

**Thousand Oaks  
January**



**Soaring Society  
2016**

*TOSS is a District X Member of the Academy of Model Aeronautics, CharterClub # 1493*

<http://www.tosoaring.com/>

## **Minutes of the Meeting Held 1-27-2016**

*In attendance: Kyle Carmona, Steve Miele, Gary Filice, John Elias, Bob Swet, Mike Stern, Craig Borstelmann, Ben Borstelmann, Don Northern, Lex Mierop, David Swain, Martin Usher*

**Treasury Report:** As of this date,  
Business Checking 0220-----\$685.50  
Business Savings 5140-----\$4,049.92  
Total-----\$4,735.42

Treasury-What do we want to invest it on??? How about the new flight site??

**TOSS DUES**—don't forget to get your membership dues in for the year!

**FAA sUAS Registration**----Kyle Carmona gave a report from the AMA Expo in Ontario regarding the AMA/FAA conference. At issue, the 400 foot altitude limitation was brought up by several people including Kyle. The resolution about the limitation was not made clear by the FAA representative! However, the issues of the altitude limitations will be resolved. The AMA, in a January 25,

2016 AMA memo, has recommended that AMA members register with the FAA.

TOSS flies under a community based safety guideline recommended by the AMA. Federal law, Section 336. SPECIAL RULE FOR MODEL AIRCRAFT, enacted by congress, identifies such organizations as exempt from the guidelines identified by the FAA.

The AMA safety rules include as a key premise, See and Avoid guidance for full size manned aircraft. A suggestion was made to have an air horn available on the field, sounded as a warning should aircraft approach. Gary will look into buying high quality, high decibel air horns. We need one for each winch set up (5 units).

**CONTEST TIP**—Subject was covered concerning pilot awareness of flying conditions, thinking as if he were the timer, for signs in the sky, other pilots and what they are doing, **before** the pilot launches

his plane. This technique also has the pilot taking his eyes OFF his plane (have timer watch it) to get a better idea of what the timer is identifying for the pilot. This is in the interest of increasing the chances of a flyer becoming more competitive.

**SAPWI TRAILS REPORT**---City of Thousand Oaks is requiring a signal at the Westlake Blvd. entrance. The schedule for the installation should be know by February 17<sup>th</sup> or 18<sup>th</sup> and Gary Filice will call Tom Hare (CRPD) on the 18<sup>th</sup> to get a status.

**MODEL AVIATION MAGAZINE-** The idea of putting TOSS labels on any magazines we donate to the local libraries or doctors offices as a way to let folks know we are the one who donated them, and to contact us about club information, etc. A URL or web site on the label will make it easy to see our web site. These labels will be distriubuted to members who want to help promote the club.

Please update our hand out literature for the field box. Steve Miele will send Gary Filice an updated form for 2016.

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## Academy of Model Aeronautics and

## Thousand Oaks Soaring Society (TOSS)

“SEE AND AVOID” GUIDANCE

### A. General:

1. The primary means to avoid collisions between all aircraft flying within our National Airspace System (NAS) is “**See and Avoid.**”
2. Vigilance must be maintained by each person operating an aircraft (whether model or manned) so as to “**See and Avoid**” other aircraft.
3. Model aircraft must avoid manned aircraft. Our privilege to fly model aircraft in the NAS depends on our commitment to remain “well clear” of manned aircraft.
4. Simply avoiding an actual collision is not enough. A “near miss” is not acceptable.
5. Unless flying at a mixed---use site where manned and model aircraft routinely share airspace through their own site---specific rules, model aircraft must fly sufficiently far away from manned aircraft so as not to create a collision hazard.
6. Model aircraft flying must not only be safe, it must be perceived to be safe by the greater manned aviation community. Modelers must continually demonstrate their respect for the safety of manned aircraft by remaining vigilant and well clear.
7. Whenever a potential conflict arises between model aircraft and manned aircraft, the pilot of the model aircraft must **always give way** to the manned aircraft.
8. The pilot of a model aircraft must never assume the pilot of a manned

aircraft can see the model or will perform any maneuver to avoid the model's flight path.

9. Visual Line of Sight is required by the Safety Code. It means that visual contact with the aircraft must be maintained without enhancement other than by corrective lenses prescribed for the model aircraft pilot. All RC flying must remain clear of clouds, smoke or any other obstruction to the line of sight.

10. "**Blue Sky**" is a term used to explain the method used to increase separation between a model and a manned aircraft in the same vicinity. The modeler should maneuver the aircraft in such a way as to increase the amount of **Blue Sky** perceived between the model and the manned aircraft. By increasing the **Blue Sky** separation, the question about depth perception is taken out of the equation and the modeler need not worry whether the model is closer to him than the manned aircraft or further away. Increasing the **Blue Sky** between the model and the manned aircraft automatically increases separation between them.

11. A modeler should never place any consideration for the well being of the model aircraft above the safety of manned aircraft. Maneuvering to avoid the conflict may require that the model aircraft be sacrificed.

12. Free flight models should not be launched with relatively low altitude manned aircraft in sight and downwind or headed downwind from the launch site.

## **B. Spotters / Winch Operator:**

1. Before a flight, the pilot must insure that the spotter / winch operator understands their duties and expectations.

2. A spotter / winch operator will assist in monitoring the surrounding airspace for manned aircraft. This individual must have sufficient visual acuity and be mature enough to take this responsibility very seriously. Each winch toolbox (total of 5) will include a high decibel air horn. The horn will be readily available to the spotter / winch operator who will sound the air horn three times when a manned aircraft is approaching at altitudes deemed in conflict with the model aircraft in the air.

3. All pilots will respond to the sounding of the air horn and immediately reduce the altitude and if the heading can be determined, fly their model to avoid the manned aircraft.

3. The spotter / winch operator should also be prepared to assist the pilot in the event that another model aircraft or spectators become endangered or in turn are perceived to be a danger to the pilot or the pilot's model aircraft.

4. If a model aircraft pilot experiences what he or she considers a near miss with a manned aircraft, that model aircraft pilot should notify AMA Headquarters with a written report of the incident, including action taken by the model aircraft pilot to avoid the manned aircraft. This report is intended to help the modeler, the club, and the AMA capture as much detail as possible so that it may be used to assist all parties in recalling the particulars of the incident at a later time. Call 1---800---435---9262 (1---800---IFLYAMA) extension 230 or 251 for assistance with this report.

## **THE OTHER HALF (Part 1 of 2)**

Behind every good pilot there is a good timer. Even though the pilot reaps the rewards of a good flight, it is the timer that makes it possible. For without the timer's assistance, observations and inputs, the pilot would be hardly doing anything more than a practice flight during a contest. A pilot needs know where it is safe to move, where there is good lift and when it is time to land.

Like the old cliché "It takes two to Tango", it also takes two to be competitive. The pilot and timer **MUST** work as a team. Look around the field during a contest that you attend and you will notice that pilots tend to pair off and time for each other. If you were to follow those pilots to multiple contests, you would notice that they will normally work together as a team. Why? Because they have learned what the other pilot expects and can fulfill those demands.

You might ask as to how those teams are formed. Sometimes they may be a spouse, a parent or a brother. For other teams it may be they started being competitive at the same time or they attend the same contests. No matter what the reason, they have learned to help each other and to minimize the anxiety for the pilot. Teams with a one-way relationship will usually last as long it takes to find a new partner.

So what does it take to make a good team? Sometimes that may be difficult to define especially when there are extreme differences in skill levels or personalities. Since I am not a social psychologist it is probably best for me to stay with defining areas of responsibilities that I can remember from all the sources for this article. Each team member has their own set of responsibilities and since this article is meant to help you be a good or better timer, we will dwell on their tasks. But before doing such, let us spend a moment to understand the responsibilities of the pilot.

### **Pilot's Responsibilities:**

- Make sure the timer knows what is expected of him/her. (Speak to your timer, let him/her know how you want to be lead around the field, how you want the time called, when to look for lift, etc.)
- Make sure the timer is aware of the pilot's dislikes. (For example, I don't like to have a hand on my shoulder when being lead.)
- Make sure that the timer is aware of the current task. (Verify with the timer what you are supposed to be doing this round, a screw up here is very costly.)
- Verify that the transmitter has proper trim setting and switch positions after obtaining it from the impound. (As hard as they try not to, the impound sometimes accidentally make changes.)
- Verify that the transmitter is on the same channel as the frequency pin. (I have been to a number of contests where the pilots were issued a frequency pin for the entry number instead of the channel number. That is why I like PCM radios.)
- Look for lift and determine the initial flight path. (Before you are to fly, start watching where the lift is and where it is going. When standing on line, both the pilot and the timer should be looking and reporting to each other. Just prior to launch, establish your initial flight path and search pattern).
- Launch the plane in a safe manner. (Make sure the transmitter and receiver are turned on. Check for people in the winch line area and there are no other planes in or entering your launch flight path. Abort a launch when it presents a danger to others.)
- Operate and fly the plane in a safe manner. (Avoid maneuvers that may break up the plane. No high speed passes over the pit and spectator areas. Avoid those pesky power lines. Do not let the glider go beyond your visual range.)
- Land the plane in a safe manner. (Avoid landing approaches where you and/or others in the landing zone need to jump or duck. If you are too high or fast, do an extra circle before you attempt to land. From my observations, if a person must get out of the flight path, the glider will suffer physical damage about 50% of the time.)

### **Timer's Responsibilities:**

#### **Before Launch Checklist**

- Make sure you know how the pilot likes his times to be called. (Some pilots liked to be counted down while others, usually old pilots who were flying before digital stop watches invented, like the time called. Know how they want the minutes called, especially the last two minutes.)
- Make sure you know how to guide the pilot across the field to the landing area. (Does he want to be

talked to, pulled by the belt or maybe dragged by the hair.)

- Make sure that you know what the current task is. (If you aren't sure, ask a contest official.)
- Make sure that the pilot knows what the current task is. (In all the excitement, a pilot may get confused.)
- Make sure that you have the correct score card. (You sure would hate to lose that perfect flight score.)
- Make sure that the stop watch is in good working order and meets the contest's rules. (Verify the switches work and don't bounce. Verify the low battery indicator is not lit. Be aware of the rules, not all contest permit watches that just count down or talk.)
- Preset the stopwatch for the task's requirements. (Making a mistake here may mean extra flight time or penalty points.)
- Check the area for signs of good lift and inform the pilot of such. ( A good idea is that the pilot watches one half of the sky and the timer watches the other. If you know approximately when the pilot will launch, start watching a few minutes earlier. Four eyes are better than two.)
- Verify that it is safe to launch. (During those few seconds just before the launch, check the launch area for people, animals and planes. I usually double check the stop watch setting during these moments.)

#### **During the Launch Checklist**

- Check the area for signs of good lift and inform the pilot of such. (As a timer, you have more opportunities to look around. Update the pilot of any new changes, the more information he has, the higher the odds of completing the task.)
- Start the stopwatch when the glider comes off the winch line. (Common rule.)
- Verify that the stopwatch is actually counting. (Older digital stop watches have buttons that sometime stick or bounce. The penalty here is against the pilot and hurts the most when there is poor lift.)
- Let the pilot know that you have started the watch. (Most timers will say "on the clock".)
- Guide the pilot away from the winch area and around the other pilots waiting. (It is tricky to navigate through the maze of planes and pilots. Don't rush the pilot to move. Having the glider under full control and in a safe flight pattern is more important than getting the next pilot into the launch position.)

This article has grown to be longer than anticipated. I hope that you have learned something about being a better team member (aka. Timer). Next month I will conclude with the responsibilities during the flight, during the landing, post landing, and some general do's and don't's.

Until then, stay safe and be good.

Bob

## **THE OTHER HALF (Part 2 of 2)**

Last month I began this article on "the other half" to provide some responsibility guidelines for the novice timer and reminders for more experienced. In part one, I went over how Pilot / Timer teams are formed, the pilot's responsibilities, and the timer's responsibilities before and during the launch. In this last installment, I will be discussing the timer's role during the flight, during the landing phase, post landing and some general do's and don'ts.

#### **During the Flight Checklist**

- Guide the pilot to a safe and "out of everyone's way" position so that he/she can concentrate on the flight. (Guide them using previous discussed acceptable methods. Usually the pilot will stop moving when he/she is comfortable. Be sure they are away from the launch and landing areas.)
- If you failed to start the watch or accidentally stopped the count, inform the pilot of such. (Every once in a while we may mess up and hit the wrong button. Make the pilot aware of the problem and solution as soon as possible. It is easier him/her to adjust the flight plan while they are still at altitude.)
- Make sure you know where your pilot is and that you are in close proximity to the pilot. (I have been at contests where the pilot and timer have become separated for various reasons. Communications become difficult if you are not in hearing distance.)
- Call out the times as defined by the pilot. (You can call out the times more often than requested but make sure you call out the defined times for these are critical decision points for the pilot.)

- Watch the sky for where the good lift is, just in case the pilot needs some. (The pilot might not always find lift where he thinks it should be. A good timer can sometimes save the contest for the pilot.)
- Provide the pilot status reports of what other planes are doing in other areas. (Inform him of where lift has been found and where sink was discovered. This will also provide relative flight performance. If your pilot is struggling and others nearby are going up rapidly, he will probably want to move to that location.)
- Be aware of where the glider is in case the pilot loses sight of his/her plane. (It can happen to the best of pilots for various reasons; flying into clouds, got confused as to which one it is, loss of focus, flying beyond his/her eyesight.)
- Inform the pilot of major wind changes. (This is a good sign of lift or hint at a different landing approach may be required.)
- Provide times when they are asked for. (Pilots will generally ask for additional times during long flights to get a better feel of where he/she is relative to the completion of the task. The other time is when they are in trouble.)
- Make the pilot aware of any dangerous circumstances. (This could be that they are too close to a tree, too low over the pits, over the launch zone, in the path of another glider or there could be a full size aircraft enter the flight pattern.)
- Guide the pilot to an available landing zone prior to the start of the landing approach. (Looking for a landing zone at that last moment ruins the concentration and may require some quick maneuvering.)
- Maneuver/protect the pilot in times of an emergency. (A pilot struck by an errant sailplane could create a second emergency.)
- Be sure the pilot is aware of the current time especially during the last two minutes. (Missed times here will lead to a rushed and possibly dangerous landing.)

#### **During the Landing Checklist:**

- Provide the final count down as requested by the pilot. (Most pilots will try to have their aircraft somewhere within various three dimension boxes during certain times of the landing approach. Without your times, he/she may be at the wrong location or moving at the wrong speed resulting in a reduced score.)
- Align the pilot with the maximum scoring pattern and behind the line. (This can be done verbally. The pilot will double check his / her final line up usually during the last minute.)
- Make the pilot aware of other planes that will be in the landing area at the same time as his/hers. (Occasionally the landing zone will get crowded. A pilot aware of other aircraft can usually prevent mid-air collisions.)
- Inform the pilot of any wind changes. (Wind changes can create havoc during a landing approach. Good pilots can make the needed adjustments as long as they are aware of the conditions.)
- If all the landing zones are occupied, ask the other teams how much time they have left before they land. If they have more than one minute than you do, ask if you can land in front of them. (About one minute separation between landings is required for scoring.)
- Stop the countdown when the first part of the glider touches the ground. (General rule for all contests. It doesn't matter whether it is the nose, a wing tip or the tail. The flight time stops at the first point of contact even if the sailplane continues to move or fly.)
- If no landing judge is available, score the landing. (Landings are scored based on the location of the "tip of the nose" of the aircraft. You should also be aware of what disqualifies a landing such as the shedding of parts [generally rubber bands are OK], flipping upside down or the lack of unsupported tail contact with the ground [AKA dorking in soft sod].)

#### **Post landing Responsibilities:**

- Provide the landing judge with the score card. (Unless you don't want to be scored.)
- Show the landing judge the count up time displayed on the stopwatch. (Set the watch to the count up "elapsed" time before showing to the judge.)
- Offer to hold the transmitter for the pilot while he/she retrieves (if permitted) the glider. (Pilots are usually permitted to retrieve the sailplane at club contests only. At formal contests, the landing judge may do the retrieving.)

- If you are holding the transmitter, turn it off after the pilot turns the glider off. (It is safe to turn off the transmitter after the receiver is off. Some receivers will force the servos to extreme positions when no signal is found.)
- Verify the correct entries on the score card. (The judges have been known to say one thing and write another. Check it right then and there. Once you hand in the card, it is too late.)
- If acceptable, inform the pilot of what he/she did well and what could have done better. (Most pilots will appreciate your input as long as it is constructive.)
- Offer to return the transmitter, frequency pin and scorecard to the impound area. (This makes life easier for the pilot as he returns his plane to its resting area. While walking back, verify the transmitter is off. Who wants to shoot down somebody else's plane by accident.)

**Things timers should do (or things that I forgot in Part 1)**

- Get the tow ring and connect it to the glider if the winch operator does not. (This makes life easier for the pilot.)
- Make sure that the winch and retrieve lines will not tangle on anything during launch. ( I have seen a few sailplanes get strained through the winch due to someone not checking where the towline initially laid.)
- Check that the frequency pin matches the transmitter's frequency. (At some past contests, I have been handed the frequency pin matching my contestant number. Four eyes work better than two.)
- Ask other teams how they are doing. (This is not necessary but will usually help during a time of crisis. Most teams are willing to provide good input just so that others may remain competitive.)

**Things you Don't Do's**

- Do Not start arguments with the pilot (The pilot has the last say while he is flying.)
- Do Not socialize with other timers or officials. (As a timer, you are not much help to the team if you are not immediately available.)
- Do Not create distractions. (Don't tell the pilot that he just missed a good crash. Gliders in the sky tend to be hard to find after you look at the ground.)
- Do Not force the pilot to try things that make him/her extremely uncomfortable. (When advising a pilot, be aware of his/her skill level. Never send a novice beyond the point of no return even if you know there is lift there. One mistake and you both may have a long walk.)
- Do Not become emotional with the pilot. (Talk calmly. Your emotions will only add to the pilot's already nervous condition.)

**Conclusion:**

A timer has many responsibilities and the better that they are performed, the more likely the pilot is to have a good flight and score. Though these responsibilities are many, they are not meant to be overwhelming. Most are a practical application of common sense and good communications. The key here is that TEAMWORK leads to success.

If you are overwhelmed, just remember the basic duties; a) starting the clock at launch, b) guiding the pilot to the landing area, c) providing the pilot accurate times through out the flight, d) stopping the clock upon landing and e) ensuring the safety of all.

Many thanks? go to Don Northern who bent my ear on this subject while riding home from the Visalia Fall Soaring Fest of 1999. Without his persistent yapping, I would have never written this article and had this opportunity to improve my timer skills. Hopefully, you too have learned something.

Never be afraid to ask!

Bob

P.S. When it is your turn to be the pilot, DO NOT forget to inform the timer of you likes and dislikes.