



SANDERSON FIELD R.C. NEWS



CHARTER NO. 3079

7th annual swap meet tables now on sale!

CLUB MEETING

*This months club meeting will be held
on Thursday September 12th. at*

PUD #3

**2621 E John's Prairie Rd
Shelton, WA**

Treasurers report was read and accepted as read.

Safety - it was recommended to get a metal bucket for damaged batteries. Be careful with clothing and lanyards when starting engines.

The Portapotty has been leveled and there is bee spray just inside the door.

The Port has logged the east end of the active runway in preparation for paving of the active runway, The Taxi way will become the temporary active runway while the paving is happening.

Event Review - Throw down, good turn out and no problems. They are looking forward to

doing it again next year. Fun Fly went well and was lots of fun. Dawn Patrol - Went well even though it was a little windy. Every one had fun. Faro scale qualifier, good turn out. There were 5 people from Shelton. We didn't do very well but it was fun. Tom and Lois Strom and crew did a great job with the food.

Upcoming events - Float fly at lake Isabella August 31st. Wenatchee Scale Championship August 23rd-25th. August 16th-18th at Arlington Balloon and airplane festival. For more info see Arlingtonflyin.org.



New business - Oysterfest applications have been filled out. Swap meet - November

9th. The swap meet is moving to a new location this year, the address is 9101 Steilacoom Rd. SE Olympia WA 98513. It's a little more expensive to start with the deposits but we get to keep the table revenue so we should do a little better. We need donations for the raffle, contact Dick Robb if you have anything.

We discussed having an extra club owned scale airplane available to take to events in the event someone can't fly their own for what ever reason. Paul Fleming and Dick Robb both offered to donate a plane towards this goal.

The club trainer situation was discussed with no resolution.

Christmas party location was discussed, the new facility at the Ridge race track might be an option.

Meeting adjourned 7:36

The runway will be closed starting the 25th for Oysterfest.

The PUD will NOT be available in October!

RECENT EVENTS

There were 3 big events last month, Throw down in the Sound at Sanderson field, Northwest scale Areomodellers scale qualifier at Faro Field and the scale championship at the Red Apple flyers field in Wenatchee.

Throw down - This was the same weekend as the qualifier at Faro field so I didn't attend. By all accounts it went well and Todd is planning on doing it again next year.

Northwest scale Areomodellers scale qualifier - This event was well attended and the weather was great. The group from the Sanderson field R/C flyers didn't do very well but we all had fun.

NWSAM Championship - I've been struggling with back issues so I didn't get to attend this event either but I understand it went well considering the wind was an issue. The wind was bad enough on Sunday that no one wanted to fly.

There was also a great float fly hosted by the lake Nahwatzel float flyers at Lake Isabelle on Saturday Aug. 31st. There was a little rain early in the morning but by 9:00 it had stopped and it was dead calm. It was just a perfect morning for float flying.



Scale qualifier at Faro field



Scale Championship at Red Apple Flyers

HOW TO CHOOSE A BATTERY CHARGER

by Terry Dunn

Modern chargers work with many battery chemistries. Check the full menu to ensure that you can charge all of your hobby batteries.

One of the key items for any aeromodeler, workbench or field box is a versatile battery charger. Just as the batteries we use have advanced dramatically throughout the past several years, hobby-grade chargers have undergone a similar evolution.

Modern chargers are extremely capable and versatile electronic devices. Unfortunately, many of them are also quite complex. Shopping for a charger can be confusing to anyone who is not up to speed with all of the latest technology and the associated lingo. Do not let the variety and complexity of chargers on today's market intimidate you. Asking yourself a few simple questions will allow you to quickly determine your charging needs. You then can focus your search and find the perfect charger.

What types of batteries do I use? Most modern chargers can charge several types of batteries, including NiCd (Nickel-Cadmium), NiMH (Nickel Metal Hydride), and LiPo (Lithium-Polymer). That is an extremely useful feature because we utilize many battery chemistries within the hobby. Do not assume that any multichemistry charger can handle all of your battery types.

I recently had to buy a new charger because none of my older units were capable of charging LiHV (Lithium-Polymer High-Voltage) cells. Perhaps you use a field box with a Pb (Lead-Acid) battery. Take stock of all of the batteries that you use. Seek out a charger that can handle them all. How many cells are in my batteries? In the blossoming days of electric-

powered RC aircraft (before LiPo batteries were practical), there was a phenomenon called the "Seven-Cell Trap." Most of the popular chargers of the time were designed to charge the six-cell and seven-cell NiCd or NiMH battery packs used in RC cars. Consequently, pilots who flew electric-powered aircraft were often limited to flying only aircraft that used those same six-cell or seven-cell batteries.

The advent of affordable high-cell-count chargers pried this trap open and paved the way for more diverse and powerful electric-powered models. Although the bar has moved significantly, the cell-count limitations of your charger can still be a determining factor for the models in your hangar.

If you only fly aircraft meeting the Park Pilot Program guidelines, this shouldn't be a problem. However, if you have a full AMA membership and you've been eyeing a big electric-powered heli, or a giant-scale electric airplane, you will need a charger that can refill the high-voltage batteries that such models require.

The manufacturer's specifications for a charger typically show the cell limit for lithium-based batteries in shorthand. For example, a cell limit listed as 6S means the charger can handle a battery with up to six cells in series. Keep in mind that high-voltage models do not necessarily use a single battery pack. For example, a large EDF model that requires a 10S LiPo battery can also be powered with two 5S batteries in series. In that case, a charger capable of handling 5S batteries will work just fine for you.

Modelers who enjoy ultramicro aircraft should also pay close attention to the cell-count limits of a potential charger. Some chargers have a two-cell minimum for LiPo batteries. Such

chargers are useless for the single-cell LiPo batteries found in many ultramicro aircraft.

How quickly do I want to charge? Although we often focus on the improvements seen in maximum discharge rates, many modern batteries can now be charged at elevated rates as well. The common charge time for a LiPo used to be one hour (1C rate). Some newer batteries can be safely charged in as little as 12 minutes (5C rate) or faster! Every minute counts when you're at the flying field and itching for another flight before sunset.

Having batteries that can handle a quick charge is only one part of the equation. You must also have a charger that will dish out the amps. Take note of a charger's maximum charge rate and the capacity of a given battery.

Let's say that you want the ability to charge a three-cell 2,200 mAh LiPo battery in 20 minutes (3C rate). This would require a charger with a maximum charge rate of at least 6.6 amps [$2,200 \text{ mA} (2.2 \text{ amps}) \times 3 = 6.6 \text{ amps}$]. Similarly, a four-cell 4,000 mAh LiPo would require 12 amps to charge in 20 minutes.

Multiport chargers are a big time-saver by allowing you to charge several batteries at the same time.

Some chargers include USB ports so that you can charge your phone and other electronic devices at the field.

Do I want AC input, DC, or both? Some chargers require a DC power source, such as a car battery or power supply. Others plug right into an AC power outlet. There are even chargers that will accept AC or DC input power. When deciding which type best fits your needs, you should consider the

HOW TO CHOOSE A BATTERY CHARGER (CONTINUED)

power sources you have access to. Even if you charge primarily at home, it is wise to consider what kind of power is available when you fly. You will likely want to skip any AC-only chargers if your flying field is off the power grid. Some clubs provide 12 volt DC power via solar-powered rigs so that you can use a DC charger at the field without having to power it with your car battery.

AC and AC/DC chargers are convenient for those who do have access to AC power. Just be aware that the built-in power supply of these types of chargers can limit their charging capabilities. You will likely find that the maximum charge rate for an AC/DC charger is significantly lower when using AC input power. It is probably not a factor for most hobbyists charging needs.

One common approach for charging with AC power is to use a DC charger connected to a beefy 12 volt external power supply. You will probably want a power supply that can deliver at least 10 amps of current. Adequate power supplies can be pricey, but there are affordable options. It pays

to see what others are using and shop around.

Although a 12 volt input source is used most often, many high-power DC chargers can accept sources of 30 volts or more. That kind of input voltage is often necessary if you intend to quick-charge high-voltage batteries. These setups are for advanced users because they demand a substantial power supply (or multiple power supplies in series). I feel that 12 volt power sources are more than adequate for most hobbyists.

How many charge outputs do I need? I like to charge all of the batteries that I need for an outing just before heading to the field. Several of my friends prefer to charge at the field. In both of those cases, a multiport charger can be a real time-saver. My primary charger has four charge ports. This allows me to charge four separate batteries, each with a dedicated charging circuit, at the same time. This is different from parallel charging, where multiple batteries are charged concurrently on the same circuit (a practice I do not recommend).

A four-port charger like mine is prob-

ably overkill for a lot of modelers. Two ports might do the trick for you. Or perhaps you only need one port. It all boils down to how many batteries you want to charge at the same time.

Now dig deeper. If you have worked through the questions I've addressed, your field of potential chargers should have narrowed considerably. Now it's time to examine each remaining candidate in more detail and make a decision.

Factors such as physical size and shape might come into play. You should also look at the extra features found on newer chargers. Some have USB ports and wireless charging capabilities for your cellphone and other devices. There are even chargers that allow you to monitor the charging process through your cellphone. And of course, there is always the price to consider.

Don't forget to pick up any charge leads and balance adapters you might need. Happy shopping and safe charging!

DUES ARE \$75 IF PAID BEFORE JAN 1ST, \$100 THEREAFTER.

IF YOU PAY BY MAIL SEND YOUR DUES, PROOF OF 2019 AMA MEMBERSHIP AND A SELF ADDRESSED STAMPED ENVELOPE TO THE TREASURER:

**MARK PENTONY
180 E VUECREST DR.
Shelton WA 98584**

Make checks payable to SFRCF

CLUB OFFICERS

President.....	Dave Windom	(406)283-1916
Vice President	Jody Diaz.....	(360)427-6102
Treasurer	Mark Pentony	(360)898-5951
Secretary	Bob Beatty	(360)229-3408
Safety Officer	Todd Pepin.....	(352)232-4283

BOARD MEMBERS

Board Member	Dave Windom	(406)283-1916
Board Member	Jody Diaz.....	(360)427-6102
Board Member	Bob Beatty	(360)229-3408
Board Member	Mark Pentony	(360)898-5951
Board Member	Todd Pepin.....	(352)232-4283
Alt Board Member	Dick Robb.....	(360)427-4521
Alt Board Member	Jeff Sterba	(360)490-5800

September 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 9:00 AM RC Breakfast 9:00 AM Club Fly-in	2 SFRCF Board meeting	3	4	5 1:00 PM Training	6	7 closed runway Vipers
8 Closed Runway NWACC	9	10	11	12 SFRCF Club meeting 1:00 PM Training	13	14 Closed runway WWSCC 6:00 PM Warbirds over Wenatchee
15 ... Warbirds over Wenatchee	16	17	18	19 1:00 PM Training 7:00 PM Float club meeting	20	21 Closed runway WWSCC
22	23	24	25 PUD Unavailable OCT 10 9:00 AM Skookum Rotary	26 ... Skookum Rotary 1:00 PM Training	27 ... Skookum Rotary	28 ... Skookum Rotary
29 ... Skookum Rotary	30 ... Skookum Rotary	1 SFRCF Board meeting	2	3 1:00 PM Training	4	5

Pacific Time Time Zone

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Training nights are ALWAYS weather permitting, check the weather at the field before leaving
 Sold days can change, check out the website before heading to the field.

<http://sfrcf.quintex.com/event/events.html>

Club Scheduled Events for 2019

Event dates in black are scheduled. Events in gray are complete.

The new contract allows us to schedule non-exclusive days again, however if the car clubs don't go to the new track we may not keep many.

- April 28thRunway repair - Sanderson Field
- June 1st Winter build Challenge - Sanderson Field
- June 2nd.....Jets and Ducted fans + general flying - Sanderson Field
- June 22nd.....Float fly, hosted by Lake Nahwatzel float club 9:00am
- July 4thClub fly-in - Sanderson field
- July 6thDawn Patrol and Golden age fly-in - Hunters
- July 13th.....Float fly, hosted by Lake Nahwatzel float club 9:00am
- July 19thScale practice, Judging and flight - Sanderson Field
- July 20 and 21stGeneral fly-in - Fun fly - Sanderson field
- August 10Club fly-in - Hunters
- September 2ndLabor day fly-in - Sanderson Field
- Nov 9thJoint Swap meet - Washington land yacht harbor 9-3
- December 12th.....Christmas Party @ ?????? from 6 to 10

dues \$75 before January 1st and \$100 on or after

Check out our web site at <http://sfrcf.quintex.com>