



ACADEMY OF MODEL AERONAUTICS CHARTERED CLUB #1255

SERVO CHATTER

A PUBLICATION OF:

ANOKA COUNTY RADIO CONTROL CLUB, INC.

APRIL 2019

THE MEETING ON THURSDAY, APRIL 18 IS AT RIVERWIND CENTER!

PRESIDENT'S CHATTER

THE APRIL 18 MEETING IS AT RIVERWIND CENTER

I have a couple of items you maybe interested in.

First off don't forget to join ACRC.

Put your FAA number on the outside of your aircraft.

Last but not least there is a recall on Honda EU2200 or EB2200 generators.

The serial numbers are as follows:

EB2200iTA EAJT- 1000001 through 1005474

EU2200iTA EAMT- 1000001 through 1260796

EU2200iTA1 EAMT-1000001 through 1260796

EU2200iTA2 EAMT-1000001 through 1260796

The units have fuel valve issues. If you have one of these units STOP USING IT and take it to Beisswenger's Hardware. They have replacement fuel valves in stock for warranty repair. The service department is open 7 days a week

Virgil Okeson

CIVIL AIR PATROL

Calling all ACRC Volunteers.

In the January edition of the newsletter I asked members to save the date for the "Great MN Wing Aerospace Fling" put on by the Minnesota Wing of the Civil Air Patrol. Incredibly, the event is just one month away. The event is on Saturday May 18, 2019 at the South St. Paul Fleming Airport.

The event is from 10:00 AM and until 4:30 PM. Our participation will have a scheduled time (which I don't know as of this writing), but will not run the entire day.

I am again asking for volunteers for the event. ACRC has worked with Jim Zuales (the event coordinator and fellow Delta pilot) in the past and had a great time showing off our field and airplanes to his cadets.

How to help:

- Bring your micro models for an indoor demonstration, hopefully in an actual aircraft hangar
- If you can't attend but would be willing to lend a micro or two to another club member (me?) to fly at the event we could assure a variety of models to be flown
- Bring your gas or glow powered model and starting equipment for a static display and possible mass engine start and run up (sorry, no flying since we will be on the airport property). The run up will only be accomplished once we determine that it is safe to do so
- Bring a laptop computer and a copy of an R/C simulator running on it along with the controller so we can let cadets try their hands at "flying" RC. I plan to bring my PC. I would like to have a few sims set up.

The goal of this event is to stir up interest in aviation in a fun, exciting and hands-on way. I really do believe that a lifelong interest in aviation often begins with RC modeling.

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Unfortunately the event is the same day as the May Fun Fly/Fly-In and the times do overlap. If you weren't planning to attend please consider volunteering.

Please contact me via email, text, phone call or radio controlled passenger pigeon to volunteer.

Bob Moser
612-325-7942
rmoserjr@gmail.com

VEEP REPORT

NEW DATE FOR SPRING FLY-IN MAY 18

That's all I got folks. I'm waiting for good flying weather. This means putting the skis away and installing wheels

Jeff Slater

MEMBERSHIP NEWS

I hope you will take time to read the flying site rules and refresh your memory now that the flying season is close at hand. This is especially important because a few years ago some changes were made to rule 10 and high-speed passes are now allowed over the runway in certain instances. The rules will be attached to the email you get with this newsletter. You should print a copy and keep it handy. If someone mentions to you that you are violating one of the safety rules please do whatever it takes to correct what you are doing. It is considered bad form to give them a hard time and then continue doing what you are doing. If it means that you have to stop flying and make repairs or go home to get something that you need, that is what the club expects you to do. The AMA

insurance for you and the landowner provides coverage only if you are following the rules. It would be a shame to lose our field because of the ignorance and arrogance of a few fliers.

Part of Rule #2 states that members are to put their membership card on the frequency board and guests are supposed to use their AMA card. The reason for this is so that we can be sure that the fliers are either current ACRC members or guests with a current AMA. Fliers are not to use last year's cards, driver's licenses or business cards. If you lose your 2019 ACRC card let me know. I will mail you a new card - FREE.

Don't forget that the first Fun Fly of 2019 is on Saturday, April 20.

The next meeting will be at Riverwind on April 18 at 7:00 PM. This is the last indoor meeting until September. The summer meetings will be AT THE FIELD.

Stan Zdon

A Look Back

APRIL 2001

18 Years Ago

President Dan Stahn reminded everyone to get their equipment in order and charged up for the new flying season. That includes your own brain as well.

Ditto by veep Tom Wesley

Dan also put out a plea for new members and made several suggestions on how to go about it.

A very informative article from the AMA National Newsletter by Gary Chudzinski regarding crosswind takeoffs and landing. It's not just "gas it and go" or "left stick ground control, right stick airborne control."

Note A book written by Don Apostolico titled "Crosswind Flying" originally published in 1993 and updated several times over the years, is a nice short read on all aspects of flying in crosswinds.

Stan Zdon reported the membership is up to 97 to date.

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Also it has been discovered some Park Flyers and RTF aircraft are being sold with single conversion receivers. It's the old channel 20 & 21 thing when mixed with TV channel 4. Ten years later, and it's still a problem.

Jesse Wilkes contributed a full page of aircraft "Daffy-Nitions".

APRIL 1991

28 Years Ago

President Dan O'Link and the Board have suggested the business portion of the monthly meetings be limited to 30 minutes. Show and tell, demonstrations, and speakers would be outside of the 30-minute window.

This suggestion is to keep things on track and still remain informative.

Dan McClain, Rob Martinson, and Bahb Johnson have video tapes over due from the club library. Dan has a book over due as well. My local library charges 20 cents a day for over due books.

HMMMM. 28 Years at 20 cents per day for four items would replenish our checkbook to the tune of just over \$8100

Jeff Slater's Who's Who column put the spotlight on Keith Moldenhauer.

APRIL 1981

38 Years Ago

Would you look at that! Tucked inside the April 1991 newsletter is a brief summary of what was happening ten years prior.

ACRC has been in existence for 3 years. This month we finally got a permanent flying field thanks to Allen Johnson, owner of ABC Sod Farm.

The club has decided to institute a pilot training and certification program.

The president will discuss with the field owner the problem of Ultralights using our new field.

Jack Overbaugh has given two 45-minute presentations to 5th graders at L.O. Jacob School.

Tim Karash

ACRC MINUTES

Board Members Present:

Virgil Okeson, Marc Tellevik, Stan Zdon, Tim Karash, Jeff Slater

Members present 19 (several familiar, long absent faces)

Guest - Dave Holter

Membership Report: 62 members paid so far

Treasurer's Report: NOTE: if you wish bank account balance info, please attend a meeting.

Income: \$1235.00

Expenses: \$120.00

Safety Report: None

Training Update:

Planes are in various stages of repair.

Additional instructors are needed, in particular ground school.

Tentative training dates of 4/17 to 9/25

Events:

Planned events for 2019:

Spring Fly-In 5/18 ***Date change from the March meeting***

Pattern - Jun 15 & 16

Fall Fly-Out - Oct 5

Monthly Fun-Flies - Saturdays after membership meeting

May Fun-Fly will be held on the morning of the Spring Fly-In

Brian Dorff will perform a Pattern Contest Primer during the Spring Fly-In

Old Business:

FAA ID numbers must be on the outside of all aircraft, however at this time, ACRC will not police. It's up to individuals to comply.

New Business:

Drone flying at the field. The board requests members to be respectful of others regardless of what they are flying.

Club sponsors run out as of March 2019.

No full-scale event at Anoka Airfield this year.

Show and Tell:

Paul Rono brought a V900 foamy. Very fast, easy



assembly. Flies well on a 3s1800 battery with an 8X8 prop. Purchase price includes the aluminum spinner. *Note - Photo on page 6.*

Jim Svare brought a work-in-progress Smud Duck. It's half size of a previous build of all foam. A pod-mounted motor is in the works.

Raffle:

1st	Marc Tellevik	Ammo/battery box
2nd	Virgil Okeson	FAA marker light set
3rd	Jim Svare	Digital Caliper
4th	Bob Barton	50 cal magnet/light
5th	Ed Belmore	Forceps
6th	Tom LaRose	Forceps
7th	?????????	Light set

Tim Karash

FACTS ABOUT BALSAS

Model airplanes are no different from any other type of flying machine, large or small. The lighter it is built, the better it will fly! With that in mind, it is easy to understand why balsa wood has been the standard material for model airplane construction since it first became readily available in the US in the late 1920s. Its outstanding strength-to-weight ratio enables hobbyists to construct durable models that fly in totally realistic manner. Balsa also absorbs shock and vibration well and can be easily cut, shaped, and glued with simple hand tools.

Where Does Balsa Wood Come From?

Balsa trees grow naturally in the humid rain forests of Central and South America. Its natural range extends south from Guatemala, through Central America, to the north and west coast of South America as far as Bolivia. However, the small country of Ecuador on the western coast of South America is the primary source of model aircraft grade balsa in the world. Balsa needs a warm climate with plenty of rainfall and good drainage. For that reason, the best stands of balsa usually appear on the high ground between tropical rivers. Ecuador has the ideal geography and climate for growing balsa trees. The scientific name for balsa wood is *Ochroma lagopus*. The word balsa itself is Spanish meaning raft, in reference to its

excellent flotation qualities. In Ecuador it is known as Boya, meaning buoy.

How Does Balsa Wood Grow?

There is no such thing as entire forests of balsa trees. They grow singularly or in very small, widely scattered groups in the jungle. For hundreds of years, balsa was actually considered a weed tree. They reproduce by growing hundreds of long seedpods, which eventually open up and, with the help of the wind, scatter thousands of new seeds over a large area of the jungle. Each seed is airborne on its own small wisp of down, similar to the way dandelion seeds spread. The seeds eventually fall to the ground and are covered by the litter of the jungle. There they lay and accumulate until one day there is an opening in the jungle canopy large enough for the sun's rays to strike the jungle floor and start the seeds growing. Wherever there is an opening, made either by a farmer or by another tree dying, balsa will spring up as thick as grass. A farmer is often hard put to keep his food plot clear of balsa. As the new balsa trees grow, the strongest will dominate and the weaker trees will die. By the time they mature, there may be only one or two balsa trees to an acre of jungle.

How Long Does It Take Balsa Trees To Grow?

Balsa trees grow very rapidly (like all pesky trees). Six months after germination, the tree is about 1.5 inches in diameter and 10 to 12 feet tall! In 6 to 10 years, the tree is ready for cutting, having reached a height of 60 to 90 feet tall and a diameter of 12 to 45 inches. If left to continue growing, the new wood grown on the outside layer becomes very hard and the tree begins to rot in the center. Unharvested, a balsa tree may grow to a diameter of six feet or more, but very little usable lumber can be obtained from a tree of this size. The balsa leaf is similar in shape to a grape leaf, only a lot bigger. When the tree is young, these leaves measure as much as four feet across. They become progressively smaller as the tree grows older, until they are about 8 to 10 inches across. Balsa is one of the few trees in the jungle that has a simple leaf shape. This fact alone makes the balsa tree stand out in the jungle.

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How Are Balsa Trees Harvested?

While nature intended the balsa tree to be a short-lived nursemaid, humans eventually discovered that it was an extremely useful resource. The real start of the balsa business was during WW I, when the allies were in need of a plentiful substitute for cork. The only drawback to using balsa was, and still is, the backbreaking work that is necessary to get it out of the jungle. Because of the way the individual balsa trees are scattered throughout the jungles, it has never been possible to use mass production logging procedures and equipment. The best way to log balsa trees is to go back to the methods of Paul Bunyan - chop them down with an ax, haul them to the nearest river by ox team, tie them together into rafts, and then float the raft of balsa logs down the river to the saw mill. The logging team usually consists of two native Ecuadorians, each armed with a broad Spanish ax, a machete, and a long pole sharpened like a chisel on one end for removing the bark from the downed trees. Because of the hilly terrain, an ox team may only be able to drag two logs to the river per day. At the saw mill, the balsa is first rough cut into large boards, carefully kiln dried, and finally packed into bales for shipment to the US via ocean freighter.

Why Is Balsa Wood So Light?

The secret to balsa wood's lightness can only be seen with a microscope. The cells are big and very thinned walled, so that the ratio of solid matter to open space is as small as possible. Most woods have gobs of heavy, plastic-like cement, called lignin, holding the cells together. In balsa, lignin is at a minimum. Only about 40% of the volume of a piece of balsa is solid substance. To give a balsa tree the strength it needs to stand in the jungle, nature pumps each balsa cell full of water until they become rigid - like a car tire full of air. Green balsa wood typically contains five times as much water by weight as it has actual wood substance, compared to most hardwoods that contain very little water in relation to wood substance. Green balsa wood must therefore be carefully kiln dried to remove most of the water before it can be sold. Kiln drying is a tedious two-

week process that carefully removes the excess water until the moisture content is only 6%.

How Light Is Kiln-Dried Balsa Wood?

Finished balsa wood, often found in model airplane kits, varies widely in weight. Balsa is occasionally found weighing as little as four pounds per cubic foot. On the other hand, you can also find balsa that can weigh 24 pounds or more per cubic foot. However, the general run of commercial balsa for model airplanes will weigh between 6 to 18 pounds per cubic foot. 8 to 12-pound balsa is considered medium or average weight, and is the most plentiful. Six pounds or less is considered "contest grade," which is very rare and sometimes even impossible to obtain.

Is Balsa The Lightest Wood In The World?

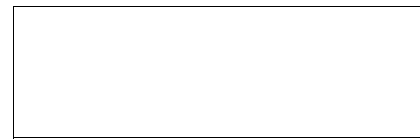
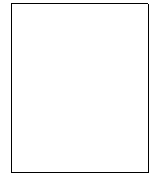
No! Most people are surprised to hear that botanically, balsa wood is only about the third or fourth lightest wood in the world. However, all the woods that are lighter than balsa are terribly weak and unsuitable for any practical use. The very lightest varieties don't really resemble wood at all, as we commonly think of it, but are more like a tree-like vegetable that grows in rings, similar in texture to an onion. It is not until balsa that there is any sign of real strength combined with lightness. In fact, balsa wood is often considered the strongest wood for its weight in the world. Pound for pound it is stronger in some respects than pine, hickory, or even oak.

*from RC Propwash
Ocala Flying Model Club
Dick Smith, editor
Ocala FL*



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ACRC SPONSORS

King Kong Hobbies
Woodworking Plus

CALENDAR OF UPCOMING EVENTS

Thursday – April 18

- ACRC Meeting-Riverwind

Saturday – April 20

- ACRC Fun Fly #1

Thursday – May 16

- ACRC Meeting-At field

Saturday – May 18

- ACRC Fun Fly #2

Saturday – June 15 & 16

- ACRC Pattern Contest

Thursday – June 20

- ACRC Meeting-At field

Saturday – June 22

- ACRC Fun Fly #3

