

AMOS April 2021 Newsletter

Board Meeting Recap - Amos Field 4/3/2021 12:00pm

New Business

<u>Minutes of Previous Meeting:</u> On **Motion** duly made and seconded, the minutes of the previous board meeting were **approved.**

<u>Current COVID19 Field Guidelines – No Change until further notice:</u> The Board agreed not to make any changes for the time being. The field is currently open to members and guests.

Swap Meet Day" **Second Saturday of each Month**

First one for 2021 – Saturday April 10th

Open to AMOS and Guests

- · Swap Meet hours 8am to 12pm
- · General Meeting 12pm to 1pm

Provide Fuel for Training Planes? – Funded by Training Donations & AMOS Budget? The Safety/Training officer is authorized to use proceeds from training donations and drink sales to purchase fuel for the trainer planes.

Website Update Discussion: Dave L reported that Ian is charging us 50% of his regular rate for running our website. The basic structure is already there for putting on the content we want. It is up to us to tell Ian what the content should be and where it should appear. The improvements Dave and Andrew recommend should not cost anything extra, but if they do, Dave says he will cover it. Nick Graham is also providing advice, and knows how to do this.

PayPal Discussion : Dave L advises that many members want the ability to pay dues on line. They are frustrated with having to deal with checks. Andrew W advises that Pay Pal is perfectly secure. This topic will have to be explored further by the board, despite having been previously voted down.

<u>Sanctions Events – Sanctions applied for?</u> The directors of each event are responsible for applying for sanctions.

Field Projects Update by Dave L:

Done Since Last Meeting:

- 1. Received Tractor, Mowing and scrapping implements. Loader will be here in 4-6 weeks.
- 2. Tom mowed over 10 acres of grass in the last few weeks.
- 3. Tom and John did "short cut work" with riding mowers around the runway and west of Gazebo
- 4. Tom fixed the hand truck wheels
- 5. Added additional cement to the flag poles bases
- 6. Cemented Section 7 and 8 poles in preparation for new shade structure
- 7. 30 more yards of AB added and spread by Mike Janssen around the Containers
- 8. Petromat added: West, South, Heli and Gazebo Areas. North and small pit extension left to do.
- 9. Finished installing cameras- 2 for general use (East and North Views). Coming on line soon.
- 10. Added external siren/strobe on my container
- 11. Added horizontal bars across both containers. Now 2 locks per container each with matching keys
- 12. Finalized truss configuration. Dick cut material for test section. Meet on Monday to review for 1st units.
- 13. Added shelving in both containers to get stuff off ground
- 14. Added larger solar panel to keep batteries charged
- 15. Installed all Sail Shades (sections 7 and 8 are temporary)
- 16. Finishing the A-Frame canopies today on the south side
- 17. Prepped entry road for repair
- 18. Moved steel tables (at Heli pad) in place for 20' long "Truss Jig"
- 19. John and Tom sprayed another round of Round Up- perimeter of runway and road.
- 20. Moved non-valuable items out of AMOS Trailer and into wood shed
- 21. Rough Draft of both Event and General AMOS "tri-folds" along with Counter Displays

Scheduled to do before next meeting:

- Focus on Shade structure trusses and get as many as possible built painted and installed.
- Lay Petromat in North area after Sections 7 and 8 are installed.
- Finish Road Repair with chip seal and binder.
- Get 2 field cameras on line
- Provide the Board with more details regarding the web site refresh
- I will get drone shots and video of field with all shade sails up and green field all for web site

AMOS BROCHURES: Dave L presented two brochures he had made up at his own expense. One promotes the training program, the other promotes the club. He will try to have these brochures available to the public at Fast Track and RC County.

Officers' Reports

Vice President Doug Keller: May Board meeting Saturday the 1st. General meeting Saturday May 8.

Treasurer Rob Ryerson: Absent. See report attached.

Secretary Jody Kahan: AMA charter renewal for 2021 is complete. We have AMA insurance coverage through 3/31/2022.

Field Marshall Dave Long: See above.

Membership Chair – Andrew Wilkins: We have 189 members as of this morning.

GENERAL MEETING Recap - Amos Field 4/10/2021 12:00PM

Opening Remarks. Doug R: Thanks to Tom A for mowing, and to Dave L and the guys who helped him on field projects.

New Business

<u>Minutes of Previous Meeting:</u> Motion made and seconded to accept the Minutes of the March General Meeting. **Motion approved.**

Review of Post COVID 19 Field Guidelines, New Gate Code: The President said the field will remain open to visitors with the gate open while members are present. The last member to leave locks the gate, as always.

<u>Swap Meet Day, General Meeting</u>: We will continue to hold swap meets open to everyone on the second Saturday of each month. Monthly General Meetings will be held at the field on swap meet days until we are able to go back to Tuesdays at Denny's.

<u>Training Program</u>: Training will be held each Wednesday from 4:00 to 6:00. The President suggests but does not require that Jet and Giant Scale pilots reduce flying during this time.

<u>Gold Leader Club Pins</u>: Members who want an AMA Gold Leader Club Pin should email John S at <u>sorensonjohn7@gmail.com</u>. Pins cost \$3.00 each.

2021 Events: All events for the year are now listed on the club website. However, the float fly will have to be cancelled unless we get some rain. As it is now, you have to walk through mud to get to the water.

<u>Field Projects:</u> Dave L suggested we expand the parking area into what is now grass west of the gazebo. It would require 30 yards of AB, which would cost \$1,000 for recycled AB or \$1,350 for new AB. The recycled would not color match the existing parking lot, and he doesn't know how well it would hold up. Mike J would spread it at no charge. No additional expense. Robb R says we thinks we have this in the budget, but will check and advise the Board. The Board has to approve first before submitting to general membership.

Dave L also presented a "quick" update:

- Tractor and mowing and scraping implements have arrived. Bucket coming in 6 months. Tractor has 25 hours on it. First service due at 50 hours.
- Salvaged enough parts from riding mowers to make three that work. Proposing to give away two to Woodland/Davis or Don Schwartz.
- Recemented poles.
- Spread 30 yards of AB around the containers.
- Entry road scraped and prepared for repair.
- Added petromat in the heli area.

- Still to add petromat in pits areas 7 and 8.
- Cameras in place for general use facing north and east. See Dave if you want to access the cameras on line.
- Leveled and welded steel tables in the heli area. Using tables as jig to make trusses for the shade awning poles.
- Dick B has built the trusses for Section 8. Dick is supplying all the material. Trusses will be put up in order starting with section 8.
- Installed shelving in both containers.

<u>Show and Tell</u>: Dave L showed samples of tri-fold brochures, one for events and one about the club along with counter stands for placement in hobby shops. He also showed event signs with left, right and straight arrows.

Board Reports:

- 22. Treasurer Rob Ryerson: About \$14,000 more has to go from checking into savings. Please see report, attached.
- 23. Secretary Jody Kahan: AMA charter renewed. Insurance in place through 3/31/2022. Annual report to Registry of charitable trusts due 05/15/2021.
- 24. Event Officer Basil Yousif: Everything is on the website. We need sanctions for warbirds, helis, and giant scale.
- 25. Safety/Training Officer Geordan White: Sodas and water for sale at training. Going back to work, so will be less available, but training afternoons are clear. Pilots have to make sure the runway is clear before landing.
- 26. Past President John Sorenson: Application for Gold Leader Club has to be submitted on paper. Checking "yes for noise level rule. Marking "yes" for club info handout. Have to designate one charitable event. Since libraries won't accept used magazines, we can make a contribution to the AMA Scholarship Foundation instead. Motion made and seconded to donate \$100 to the AMA Scholarship Foundation. Motion passed.
- 27. Field Marshal Dave Long: If the club will buy 10 new chairs at \$45 apiece he will donate 10. Motion to approve made and seconded. Motion Passed.

Treasurer's Report - March - Last Month 3/1/2021 through 3/31/2021

Balance 3/1/2021				\$30,726.29	
March Deposits	Field Improvement Fees			900.00	
	2021 Memberships/Renewals		\$	1,340.00	
3/2/2021	AMA Annual Membership	-120	0.00		
3/4/2021	Field Lease	-623	3.35		
3/10/2021	Porta Potty	-133			
Balance 2/28/2021 (Checking)			\$	32,089.44	
		Total Inflows	\$	2,240.00	
		Total Outflows	\$	- 876.85	
Balance 3/31/2021 (Savings)			\$	10,000.29	

AMOS 2021 Event Schedule;

Float Fly at Camp Far West Lake: May 17-23 (John Sorenson)

"It is on – bring your Boots!!"

water level is low

War Birds: June 12 (Basil and Geordan)

Electric Fun Fly: August 7

Presidents Fun Fly and General Meeting- August 14

Jet Rally: (David Long) - September

9,10 and 11th

"Can't Miss Event!!"

Helicopters: September 25 (Basil Y, Geordan W)

Profile Event October 2nd (Randy Allen)

Giant Scale: October 16

Expert Fliers - Gary Myers and Dave Sullivan to Host!









<u>Upcoming Events</u> are set to resume this year as Covid 19 restrictions are easing. Volunteers needed!

ANNOUNCEMENT MEMBERS TO VOTE ON NOMINATION TO FILL VACANT POSITION OF TREASURER.

At its regular meeting on May 2, 2021, the Executive Board voted to accept Rob Ryerson's resignation from the office of Treasurer. President Doug Reid nominated Jody Kahan to fill the vacant Treasurer's position. The Board voted to approve this nomination. The nomination will be presented to the membership for approval at the regular general membership meeting on Saturday, May 8.

AMOSRC Membership Report - May 2nd, 2021

Current Membership for May 2021 - 195
All those Current Members that have elapsed AMA are being contacted by email.
Respectfully submitted by: Andrew Wilkins

BATTERY BASICS FOR NEWBIES

By Jody Kahan
Part Two of Two
Checking and Charging Dumb Batteries

In Part One, we learned that you can kill or maim a LIPO battery by draining it either too rapidly or too deeply. In this Part, we will look at how to maintain your LIPO with the least damage to its health and well-being.

Before proceeding further, please be advised that nothing herein pertains to Spektrum's smart battery system. If you want to commit to their system, you needn't know a whole lot about batteries, or how to care for them. It's a slick system. But it is rather expensive, and somewhat limited in what's available. Will the extra expense pay off in increased battery life? I don't know, but I believe that if you don't abuse your dumb batteries they will last as long as smart batteries.

To properly pamper dumb batteries, you will need the following:

- 28. A battery checker that can display percent of charge remaining and the charge on each individual cell.
- 29. A charger that provides all of the following functions: Charge, balance charge, quick charge, storage charge, and discharge.

AFTER FLIGHT. After you fly, check the remaining charge in your battery. You want the remaining charge to be between 20% and 40%. You can adjust the length of your next flight depending on whether it is above or below the desired level. If you want to know the relationship between charge and remaining capacity, it is as follows:

%	1	2	3	4	5	6	7	8	9	10	11	12
00	4.20	8.40	12.60	16.80	21.00	25.20	29.40	33.60	37.80	42.00	46.20	50.40
95	4.15	8.30	12.45	16.60	20.75	24.90	29.05	33.20	37.35	41.50	45.65	49.80
90	4.11	8.22	12.33	16.44	20.55	24.66	28.77	32.88	36.99	41.10	45.21	49.32
85	4.08	8.16	12.24	16.32	20.40	24.48	28.56	32.64	36.72	40.80	44.88	48.96
80	4.02	8.04	12.06	16.08	20.10	24.12	28.14	32.16	36.18	40.20	44.22	48.24
75	3.98	7.96	11.94	15.92	19.90	23.88	27.86	31.84	35.82	39.80	43.78	47.76
70	3.95	7.90	11.85	15.80	19.75	23.70	27.65	31.60	35.55	39.50	43.45	47.40
65	3.91	7.82	11.73	15.64	19.55	23.46	27.37	31.28	35.19	39.10	43.01	46.92
60	3.87	7.74	11.61	15.48	19.35	23.22	27.09	30.96	34.83	38.70	42.57	46.44
55	3.85	7.70	11.55	15.40	19.25	23.10	26.95	30.80	34.65	38.50	42.35	46.20
50	3.84	7.68	11.52	15.36	19.20	23.04	26.88	30.72	34.56	38.40	42.24	46.08
45	3.82	7.64	11.46	15.28	19.10	22.92	26.74	30.56	34.38	38.20	42.02	45.84
40	3.80	7.60	11.40	15.20	19.00	22.80	26.60	30.40	34.20	38.00	41.80	45.60
35	3.79	7.58	11.37	15.16	18.95	22.74	26.53	30.32	34.11	37.90	41.69	45.48
30	3.77	7.54	11.31	15.08	18.85	22.62	26.39	30.16	33.93	37.70	41.47	45.24
25	3.75	7.50	11.25	15.00	18.75	22.50	26.25	30.00	33.75	37.50	41.25	45.00
20	3.73	7.46	11.19	14.92	18.65	22.38	26.11	29.84	33.57	37.30	41.03	44.76
15	3.71	7.42	11.13	14.84	18.55	22.26	25.97	29.68	33.39	37.10	40.81	44.52
10	3.69	7.38	11.07	14.76	18.45	22.14	25.83	29.52	33.21	36.90	40.59	44.28

When you are done using your LIPO battery, discharge or charge it as necessary to bring it to STORAGE CHARGE, which should be between 3.75 and 3.85 volts per cell. If your charger has a storage function, it will automatically charge or discharge to reach the desired level. BEFORE CHARGING.

Before you charge your LIPO, check the cell voltages for balance. If you have a typical three button battery tester you can find the charge per cell by pressing the "cell" button repeatedly and reading the cell voltages one at a time. I like to be able to see the voltages of all cells at once, so I use this checker for checking cell voltage:

https://hobbyking.com/en_us/turnigy-dlux-lipo-battery-cell-display-and-balancer-2s-6s.html? queryID=b86a84a3e8f626b7342c8222fda95e70&objectID=45202&indexName=hbk_live_magento_en_us_products



I consider cell balance to be acceptable if all cells are within .04 volts of one another on a three cell battery or .05 volts on four or more cells. As a practical matter you probably will not be able to get them closer than .02 volts.

If all your cells are within the above limits, you don't have to run a balance charge, which will save time.

You are generally advised never to charge a LIPO unattended. This is good advice, but impractical. My rule of thumb is never charge a LIPO in the vicinity of anything flammable, unless you don't mind replacing it. For those of you who charge off your car battery, I would point out that your car is flammable. LIPOs do, on occasion, burst into spectacular flames. This can happen when you charge if (1) your charger fails to cut off after fully charging your battery, or (2) your battery develops an internal short. As an added precaution, you might want to put your battery in a charging bag while charging. This will, hopefully, contain the flame should your battery ignite.

CHARGING.

Select the charge cycle on your charger as appropriate.

Balance charge: to run a balance charge, plug in both the power lead and the balance lead on your battery. The balance charge will take longer than a regular charge. If your battery is considerably out of balance, it will take a lot longer. However, if your battery is considerably out of balance there is something wrong with it, and you should consider replacing it. Your charger probably will automatically sense the number of cells. If not, you might have to enter the number. On most chargers, you will have to enter the charge rate in AMPS. If your battery is at least at 15% of capacity, it is safe to charge at a rate of one C. If not, a lower charge rate is advisable. One C is equal to the capacity of your battery in AMPS. Since your battery capacity is labeled in milliamp hours, you have to divide the labeled capacity by 1,000. For example, if your battery is labeled as 3,200 maH, one C is 3.2 amps.

<u>Charge</u>: To run the charge cycle, you don't plug in the balance lead. You have to enter the number of cells, and the charge rate.

Fast Charge: The procedure is the same as for the charge cycle.

<u>Storage Charge</u>: The procedure is the same as for the charge cycle, except you might also have to enter the target voltage.

Charger cycles: The following describes the program followed by a typical charger.

On balance charge, the charger will charge the battery at constant AMPERAGE, gradually increasing its voltage output until the overall charge is near the target voltage of 4.2 volts per cell. It will then charge at constant voltage while continually reducing the amperage. During this cycle, it continuously monitors the voltage of each cell. If it detects one or more cells that are above 4.2 volts, it will attempt to discharge those cells through the balance port, then continue charging through the main port, and will keep up this sequence until all cells are as near as it can get them to 4.2 volts.

On charge, the charger will charge the battery at constant AMPERAGE, gradually increasing its voltage output until the overall charge is near the target voltage of 4.2 volts per cell. It will then charge at constant voltage while continually reducing the amperage until the battery is fully charged.

On fast charge, the charger will charge the battery at constant AMPERAGE, gradually increasing its voltage output until the overall charge is near the target voltage of 4.2 volts per cell. It will skip the constant voltage stage. This will save time. The battery will be charged to approximately 95% capacity.

On discharge, the charger draws current from the battery and converts it to heat. It uses a built in fan to disperse the heat. This is a slow process. You have to input the target volts per cell (3.75-3.85 volts) and the rate in amps, but the charger will limit draw to keep itself from overheating, regardless of the rate you input.

On storage charge, the charger will seek to bring the battery to a predetermined volt level. It does not read from the balance plug, and just goes by overall voltage. The charger may have a pre-programmed storage charge level, or it may require you to enter the target voltage. The charger will read the battery voltage and go into the charge or discharge cycle as appropriate.

SPEEDING UP THE PROCESS

A well made battery <u>may</u> be capable of charging at a higher rate than one C, but I wouldn't push it. If you are in a hurry, use the fast charge cycle instead. Some batteries are labeled as capable of charging at a higher C rate. If you choose to do so, make sure the battery is not heating up while charging.

Jokes;

Helicopter Crash!

The blonde pilot was interviewed after her helicopter crashed... Interviewer: "Would you mind telling us what happened before you crashed?" Blonde: "I decided to turn off the fan because it was getting really cold."

Good Advice!

A man parachuted out of a plane and his chute did not open. As he headed for almost certain death, he saw a man coming up toward him through the air from the ground. As the man zoomed by, the man headed down asked, "Do you know anything about parachutes?" The man replied in passing, "No, you know anything about gas stoves?

AMOS Newsletter prepared by: Basil Yousif, basil.yousif@sbcglobal.net