



AMOS October 2015 Newsletter

10-05-2015 AMOS Board Meeting

Christmas Party:

Christmas Dinner Dec. 6th. Will be at Turkey Creek. Cost expected to be \$28 per person. Some people believe it is costly for some members. A motion was made by Mike Haston and 2nd by Doug Keller to keep moving forward with the dinner as planned and try to promote it to the Membership. Motion Carried.

Field Improvement:

Jesse Torrez would like to use the last of the Petro-mat to lengthen the cross wind runway. We have some money donated for field improvement available, but not enough to cover all costs.

No motion carried to do the extension at this time. A discussion about further improvements needed included a desire for more and better seating. Also a Flag Pole should be added. These items were put off for next year.

End of year Committees:

**Nominating: Chairman Bob Rives , Budget: Chairman Fred Light
Audit: Chairman Tracy Trammell**

Events for Next Year: A motion was made by Doug Keller and 2nd by Mike Haston to bring before the board at the next meeting regarding how many and what events we should have. Motion Carried.

Concerns/Reports from Board members:

President John Sorenson. We should put in a request for a Grant from the AMA in 2016.

Secretary- Marvin Bennett. Reminded everyone that ballots for the AMA section X election is due Nov. 6th.

Treasurer - Gloria Irey. Would like information on plans and costs for 2016. The Port A Potti company raised their rates from \$110 to \$120 for 4 weeks. She responded to questions regarding if our dues cover the club's routine expenses. The clubs routine expenses run about \$12,000 to \$13,000 per year.

Our membership renewals have been typically bringing in about \$17,000 per year. New members dues bring in about \$2000 or more per year. So the answer is YES/ Our current dues bring in more than enough to cover the club's routine expenses.

Membership. Jim Irey. We have currently 228 members.

Field Marshall- Glen Gibson. Reported that we have a lot of debris around the gate.

AMOS GENERAL MEETING MINUTES 10-13-2015

Guests: Carmel Hill and Kathleen Rives New Members Tom and Sharon Young.

Thunder Valley Jet Fly - October 10th. Randy Sizemore ran the event. Thanked Helpers. Field was in good shape. It turned out to be a profitable event. No major crashes and was our biggest event. Our publication in the Lincoln paper paid off.

Xmas Dinner. Will be Dec. 6th (Sunday) at Turkey Creek. Flyer is out. We should encourage participation. .

Meeting with Placer High School—John Sorensen went and talked to the class about technology. There was some interest in our training.

End of Year Committees:

Nominating: Chairman Bob Rives List of nominees passed out at this General meeting. Members Kathy Rives and Marv Bennett

Budget: Chairman Fred Light. Report at Dec. General Meeting. Members Gloria Irey and Mal Toy

Audit: Chairman Tracy Trammell. Report at Dec. General Meeting Members: David Jenkins and Dean Crump

Field Improvement: Jesse would like to use the last of the petromat to lengthen the cross wind runway. Doug has donated the \$350 from the sale of his generator to field improvement. Since it will cost at least \$1000 for

**this do we want to do it. The Board recommends we hold off at this time.
No motion to proceed now.
Events for 2016:**

Randy Allen would like to see us put on a Profile Event. John Sorenson to get with him to see if he has specifics.

John Sorenson to put on the Sea Plane Event the weekend before Memorial Day. A motion was made by Jim Irey and 2nd by Mike Haston to move forward with this event. Motion Carried. Sanction War Bird Event June 11th. Motion made by Mike Haston and 2nd by Randy Sizemore to have one in 2016. Motion 'carried.

New Business:

Field Safety—We need it safer to walk around the food area. This will be looked into and action taken.

Chairs-- We need more seating. Tom Young volunteered to bring some chairs. Others have also planned to bring some .Bleachers are desired by some members. This to be looked at in the future.

Hats, Shirts, etc.-- Jim Irey to put in a new order tomorrow.

Lipo Cans.-- Jim Irey building a couple of cans to put by the bulletin Board. Cigarette Butt Cans. These are desired to clean up the butts. A Motion was made by Mike Haston and 2nd by

Randy Sizemore to install the cans. Motion Carried.

Front Gate Trash-- Suggestion was a light. Because of cost no one pushed for this.

Flag Pole-- Suggested by Randy Sizemore. John Sorenson will check.

Board Reports:

Vice President—Mike Haston—Concern by members voiced at events if asked to pay to fly.

Treasurer—Treasurer Report out. We may be able to pay off more of our loans next month if approved by the Board.

Membership—Jim Irey-- We now have 229 members in the club. Traditionally 85% of members renew annually.

Safety/Training—Fred Quartier-- Continue to fly safely and remember to put your AMA member number on your planes. This is required by AMA.

Committee Chairman-- Richard Cross : “Contest Director: AMA rules requires taking an AMA test . Remember at Events you cannot fly a plane on its maiden flight.

Field Marshall-- Glen Gibson—Let him know if anything at the field needs maintenance.

REMEMBER NOMINATIONS FOR NEXT YEARS OFFICERS ARE STILL OPEN AND WILL BE VOTED ON AT THE NOVEMBER GENERAL MEETING. PROXIES ARE ACCEPTED AND MAYBE MAILED TO THE SECRETARY OR PRESENTED AT THE MEETING.

Mailing Address: MARV BENNETT 1848 HOMEWOOD LANE LINCOLN, 95648.

Snow-Ball Raffle-- Won by Rich Nowatzki

AMOS Event News Thunder Valley Rally of Jets on 10-10-15



This was another great event at the AMOS field and the last to be held this year. Modelers came from all over California with some very fancy Jets. Many AMOS members got into the action with some nice EDF jets. The large Turbine jets were fantastic to watch. The weather was as great and the BBQ was top notch! Hopefully this event continues in the years to come.



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 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. Your 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.

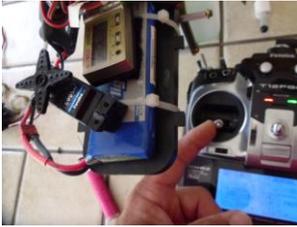


I put the notch to the front for my servo before assembling it.



Test out the servo:

Some Gyro Matched Servos don't work with servo testers so you'll have to install it with the Gyro to test the servo. This might also be true for other R/C applications. 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 as described in my article in the August 2015 Newsletter.

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 there Digital Standard servo with those gears. Futaba does a good job at making there 1st 2nd and 3rd gears available in a set of 3 each for \$10 for there 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 there models. So you may be able to save that off brand servo with more available parts. Asking someone in a 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. In some cases you can buy just 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 to frequently or need more strength, if it's cost effective.

Jokes:

What did the Vampire use when he wanted to learn how to fly a R/C plane ?

Real Fright Simulator - 666.0

**What do you get when you cross a snowman and a vampire?
Frostbite!**

Graveyard Music!

A daring vacationer is walking through a graveyard on Halloween when all of a sudden she hears music. No one is around, so she starts looking to see where it's coming from.

She finally locates the source and finds it is coming from a grave with a headstone that reads, "**Ludwig van Beethoven.**"

Then she realizes that the music is the Ninth Symphony and it is being played backward. Puzzled, she leaves the graveyard and persuades a friend to return with her.

By the time they arrive back at the grave, the music has changed. This time it is the Seventh Symphony, but it is also being played backward.

Curious, the ladies agree to consult a music scholar. When they return with the expert, the Fifth Symphony is playing and the expert concludes that the symphonies are in fact being played in reverse order.

By the next day the word spread and a huge group gathered around the grave to hear the Second Symphony being played backward. Just then the **graveyard's** caretaker approaches the group. Someone in the crowd asks him if he has an explanation for the music.

"Oh, it's nothing to worry about" says the caretaker. "He's just decomposing!!"

AMOS Newsletter prepared by: Basil Yousif, Send Newsletter feedback and topic info to - basil.yousif@sbcglobal.net use AMOS Newsletter as the Subject for the E-mail. Also see the clubs website at www.amosrc.com for more field information and Flyers.