



AMA Chapter #3798

Chino Valley Model Aviators

Official News



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"To create an interest in, further the image of, and promote the hobby/sport of radio controlled aircraft"

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Aviation Thought:

Truly superior pilots are those who use their superior judgment to avoid those situations where they might have to use their superior skills!

Support our Local Hobby Shop



Valley Hobby
Prescott Gateway Mall

Terry Steiner's RV-4



Steve Zingali's Ironman "Z"





At our last meeting we discussed the 1,145-acre wildfire down in North Phoenix at the Sun Valley Fliers field. An EDF powered airplane crashed and sparked the fire that we should all learn from.

First, a quick response is critical. At the first sign of smoke all flying must be suspended.

Second, every available person needs to get to the scene and do everything possible to contain it.

Third, failing our containment efforts, emergency services need to be brought in. We discussed

storing rakes and shovels around the covered area so we could get to them quickly. Perhaps a small locked shed that has the same combination as the gate. (Do you know the combo to the gate?)

Your suggestions would be helpful.

The overflowing trash can has become a problem. The wind knocks it over and blows water bottles, and food wrappers everywhere. If we can't find a solution with another receptacle that can be secured and is animal resistant, then we'll have to take it away. Again,

your suggestions would be helpful. Let any board member or myself know your suggestions.

We've been having fun with our Crash-Of-The-Month award. It's good-natured ribbing that gives us all a chance to commiserate with the grieving pilots. If we take the time to listen, it's also a teachable moment, perhaps pick up a tip, or what not to

do. If you have a picture and nomination for the award, email it to me and we'll all get to relive the carnage.

Blue Skies!
Don



CVMA NEWSLETTER
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Published Monthly

President — Don Crowe



Vice President — Bill Gilbert



Treasurer — Marc Robbins



Secretary — Bob Steffensen



Safety Officer — Steve Shephard



At Large Member — Randy Meathrell



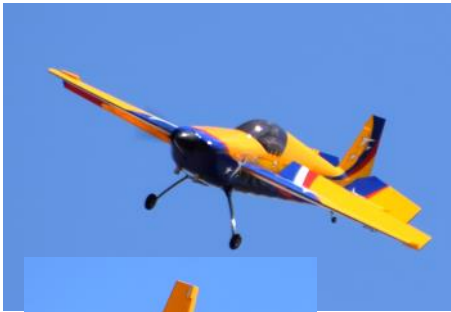
Newsletter Editor — Bob Shanks



(See Page Ten)

Club Pilot's Flying Machines

Shel Liebach's Boomerang



Check out *Dane O'Brien's Slick 540's wild control surface throws* as he goes through an extreme set of maneuvers.



Don Crowe's maiden flight on his gas powered Redwing RC SBach 342 aptly named "Salma".



Steve Zingali's "Surfer Dude" on the ready table waiting for the sky to clear up a little so he can go surfing in the blue sky.



Craig Hale's U.S. Navy Airship Squadron 32's blue Cub.



Surfing the blue Sky.

Jack Potter's profile P-51 in very visible bright pink.



Club Members Flying Machines in Action



John Riese's Pronto



High altitude photo of Radian Glider..



Don Crowe's SBach maiden flight.



The engine test table is now next to the hanger and low concrete wall to help mute the noise away from the flight line and cabana across the parking lot.

John Stewart, above left and Frosty Wells at right are watching Don Crowe get his SBach engine set up for the maiden flight.



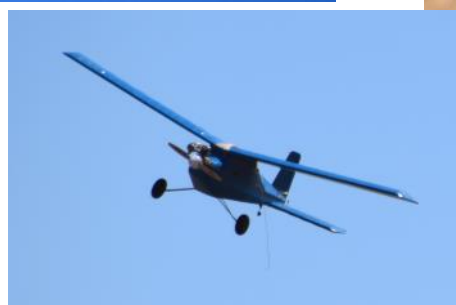
Jack Potter and Ray Landry often fly their Radian gliders together, no it's not combat just a little joint-soaring looking for thermals. They are at higher altitudes and way out over the expanse of our field.



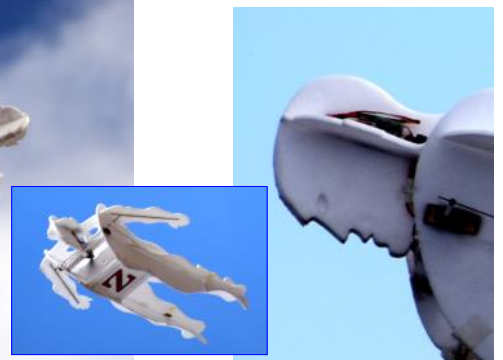
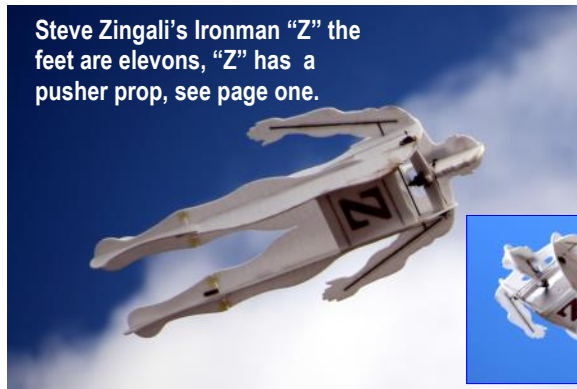
Mark Lipp and his glow powered "Old Timer" at take off right in front of him and at left soaring over the field's wind swept hills and grasses.



Steve Zingali launching his paraglider.



Steve Zingali's Ironman "Z" the feet are elevons, "Z" has a pusher prop, see page one.





What You Need to Know About Electric Motors

By Randy Meathrell

Editor's Note:

Members, we ran this article by Randy a few years ago but more and more flyers are using electric power for flight and we have a lot of new members so it seemed like the right time to run this article again. Don't hesitate to contact Randy if you have more questions about your electric power plant and how to set things up for flight.

ELECTRIC MOTOR BASICS



So how do you figure out what electric motor to use on your latest flying creation? Let's see if I can help you pick the right motor. First, I need to define a few things to help in selecting the right motor. The measure of energy we will use is the WATT. A Watt is a derived unit of power, with 1 horsepower = 746 Watts. To determine the best motor for your airplane you need to determine what you want the model to do.

A general guide to sizing electric motors is:

Gentle Rise Off Ground (ROG) model	= 50 Watts / Lb. of airplane
Mild Acrobatics	= 75 Watts / Lb. of airplane
Aggressive Acrobatics	= 100 Watts / Lb. of airplane
3D or High Speed	= 150 Watts / Lb. of airplane (plus)

Nitro powered model engines generally fall into the following categories:

Sport 2 or 4 Cycle nitro engine	= 1250 Watts / Cubic Inch displacement
Ball Bearing 2 Cycle nitro engine	= 1500 Watts / Cubic Inch
High Performance 2 or 4 Cycle	= 1800 Watts / Cubic Inch
Racing / Ducted Fan engine	= 4000 Watts / Cubic Inch

With this information we can determine what type motor to use. For example: a 40-size nitro sport engine generates (.40 Cubic Inch X 1250 Watts / Ci = 500 Watts). A typical 40 size trainer weighs 6 pounds. If you do the math it shows a power loading of 83 Watts / Pound ... a Mild Acrobatic airplane. Therefore, a 500 Watt electric motor will fly the 40 size trainer the same as a .40 nitro motor. The WATT is the magic way to size a motor to fit you airplane.

If your motor does not list Watts in its description you can determine it using the following simple equation. (Watt = Voltage X Amperage). These values also help in selecting an Electronic Speed Controller (ESC) and battery for your model. A Himax specification sheet for a 500Watt motor shows it drawing 48 Amps using a 12X6 Electric prop on a 6-cell battery. This means you would want an ESC of around 60 Amps for your 40-size trainer. Most motor dealers now list the needed specifications for their motors, If not, perhaps you should choose a dealer who does list motor specifications. If you still need help selecting the proper motor for your airplane, I will be glad to help.

Randy can be contacted at RMeathrell@aol.com or (928) 830-2258.



Lunar Reconnaissance Orbiter Images

NASA's Goddard Space Flight Center *



NASA's Goddard Space flight Center's Lunar Reconnaissance Orbiter (LRO) satellite captured the sharpest images ever taken from space of the Apollo 12, 14 and 17 landing sites. Images show the twists and turns of the paths made when the astronauts explored the lunar surface.

At the Apollo 17 site, the tracks laid down by the lunar rover are clearly visible, along with the last foot trails left on the moon.

The images also show where the astronauts placed some of the scientific instruments that provided the first insight into the moon's environment and interior.

"We can retrace the astronauts' steps with greater clarity to see where they took lunar samples," said Noah Petro, a lunar geologist at NASA's Goddard Space Flight Center in Greenbelt, Md., who is a member of the LRO project science team.

All images show distinct trails left in the moon's thin soil when the astronauts exited the lunar modules and explored on foot. In the Apollo 17 image, the foot trails, including the last path made on the moon by humans, are easily distinguished from the dual tracks left by the lunar rover, which remains parked east of the lander.

"The new low-altitude Narrow Angle Camera images sharpen our view of the moon's surface," said Arizona State University researcher Mark Robinson, principal investigator for the Lunar Reconnaissance Orbiter Camera (LROC). "A great example is the sharpness of the rover tracks at the Apollo 17 site. In previous images the rover tracks were visible, but now they are sharp parallel lines on the surface."

At each site, trails also run to the west of the landers, where the astronauts placed the Apollo Lunar Surface Experiments Package (ALSEP) to monitor the moon's environment and interior.

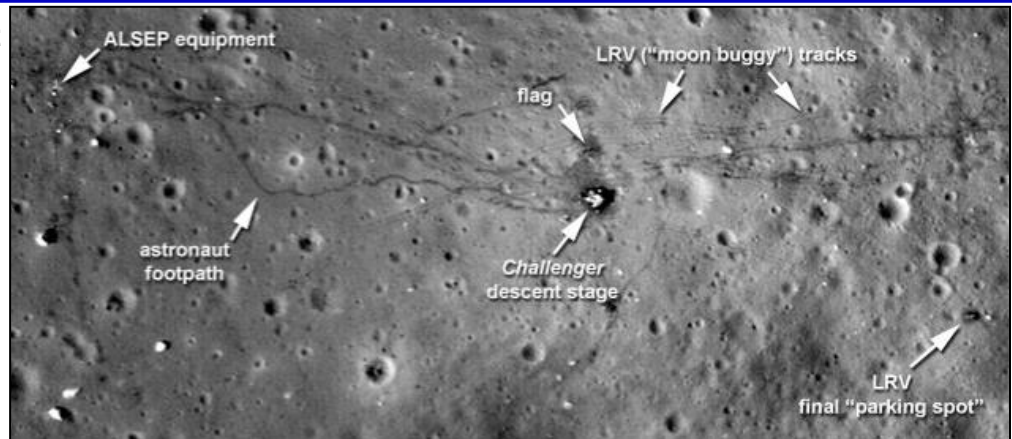
This equipment was a key part of every Apollo mission. It provided the first insights into the moon's internal structure, measurements of the lunar surface pressure and the composition of its atmosphere. Apollo 11 carried a simpler version of the science package.

One of the details that shows up is a bright L-shape in the Apollo 12 image. It marks the locations of cables running from ALSEP's central station to two of its instruments. Although the cables are much too small for direct viewing, they show up because they reflect light very well.

Noah Petro Explains New LRO Images of Apollo 12, 14, and 17 Sites

The higher resolution of these images is possible because of adjustments made to LRO's orbit, which is slightly oval-shaped or elliptical. "Without changing the average altitude, we made the orbit more elliptical, so the lowest part of the orbit is on the sunlit side of the moon," said Goddard's John Keller, deputy LRO project scientist. "This put LRO in a perfect position to take these new pictures of the surface."

The maneuver lowered LRO from its usual altitude of approximately 31 miles (50 kilometers) to an altitude that dipped as low as nearly 13 miles (21 kilometers) as it passed over the moon's surface. The spacecraft remained in this orbit for 28 days, long enough for the moon to completely rotate. This allows full coverage of the surface by LROC's Wide Angle Camera.



Astronaut footpaths and moon buggy tracks show up very clearly from Lunar orbit.

* Credits: NASA's Goddard Space Flight Center

https://www.nasa.gov/mission_pages/LRO/news/apollo-sites.html

*Strange But True Aviation Stories**

B-1 Bomber Pilot Mike Gongol Recruited to Help United Air Lines

United Air Lines Flight 1637 on Feb. 16, 2014 was supposed to be a quick holiday jaunt for off-duty Air Force Captain Mike Gongol and his family. But when the 737's pilot suffered an apparent heart attack, Gongol ended up in the cockpit, helping guide the plane to an emergency landing that saved 160 souls.

The Des Moines-to-Denver flight's emergency diversion was well publicized at the time, but Gongol's very key role only came to light to the public after a military reporter published his story.

Gongol, his wife and daughter were on the way from Des Moines International Airport Dec. 30, with 151 other passengers and six crewmembers, after spending the holidays with his family. To him and his family, the day was just like any other, except for a short flight delay due to weather.

Approximately 30 minutes into the flight, Gongol, a B-1B Lancer pilot, noticed the engines power down to idle. The thoughts immediately started jumping through his head; there were a variety of reasons why the engines would shut down to idle, none of them categorized as normal. Slowly, the aircraft began to descend and turn right.

"Over the public address system; a flight attendant asked if there was a doctor on board the plane," said Gongol. "A few more calls went out for medical professionals and the flight attendants were all hurrying to first class with their beverage carts and a first-aid kit."

At that moment, Gongol thought it was a medical emergency with a first class passenger, his instincts told him to stay seated and stay out of the way. A fourth call went out, "are there any non-revenue pilots on board, please ring your call button." Immediately, Gongol realized the pilot was the patient. He looked to his wife; as she gave him a nod, Gongol pressed his button and headed toward the flight deck.

On the long list of places the Air Force Captain never wanted, was to be put on a commercial jet in a dive with flight attendants searching for doctors and pilots. Now, Gongol—shown above in front of his usual office—didn't land the plane all alone; he merely helped the flight's first officer realize her own aviation leadership potential.

"After they moved the pilot, I was asked by the first officer, 'are you a pilot,' which was quickly followed with 'what do you fly,'" said Gongol. "I knew she was in a serious situation and that question gave her five seconds to judge if I would be useful. I also had about five seconds to assess her, 'was she panicking, or was she OK to fly the aircraft?' We both finished our silent assessments, she made the right judgment and told me to close the door and have a seat."

From there, Gongol was calm and collected, the first officer quickly decided that she would be most useful to talk on the radios, back him up on the aircraft's checklists and look for anything going wrong as they both flew the 737.

Having been an aircraft commander, Gongol is used to making decisions, but he knew the best way to get the aircraft down safely was to play a support role to the first officer and make things as normal as possible for her. In an emergency situation, he had the ability to place himself outside the situation for a second and make the right call.

"She was calm, but you could tell she was a little stressed, who wouldn't be," said Gongol. "At the beginning, I interrupted her flow of operations, but we figured everything out extremely quickly. She was very impressive."

Though safely on the ground, traffic controllers didn't realize the medical emergency that had grounded the flight was the captain, so they didn't give great instructions on how to taxi. The first officer had never landed at Omaha, so Gongol—who'd landed there while training as a B-1 bomber pilot—gave her another hand.

The captain, by the way, made a full recovery, thanks to the quick landing and a nurse who was also aboard the aircraft. Gongol had nothing but praise for the crew he worked with. "I saw nothing but the finest professionalism under pressure out of the flight attendants, the nurses and the first officer," he said.

But he added: "Every pilot thinks 'what would I do if this all goes wrong' on an aircraft they are not controlling."

(Photo credit: U.S. Air Force)



Captain Mike Gongol, USAF

* Edited from article in "Gawker.com" by Adam Wienstein

Source:

<https://gawker.com/off-duty-bomber-pilot-helps-land-a-united-737-after-cap-1585019067>



July 2019 General Membership Meeting



The General Membership meeting of July 17, 2019 began at 7pm and opened with Pledge of Allegiance as we always do. Club membership now sits at 145. We had 43 members and guests present this evening and we welcomed new member **Ethan Ruiz** and his father **Jesse Ruiz**.

Minutes of June meeting were approved unanimously after noting a correction to the spelling of **Terry Steiner's** name. The minutes were corrected.

President's Agenda

President **Don Crowe** led additional discussion on the "hold harmless" agreement. **Don** received additional input from members since the original presentation at the June meeting. After additional comments to scrap the plan to add the agreement to the by-laws, a motion was made to do just that. Members voted to not add the agreement to the by-laws. A brief "hold harmless" sign will be placed near

the entrance to the field, as well as similar posting to the bulletin board.

We thanked **Ray Van Holten** for building the new engine test stand.

Additional members were issued badges that **Steve Zingali** made for us. If have not yet received your new name badge, come to a meeting to pick up yours. (They will not be mailed.)

Harold Ellis led the nomination process for the Horse's Ass trophy award for July. Nominees were: **Dave Bates** for tanking his EDF jet; **Glen Heithold** for his mid-air fire ball; and **Riley Harley's** spectacular maiden flight destruction of his Corsair. **Riley** took home trophy after a show of support from members.

Reports

President **Don Crowe** presented the Treasurer Report for **Marc Robbins** who was not present. Financial assets stand at \$5712 and change. The report which was approved unanimously.

Safety Officer **Steve Shepherd** recommended that gassers and turbines use an assistant to hold the aircraft and release it upon signal from the pilot after they have reached the pilots station. Pilots should be in the pilot's station when taxiing for takeoff. If your crash starts a fire, react immediately to extinguish and/or call the fire department. Be careful at the field... snakes are numerous.

Member Comments

Steve Shepherd recommended that we call the porta-potty owners for service...it is in need of "freshening".

We broke about 7:30pm for cookies provided by **Ron Arrigoni**. Thanks **Ron!** We resumed the meeting at about 7:45pm.

Show and Tell

Don Crowe displayed his new Extreme Flight Vanquish II; and **Steve Zingali** showed his surfer girl along with a humorous description of finding center of gravity on his unique aircraft designs.

Door Prize/Raffle

Willie Hermann won the door prize consisting of the proverbial glue, a block sander and a small wood project. **Dave Bates** snagged the Slow Ride in the Monthly Raffle. We adjourned about 8:15pm. Respectfully, **Bob Steffensen**



Great Membership Turnout



Steve's lady surfer flies very well.



Don's Extreme Flight Vanquish II

Crash of the Month



Riley Harley's Corsair



Willy above won the door prize, yes there was glue in it plus other useful workshop items.

Left, **Riley Harley** won the "Best Crash of the Month" trophy. Out of three member crash photos Riley was voted the best. He ran out of gas. He demolished his Corsair, inset photo. **Harold Ellis** is giving **Riley** his award.

July Raffle Winner



Dave Bates won this month's raffle: **A Tower Hobbies Slow Ride**

Page Two Cockpit Photo: ENDEAVOUR SPACE SHUTTLE*

Authorized by Congress in August 1987 as a replacement for the Space Shuttle orbiter Challenger, Endeavour (OV-105) arrived at Kennedy Space Center's Shuttle Landing Facility on May 7, 1991, piggy-backed on top of NASA's new [Space Shuttle Carrier Aircraft](#).

For the first time, an orbiter was named through a national competition involving students in elementary and secondary schools. They were asked to select a name based upon an exploratory or research sea vessel. In May 1989, President George Bush announced the winning name.

Endeavour was named after a ship chartered to traverse the South Pacific in 1768 and captained by 18th century British explorer James Cook, an experienced seaman, navigator and amateur astronomer. He commanded a crew of 93 men, including 11 scientists and artists.

Cook's main objective, tasked by the British Admiralty and the Royal Society, was to observe the Transit of Venus at Tahiti. This reading enabled astronomers to find the distance of the Sun from the Earth, which then could be used as a unit of measurement in calculating the parameters of the universe.

Cook's achievements on Endeavour were numerous, including the accurate charting of New Zealand and Australia and successfully navigating the Great Barrier Reef. Thousands of new plant specimens and animal species were observed and illustrated on this maiden voyage. Cook also established the usefulness of including scientists on voyages of exploration.

Space Shuttle Endeavour embodies similar experiences. Its first launch, the STS-49 mission, began with a flawless liftoff on May 7, 1992, beginning a journey filled with excitement, anticipation and many firsts.

One of Endeavour's primary assignments was to capture [INTELSAT VI](#), an orbiting, but not functioning, communications satellite, and replace its rocket motor. Unfortunately, the Space Shuttle wasn't designed to retrieve the satellite, which



created many repair challenges.

The project sparked public interest in the mission and NASA received a deluge of suggestions on possible ways for the crew to grab onto the satellite. It took three attempts to capture the satellite for repairs to be made. *An unprecedented three-person spacewalk took place after the procedure was evaluated by the astronauts and ground team.*

Between satellite rescue attempts, the STS-49 crew was busy with a variety of activities. They conducted medical tests assessing the human body's performance in microgravity, and recorded footage for an educational video comparing Cook's first voyage on Endeavour with the Space Shuttle orbiter's maiden voyage.

Once the new motor was attached, it propelled the satellite into the correct orbit, providing a relay link for the equivalent of 120,000 two-way simultaneous telephone calls and three television channels.

This was the first time four spacewalks were conducted on a Space Shuttle mission and one

of them was the longest in space history, lasting more than eight hours.

The crew also took part in the Commercial [Protein Crystal Growth](#) experiment. The research tested the production of protein crystals grown in microgravity.

Because of Endeavour's excellent performance, NASA decided to extend the flight two days to complete more mission objectives and allow the crew enough time to prepare for landing.

OV-105 became the first Space Shuttle orbiter to use a drag chute during a landing -- only one of many technical improvements made to Endeavour.

Just as James Cook set the standard with his seafaring Endeavour voyage, the Space Shuttle Endeavour missions have continued to uphold and surpass the standards set by its namesake, more than 200 years later.

Endeavour now on display at [California Science Center](#) in Los Angeles.



* https://en.wikipedia.org/wiki/Space_Shuttle_Endavour