

THE SLOW ROLL

OCTOBER 2018

President—Lou Pfeifer IV

Vice President—Andrew Schear

Treasurer—Dan Smith

Secretary—Robert Poe

Editor—Bob Purdy



CHARTERED #921
Since DEC. 1974



*The Slow Roll is published by the Sun Valley Fliers by
and for its membership to all others interested in the
building and flying of radio control aircraft.*



Be SUN SAFE



Inside this issue: Cover Photo by Bob Purdy of John Wanner

WARBIRDS
AMA/MUNCIE
RENO
FOKKERS

No Videos

POWER?
SVF SUNDAY

President Report
Birthdays
Board Meeting
Minutes

SVF MEETING OCTOBER 3, 2018

SVF CLUB Starting 43 years



Presidents

Report For October 2018

Hello all;

Not much to report this month. Everything is well. As you are all aware of the Solar Station is still down and now with the weather starting to change for the better Bob True And Andrew Schear will be trying to get it back up and better than before.

Bob True Membership Director asked me to tell you that the 2019 Membership renewal is now OPEN! The Board and I will have the 2019 STICKERS for those who renewed. The site is all ready to go for renewals. The Process will be exactly the same as last year and it was flawless! Try to remember to renew and as always there will be a late fee imposed after January 1st 2019. Thanks Bob for all the hard work!

We will be trying to get bids on the well needed runway repair project. I will be working with Danny Smith to try and secure bids so we can get everything in place for this winter project.

Andrew Schear and I will be hosting our Annual Family Fly-In Event on Saturday December 1st. We chose this date so we have no conflicts with other scheduled events so everyone can attend. It will be even better than our last 2!! I will be sending out more info as we move closer.

Well that is about it. Our Monthly scheduled Membership Meeting is on Wednesday October 3rd at 7; 00 PM. As usual we are looking for more membership participation. Please try and attend. Remember the members run the club!!!

*Lou Pfeifer N.
President*



09/05/2018 MEMBERSHIP MEETING MINUTES

Call to order: 7:05pm

Officers: President- Lou Pfeifer, Secretary- Robert Poe

Board Members: Jamie Edwards, John Geyer, Wayne Layne, Wayne Robinson, Bob Santoro.

Absent: Danny Smith, Bryant Mack, Ernie Mack, Frank Moskowitz, Bob True.

Open: Tony Quist was presented with an achievement award by Lou for his dedicated service to SVF. Well deserved Tony - we hope you will continue on with your great work!

Guests: John Knight and Chase Knight (son) were welcomed.

New Members: None

Solo Pilots: John Long

Secretary's Report: Robert Poe Approved August's Report 1) Wayne Layne 2) Jeff Buck

Membership Report: Bobby Santoro

1. Talk about changes made by Bob True to membership. Registration is now open at 9/1/18, so far no renewals but early in season. New applicants carried thru EOY, no proration of dues.

Treasures Report: Danny Smith (absent) Approved August's Financials 1) Dan Crum 2) John Geyer

Safety Officers Report: Ernie Mack (absent) NONE

Old Business:

- 1) Getting bids for runway and waiting on funds from renewal to determine level of funds needed. Will do the resurfacing in winter, base may be over 40 years old per Tony Quist.
- 2) Solar charging project repair and upgrade is going ahead when weather and time permits.
PLEASE NOTE: THE SOLAR CHARGER IS NOT OPERATIONAL AT THIS TIME AND THE FIELD TEAM IS FULLY AWARE OF IT. THERE ARE NO CHARGING FACILITIES AT FIELD SO IF YOU WANT TO FLY CHARGE ALL BATTERIES AT HOME.
- 3) Will be installing new wind sock and new pole soon when time and weather permit, new wind sock and flag will be installed as well.

New Business

- 1) BOD to arrive at date for Family Fly-In. Project was approved but needs a date. Possible early December date was discussed as few events around then.
- 2) Spotters are needed if one is available, please volunteer if you see a need!
- 3) Spencer Key related his experience with a commercial drone company testing at SVF field apparently without authorization. He was denied access to helicopter area of field due to the commercial drone company taking all the bench space and told to leave by non member. Field is a recreational model flying only site and BOD will discuss further action on this matter at the meeting. Commercial purpose flying of UAVs at SVF field are not allowed as a general rule. Part 107 licensing does not allow flying at field either.

Door Prizes: Jamie Edwards, Jeff Buck, Bruce Brettschneider, Robert Poe, Wayne Lane, Tony Quist

50/50 Raffle: Robert Poe (Donated back to runway fund)

Show and Tell: None

Adjourn at 7:49 pm 1) Dan Crum 2) John Geyer

Bob Poe, Secretary



09/10/2018 Board Meeting

Call to order: 6:31pm

Officers: President- Lou Pfeifer, Secretary- Robert Poe, Treasurer- Dan Smith

Board Members: Ernie Mack, Frank Moskowitz, Wayne Robinson, Bobby Santoro, Bob True.

Absent: Jamie Edwards, John Geyer, Wayne Layne, Bryant Mack.

Open: Discussed BOD attendance issues and no action at this time

Guests: None

Secretary's Report: Robert Poe Approve August's Minutes 1) Lou Pfeiffer 2) Wayne Robinson

Treasures Report: Dan Smith Approve Financials for August. 1) Robert Poe 2) Frank Moskowitz

Safety Officers Report: Ernie Mack. None

Membership Services: Bob True/ Bobby Santoro.

1. Discuss Membership and site update. Site is open for Membership renewal for 2019. No renewals posted as yet. Site is open from 9/1/18-12/31/18 for renewals.

Old Business:

- 1) Discussed date for Membership fly-in. Lou and other BOD members had checked on other conflicting events and it appears Saturday 12/1/18 will be the best pick for a date.
- 2) Runway project is open for bids now, will be extensive project. Lou to follow up on bids.
- 3) Solar charging system will be repaired AND upgraded but waiting for cooler weather. Need to make membership aware that the system is currently OFFLINE and the field team is aware of it. Charge all batteries at home as there is no system at the field currently.
- 4) Flag pole and windsock installation will begin with cooler weather. US Flag and windsock to be ordered.

New Business:

- 1) The BOD discussed Commercial use of Drones at our field. Spencer Key relayed his experience at the field when he was attempting to access the helicopter area of the field for recreational flying and was asked to leave the area so the commercial drones could fly. There have apparently been several incidents of this type at the field. Field is recreational only. It is suggested that officers and BOD members confront the commercial drone operator/SVF member and request AMA card, FAA card and SVF membership endorsement and explain the rules of the field in regards to commercial operation and nonmember supervision of guests. BOD will monitor this situation for any other incidents going forward and take action as needed.

Adjourn at 7:29 pm 1) Wayne Robinson 2) Dan Smith

Bob Poe, Secretary

What's Happening



Lou presenting Tony Quist the appreciation award from the SVF



Lou receiving his Solo Turbine from Tony



Lou presenting John Long his Solo Award
Congratulations John!



Ken is telling us it was hot/warm up in Colorado for the WOR at 92 degrees

SVF SUNDAY IN SEPTEMBER



Wayne Robinson with Tony doing the maiden flight on Wayne A-10



SVF Sun Valley Fliers



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\$40: PILOT REGISTRATION INCLUDES:

3 DAYS OF FLYING | SATURDAY EVENING DINNER | SWAG BAG

TENT SPACES ARE AVAILABLE AT NO CHARGE BUT ARE FIRST-COME, FIRST-SERVED.

SEPTEMBER 14–16, 2018

INTERNATIONAL AEROMODELING CENTER,

MUNCIE IN (SITE 3)

FRIDAY:

10 A.M.–6 P.M.

SATURDAY:

8 A.M.–6 P.M. | DINNER AT 6 P.M.

SUNDAY:

8 A.M.–NOON



AMAFoundation.ModelAircraft.org/FunFly

Prepping & Loading for the Eastern Swing

Prepping and loading for the RC eastern swing with Ken Rhoads, Jim Spice and Dan Bott. Transferring helicopters from trailer to rental car for Jim to drive down to Dalton, Georgia for a scale helicopter gathering.

Kenny Rhoads and I continued onto Litchfield, Illinois for the Route 66 Jet Rally. It got shortened a day with rain and high wind.

Jim Spice reconnected with us on Sunday evening in Muncie. Kenny flew back to AZ to pick up his trailer to drive to warbirds in Denver.



AMA Foundation Fly In



Photos by
Jenni Alderman
And
others

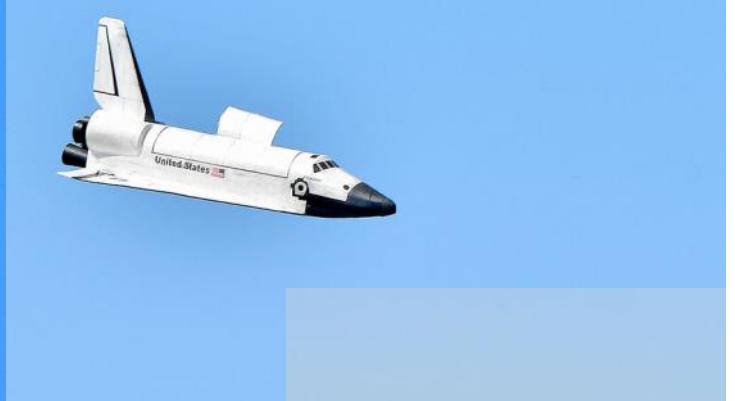


AMA Foundation Fly In



Photos by
Jenni Alderman

AMA Foundation Fly In



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Photos by Jenni Alderman and others

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Full scale Fly-overs - **P-51** and **T-33**
Friday, late afternoon.

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AT ABOUT 1PM



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- Food, R/C vendors and more!
- Net proceeds goes to COLORADO MENTAL HEALTH.

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warbirdsovertherockies.com



Warbirds Over The Rockies



Shocked to win best paint and markings for my Fiber classics Old Crow P-51. **Tony**



Arthur Gambino Stuka



Tony Quist Cougar fly by



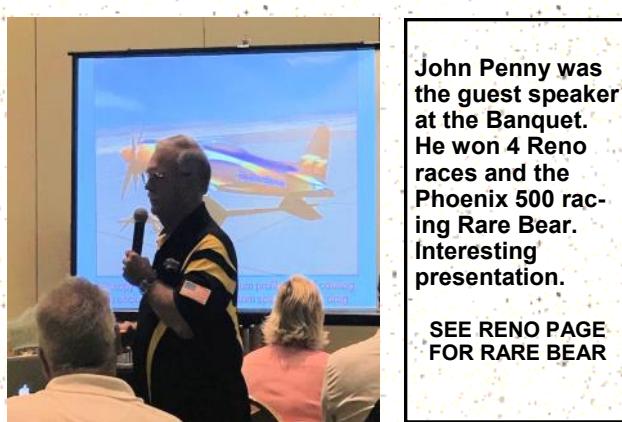
Wayne Layne Spitfire



Keith and Ken ready to go



Why isn't Ray out at the flying field?



John Penny was the guest speaker at the Banquet. He won 4 Reno races and the Phoenix 500 racing Rare Bear. Interesting presentation.

SEE RENO PAGE FOR RARE BEAR



Warbirds Over The Rockies



This B-17 was used in making of the movie MEMPHIS BELLE



SF Sun Valley Fliers



NATIONAL CHAMPIONSHIP
AIR RACES
AND AIR SHOW

Photo credits go to Al Dixon a friend of Bob Poe SVF



SVF
Sun Valley Fliers

WHAT'S GOING ON



**2018 HIGH DESERT FLY-IN
SATURDAY, OCTOBER 13
8 AM TO 12 NOON**

WINSLOW-LINDBERGH REGIONAL AIRPORT, 701 AIRPORT ROAD

ACTIVITIES: Pancake Breakfast (8 to 10 am; \$6), Historic and Specialty Aircraft on the Tarmac, Complimentary Plane Rides for Kids (8 to 11 am; waiver required), Car Club Show-and-Shine, Flying Fun Kids Area with hands-on activities, Flying Through History Area, High Desert Silent Auction

FOR PILOTS: Free Breakfast, Gift Bags, Fuel Sale, Safety Seminar

FLY-IN ANGELS: All are invited to donate new or gently-used winter outerwear & accessories to Winslow Head Start's 4-to-6-year-old kids.

GO TO WWW.HIGHDESERTFLYIN.ORG AND FACEBOOK FOR DETAILS!



**2018 FLY BACK IN TIME GALA
SATURDAY, OCTOBER 13
6 TO 9 PM**

WINSLOW-LINDBERGH REGIONAL AIRPORT, 701 AIRPORT ROAD

TICKETS: Purchase your \$25 ticket from the Winslow Chamber, Winslow Airport, or High Desert Fly-In Website (below)

ACTIVITIES: Buffet Dinner at 6:30 pm, Dancing to Flagstaff's Big Band Connection, Vintage Threads Costume Contest, Vintage Candy Terminal, High Desert Silent Auction

FLY-IN ANGELS: All are invited to donate new or gently-used winter outerwear & accessories to Winslow Head Start's 4-to-6-year-old kids.

GO TO WWW.HIGHDESERTFLYIN.ORG AND FACEBOOK FOR DETAILS!





THOSE CANADIAN FOKKERS

by EDWARD PETER SOYE

WAR TROPHIES AND THE NASCENT CANADIAN AIR FORCE

<http://www.vintagewings.ca/VintageNews/Stories/tabid/116/articleType/ArticleView/articleId/38/Those-Canadian-Fokkers--War-Trophies-and-the-Nascent-Canadian-Air-force.aspx>

Pick your power: electric, gas or glow!

Getting Started, Power Systems

There's an old saying that suggests, "If in doubt, add power!" And we have to admit, there are some *Model Airplane News* editors who do believe there's just no substitute for horsepower. But when it comes to selecting which kind of power system to use, many RC modelers can use a little help. *Model Airplane News* has published many articles on various power systems, and so we thought we'd round up some of the setup and operation tips and techniques used for gasoline, glow, and electric power systems. If you're looking for something to power your newest project, this article highlights some of what's involved and what you'll need to know to be successful.

GASOLINE

RC engines that use gasoline are no different in operation as those in chainsaws and leaf blowers. If you treat them properly and set them up correctly, they will run reliably. Gasoline engines come in a variety of displacement sizes, and all of them are easy to start and are user-friendly. One of the more important tasks is to set up the throttle linkage and the throttle servo's endpoints (travel) so that the carburetor opens and closes completely over the entire throttle stick's travel. Avoid setups where the carburetor is fully open when the throttle stick is not at full power. And remember, if your engine begins to act up and run erratically, land immediately or, if still on the ground, don't take off. Make sure that all the screws and bolts for the carburetor and muffler are tight and then check your fuel lines, filters, and carburetor.

NO BREAK-IN NEEDED

Gasoline engines have been around for a long time, and they are viewed by many as the best choice for ease of operation. The best thing about gasoline engines is that they are designed to be run without first having to be broken in like glow engines. Bench running is not so much about breaking in your engine as it is about getting to know your engine and not being rushed at the flying field.

PROPER FUEL MIXTURES

When it comes to lubrication for gasoline engines, just like with any 2-stroke, you need to mix oil into your gas. The best thing to do is to read the instructions and follow the manufacturer's recommendations. Typical mix ratios are from 25:1 to 50:1, depending on the oil used. Some specialty synthetics can be mixed at 100:1. There are lots of great-performing, high-quality standard 2-stroke engine oils to choose from, and if you can't find something at your local hobby shop, you'll find them in small-engine shops and motorcycle- and marine-equipment outlets.

"I have been flying with gasoline engines since the late 1980s, and I have enjoyed excellent performance and extended engine service while using Honda HP2 high-performance synthetic 2-stroke engine oil. I have never had any fouled carburetor passages, and even after the engines have sat idle for years, they fire right up." —Gerry Yarrish

Regardless of the fuel-to-oil mixture ratio you use, it is important to use good-quality oil. Cheap oil can risk the health of your engine. The 40cc RCGF 40T engine is shown at the lower left.

It is very important to keep your gasoline engine fuel clean and stored in a container that has a filter in the supply line.

"After 24 years of servicing giant-scale gas engines, we strongly recommend Redline Two-Stroke Racing Oil, mixed at 40:1 for all Desert Aircraft engines. It leaves little to no residue in the engine, while lubricating extremely well. Ring grooves stay clean, eliminating stuck ring issues, and bearing life is excellent." —Dave Johnson

CARBURETOR ADJUSTMENTS

Even when using gasoline-grade fuel tank hardware and fuel lines (Sullivan Products shown here), be sure to secure the fuel line inside and out with some clamps or cable ties, as shown here.

We all know that you don't want to run any engine lean! This overheats your powerplant and can lead to expensive engine damage or, even worse, the loss of your entire airplane. With new engines, it is wise to use a test stand before bolting the engine to an airplane. This way, it's easy to work out linkage setups and fuel-line clear-

ances and to test various propellers using a digital tachometer. Set the top end for maximum rpm without going too lean in the fuel mixture. For the idle adjustment, adjust the idle setscrew for as low and reliable rpm as possible while maintaining a smooth transition to full power.

SPARK PLUGS

"Our common 2-stroke gas/oil mixture engines used in giant-scale models are pretty simple to troubleshoot. All they need are air, fuel, and spark to make them come alive. If an engine won't start or even "pop," you may have a spark issue. There are two types of spark-producing accessories on our engines, Magneto and ignition module, but before you dig any deeper, check out the spark plug. Is there fuel present on the electrodes? Also, what is the condition of the spark plug? There have been times when my engine would not start due to carbon bridging—a carbon deposit between the ground and center electrode. This is a good indication that you are running an oil-rich mixture. Once removed and cleaned, you're back in business."—*Sal Calvagna*

PROPER FUEL LINES

"Always use only a gasoline-grade fuel tank, fuel lines, and fittings. You might get away with not doing so once or twice, but if you use a silicone 'glow fuel' system setup, the gasoline will degrade it. Eventually, the tank stopper and fuel lines will begin leaking, or worse, the goo in the tank will clog your carburetor. Always use Tygon or other fuel line specifically designed for gasoline. Even when using the correct type of fuel line, remember that, over time, they will become hard and lose flexibility. It is a good practice to change internal fuel tank 'clunk' lines because of this. Don't forget, also, to secure your lines with tie wire or zip-ties."

—*Kevin Siemonsen*

If your gas engine suddenly becomes harder to start and the carburetor more difficult to adjust, check the internal fuel screen under the side plate. Chances are that it is dirty. So clean it or, better yet, replace it with a new one.

While setting up your gasoline engine and adjusting the carburetor settings, it is best to bench-run the engine before installing it in your giant-scale airplane.

MULTIENGINE SUCCESS

"The most important thing to consider when flying twins is engine reliability. I have hundreds of flights on my P-38 and my Black Widow and have never suffered an engine-out. This is because I take the time to set the engines up properly. To keep the engines running reliably, you must supply them with clean fuel. I see it all the time at the flying field: An engine quits because the filter screens inside the carb are clogged and fuel flow suffers. I always use two filters in my fuel container: a felt clunk filter and an in-line paper filter. Clunk filters backed up with in-line filters between the engines and the model's fuel tanks are standard equipment on all my models. Clean, well-filtered fuel is also very important for glow-engine aircraft. I use industrial-grade filters that you can buy at most small-engine and lawn-mower shops. They are good insurance and should always be used." —*Nick Ziroli Sr.*

GLOW

The typical model airplane engines used for decades, glow engines using methanol-based fuel are the gold standard for all sizes of model airplanes. From small .049ci to over 2ci (and larger) displacements, glow engines get the job done. In simple terms, 2-stroke glow engines are popular because they have relatively few moving parts, do not require a separate ignition system, and are easy to start and maintain. When properly broken in and tuned, they produce amazing power.

The proper care and feeding starts with the break-in, and this will take several tanks of fuel, depending on the type and brand of engine. The type of engine you have is usually identified with three letters (ABC, for example), which refers to the kinds of materials that the engine's piston and sleeve assembly are made of. "ABC" means an aluminum piston (A) fitted into a brass sleeve (B) that has been chrome-plated (C). Another popular type of glow engine is an "AAC," which refers to an aluminum engine (A) fitted into an aluminum sleeve (A) that has been chrome-plated (C). Some engines use simple aluminum pistons, while others can be equipped with a steel piston ring, so it is always best to follow the engine manufacturer's recommendations for break-in.

BREAK-IN

Glow engines come in various sizes and setups. This Evolution .60 2-stroke comes with a separate high-end needle valve behind the engine. It is connected to the carburetor with a short length of glow-fuel-compatible fuel line.

Engine break-in is the process of slowly conditioning the internal parts of the engine so that they fit more precisely together. Even though some manufacturers suggest that you can break in your engine while flying your model with a rich fuel mixture, it's a lot safer—and you will have more control over the first few initial engine runs—if you run it on the ground with the airplane secured by the tail. Keep your glow engine fed with clean, filtered fuel. Install a fuel filter between the engine and the fuel tank, and use another filter in your fuel-supply container.

At the end of the day, empty your fuel tank and run out the last bit of fuel in the tank by running the engine. Never leave old fuel in the tank for long periods of time. Also, use some after-run oil after the last flight of the day. Adding a few drops down the carburetor and into the glow plug hole will lube the piston and sleeve assembly and prevent corrosion. And if your engine has been running properly and suddenly quits or it won't readily start up, replace the glow plug.

Once your airplane is built and your engine installed, be sure to use a quality fuel and use the same nitro percentage during break-in that you intend to fly with.

Regardless of the size or brand of glow engine that you install in your airplane, it is very important to break in the engine before you use it to power your model.

"For break-in, use fuel with the same nitro percentage as you plan to fly with. Why? Generally, the more nitromethane a fuel contains, the higher the cylinder-head temperature will be. Higher cylinder-head temperatures mean greater expansion for the upper cylinder and, to some degree, the piston. If you break in an engine with 5% nitro fuel, it will actually be too loose when 15% nitro is used because the cylinder expands faster than the piston as temperatures increase."—*Dave Gierke*

CARBURETORS

When breaking in an engine, it is important not to run an ABC engine excessively (slobbering) rich. This is because the engine will run far cooler than designed to at normal operation. The engine's internal clearances are tighter when cold. Running the engine below designed operating temperature will promote premature wear. It is best to use a tachometer to read the engine's speed while leaning out the high-end mixture. When you get to a point where further leaning creates no further increase in rpm, stop leaning the needle. Now, turn the needle clockwise to richen the mixture to produce a 200 to 300rpm drop.

"If you don't have a tachometer, you can also perform the 'pinch test.' At full power, start leaning out the fuel mixture and then pinch the fuel line. The engine should momentarily speed up. Keep doing this until the engine stops speeding up when you pinch the fuel line. Now richen the needle setting a few clicks richer, and you are good to go. As a last resort, you can raise the nose of the airplane vertical and see if there is any difference in engine rpm. If the engine rpm lowers ('sags') with the nose up, the engine is too lean. Richen the needle a few clicks, and repeat." —*Kevin Siemonsen*

PROPELLERS

"To minimize vibration, always balance your propellers and never try to repair or glue a damaged one. Vibration increases wear and tear on the engine's bearings as well as the rest of your airplane's parts and radio equipment. Also be sure to select the correct propeller from the recommended range specified by the engine manufacturer. Running a prop that is too big can lead to overheating, while a propeller that's too small can allow the engine to over-rev, further affecting overall performance. Again, follow the instructions, and experiment with size and pitch values to fine-tune your airplane and engine combined performance. For safety while starting your engine, use an electric starter or a chicken stick."—*John Reid*

ELECTRIC

The best way to keep your glow engine happy and running reliably is to use a quality fuel and install fuel filters in both the model between the tank and the engine as well as in the fuel supply line used to fill the tank. A Du-Bro Products filter is shown here.

More than ever, we are today enjoying a true golden age of RC electric flight. The amount of quality motors, bat-

teries, controllers, and connectors seems limitless as are the types and sizes of airplanes you can fly with electric power. Even though there are plenty of ready-to-go packages where you get everything needed in one box, some can find it difficult to get started. If you've never tried an airplane with clean electric power, here are some basics points that you need to know.

To be successful, you need to look at your model's entire power system as a whole—one that will work together for maximum power and efficiency for the plane you are flying. And you have to understand how much power is needed to fly your plane safely. Whether you're flying a lightweight microflier or a large 3D aerobatic plane, its performance is based on the amount of power that it develops relative to its ready-to-fly weight. If you are putting your plane together with a separate airframe and power-system components, then you have to know what will work together.

WATTS PER POUND

If a nitro-burning glow engine had a heart, it would be its glow plug. There are several types available, so start with your engine manufacturer's recommendation.

This categorization is a loose, flexible way to estimate the amount of power that you'll need for a specific-size airplane while giving the performance required for safe flight. The rule is really just a guideline to determine how many watts of power are needed per pound of airplane weight and is expressed as W/lb. Here are some commonly accepted numbers (fast fact: 746 watts = 1hp):

- **50 W/lb. or less**—very lightweight micro RC and slow fliers
- **50–75 W/lb.**—sport powered sailplanes and gliders, basic trainers, lightweight scale planes, vintage RC fliers, and RC Assist-Free Flight designs
- **75–100 W/lb.**—basic sport fliers, intermediate aerobatics, scale low-wing designs, and medium-size warbirds
- **100–150 W/lb.**—advanced aerobatics, pattern flying, 3D planes, larger warbirds, and jets
- **150–200 W/lb. or more**—unlimited 3D aerobatics, warbirds, and large jets

Brushless motors have all but eliminated the use of older, brushed motors. When it comes to setting up your electric airplane, the motor that you use needs to be compatible with the rest of your power system.

CHARGING AND C RATINGS

Compared to the NiMH and NiCd, the lithium polymer (LiPo) battery packs have totally altered our definitions for power and flight duration. Where the older types of batteries offered 1.2 volts per cell, (1V under load), LiPo cells offer a nominal voltage of 3.7 volts per cell, and they provide much larger capacities (C ratings) along with an impressive weight saving. More voltage, more capacity, and lighter wing loadings have really improved our airplanes' flight performance.

Unlike other types of batteries, LiPo batteries can be stored for one to two months without significantly losing charge. LiPo batteries should not be trickle-charged, and the typical maximum and minimum voltage for LiPo cells should be 4.23 and 3 volts per cell, respectively.

Great care is required when using LiPo battery packs. Overcharging a LiPo battery can cause the pack to burst and vent violently and can cause the pack to catch fire. As for overdischarging, most speed controls allow you to set a low-voltage cutoff or use the default, which varies by manufacturer. Three volts is the absolute minimum anyone should use as allowing LiPo cells to go below this voltage will damage them. As with any high-energy electrical equipment and battery packs, you should always carefully follow the manufacturer's instructions for proper use.

"LiPo batteries must be properly charged with appropriate chargers to extend their life span and optimize their capabilities. Many manufacturers now produce packs that can be charged at very high rates and discharged at extreme rates. It's common to see charge rates listed as 5C or higher and discharge rates at 45C continuous and even 90C bursts. For the absolute best service from your packs and to increase their longevity, it's still best to charge at the 1C rate (example: 3.3A for a 3300mAh battery). Discharges are best kept within the continuous discharge rating and bursts only used for emergencies. Proper chargers should provide constant cell monitoring and balance charge capabilities."—Greg Gimlick

The fuel tanks for electric-powered airplanes are the battery packs. They are available in various voltag-

es and capacities. Knowing their C-ratings is also very important.

For electric-power systems, the speed control that you use needs to match the requirements for your motor and the type of airplane performance you are looking for.

BALANCING BOARDS

“Never charge a LiPo pack without the balancing board plugged in. There is no reason to charge without balancing a pack. This keeps all the cells even, allowing them to work together with less stress on each. A balanced pack will always outlast a pack that has never been balanced. Keep this in mind: Almost every new charger has balancing ports for keeping the packs balanced.”—*John Reid*

ARMING SWITCHES

An excellent way to make operating your electric airplane safer is to add an arming switch to your power system. It is a simple way to safely install your battery pack without bringing the speed control online until you get to the flightline and are ready to fly. These switches and plug-in connectors are made by a number of manufacturers and are easy to install.

“While working on the workbench, another excellent safety tip is to remove the propeller from the motor. This way, should you accidentally switch on your power system or bump the throttle stick while the radio is on, the propeller won’t cause any damage or injury.”—*John Reid*

BOTTOM LINE

Always use a balancing board when charging LiPo battery packs. There are several types available, so matching the connector to your battery pack shouldn’t be a problem.

As with anything else about our hobby, before you make a major purchase, you first need to know the basics. It is always good to ask friends who have used the power system that you are thinking about and see how they liked it. And when it comes to accessories and hardware, don’t be price-driven; look for the best recommendations and pick the best quality you can use within your budget. Match your engine- or electric-powered system to the airplane that you want to fly, and treat it with care so that it lasts a long time.

Updated: November 22, 2017 — 12:35 PM

OCTOBER 2018 SVF Birth Day Boys

Robert Purdy

Robert Santoro

Craig Guest

Ken Justice

Robert Ritchey

Brian Chamberlin

Neil Wallis

Dennis Keith Hoffman

George Metro

Harold Meeker jr

Ramon C Rosenkrans

Kenneth Rhoads

Howard Buxton

Abe Mirich

David Thielman

Mike Rogers

Dean Brox

Steve Miller

Rick Paquin



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Mon-Fri 9:00 AM — 8:00 PM

SAT 10:00 AM — 8:00 PM

SUN 11:00 AM — 6:00 PM



8058 N. 19th Ave. 602-995-1755 Phoenix

M-F 9:30-8PM, SAT 9:30-6PM 11-5PM

4240 West Bell Rd. 602-547-1828 Glendale

M-F 9:30-9PM, SAT 9:30-6PM, SUN 11-5PM





THE SLOW ROLL



Club Officers 2018-2019

Lou Pfeifer IV, President
Andrew Schear, Vice President
Dan Smith, Treasurer
Robert Poe, Secretary
Safety Officer Ernie Mack

Bobby Santoro
Website Supervisor
**Please check your
Membership list for
Phone numbers.**



Board of Directors

Wayne Layne '17-19
Jamie Edwards '17-19
Bryant Mack '17-19
Bob True '17-19
Wayne Robinson '18-20
Bobby Santoro '18-20
Frank Moskowitz '18-20
John Geyer '18-20
Ernie Mack '18-20



First Class Mail

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To:



SINCE DECEMBER 1974