



PEAK CHARGE

Newsletter of the Silent Electric Flyers of San Diego

1994 Officers

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Club meetings are held on the third Tuesday of each month at the Serra Mesa Recreation Center, 9020 Village Glen Drive, San Diego, at 7:15 pm. Full membership is open to all Academy of Model Aeronautics (AMA) members. Next meeting: Tuesday, July 19th, 1994. Next Fun-fly: 8:30 am, Saturday, July 23rd at Dusty Rhodes Park, SW corner of I-8 and Nimitz Blvd.

Volume IV, Number 7, July 1994

MINUTES OF THE JUNE MEETING

The meeting was called to order at 7:40. The President, Vice-President, Secretary and Treasurer were present. A total of 13 members attended.

1. **Guest:** **Brian Jones**, a friend of one of the members, introduced himself.
2. **Mission Bay Park Flying Site:** Unfortunately, no progress has been made on the Right of Entry permit. **Steve M.** was told by the bureaucrats that it would do no good to pursue the matter until the work on the site was complete. As for the site, the dredges have returned because some part of the previous dredging was done improperly. Also, the earth moving equipment continues to smooth it out. Reports are the site looks pretty good.
3. **E-Power Conversion:** The Major Hobby's Fantasy kit has been received. The kit will be divided up shortly and given to the volunteers to build. **Bob Kreutzer** will be assembling the wing, **Wayne Walker** will put the tail feathers together and cover the entire model, & **Steve Belknap** will assemble the fuselage. The electric modifications are mainly to move the receiver and battery out of the way to accommodate the 18-cell battery pack and to eliminate the throttle servo and gas tank. Also, the plane will be built as a tail dragger. The generous wing area allows for a reasonable wing loading even with the extra weight of the motor battery. The estimated final E-weight is 7.5 pounds and the wing area is 690 square inches. This will give a wing loading of 25 ounces per square foot. The plans are that the model will be built, flown by all interested individuals, then raffled off minus the motor, radio, & battery. The immediate goal is to have the airframe completed and ready for covering by July's meeting.
4. **Hobby Horn:** The club has received some close-out merchandise from Hobby Horn at great prices. These will be used for future raffles. Hobby Horn is to provide a list of final items available at close-out prices. A list will be published in *Peak Charge*, but each member will have to deal direct with Hobby Horn.

5. **Association of Model Clubs Mtg.:** **Chuck Grim** reported two items from the recent meeting. First, the Torrey Pines Gulls have recently incorporated. Second, The Plaza Camino Real mall in Carlsbad has contacted the association regarding another mall show. The last show, at the mall, that SEFSD was involved in was in February '93. Although the show date has not been determined, it would probably be several months away due to promotional lead time. If anyone would like to volunteer to organize the event, call **Chuck Grim**.
6. **July's Raffle:** Don't miss this one! There will be some real goodies to grab. Time has run too short the last couple meetings so there were no raffles. **Chuck** has quite a stockpile now. Two items of particular interest that will be raffled are: a **Steve Neu** motor control, relay type and a Davey Systems' Heron kit (this kit is intended for 05/075 motors, sport/competition, & has a 65" span). There will be several other items also.
7. **Treasurer's Report:** There was no Treasurer's report this month.
8. **Show & Tell:**
 - a. **Steve M.** showed us his electric modified Kyosho Concept 30 helicopter. The model is virtually finished and has yet to be flown. Steve did a superb job of retrofitting the Ultra 1800 electric motor and 20-cell battery pack. Remember, this model was intended to be used with a gas engine. Steve estimates the E-weight to be 7.5 pounds (approx. 40 ounces heavier than the gas version).
 - b. **Steve M.** also showed his recently completed Tangent 10-cell F-3E plane. This model used a recycled **Steve N.** wing that Steve N. had crashed. The motor is a Keller 70/3 running on 10-1400mA cells. It uses a homemade composite folding prop that turns at 9800 RPM. Weight is 60 ounces. According to **Steve M.**, "it doesn't climb as well as with a Mega motor but not bad".
 - c. **Bob Kreutzer** brought a set of outline drawings for a one-

of-a-kind airplane project called the Mach Buster I. This is a full-sized aircraft that is being built at Montgomery Field. The uniqueness is that it will be an attempt to fly a propeller driven airplane at supersonic velocity. The current powerplant choice is a supercharged Oldsmobile marine engine. The wings and propeller are made of graphite. The fuselage is long with short wings. Bob has reduced the drawings so that a model with about a 300 square inch wing could be made from them.

9. **Program:** Steve N. played a video of a recent European F-

5B contest. A lot of close-up shots of wings, motor installations, etc.. Also of interest were several solar powered planes that flew very well. There were a few shots of an electric ducted fan plane that also flew well.

10. **Forward Dates:**

July 19 Club meeting, Serra Mesa Rec. Center, 7:15 pm.

July 23 Funfly at Dusty Rhodes Park, 8:30 am.

August 7 Black Sheep Electric Contest in Sepulveda Basin.
See flyer in newsletter.

PRESIDENT'S CORNER

Project Fantasy

The E-Power conversion effort for the Major Hobbies "Fantasy" is progressing nicely. I spent some time "redlining" the plans for the preliminary modifications which I thought were pretty straight forward. The kit was passed to Steve Belknap at June's meeting. Steve who is the fuselage builder is also an engineer. His weight and balance calculations indicated the rudder and elevator servos could remain in their original locations (instead of in a new compartment behind the wing); all the better! We agreed that if the model were ours, we would make a removable canopy/hatch to access the flight batteries without removing the wing. However, this would violate the directive of "minimal modification" and require more than one battery pack to be of use. Though I have several battery packs for each model, this is apparently not that common. Steve also predicts a wing loading of 25 oz per square foot; quite reasonable for a model of this size. The wing parts are in the capable hands of Bob Kreutzer whose modification requirement is to deepen the aileron servo so that the hardware clears the flight batteries, and relocate the landing gear blocks to make the Fantasy a tail dragger. After fuselage and wing are complete, the bare bones will be forwarded to Wayne Walker for covering and assembly. The club will reimburse the builders for incidental items like covering, wheels, etc. We should have something to look at July's meeting.

Move our Meetings?

Speaking of meetings, our June meeting was cut short by the Serra Mesa Recreation Center Staff who tried to lock the place up at 9:00 P.M. and begun hustling us out the door at about 8:45. This cut off our raffle. Given that we can't even get in to start setting up furniture until at least 7:15, our meetings are practically limited to about 80 minutes. A limit is good for meetings at work, but maybe not so good for "airplane meetings". The propensity of "after meetings" in the parking lot following our eviction, indicates that 80 minutes is not long enough to get it out of our systems! If we had the time, it would be nice to change to a format that had a break during which raffle ticket could be sold and what currently transpires in the parking lot could happen indoors. To do so, we will need another site for our meetings. The executive committee

will investigate. Stand by for news.

Concept 30 EP Helicopter

My converted Concept 30 DX helicopter shown at June's meeting has now flown several flights and flies super! The relatively simple conversion involved discarding the parts directly related to the glow engine, and replacing the front frame set with a fiberglass U-shaped tray that holds the batteries. The same formica-lined particle board U-shaped mold that made the battery tray, also made the motor mount. The motor mounts parallel to and just under the tailboom and runs in reverse (clockwise as viewed from the front) to drive the rotors properly. The clutch bell was machined off the clutch drive gear and a simple aluminum bushing fabricated to center the drive gear on the prop drive adapter. The motor drives the rotor system without a clutch and doesn't seem to need one. The main rotor has a one-way clutch which allow to freewheel for autorotation landings. For the E-version, this has the benefit of reducing the inertia of the gear train when the motor decelerates and the gear train tries to overdrive the motor. The Concept 30 EP uses and Ultra 1800 and 20 Cells for power. Although the weight of the glow version is not specified, I estimate it to be approximately 2 pounds less than its clean cousin's 7.5 lbs. The only modification I made after the first flight is adding more collective pitch. The model is capable of steady hover for approximately 4 minutes.

Former Model Aviation Helicopter Columnist Larry Jolly also has a Concept 30 flying with an Astro Cobalt 40 and 20 cells. Larry being a much more accomplished helicopter pilot than I, has made some modifications to improve performance which I hope to duplicate someday. In the meantime I am happy practice hovering in front of my house!

July's Meeting Program

Due to popular interest, our illustrious VP will show us how to make our own folding propellers; from mold making to balancing the finished unit. Every glider can benefit from a individually tailored prop and making them is not that tough! We also have oodles of good stuff for the raffle.