group. Send Mike an email asking to join from your preferred email account. Mike will then reply with an invite to join the group. The invitation contains the links and instructions necessary to join.

The following designations are new rulings from the AMA on FPV and Failsafe Programming.



Academy of Model Aeronautics AMA Document #550
"AMA Advanced Flight Systems Committee"
amaflightsystems@gmail.com

Radio Controlled Model Aircraft Operation Utilizing "First Person View" Systems

1. DEFINITION OF TERMS:

Please refer to Page 5 section 7 which contains an alphabetical listing of the definitions of the terms

in italics that are used in this document.

2. GENERAL:

FPV flying of radio control model aircraft by AMA members is allowed only for noncommercial purposes as a hobby/recreational and/or competition activity and must be conducted in accordance with AMA's current National Model Aircraft Safety Code and any additional rules specific to a flying site/location.

3. OPERATIONS – REQUIREMENTS – LIMITATIONS:

- a) *AMA FPV novice pilots* must use a buddy-box system with an *FPV spotter* while learning to fly *FPV*.
- b) All *FPV* flights require an *AMA FPV pilot* to have an *AMA FPV spotter* next to him/her maintaining *VLOS* with the *FPV aircraft* throughout its flight.
- c) The *FPV pilot* must brief the *FPV spotter* on the *FPV spotter's* duties, communications and hand-over control procedures before *FPV flight*.
- d) The *AMA FPV spotter* must communicate with the *FPV pilot* to ensure the *FPV aircraft* remains within *VLOS*, warning the *FPV pilot* of approaching aircraft, and when avoidance techniques are necessary.
- e) The *FPV spotter* may at any time during an *FPV flight* acquire the transmitter from the *FPV pilot* and assume *VLOS* control of the model aircraft.
- f) If the *FPV pilot* experiences a problem due to a loss of video link, orientation, or is unable to safely fly, he/she must abandon *FPV* mode and fly *VLOS* or pass the RC transmitter to the *FPV spotter* to assume *VLOS* control of the model aircraft.
- g) Before the initial *FPV* flight of an *FPV model aircraft* and/or after any changes or repairs to essential flight systems, the *FPV model aircraft* must have an *R/C test flight* by conventional *VLOS*.
- h) *FPV model aircraft* must use frequencies approved by the FCC for both the RC system and the wireless video system. Pilots must meet applicable FCC licensing requirements if they choose to operate the RC flight control system or the wireless video system on Amateur Band frequencies.

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4. RANGE – ALTITUDE – WEIGHT – SPEED:

- a) One of the requirements in Federal Law (Public Law 112-95 Sec 336 (c) (2) February 14, 2012) for model aircraft to be excluded from FAA regulations is that model aircraft must be flown within *VLOS* of the operator.
- b) Model aircraft flown using *FPV* must remain at or below 400 feet AGL when within 3 miles of an airport as specified in the AMA Safety Code.
- c) Model aircraft flown *FPV* are limited to a weight (including fuel, batteries, and onboard *FPV* equipment) of 15lbs. and a speed of 70mph.

5. RECOMMENDATIONS & INFORMATION:

- a) *AMA FPV novice pilots* should consider using a cockpit view flight simulator to become accustomed to *FPV* flight.

b) AMA *FPV pilots* should consider using a programmable *autopilot* (AMA Document #560) with a failsafe “return to launch” (RTL) feature that will maintain control of the aircraft in the event of signal loss.

c) An onboard camera equipped with a pan and tilt mount that is positioned by head tracking goggles, will improve the *FPV pilot’s* situational awareness of airspace surrounding the *FPV aircraft* during flight, but does not replace the requirement for an AMA *FPV spotter*.

d) When purchasing *FPV* operational systems, always try to select quality equipment, verify its compatibility, install components for interference rejection, and determine that signal range is adequate for maximum VLOS range.

6. PRIVACY PROTECTION SAFEGUARDS:

The use of imaging technology for aerial surveillance with radio control model aircraft having the capability of obtaining high-resolution photographs and/or video, or using any types of sensors, for the collection, retention, or dissemination of surveillance data information on individuals, homes, businesses, or property at locations where there is a reasonable expectation of privacy is strictly prohibited by the AMA unless written expressed permission is obtained from the individual property owners or managers.

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7. DEFINITIONS OF TERMS:

AMA FPV Pilot is an AMA member who is capable of maintaining stable flight of a model aircraft within its intended flight envelope when flown FPV without losing control or having a collision.

Essential Flight Systems are any systems or components necessary to maintain stable flight

within a model aircraft’s flight envelope. (This includes primary radio control systems and any stabilization or gyros required to maintain stability and heading in certain types of model aircraft that

would be uncontrollable/unstable without their use).

First Person View (FPV) refers to the operation of a radio controlled (R/C) model aircraft using an onboard camera’s cockpit view to orient and control the aircraft.

Flight Envelope is defined as the range of airspeeds, attitudes, and flight maneuvers which a model aircraft can safely perform/operate for its intended use.

FPV Aircraft is an RC model aircraft equipped with a video transmitter to send realtime video images from an onboard camera to a ground based receiver for display on a pilot’s video monitor/goggles. (*FPV model aircraft* types include: Fixed Wing, Rotary Wing, and Multi-Rotor Platforms).

FPV Novice Pilot is an AMA member learning to fly *FPV* utilizing a buddy-box system with an experienced AMA *RC pilot* operating the master transmitter and serving as the *FPV spotter*.

FPV Spotter is an experienced AMA *RC pilot* who has been briefed by the *FPV pilot* on the tasks, responsibilities and procedures involved in being a spotter; is capable and mature enough to perform the duties and is able to assume conventional VLOS control of the aircraft.

Non-Essential Flight Systems are any systems or components that are not necessary to maintain stable flight within the model aircraft’s *flight envelope*. (This includes *autopilot* or *stabilization systems* that can be activated and deactivated in flight by the pilot without affecting stable flight).

R/C Test Flight requires an *AMA Pilot* to manually operate an R/C transmitter to control a model aircraft’s flight path and determine if the aircraft is capable of maintaining stable flight within its *flight envelope*.

Visual Line Of Sight (VLOS) is the distance at which the pilot is able to maintain visual contact with the aircraft and determine its orientation without enhancements other than corrective lenses.



Academy of Model Aeronautics
AMA Advanced Flight Systems Committee
amaflightsystems@gmail.com

Radio Controlled Model Aircraft Operation
Utilizing Failsafe, Stabilization and Autopilot Systems

1. DEFINITION OF TERMS:

Please refer to Page 8 section 7 which contains an alphabetical listing of the definitions of the terms in italics that are used in this document.

2. GENERAL:

All model aircraft flights utilizing *stabilization* and *autopilot* control systems must be conducted in accordance with AMA's current National Model Aircraft Safety Code and any additional rules specific to a flying site/location.

3. OPERATIONS – REQUIREMENTS – LIMITATIONS:

- a)** AMA members flying radio controlled model aircraft equipped with flight *stabilization* and *autopilot* systems must maintain *VLOS* with the aircraft at all times including programmed autopilot waypoint flight.
- b)** *AMA Pilots* must be able to instantaneously deactivate programmed flight of *autopilot systems* at any time during flight and resume manual control of the model aircraft.
- c)** *AMA Pilots* must perform an *R/C Test Flight* of a model aircraft before activating a newly installed *autopilot* or *stabilization system* and/or after any repairs or replacement of model aircraft *essential flight systems*.
- d)** Model aircraft exceeding 15lbs and/or 70mph may only use an *autopilot* for a programmed "return to launch" (RTL) flight and not for programmed waypoint flying of a predetermined course.

e) STABILIZATION & AUTOPILOT SYSTEMS MAY BE USED FOR/TO:

- Stabilization/automatically stabilize aircraft to level flight when control sticks are centered.
- Recovery/activate TRX switch to recover an out of control aircraft to level flight.
- Heading/activate TRX switch to hold a model aircraft's heading for precision flight path.
- Altitude/activate TRX switch to maintain fixed aircraft altitude while allowing directional control.
- Return GPS/activate TRX switch to return aircraft via GPS to launch point.
- Return FSS/failsafe activated from radio signal loss to return aircraft via GPS to launch point.
- Fixed circle/activate TRX switch to circle aircraft at point of activation at fixed altitude.
- Waypoint/activate TRX switch to initiate an autopilot programmed flight path via waypoints.
- Fencing/autopilot programmed to display site unique boundaries on video monitor/goggles.

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4. RANGE – ALTITUDE – WEIGHT – SPEED:

- a)** One of the requirements in Federal Law (Public Law 112-95 Sec 336 (c) (2) February 14, 2012) for model aircraft to be excluded from FAA regulations is that model aircraft be flown within *VLOS* of the operator.
- b)** Model aircraft must be flown at or below 400 feet AGL when within 3 miles of an airport as stated in the AMA Safety Code.
- c)** Model aircraft utilizing an *autopilot* for waypoint flying are limited to a maximum weight (including fuel, batteries, and onboard *autopilot systems*) of 15lbs and a speed of 70mph.

5. RECOMMENDATIONS & INFORMATION:

- a) If your radio system lacks *failsafe* capability, consider using programmable digital servos or auxiliary *failsafe* modules. In the event of a radio signal failure these components will activate desired safe servo settings or an *autopilot* for return to base/launch (RTL).
- b) When using an *autopilot system* the “return to launch” (RTL) feature should be programmed to return the aircraft to a safe location and safely terminate the flight should manual control of the aircraft be lost. When using RTL, pay particular attention to the manufacturer’s throttle recommendations to prevent stalling.
- c) The use of *stabilization systems* is recommended when flying FPV to improve flight stability and video quality.
- d) Pilots usually choose to incorporate *stabilization* and *autopilot systems* for model aircraft flying to enhance flight performance, correct bad tendencies of the model aircraft, maintain stability in windy weather, establish precision heading holds for takeoffs/landings, flight training for novice pilots, create a steady flight platform for cameras, and generally just to make an airplane easier and safer to fly.
- e) When purchasing *stabilization* and *autopilot systems*, always try to select quality equipment from reputable dealers, ensure for compatibility with other onboard systems, and install components according to manufacturers’ instructions.

6. PRIVACY PROTECTION SAFEGUARDS:

The use of imaging technology for aerial surveillance with radio control model aircraft having the capability of obtaining high-resolution photographs and/or video, or using any types of sensors, for the collection, retention, or dissemination of surveillance data or information on individuals, homes, businesses, or property at locations where there is a reasonable expectation of privacy is strictly prohibited by the AMA unless written expressed permission is obtained from the individual property owners or managers.

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7. DEFINITIONS OF TERMS:

AMA Pilot is an AMA member who is capable of manually operating an R/C transmitter to control a model aircraft’s flight path within its safe intended *flight envelope* without losing control or having a collision.

Autopilot Systems incorporate programmable flight *stabilization* with an altitude sensor and a GPS receiver for accurate positioning and to navigate/control a radio controlled model aircraft’s flight path. Advanced systems offer software for entering navigable waypoints. The flight data waypoints may be saved to autopilot’s/GPS memory for programmed flight.

Essential Flight Systems are any systems or components necessary to maintain stable flight within a model aircraft’s *flight envelope*. (This includes primary R/C systems and any *stabilization* or gyros required to maintain stability and heading in certain types of model aircraft that would be uncontrollable/unstable without their use).

Failsafe Systems are designed to minimize or prevent damage and safely terminate a flight when a radio controlled model aircraft loses radio signal. Modern radio systems can be programmed to position servos to a desired control setting in the event of radio signal failure.

First Person View (FPV) refers to the operation of a radio controlled (R/C) model aircraft using an onboard camera’s cockpit view to orient and control the aircraft. (AMA Document #550).

Flight Envelope is defined as the range of airspeeds, attitudes and flight maneuvers which a model aircraft can safely perform/operate for its intended use.

Non-Essential Flight Systems are any systems or components that are not necessary to maintain stable flight within the model aircraft’s intended flight envelope. (This includes *autopilot* or *stabilization systems* that can be activated and deactivated in flight by the pilot without affecting manually controlled stable flight).

R/C Test Flight requires an AMA Pilot to manually operate an R/C transmitter to control a model aircraft’s flight path and determine if the aircraft is capable of maintaining stable flight within its safe intended *flight envelope*.

Stabilization Systems are designed to maintain intended model aircraft flight attitudes. The pilot can install, program and/or activate a system to stabilize yaw, pitch, or roll or any one attitude or combination of attitudes. Systems are often based on rate/heading hold gyros or inertial motion sensors utilizing multi-axis gyros and accelerometers for attitude stabilization.

Visual Line of Sight (VLOS) is the distance at which the pilot is able to maintain visual contact with the aircraft and determine its orientation and attitude without enhancements other than corrective lenses.



STARS Field Satellite photo

RCCR SWAPMEET

Our Mother of Sorrows Church

5000 Mount Read Blvd

Rochester, NY 14626



Saturday

Feb 16th, 2013

9:00am – 3:00pm

\$5 table fee

\$3 entry for 12 & over

for more information:

www.rccr1957.com



FLAPS *presents:*

Eleventh Annual

RC Swap Meet & Auction

Saturday, April 13, 2013

at the

(Easy Access!)

Magee Fire House

(Plenty of Parking!)

Route 318, at intersection of Route 414, Seneca Falls

Swap Meet - 10:00am

Auction - 12:00 noon

Doors open 9:30 am

\$5.00 Admission (*ladies & children free*)

No Auction Fees

Tables provided no charge

Food and Refreshments available

50/50 Drawing

Drawings for door prizes

Tickets on sale for other great Prizes



Directions:

From the Thruway Exit 41 (Waterloo):

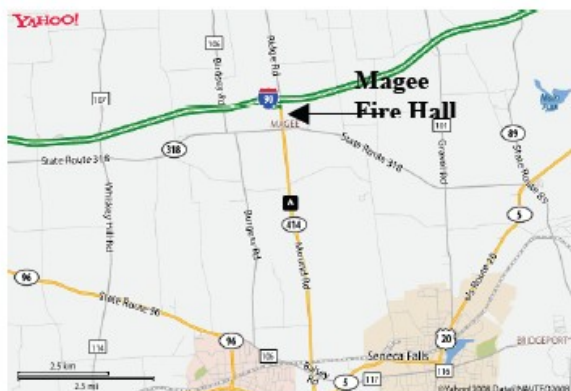
Turn right on Route 414 and south to Route 318, turn left, Magee Fire House is immediately on left.

From the South:

Take Route 5&20 to intersection of Route 414, between Seneca Falls & Waterloo. Go North on 414 toward Thruway Exit 41, turn right on Route 318, Magee Fire House is immediately on left.

Check Our Auction Site:

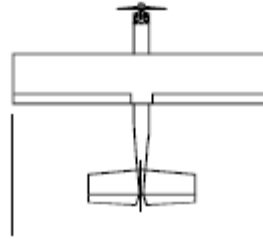
*Easy Access! - Great Deals!
More Space - Lots of Parking*



Sponsored by the Finger Lakes Air Pirates Inc.

Visit us at: www.flapsrc.com

STARS Field Rules



1. General:

- A. License: All pilots, students, and flying guests *must* have a current membership in a nationally recognized model aircraft association in order to fly. Those pilots participating in the Park Pilot Membership Program must fly models that weigh two pounds or less and be incapable of reaching speeds greater than 60 mph. They must be electric or rubber powered, or of any similar *quiet* means of propulsion.
- B. Spectators: Only those people essential to flight operations will be permitted in the pit area; all others will remain on the spectator side of the fence. Impound: All pilots, students, and flying guests must place their transmitter(s) in the impound area immediately upon arriving at the field.
- C. Vehicles: Vehicles will not be permitted *on* the flying field.
- D. Crash Debris: Pilots must retrieve all pieces of their aircraft after a crash. Particularly, attention must be made to obtaining all pieces of aircraft that land in the neighboring fields under cultivation.
- E. Trash: All members will take home their own trash.
- F. Alcoholic Beverages: Members will not consume alcoholic beverages prior to, nor during, participation in any *modeling* operations.
- G. Smoking: Smoking will not be permitted in the pit area or on the flight line.
- H. Mowing: Flying on the field will not be permitted if the field is being mowed or maintained.

2. Transmitters:

- A. Frequency Control (*For non 2.4 GHz transmitters only*): All members, students, and guests *must make use of the field frequency control system*. Each pilot will obtain the correct frequency flag (or pin) from the impound board and attach it to his/her transmitter before attempting to fly.
- B. Range Checks: Each pilot will conduct a successful radio equipment ground range check before flying a new or repaired aircraft and prior to each flying session.

3. Engines:

- A. All internal combustion engines run at the field will have a silencer (except for small displacements of .09 cubic inches or less).
- B. When running an engine in the pits, keep neighboring personnel behind the prop arc.

4. Flying:

- A. Boundaries: Flying over the pit area or the spectator side of the fence is prohibited, unless beyond the control of the pilot(s).
- B. Taxing: Taxing is prohibited in the pit area!
- C. Flying:
 - (1). Pilots will initiate their first turn after takeoff away from the pit and spectator areas.
 - (2). Engines will not be started before 9 AM Monday through Saturday and 11 AM on Sunday, unless approved by the Event Director.
 - (3). No more than three aircraft will be permitted in the air at one time.
 - (4). All flying will be conducted from the designated flight boxes.
 - (5). Hand launching of aircraft is prohibited from the pits.
 - (6). Flight operations will cease during electrical storms.

5. Guests:

- A. All guests must have a current membership in a nationally recognized model aircraft association in order to fly.
- B. Guests may fly at the field only with the approval of a member in good standing and only as long as a sponsoring member *remains at the field*. Guests will not fly unattended.
- C. A local guest will be allowed to fly at the field on three (3) separate occasions and then will be asked to join the Club.
- D. An out-of-town guest may make arrangements with the Club to fly at the field while visiting the area. The Club Officers and the Safety Officer will handle each out-of-town visitor on a case-by-case basis.
- E. *All guests are required to extend every courtesy to current members sharing the same flying frequency*. But when there is a conflict over who shall fly, the Club member will have the first option to fly. Both the guest and the members should use common sense while sharing the flight line or using the same radio frequencies.

6. RC Aircraft Utilizing “First Person View” Systems (AMA Document 550):

A. GENERAL:

- (1) FPV flying of radio control model aircraft by AMA members is allowed only for noncommercial purposes as a hobby/recreational and/or competition activity.
- (2) All FPV flights must be conducted in accordance with AMA’s current National Model Aircraft Safety Code and any additional rules specific to the flying site/location.

B. OPERATIONS – REQUIREMENTS - LIMITATIONS:

- (1) AMA FPV novice pilots must use a buddy-box system with an FPV spotter while learning to fly FPV.
- (2) All FPV flights require an AMA FPV pilot to have an AMA FPV spotter next to him/ her maintaining VLOS with the FPV aircraft throughout its flight.
- (3) The FPV pilot must brief the FPV spotter on the FPV spotter’s duties, communications and hand-over control procedures before FPV flight.
- (4) The AMA FPV spotter must communicate with the FPV pilot to ensure the FPV aircraft remains within VLOS, warning the FPV pilot of approaching aircraft, and when avoidance techniques are necessary.
- (5) The FPV spotter may at any time during an FPV flight acquire the transmitter from the FPV pilot and assume VLOS control of the aircraft.
- (6) If the FPV pilot experiences a problem due to a loss of video link, orientation, or is unable to safely fly, he/she must abandon FPV mode and fly VLOS or pass the RC transmitter to the FPV spotter to assume VLOS control of the aircraft.
- (7) Before initial FPV flight and after any flight system changes or repairs, FPV model aircraft must be test flown by conventional VLOS to determine that flight systems are working properly.
- (8) FPV model aircraft must use frequencies approved by the FCC for both the RC system and the wireless video system. Pilots must meet applicable FCC licensing requirements if they choose to operate the RC flight control system or the wireless video system on Amateur Band frequencies.

C. RANGE – ALTITUDE – WEIGHT – SPEED:

- (1) One of the requirements in Federal Law (Public Law 112-95 Sec 336 (c) (2) February 14, 2012) for model aircraft to be excluded from FAA regulations is that model aircraft be flown within VLOS of the operator.
- (2) Model aircraft flown using FPV must remain at or below 400 feet AGL when within 3 miles of an airport as specified in the AMA Safety Code.
- (3) Model aircraft flown FPV are limited to a weight (including fuel, batteries, and onboard FPV equipment) of 15 lbs. and a speed of 70 mph.

STARS

Field Protocol

Dedicated to responsible
RC fun with safety by
choice, not chance.

1. General:

- A. Civil and courteous behavior is required at the field at all times.
- B. Safety is paramount and everyone's business. Use common sense in all matters.
- C. It is strongly recommended that you do not fly alone.
- D. Learn where the First Aid station is located and inform the Field Committee if material has been issued from it.
- E. When opening or closing combination locks, *always* set the wheels to 0000.
- F. Last member out must close and lock the refrigerators, pavilion, and main gate.
- G. Cell phones are not to be used on the flight line or in the pavilion near the transmitters.

2. Engine Courtesy:

- A. Long term tuning and initial break-in should be conducted away from the pits and spectators (usually at the engine break-in stand).
- B. Do not direct prop wash at other modelers, their aircraft, equipment, or bystanders behind the pit fence. Kindly inform those bystanders near the fence that you intend to start an engine before you do so.

2. Flying Courtesy:

- A. Any person wishing to enter an active flying field or runway to cross same or to retrieve an aircraft, must loudly announce their intention to all fliers on the flight line.
- B. A "landing" aircraft has the right of way over an aircraft "taking-off".
- C. A "dead stick" aircraft has the right of way over all others.
- D. All take-off and landing attempts must be announced to other pilots on the flight line. Take-offs are normally announced by saying "taking off", and landings are announced by saying "landing" or coming in". Dead stick landings are announced clearly to all pilots in the pits and on the flight line by saying "dead stick".
- E. A pilot having difficulty in controlling his/her aircraft must announce to all in the pits and on the flight line that he/she is experiencing radio or mechanical problems. Pilots on the ground preparing to fly will turn off their transmitters and wait for the problem to be resolved before continuing to fly. Fliers in the air will stay clear of the aircraft in distress and will land, if possible, as long as it does not contribute to the crisis. All personnel near the pit area must be alerted to the situation.
- F. If a crash occurs on the field or in the pits, all flying will stop until the accident has been investigated and the debris has been cleared from the field.
- G. Normal flight duration is 10 minutes. Obviously, flight time may be extended if there are no other pilots waiting to fly or waiting for a particular radio channel.
- H. When you have finished flying, please return your transmitter to the impound.

3. Good Earth Policy:

- A. Place recyclables in the appropriate container in the pavilion.
- B. Turn off all pavilion lights when departing the field for the night.
- C. The field does not have a trash removal service. If you carry anything to the field, carry it back out.
- D. If a pilot or guest brings a pet to the field, he/she will be responsible for supervising the animal's conduct while at the field. Please observe all appropriate Field Rules.
- E. If you smoke, please place all cigarette butts in the butt cans in the field.
- F. Do not throw cans or bottles or any other trash in the outhouse pits.
- G. DO NOT DRINK THE WELL WATER. Well water is to be used for washing only.

4. Replacement Courtesy:

- A. Where an individual's plane or property is damaged by the actions of another individual, it will be the responsibility of the two parties to resolve the situation in an appropriate manner.



S.T.A.R.S.

Auction 2013



When?

Friday, 18 January 2013

5 PM to 9 PM

Bidding starts at 6:00 PM

Where?

Walt's Hobby

No Admission Fee!!

Only Modeling Aircraft and Related Items will be Auctioned

10 % Commission will be charged on all Sales

Sellers will not be permitted to bid on their own Equipment

A Minimum acceptable bid will be required on each item up for Bid

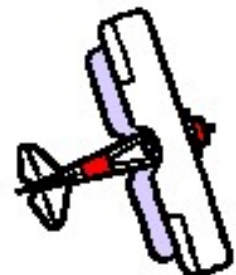
5:00 PM to 6:00 PM — Setup and Preview



Auctioneer: Phil Morgan

For more information, contact:

Phil Morgan: 457-3674





Aero Radio Club of Syracuse
Syracuse Thunderbirds Aero Radio Society
Central New York Indoor Flying Society



Jointly Present the 17th Annual

***MODEL AIRCRAFT FORUM
and Electric Fly-In
[Swap Shop too!]***

**Saturday, January 26, 2013
9 AM to 4 PM
at**

Syracuse Academy of Science Charter School
1001 Park Avenue, Syracuse, New York, 4 blocks from Hiawatha Exit off 690 East

AMA Sanctioned! AMA license required to fly!

**ELECTRIC and RUBBER FLYING HELD IN 80' x 80' x 24' INDOOR FACILITY
in separate large room**

**AIRCRAFT STATIC DISPLAY and Swap Shop (no commission)
STARS/ARCS FLIGHT SCHOOLS and RC FLIGHT SIMULATORS
HOBBY VENDORS and WALT'S HOBBY SHOP
Concession Stand open all day!!**

**Raffles held through out the day
(Prizes Donated by Vendors and Manufacturers)**

**Admission - \$4.00
Children 6 to 12 - \$1.00
Children 5 and under - free**

For more information, contact:

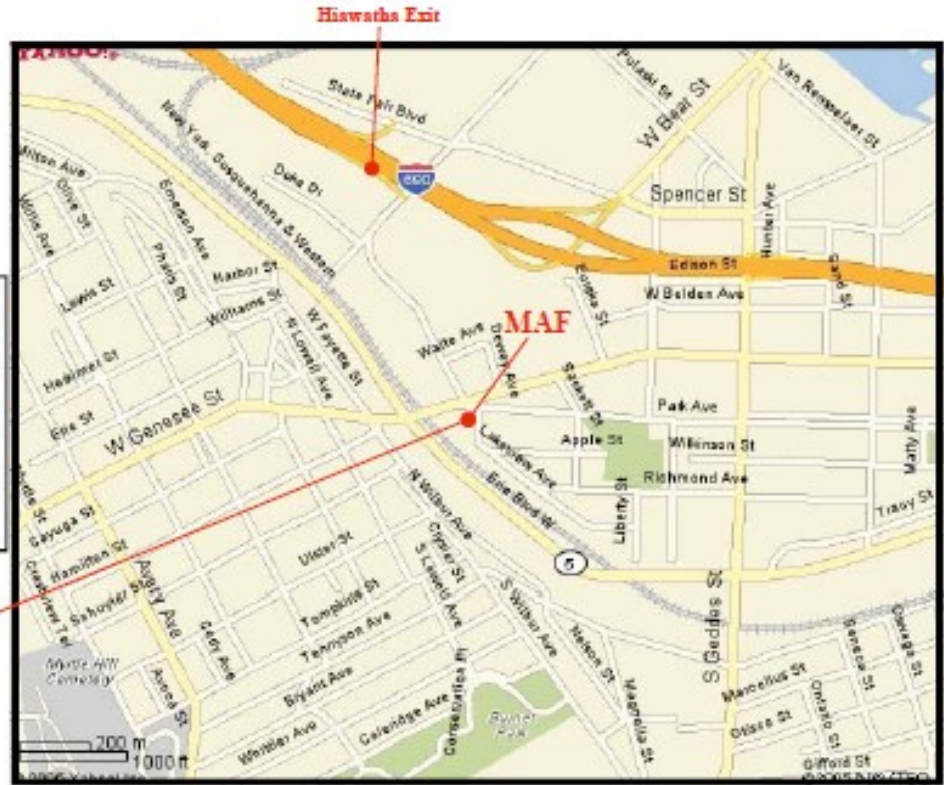
**Peter Seiffert at 315/635-6370 or Herb Ziegler at 315/638-2824
pseiffe1@twcny.rr.com and herbz1957@yahoo.com**



Bring your Indoor Aircraft and Fly with Us

The location of the Syracuse Academy of Science is just off West Genesee Street. Parking is off street and immediately outside the gymnasium on the school grounds.

76° 10' 51"W, 43° 03' 12"N



Plenty of room for flying your indoor models here!! Tables will be setup on the stage for working on models and charging them.

If you have models to display or a booth to set up, the room below the flying area can accommodate all your needs. Concession stand will be open during the day for hot sandwiches and cold drinks.



S.T.A.R.S.

Flight Training Program

2013



When?

**Every Thursday evening from 5:30 PM to Sunset
May 09, 2013 through September 12, 2013**

Where?

**At the S.T.A.R.S. field in Phoenix, New York
649 County Route 12, Pennellville, NY 13132
N43.23696, W76.24550**

Who?

Anyone wanting to learn to fly powered R/C model airplanes!! You do not have to be a Club member and all lessons are free. Each student must furnish his/her own plane and radio equipment and also must hold a current membership in the Academy of Model Aeronautics aircraft association in order to fly.

PreFlight Workshop

**Held at Walt's Hobby
Thursday April 25, 2013 at 7 PM**

Interested?

Contact:

SENIOR FLIGHT INSTRUCTOR: Bob Rowe (474-8428)



Syracuse Thunderbirds Aero Radio Society

Phoenix, NY

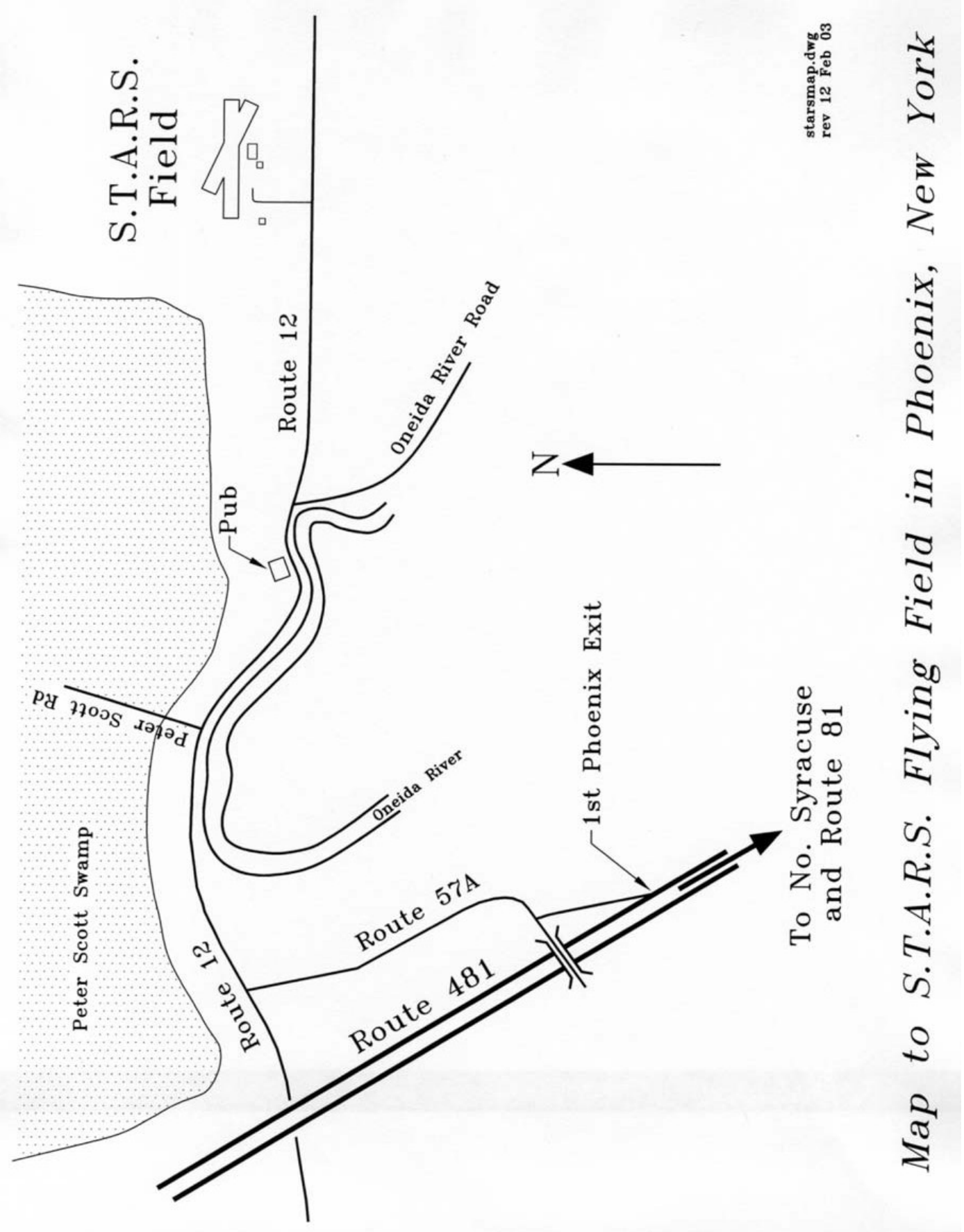
Charter 473

2013 Helicopter Flight School

*All skill levels welcome but must be a current AMA
Member and provide your own outdoor Helicopter*

**Tuesday evenings – April 23 to October 29
5:00 pm until dusk**

Map to the STARS



starsmap.dwg
rev 12 Feb 03

Map to S.T.A.R.S. Flying Field in Phoenix, New York



A family business serving Central New York hobbyists for over 35 years!

**So, What does
Walt's have for me?**

- R/C Trucks, Planes, Heli's, Boats and more!
- Model Trains and Accessories
- Slot Car Sets and Parts
- Plastic Models
- Rocket Kits, Starter Sets and supplies
- Pinewood Derby Supplies (Including a test track @ the shop!)
- Metal Detectors
- Tools
- Best Supply of Modeling paints in Central New York!
- Glues
- Balsa Wood, Basswood, Carbon Fiber Rods and Tubes, Foams & More!
- Kites
- Rubber Powered Planes
- Rock Tumblers
- Puzzles



address: 2 Dwight Park Drive, Syracuse NY, 13209

e-mail: waltshob@dreamscape.com

phone: (315)453-2291

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Like us on *facebook* and you'll **always** have the most up-to-date information!

We'll always keep you posted with all events, and any other cool things going on here! *Like Us Now!*

Holiday Hours

Thanksgiving: Closed

Black Friday: 9am—9pm

Small Business Saturday: 9am—9pm

Cyber Monday Eve (Nov 25) 11am—5pm

Christmas Eve: 9am—4pm

Christmas Day: Closed

New Years Eve: 10am—4pm

New Years Day: Noon — 5pm

Open 7 days a week! A REAL hobby shop!

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
11-5	9-9	9-9	9-9	9-9	9-9	10-5

address: 2 Dwight Park Drive, Syracuse NY, 13209 : **e-mail:** waltshob@dreamscape.com : **phone:** (315)453-2291



Est. 1965

Syracuse Thunderbirds Aero Radio Society

Online at: <http://www.amadistrictiistars.org>



Charter 473

Membership Application Form

Date: _____

Membership: Open (\$220.00 share+dues) Extra Family member (\$30.00)
 Associate (\$75.00) Youth (< AMA age 19 - \$5.00)
 Park Pilot - Associate (\$75.00) Park Pilot - Youth (< AMA age 19 - \$5.00)

Name: _____

Address: _____

Phone: _____

AMA: _____ DOB: _____

RC Channels Used: _____

STARS Member(s) Contacted: _____

Primary Interests (Sport, Scale, Pattern, Fun Fly, etc.): _____

Other Club Affiliations: _____

Desired Name on Nametag: _____

Email Address (for newsletter and notices): _____

You must be a current member of the Academy of Model Aeronautics (AMA) in order to join the STARS. Please show your AMA card to the Officer given this application or include a photocopy of the application for the license.

"I have read and agree to abide by the STARS Field Safety Rules." (on back)

Submit this form to a Club Officer

Rev 04/10/09

Plane Propwash

Syracuse Thunderbirds Aero Radio Society
Monthly News Letter
January 2013