



AMOS June 2018 Newsletter

AMOS Board Meeting 6/5 /18 @ 7:00PM – recap

Unfinished Business

Float Fly May 16-20: John Sorenson: Made about \$800. 41 pilots came from as far away as Tucson. Some showers, but flew every day. Looking for someone who can run this event in future years as advancing age makes this difficult.

Start Up Stands: Jim Irey: Stands are done. Mike Haston: looking Very Nice.

Issue With Former Member: Les Klear: The former member came out to the field one time. He is aware he is on our radar. Mike Haston: We will let it go for a while.

New Business:

Arming Electrics (safety issue): Mike Haston: We had an incident of an electric plane arming with the throttle open, and getting away resulting in injury to the operator. No one else was injured. However, this type of incident presents a danger to everyone else around, particularly in the vicinity of the shade covers where a lot of people might be working on their own stuff and not watching out for other members' planes. There needs to be a rule against arming any electric under the shade covers. Jim Irey: We shouldn't need a new rule. This situation should be covered under unsafe practices. John Sorenson: If we require members to arm their planes away from the shade covers we have to have tables for them in the pit area. After further discussion Motion by Randy Sizemore that we hold a vote at the general meeting on whether to pass a rule forbidding arming of electrics under the shade covers. Second by Basil Yousif. Motion Passed.

New Communication Tool: Mike Haston: Recommends club try using MyGrove.com as a bulletin board for communications between members and, to some extent, notices to members. Use of the site is free, and ads would not appear on the club's page. This is not intended to replace our web site, nor to take the place of email for official club communications. Board members express some caution. All agree that members' personal information such as email addresses should not be revealed. Also, each member should be able to opt in or out of using site. Consensus of Board is to put this proposal to a vote at the general meeting.

Beale AFB Event: Mike Haston: He was contacted by the Boy Scouts concerning an event at Beale AFB October 19-21 inviting AMOS to participate. This will be discussed at the general meeting.

Upcoming Events:

August 11: Amos Electric Fun Fly. This will be our National Aviation Day participation.

Board Reports:

Vice-President Randy Sizemore. Castle event had a good turn out. Would like members of AMOS to go as a group next year.

Treasurer Keith Roberts. Treasurer's report for April attached here. Although checking account balance is shown as \$1,147.91 that is without the \$2,718 from the Float Fly. After that bank balance will be close to \$4,000.

Membership Jim Irey. 205 members. Motion to issue John Garfein a badge as official club photographer. Second by the Secretary. Motion passed. Board also approved reimbursing Jim for \$49 loss to his truck hauling the club's junk to the dump.

Past President John Sorenson: Two suggestions: (1) Get cheap plastic folding tables for pilots to arm their electrics. (2) All members' sign ups to include statement "I have fail safe activated on my radio for my engine/motor."

AMOS General Meeting 6/12 /18 @ 7:00PM – recap

Unfinished Business

Startup Stands/Tables: Mike H: Thanks to Tom and Jim. Stands now sealed and carpeted. Some discussion of modification to accommodate twins.

Amos Float Fly: John S: 42 pilots. Lots of fun. Nothing sank. Dave and Karen camped out and helped all week. Cleared about \$800. John made a plea for someone else to take on the tasks of checking in fliers, collecting money, and food preparation for future events as he is finding that, nearing 80 years of age, this is physically too demanding. Otherwise this popular event might come to an end. Jody K said he could do this if someone could provide a motor home to camp in.

Warbirds Over Roseville: Mike H: 33 pilots. Largest turnout ever for this event. Ran out of food. Received a lot of compliments from participants. About \$750 profit.

New Business

Sand Bags: Jim I: The sandbags we keep on hand in case of lipo fire are rotting. Randy S: for a lipo fire in the dirt, a shovel is the best thing to use.

Boy Scouts Expo: Mike H: We have been invited by the Boy Scouts to participate in an expo at Beale AFB October 19-21.

(Further info at <http://www.gec-bsa.org/programs/2018-scoutexpo/66568>).

Apparently Beale has given permission to fly RC at the event. This could be great public relations for AMOS. We would need a few volunteers to bring aircraft to the event. John S: We have to find out how large a flying area is available to know what size planes to bring. Motion by John S with second by Van B. that we look into participating. Motion passed.

Arming Electrics in Shade Structures: Mike H: There is concern over safety of bystanders whenever in the vicinity of an armed electric (prop driven) plane because the motor can suddenly go to full power for a number of reasons. Under the shade covers is a particularly dangerous place because people are congregated there and are not necessarily looking out for other peoples planes. Having a plane armed while under the shade covers is potentially dangerous, and we need a rule to address this. Discussion followed. Members were divided over whether to forbid armed electrics under the shade covers under all circumstances. Mike H and Randy S argued in favor of an outright prohibition with no exceptions. Jim I and John S favored a common sense approach and keeping existing rules. John S recommended that we provide a safe place to arm and disarm electrics and recommend that flyers use it. Jody K pointed out that planes with gyros have to be armed on a level surface. Jim H noted that if we pass a rule there has to be a way to enforce it. Jim I wants to call for proxies from all members for vote on this issue. Motion by John S to table the issue until next month. Second by Jim I. Motion passed.

Communication Program MyGrove: Mike H: Recommends setting up AMOS with a page on MyGrove which is a social media website. Members would be able to post notices (planes for sale, or whatever) and communicate directly with one another. Information on club events would be available. This would not replace official club business which would continue to be conducted by email. Jim I expressed concern over members' privacy. Mike H assured him that he would remove any information concerning any member who wants to be excluded. Motion by Randy S that we proceed to implement this program and Mike H be in charge of it. Second by Van B. Motion passed.

Board Reports:

President Mike Haston: Thanks to the many members who helped put on the Warbirds

Vice President Randy Sizemore: Consider getting feathers (custom advertizing flags) made to call attention to our events.

Treasurer Keith Roberts: Absent. Mike H summarized his May report which was distributed to members with the Board minutes last week.

Membership Jim Irey: 207 members. Usual for this time of year would be 225.

AMOS 2018 Event Schedule

Electric Fun Fly - August 11th - This will also be our National Aviation Day Participation
John Heinlen has agreed to host the event again this year!



**AMOS Electric Fun Fly -
Saturday August 11th 2018**

At the AMOS field Located at 4015 East Catlett RD, Lincoln CA,
One Mile East from the Thunder Valley Casino
Any Size Model Electric Airplanes and Helicopters
are welcome - Starts at 9:00 AM and
goes Late with Night Flying with
Electric LED Models,
No Landing Fee but
AMA insurance is Required

Great BBQ Hamburger - \$7 meal -w- Drink and chips
Hotdog meal \$6 -w- Drink and chips

Contests - Limbo , Pylon Racing , and Spot Land

Contacts: Basil 916-410-2791 or
E-mail: basil.yousif@sbcglobal.net
Also See: www.amosrc.com for more information

Presidents Fun Fly - September 8th - Mike Haston , Randy Sizemore

Jet event: Randy Sizemore: September 28-30

**Nor-Cal Huckfest - Saturday October 6th - Basil Yousif, Gary Meyers, Geordan White
and Ron Brugh - Big Planes - Great Time!!**



Nor-Cal Huckfest
3D Giant Scale Event
Saturday & Sunday
October the 6th
and 7th, 2018

At the AMOS field Located at
4015 East Catlett RD, Roseville, CA

One Mile from the Thunder Valley Casino
Great Event Lodging

Any Giant Scale 79" and above wingspan
3D Model Airplane can Fly
Free overnight RV parking

Pilots can arrive on Friday 5th to Practice
Flying at the field.

\$10 Landing Fee Saturday - Sunday no charge
AMA insurance is Required

Great BBQ - Hamburger or Hotdog \$7 meal Tri-tip \$10

The AMOS Field is a Gold Member AMA field
One of the Best in California

Contacts: Basil 916-410-2791
Geordan White 916-521-8590
Gary Meyer 916-276-6990 Web www.amosrc.com

AMBRO Profile Event - October 20th - Randy Allen

**2018 Christmas Dinner - Glen Gibson organizer. To be held at El Torrito Mexican
Restaurant at 5637 Sunrise Blvd, Citrus Heights. The date hasn't been set.**

Large propeller Balancing using chairs

Can't fit a large propeller into the popular Top Flight magnetic balancer.

Take the shaft that the propeller mounts to and synch the rubber supports on your large propeller then use two similar height chairs back to back and balance away!!



The Chairman of the club invented this system!!

Replacing Damaged gears in your Servos

Most of us that buy expensive servos have stripped gears in a crash or while trying out a setup that badly binds. We have replaced gears and it seems simple but was the right grease used (Some can ruin plastic gears) and was it done as cheaply as it could have been?



Using a Magnifying glass makes the Job easier.

The bad gears are usually the smallest gears at the bottom. Always check the smallest gear that meshes with the motor first. That gear will almost always be the bad gear and there sold in heaps (called the first gear) for most popular servos on Ebay.



Grease options:

From the Servo Manufacturers;

Hitec Servo Grease 58450, Futaba Servo Grease - Plastic Gears- **FUTSRVGRS Metal Gear - FUTSRVGRSMET** ,Cons - Very small amounts 1oz and High price

Aftermarket Silicone Grease:

Super Lube (92003 3oz) ,(92016 14oz) - Silicone Lubricating Grease



3 oz - \$10, 14oz - \$22

There are many other options but this is the best most available grease that's Rubber and Plastic safe. it's also good on Helicopter plastic gears.

Lithium greases can dry out over a few years and can leave behind a residue that can get hard and bind the gears in a low temperature application. Petroleum Based greases and additives can also deteriorate plastic gears and make them soft or cause them to break.

Silicone Grease is the best and longest lasting. It is used in manufacturing where disassembly and relubrication maintenance is very infrequent. Lithium is fine for Metal Gears but watch that plastic gear at the bottom of the metal gear train.

Most new servo plastic gears are made of Polyoxymethylene (POM) which can stand up to chemical additives in many types of grease. Older plastic gears would get soft and strip out if you used the incorrect lubrication. Stay on the safe side and use Silicone grease. You don't know what kind of plastic is in cheaper servos.

Servo Disassembly:

Remove the 4 screws at the bottom of the servo. That's all you need to get to the gear train out on most popular servos. If you don't have a photographic memory take a picture of the gear train so you know how the gears go back together.



To keep gear train in tact while you take the top of the case off you have to push the top gear/shaft down (that holds the servo arm) before removing the top case. You're trying to push the bearing down along with the main gear to release the shaft. This way the gear train stays together when you remove the top case. Sometimes the bearing stays in the case.

Remove all the gears and dip them in rubbing alcohol and brush them off to get the old grease off them. Then inspect them for missing gear teeth. Start with the smallest gear and work your way up. I have seen multiple gears go bad so check all of them.

Get the replacement gears, smear a little bit of thin grease on them with a brush and the shafts they mount into and install them in there proper location.



You can test the gear movement by installing the gears into the top case and moving the top shaft. Attaching the servo arm on the shaft can help. Test the servo travel. When turning the servo arm it should stop at the endpoints as the gears turn.

Cutting down the bristles of the Acid brush makes applying and cleaning off grease



Easier.

Lining up the main gear- The main gear usually has a stopping notch on it. This notch stops the servo arm from moving when it gets to both end points so it should be centered. The top of the case has barriers to stop this protruding metal circle (notch) when endpoints are reached. This is for a Futaba servo, other types might align this notch differently the idea is to get the notch in the center of the travel before assembly.



I put the notch to the front for my servo before assembling it.



Test out the servo:

Some Gyro Matched Servos don't work with servo testers because they operate on high speed 720us frequency. You'll have to install it with the Gyro to test the servo. This might also be true for other R/C applications where the servo is specialized. You might think you incorrectly rebuilt the servo gear train but it's fine.



The Servo should be smooth along the travel and not bind. Grab the servo arm and activate the servo making sure it can work slightly loaded down without stripping.

Some servos can bind from the four case screws being too tight. This forces the top case to push down with too much pressure on the main gear and bearing causing problems. Don't over tighten them. Watch out for a worn bearing here.

You can also test the Servo's Volts and Amps consumption with the Two Volt meters and a homemade harness or use the Watts up Meter inline with the battery. The servo should not be using any current when idle or not moving.

Servo Maintenance Tips:

Many manufacturers use the same gears in many different models so don't throw away your servos that have had the motors or circuit boards go bad on them. Futaba and JR make the best gears.

Dismantle them and take the gears out and save them. Also save the top cases should the mounting flanges break off a good servo. Almost all cases (for every size servo) are interchangeable for every manufacturer.

If you have to buy the whole gear set for a servo it's not cost effective unless it's a \$60 or over priced servo. A Hitec Carbonite gear set can cost as much as their Digital Standard servo with those gears. Futaba does a good job at making their 1st 2nd and 3rd gears available in a set of 3 each for \$10 for their premium servos. I saw a pile of 50 of the 1st gear for the high end servos available for \$10 on Ebay.

Many of aftermarket servos (like Turnagy) will use Futaba gear trains, cases and servo arms on some of their models. So you may be able to save that off brand servo with more available parts. Asking someone in an Online R/C Forum can help with matching gears.

Metal gear servos sometimes have one plastic gear. More often the plastic gear is likely to be the stripped one. The gear train is designed this way to protect the motor - but not your model!! In some cases you can buy only the bad plastic gear. The whole metal gear set is always very expensive. Some manufacturers make it so expensive to get replacement gears that you'll be better off buying a new servo instead.

Upgrading Plastic gear servos to metal gears - Some expensive servos with plastic gears can be upgraded with metal gears. Many manufacturers sell the same servo with and without metal gears under different model numbers. Get a set of the metal gears for the servo if you find your stripping it out too frequently or need more strength, if it's cost effective.

Joke:

The manufacturers of Model Airplanes need to Change the Kit Abbreviations for

Almost Ready to Fly Models

From - ARF to ARF50h

Almost ready to Fly in 50 hours!!

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