

Chino Valley Flyers

Official Club Newsletter





May 31, 2022

Volume 25 Issue 5

www. chinovalleyflyers.org

""To create an interest in, further the image of, and promote the hobby/sport of model aviation"

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Quote of the Month:

If you cannot serve others, then you cannot lead.

Unknown

Support our Local Hobby Shop

They support Us



Also, Check out

Terry Steiner's Control Line 22.5" W.S. Deweybird



DON CROWE'S ELECTRIC EDGE 540





Bill Gilbert: CVMA President's Message



Our windy weather is sure putting a damper on our flying! And worse, Red Flag fire conditions have been declared sever- gate. al times already. We should all know that there is to be no flying electric, or wet fuel model airplanes during these Red Flag way to full scale aircraft. conditions. Any accident resulting in a fire may be very difficult over the gun range. And, do not to put out.

This bring us to increased awareness of all the requirements we need to be concerned with as a club, to keep our flying field and flight privileges. Especially given the recent events at our sister club Casa de Aero.

It can sometimes take just one incident to catch the ire of some agency that leads to closure or loss of a field. Fire safety is but one; bring the "Fire Cart" out when you are flying if head off intrusions into our

last one flying to put it away and close the shed, and lock the

We all need to mind our altitude restriction, with controlled airspace above us at 700'. Give

Do not fly south of the runway climb the hills to our East, behind the gun range. Put FAA registration numbers on your aircraft. We need to do everything within our power to not draw negative attention to our club and our flying activities.

We want to continue to enjoy the club for many years to come. With the recent revision to our membership categories and now the adoption of rotorcraft and drone policy at our field, we should be in a good position to

the first to arrive at the field. The normal flying. I thank he membership for their interest and participation in these administrative matters.

> On to fun stuff, we have a lot of events coming up; the e-warbird races in June, Glider Endurance event in July, the **IMAC** in August!

And don't forget the Build n Fly in October. Get building if you want to enter and participate. We have more activities planned when the wind dies down! See you at the field!

Bill

Flight Instructors

- > Al Morello Chief Flight Instructor
- > Randy Meathrell -**Control Line Flying**
- > Marc Nelissen-Basics
- > Jack Potter-Gliders

NEWSLETTER

AMA Chapter #3789 **Published Monthly**



President - Bill Gilbert



Vice President — Mark Lipp



Treasurer — Don Crowe



Secretary - Bob Steffensen



Safety Officer — Rick **Nichols**



Chief Flight Instructor — Al Marello



At Large Member — Dan



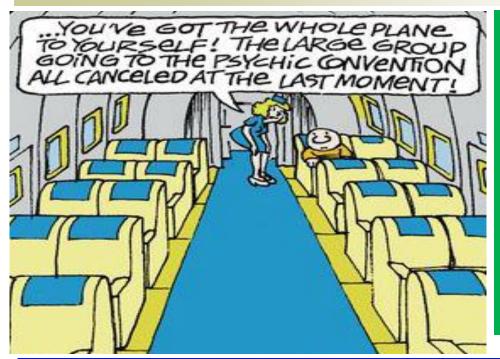
At Large Member — Dennis O'Connor



Newsletter Editor — Bob **Shanks**







MARK YOUR CALENDARS

Events for 2022

- June 18 E-warbird races
- July 4 Pot luck Fun Fly & Chino Valley Town fireworks
- ◆ July 16 Glider Endurance Event
- ◆ Aug. 19-21 IMAC Shootout
- Sept. 17 Steve Crowe Fun Fly
- ♦ Oct. 15 Fourth Annual Build & Fly Challenge
- Nov. 12 Fall Swap Meet & Fun Fly
- ◆ Dec. 2 Annual Christmas Banquet



WERE YOU BORN IN A BARN?

IF YOU ARE THE LAST ONE TO LEAVE THE FIELD CLOSE & LOCK THE GATE.



CRITICAL RC FLYING SAFETY ISSUES

Rick Nichols Club Safety Officer

RED FLAG WARNINGS

It's that time of year again and fire danger is extremely high. We will more than likely be under Stage 1 Fir Restrictions all summer long until the Monsoons begin, if we get any this year.

The most extreme fire event is RED FLAG conditions. On these days the fire marshal puts restrictions on all sorts of activities and includes flying any powered airplanes at our field. Our first RED FLAG days this year began on May 7 and was still in effect as I wrote this article on May 11. Club president Bill Gilbert E-mailed each member to get the information out to all members.

At the May 22 board meeting board

members discussed posting a red Flag warning at the entrance gate when these conditions occur.

With the dryness of the grasses (weeds) at our field along with the low humidity and heat it's important that we have our fire cart on the ready while the field is in use. If you arrive early to the field, please open the shed and drive the cart to the flight line area. Also remember that the last person or persons leaving the field are responsible for returning it to the shed and locking it up.

All paid members have the combination to the shed as ell as the entrance gate. If you are unfamiliar with the operation of the fire cart ask me or any board officer to check you

out on its operation. It is easy and straight forward to operate. The cart should also be utilized in the retrieval of all downed aircraft. It is rattlesnake season again and caution is advised. We have had rattlesnakes at the field.

We will probably be welcoming some new members from our sister club Casa de Aero due to the shut down of RC flying on the Embry-Riddle campus. I know we all will be helpful to them with any questions they might have concerning our rules and workings of our club. Let's make them feel at home folks.



Chino Valley Flyers Control Line Action at the Field











Dave Domzalski's C/L Navy F4-F.



Randy Meathrell's C/L mini flyer.



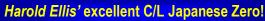




Rick Nichols at left and Randy Meathrell at right C/L flying as seen from main runway pit area.

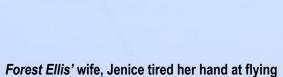












the C/L Platter with Harold Ellis assisting.







Larry Parker's Junkers at right is a Seagull Model JUNKERS CL1 G-BUYU with a wingspan of 68.9". Weight is 8.8 lbs. with power from a 10cc — 15cc Rimfire 80 with a 16 x10 prop. It has a 60 amp ESC and uses a 6 cell battery. Larry modified the wing bolts using T-nuts for faster and

easier assembly. Pilot sports a WWI helmet with a Snoopy rear seat gunner.







Casa de Aero Flyers Aircraft Flown During Their Visit

Some of the Casa de
Aero members came out
to fly since ERAU has
halted all RC flying
on campus.
Flying were Casa de
Aero members:
Bob Vaught, Rick
Lehman, & Shel Liebach.







Bald Eagles are Now Removed from the Endangered and Threatened Species List

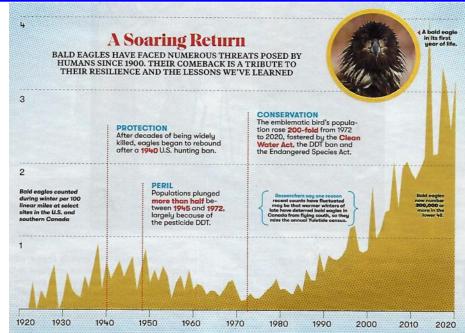
Here's an interesting chart from the Smithsonian April/May 2022 magazine edition about the return of the Bald Eagle. We occasionally have sighted some Bald Eagles at the field as well as some Red Tailed Hawks.

As one examines the chart it is clear we almost lost the bird in the 70's. This is welcome data on the Bald Eagle from the Audubon Society's annual bird count as well as sightings from ornithologists and citizen-scientists.

It's a large bird, the Bald Eagle has an average wingspan upwards of eighty inches. Female eagles are larger than their male counterparts, but otherwise, both look alike and sport the same hooked yellow beak and yellow eyes.

They have recently been removed from the Endangered Species and Threatened Species Lists for the contiguous United States, the bald eagle now thrives throughout Arizona and the country.

This is Montana at right who was born in Montana in approximately 2002. She was rescued and rehabilitated in Arizona. She arrived at the Prescott Heritage Park Zoo in 2013. Due to her injuries she was unable to be released back into the wild. Take a trip to our local zoo and check out Montana.





Bald Eagles are quite a Majestic bird in flight.



Ten Fascinating Facts About Bald Eagles *

- 1. Bald eagles are among the most flexible and opportunistic foragers.

 Bald eagles choose habitats with large concentrations of fish, waterfowl, and small mammals.
- 2. Bald Eagles eat mostly fish.
- 3. Bald eagles can be kleptoparasitic.

Kleptoparasitic comes from the word Kleptomaniac, which means having an impulse to steal. While eagles do not have the urge to steal food from other birds, they can occasionally supplement their food intake for food in this manner.

- 4. Occasionally, bald eagle predate on livestock.
 - Bald eagles have been implicated in predatory situations involving young pigs, goats, and sheep. With only a few cases confirmed mainly by Golden Eagles
- 5. Bald eagles are the largest North American "actual" bird of prey.
- 6. The Bald Eagle is America's most successful conservation story.
- Bald Eagles hold the world record for the largest tree nest ever recorded.
- 8. Young bald eagles live a nomadic lifestyle.
- 9. The bald eagle was nearly replaced as the national symbol.

Myth or reality? As the story goes, Benjamin Franklin recognized the wild turkey's fascinating characteristics as an appeal when he suggested the bird be our nation's national bird. Even though the turkey lost by just one vote, it is still a favorite game bird in America because of its keen senses. If Franklin had succeeded, we might have seen the wild turkey as the national symbol.

10. Bald Eagles can live for nearly four decades in the wild.

^{*} https://avianreport.com/10-fascinating-facts-about-bald-eagles/

PANCAKE FEED SWAP MEET & FUN FLY SATURDAY MAY 14

Photography by Bob Shanks and Paul Gendarme





What a great turnout for our May Fun Fly and Swap meet. Lots of great pancakes prepared by *Mark and Jane Lipp* and *Harold Ellis*. Thanks for all the extra work cooking pancakes for a very well attended club event. Also, next time you see *Paul and Lisa Gendarme* make sure to thank them, they prepared coffee for the event Paul and Lisa are always at club events to take outstanding photos for the newsletter and to assist.





Riley Harley and John Stewart flew some great formations with their gas powered Spitfires.













Trash Left After Our Fun Fly

This is a safety hazard members, so if you bring it out you take it home to throw it away.



Did Tesla Discover the Secrets of Antigravity?



https://electrical-engineering-portal.com/did-tesla-discover-the-secrets-of-antigravity

Nikola Tesla has been credited for the creation of much of the technology that we take for granted today. Without the genius of Tesla we would not have: Radio, Television, AC electricity, Tesla coil, Fluorescent lighting, Neon lighting, Radio control devices, Robotics, X-rays, Radar, Microwaves and dozens of other amazing inventions. This is an impressive list.

Because of this, it is no surprise that Tesla also delved into the world of flight and possibly, antigravity. In fact, his last patent in 1928 (#6,555,114), was for a flying machine that resembled both a helicopter and an airplane.

Before he died, Tesla reportedly devised plans for the engine of a spaceship. He called it the *anti-electromagnetic field drive or Space Drive*. William R. Lyne writes in *Occult Ether Physics (Creatopia Productions)*, that a lecture Tesla prepared for the Institute of Immigrant Welfare (*May. 12, 1938*), dealt with his *Dynamic Theory of Gravity*. Tesla said in his lecture that this was: "One of two far reaching discoveries, which I worked out in all details in the years 1893 and 1894."

While researching Tesla's statements, Lyne discovered that more complete statements concerning these discoveries could only be gleaned from scattered and sparse sources, because Tesla's papers are concealed in government vaults for national security reasons. When Lyne specifically asked for these papers at the National Security Research Center (now the Robert J. Oppenheimer Research Center) in 1979, he was denied access because they were still classified.

In his 1938 lecture, Tesla said "...he was progressing with the work", and hoped to give the theory to the world very soon. The two great discoveries to which Tesla referred, were:

The Dynamic Theory of Gravity

Which assumed a field of force which accounts for the motions of bodies in space.

Assumption of this field of force dispenses with the concept of space curvature (ala Einstein); the ether has an indispensable function in the phenomena (of universal gravity, inertia, momentum, and movement of heavenly bodies, as well as all atomic and molecular matter).

Environmental Energy

The Discovery of a new physical Truth: there is no energy in matter other than that received from the environment. (Which goes against Einstein's E=mc²). The usual Tesla birthday announcement – on his 79th birthday (1935) – Tesla made a brief reference to the theory saying it applies to molecules and atoms as well as to the largest heavenly bodies, and to "... all matter in the universe in any phase of its existence from its very formation to its ultimate disintegration".

In an article, Man's Greatest Achievement, Tesla outlined his Dynamic Theory of Gravity by saying that the luminiferous ether fills all space. The ether is acted upon by the life-giving creative force and is thrown into "infinitesimal whirls" ("micro helices") at near the speed of light, becoming ponderable matter. When the force subsides and motion ceases, matter reverts to the ether (a form of "atomic decay").

Man can harness these processes to: Precipitate matter from the ether. Create whatever he wants with the matter and energy derived. Alter the earth's size. Control earth's seasons (weather control). Guide earth's path through the Universe, like a spaceship. Cause the collisions of planets to produce new suns and stars, heat, and light. Originate and develop life in infinite forms. When Tesla was 82, instead of speaking at a dinner party, he issued a written statement. Although this was soon after he had been struck by a car. "I have worked out a dynamic theory of gravity in all details and hope to give this to the world very soon."

It explains the causes of this force and the motions of heavenly bodies under its influence so satisfactorily that it will put an end to idle speculations and false conceptions, as that of curved space.

According to the relativists, space has a tendency to curvature owing to an inherent property or presence of celestial bodies. "Granting a semblance of reality to this fantastic idea, it is still very self-contradictory. Every action is accompanied by an equivalent reaction and the effects of the latter are directly opposite to those of the former. Supposing that the bodies act upon the surrounding space causing curvature of the same, it appears to my simple mind that the curved spaces must react on the bodies and, producing the opposite effects, straighten out the curves.

"Since action and reaction are coexistent, it follows that the supposed curvature of space is entirely impossible – However, even if it existed it would not explain the motions of the bodies as observed. Only the existence of a field of force can account for them and its assumption dispenses with space curvature. All literature on this subject is futile and destined to oblivion."

It is a great pity that Tesla never published his *dynamic theory of gravity*. Modern thinking about gravity suggests that when a heavy object moves it emits gravitational waves that radiate at the speed of light. These gravity waves behave in similar ways to many other types of waves. Tesla's greatest inventions were all based on the study of waves. He always considered sound, light, heat, X-rays and radio waves to be related phenomena that could be studied using the same sort of mathematics.

His differences with Einstein suggest that he had extended this thinking to gravity. In the 1980s he was proved to be right. A study of energy loss in a double neutron star pulsar called PSR 1913 + 16 proved that gravity waves exist. Tesla's idea that gravity is a field effect is now taken more seriously than Einstein took it. Unfortunately, Tesla never revealed what had led him to this conclusion.

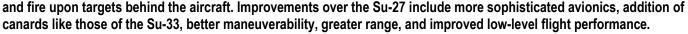
Editor's Note: After Nikola Tesla was found dead in January 1943 in his hotel room in New York City, representatives of the U.S. government's Office of Alien Property seized many documents relating to the brilliant and prolific 86-year-old inventor's work. It was the height of World War II, and Tesla had claimed to have invented a powerful particle-beam weapon, known as the "Death Ray," that could have proved invaluable in the ongoing conflict. What happened to Tesla's files from there, as well as what exactly was in those files, remains shrouded in mystery—and ripe for conspiracy theories.

Guess the Cockpit: Russian Sukhoi SU-34 "Fullback" *

Aerospace Web Article

Based on the Su-27 fighter, the Su-34 is a tactical low-level bomber designed to replace the Su-24. The first Su-34 prototype was a modified Su-30 tandem two-seat trainer, itself a variant of the Su-27, reconfigured with two side-by-side seats in a widened fuselage. The widened nose also contains a terrain-following radar and terrain-avoidance system needed for low-level flight. Furthermore, the revised nose shape is a flat, sharp, chined configuration similar to that on the U.S. SR-71 Blackbird to reduce radar cross-section.

Like the Su-27, the Su-34 also features a rearward facing radar between the engines to track



The Su-34, originally known as the Su-27IB, is expected to replace the Su-24 bomber as well as the MiG-25RB reconnaissance plane. A further variant of the Su-34 is the Su-32FN optimized for maritime attack and reconnaissance duties. Some reports also suggest a version for the Navy may be developed from the Su-34 (possibly confused with the Su-33UB) equipped with more powerful engines and thrust vectoring to reduce the takeoff distance. This variant remains somewhat doubtful, however, since the Russian Navy only operates a single aircraft carrier that seldom leaves port.

Russia hopes to ultimately build as many as 600 examples of the Su-34 by about 2030. Even though the Su-34 first flew in the early 1990s, production has been slow to get underway and only 58 have been funded through 2015. The age of the Su-24 and MiG-25 means these aircraft will likely be removed from service by 2020 leaving a large gap in capability until sufficient numbers of the Su-34 become available.



The Sukhoi Su-34 was supposed to change the Russian air force. The twin-engine, twin-seat, supersonic fighter-bomber—a highly-evolved variant of the Su-27 air-superiority fighter—promised to usher in a new era of high-tech, precision bombing. *Instead, the Su-34s have flown into Ukraine lugging the same old dumb bombs*. A lack of precision-guided munitions—not to mention Russian doctrine that conceives of aircraft essentially as flying artillery—forces the \$50 million warplanes to fly low through the thickest Ukrainian air-defenses in order to have any chance of delivering their bombs with any degree of accuracy.

As a result, Su-34s are falling from the sky in numbers that must be startling for air force commanders. Their newest planes are suffering the same fate as their oldest. The Russian air force ordered its first batch of 32 Su-34s back in 2008. A second batch of 92 followed in 2012. The Russians as of 2021 possessed around 122 Su-34s in several regiments. Even taking into account losses, by 2030 the air force could operate nearly 200 Su-34s.

The plan, all along, has been for the Su-34 to replace the 1970s-vintage Su-24, around 70 of which linger in service. Nowhere was that more evident than in Syria. The Kremlin deployed Su-34s to Syria starting in November 2015, shortly after a Turkish F-16 shot down a Russian Su-24 that reportedly strayed into Turkey's air space.

The Su-34 is impressive to look at. The type borrows the airframe of the Su-27 but adds a two-person cockpit with side-by-side seating. The Su-34 can strike targets as far as 600 miles away while carrying 12 tons of bombs and missiles, including air-to-air missiles.

* Sources:

DON'T COOK YOUR ESC: ARTICLE FROM PAST MODEL AIRPLANE NEWS ON ELECTRICS

Avoid These Common Power System Mistakes

Electric fliers all have one thing in common regardless of the size or type of models they fly—the electronic speed control (ESC). It doesn't matter if you fly helicopters, airplanes, giant-scale, indoor, or micro models; at the heart of your power system is the speed control, and if it's unhappy, you will be too. The costs and types of speed controls vary in every aspect and that includes quality. The one constant, however, is your understanding of how to make them last, which in the end, saves money and your aircraft! Poorly constructed motors can throw magnets and cause extreme current spikes that will destroy a speed control.

Quality Matters

This pretty much covers everything. Quality motors, connectors, speed controls, installation, solder joints, etc., but let's talk about components. When encountering speed control problems, we don't often think about whether they might have been caused by a cheap (poorly made) motor, but it can and does happen. I recently experienced a catastrophic failure in a foam jet that caused the speed control to melt and actually burn its way out of the bottom of the aircraft. Parts of it were left inside, but it unsoldered itself and melted completely. Upon post-mortem inspection, I found that the magnets inside the motor were unevenly spaced, and one had actually come loose and been chewed into pieces as the motor spun. The funny thing about electric motors is when something starts to go wrong, the motor will just ask for more current so it can work to overcome it. On-board data logger can show normal current at takeoff and shortly after, it began to climb until it spiked off the scale. This is an indication that the motor can be failing, and the binding of the magnet chunks caused the excessive current spike that subsequently melted the speed control. Some speed controls have over-current protection and others don't. Look for one that does! This doesn't guarantee that it won't be damaged by a sudden failure like mine, but it just may help save the speed control. This was an expensive failure due to a poorly made motor.

Be Cool!

The speed control in this foam jet is jammed into the nose, so it's fully insulated and gets no cooling air. With the heavy load from the motor and too many servos, this will overheat and die quickly.

Install your speed control in a place where you can get maximum airflow across it. Remember that if you let cool air into the fuselage, you have to provide a place for the air to get out too. That exit hole should be about twice the size of the inlet hole. Heat is the enemy, so the cooler you keep your speed control, the happier it will be. Eleven servos and an onboard LED lighting system overtax the speed control's BEC.

Size Matters

The quickest way to get experience buying speed controls is to buy them too small for the application—meaning the motor voltage and current requirements along with the BEC (battery eliminator circuit) requirements if you're using one. If you're sizing your speed control based on the maximum requirements of the system and you're just barely meeting them, go to the next size up. If you can use one with a heat sink, do so. If your BEC requirements match or exceed the ratings of the speed control's BEC, then choose a different speed control or disable the BEC and use appropriate receiver power. Remember, if your BEC fails, you lose the airplane.

Proper Soldering

A good, soldered joint between the wire and 6mm bullet will handle a lot of current. Note that there is no excess solder running all over the outside of the bullet and the joint is shiny clean.

Recipe for a Cooked Speed Control

Take one undersized speed control
Add cold solder joints
Use extra long wires from the battery to the speed control
Pack it in a foam plane with no cooling air
Fly partial throttle settings extensively
Push the BEC to its max limits and beyond
Fly consecutive flights without a break

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Chino Valley Flyers: May General Membership Meeting Meeting Photos by Paul Gendarme



The General Membership meeting on Saturday May 28, 2022 opened at10am with the Pledge of Allegiance. Club membership now stands at 128 paid members. 44 Members signed in...a good showing for a no flying Red Flag day.

Last month's minutes approved. Don **Crowe** presented the Treasurer's report to date. Treasurer's report was unanimously approved by members.

Drone Policy that was sent out after the last meeting we well received by members and some additional comments and edits were made. Today, after discussion and answering questions and concerns, members approved the new policy.

President Bill Gilbert updated members on the expansion plans. The Chino Valley building permit has been approved. Expenditure for expansion was approved at the January meeting, however we have additional costs for fill dirt, leveling and compacting the pad that were not a part of the original contract.

Don Crowe and John Stewart have donated some model kits and ready to fly aircraft that you can bid on, proceeds will go to the club to help fund additional costs. The concrete contractor will begin as soon as concrete is available. This work will not impede your flying activities although trailer parking will be limited until the construction is finished.

New fencing is complete for pilot stations and looks great; remaining is a fence that will be angled at the west end of the taxi way; we have been mowing and spraying for weeds; additional work on weeds and things, will be done on Saturday June 4 by members; to include "patching stripping and X at each end of the runway due to crack sealing. Be there!

Do comply with the FAA registrations requirement and label each of your planes with your information: Name, phone number, AMA # and FAA #. Our field altitude limit is 700 ft. Do land if we have a low flying full size aircraft in the area. Do be diligent on the rules and regulations so we do not jeopardize our ability participate in our RC flying sport here.

Bill Gilbert and members thanked Mark and Jane Lipp for the pancake breakfast at the Flying/Swap Meet on May 14.

Foam Warbird Race on Jun 18, get your planes ready to fly Randy Meathrell is EM. The Glider Event is July 14, Jack Potter is EM. And don't for get the 4th of July fire works (hopefully!) and get together at the

Safety Officer Report

Rick Nichols stated that we have been safe for several weeks now...keep flying safely. First at the field? Bring out the fire cart. If you need an update on operation, Rick will provide fire cart training for anyone who needs it.

Important Note:

The red cone on a post on the northside of the control line circle... please do not make wide approach turns to the south of that cone when members are flying control line planes in the circle.

Other Business

Special meeting May 7th on revision to Memberships in the club By-laws: the proposal was to eliminate associate and as well as student members 18 year and older. These members will have until the end of the year to become full members. These changes were sent to members by email two weeks prior for information and com-

After brief discussion and questions answered, members approved the changes.

Another proposal presented was a Drone (rotor and multirotor) Policy. This policy will be sent to members soon and presented for approval at the general meeting on May 28th.

Member Comments

Lee Boekhout asked if we had ever considered buying property for the club: probably cost prohibitive! Steve Zingali asked if any members need new CVF name badges and presented a signup sheet and several members requested them.

We broke about 10:40am for a variety of goodies provided by Harold Ellis. Thanks Harold! We resumed at 10:50. Show & Tell: Planes and Projects

Wind prevented showing projects and planes.

Door Prize/Raffle

Jean Greear won the door prize with: Velcro and the proverbial (super) glue. Bill Gilbert won the Tower Hobbies Vista Grande ARF sailplane and offered it for sale: Lee **Boekhout** bid \$100 for the prize and Bill donated the \$100 to the club.

A motion to adjourn the meeting was offered and unanimously approved about

Respectfully, Bob Steffensen Club Secretary.

for Landing **Approaches** control line circle is busy.









Jean Greer won the "Door Prize at right. Bill Gilbert won the Vista Grande Glider and Lee Boekhout, left bought it from Bill and he then donated it to the new cabana construction project.