



December 25, 2021

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

Inside This Issue

\Rightarrow President's Message	2
\Rightarrow Local History Photo	2
\Rightarrow Safety Column	3
\Rightarrow Field Flying 4	& 5
\Rightarrow Artificial Intelligence	6
\Rightarrow Control Line Combat	7
\Rightarrow Mystery Photo Answer	8
⇒ EMP Article	9
\Rightarrow Club Christmas Party	10

Quote of the Month:

The strength of the turbulence is directly proportional to the temperature of your coffee.

> Gunter's Second Law of Air Travel

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Valley Hobby Prescott Gateway Mall Volume 24 Issue 12

www.chinovalleymodelaviators.org

Matt Butler's Very Nice T-6 Texan



CLINT MANCHESTER'S T-28



Bill Gilbert: CVMA President's Message

I want to wish all our members Happy Holidays! We enjoy having all of you as live with at the field. I'd like to ship in numbers, it is impermembers of our wonderful club. It is the membership that makes our club so enjoyable, with many different interests in aircraft types and equipment. So much experience in our members; we can harbinger of more change, learn so much from each oth- hopefully for the better. er.

We have been through a lot of changes the past year or two, with the pandemic, loss of our meeting room, etc. Our membership has been very resilient, adapting to the changes we all have had to endure.

It seems we have reached a new normal that we can all thank all of you for being flex- ative we continue to keep up the new year! ible and adaptive to everything we've been through this safety practices at the field, year.

This coming year is sure to be busy, and perhaps a

We anticipate continuing the field expansion with an additional cabana and more concrete. We expect the additional space on busy days will make our experience at the flying field even more enjoyable than it already is!

With the club being active and with a healthy memberwith safety. Following good diligent airplane setup, and working to improve our flying skills (especially takeoffs and landings) will all enhance our safety margins. This is not to be taken

lightly; it is very anguishing when a member gets injured at the field.

Lastly, a friendly reminder to renew your

club membership. We want to see all of you flying at the field in

CVMA Flight Instructors

- **AI Marello-Basics**
- **Jack Potter-Gliders**

CVMA NEWSLETTER

AMA Chapter #3789 **Published Monthly**

President — Bill Gilbert

Vice President — Mark Lipp



What Photo from History is This?



At Large Member — Dan Avilla

At Large Member — Dennis O'Connor

Nichols



Newsletter Editor - Bob Shanks





SAFETY IS ALWAYS A CRITICAL ISSUE

This is the last issue of our 2021 newsletter and wouldn't you know it, our safety officer, *Rick Nichols* was out of town visiting family in California. So your editor's already scrambled mind was searching the crevices of his old weak mind for safety ideas to end the year.

In the work-a-day world industrial safety professionals often talk about the "safety culture" of their respective companies so why not end the year in a discussion of our club's culture of safety.

A nice way to end 2021, as we enter the Christmas holiday season, is to think about how next year's flying can be made better with each of us developing a mind set of a 2022 culture of field flying safety for the upcoming year.

We already have a very friendly and collegial club with members always at the ready to help new members or to assist anyone in need of some help in the pit.

As part of a new safety mind set can be thinking about ideas to share with our safety officer, especially if one sees something "unsafe" at the field or if one sees a new member doing something they shouldn't do to speak up diplomatically with the member and to also share what almost happened or could've happened with our safety officer.

As an example, we still have a number of folks flying gas and glow engines that need to have the needle valves "tweaked" while the engine is running. So even though we have all started engines and worked on them while running be wary of getting those knuckles or fingers too close to the back side of a spinning propellor trying to adjust the needle valve.

The photo at right shows a proper position of fingers on the needle valve, they are at the rear of the engine.

Of course this photo may not be good at depicting the many ways engines are located on various models. If the engine is in front and upright with no cowl the needle valve is easily accessed for getting that special engine sound that



the engine is running up to speed and is ready for flight.

Having a complex cowl and a difficult position of an engine can compound the issue. Try to plan ahead on how an engine could be placed on your model for easy access. The building directions aren't always helpful so do a little planning a head for engine and tank placement for your fingers safety.

CVMA OFFICIAL NEWSLETTER





Matt Butlers' excellent Horizon Hobby X-Vert hover craft and it is fully aerobatic and versatile model.







The Patter with the moon in the background.

s





A number of folks have tried their hand at control line flying, *Randy Meathrell* set the timer for 30 seconds and launched for them to insure minimal dizziness. At left *Terry Steiner* flew, center and far right is *Dave Domzalski*. *Randy Meathrell* below is the master at flying C/L Platters. They are excellent trainers for a fun trial at flying control line.











More of the Many Masterful Member Models!





George Muecke far left and his really nice Cub.









Ha spi

Harold Ellis knows how to spruce up his P-51...nice pilot.



Will Artificial Intelligence (AI) Get Out of Control?

https://www.bbc.com/news/technology-33629465 https://builtin.com/artificial-intelligence/risks-of-artificial-intelligence

We all love to watch a good science fiction movie occasionally. Fiction has not been too good at revealing our future, however. Many are concerned with the seemingly fast development of Artificial Intelligence (AI). Like any technology there must be careful planning and uses conceived for how it will be used and developed to assist mankind and science. <u>Sadly that seems to not be the case with AI development</u>.

Hal is perhaps the most famous Al turned bad. Created by Arthur C Clarke for the book and film 2001: A Space Odyssey, Hal stands for Heuristically Programmed Algorithmic Computer.

Designed to control the systems of the Discovery One spacecraft, on which much of the film is set, as well as interact with the crew, it quickly starts taking its own course - one that does not involve humans.

Perhaps the closest we currently have to Hal is Watson, IBM's supercomputer, which can understand natural language and read millions of documents in seconds. In 2011, it beat the world's two best players of the Jeopardy quiz show.

Unlike Hal, it is currently working in harmony with humans, in diverse fields such as the research and development departments of big companies such as Proctor and Gamble and Coca-Cola - helping them find new products.

It is also being used in a dozen US hospitals, helping oncologists find treatments for cancer. It has even been incorporated into a toy dinosaur, allowing children their first taste of communication with an AI. They can ask the dinosaur questions and Watson will help it answer them.



Killer Robots

T-800, the Terminator robot from the films of the same name, has living tissue over a metal endoskeleton and is programmed to kill on behalf of Skynet, an artificially intelligent system that has taken over the world's computers in order to destroy the human race. No Als yet being developed have self-awareness and all are programmed to help humankind. The exception to this is military robots, which are increasingly being developed for deployment on battlefields, where their role could be more contentious. The US military unit DARPA is developing lots of robotic kits, such as exoskeletons to give soldiers superhuman strength and access to visual displays that will help their decision making.

DARPA is also using Atlas robots, developed by Boston Dynamics, intended for search and rescue. Although there are currently no killer robots, there is a campaign to stop them ever being produced, and the UN has said that no weapon should be operated without human control.

Helpful Robots

C-3PO is a humanoid robot from the Star Wars films. He is designed to serve human beings and boasts of being fluent in over six million forms of communication. His main job is to assist etiquette, customs and translation so that meetings of different cultures run smoothly. In the real world, companion robots are really starting to take off. Pepper is a humanoid robot, developed by technology firm SoftBank, that went on sale in Japan this summer and sold out almost immediately.

Its big selling point is that it can supposedly recognize human emotions. So if you look sad when you get home from work, it will suggest that you play some music. t has learnt about human emotions by watching videos showing facial expressions.

Last March, at the South by Southwest tech conference in Austin, Texas, Tesla and SpaceX founder Elon Musk issued a friendly warning: "Mark my words," he said, "AI is far more dangerous than nukes."

Musk is no shrinking violet, especially when it comes to opining about technology, the outspoken Musk has repeated a version of these artificial intelligence premonitions in other settings as well. *"I am really quite close... to the cutting edge in AI, and it scares the hell out of me,"* he told his SXSW audience. *"It's capable of vastly more than almost anyone knows, and the rate of improvement is exponential."*

Risks of Artificial Intelligence

- Automation-spurred job loss
- Privacy violations
- 'Deepfakes'
- Algorithmic bias caused by bad data
- Socioeconomic inequality
- Market volatility

Weapons automatization

Musk, though, is far from alone in his exceedingly skeptical (some might say bleakly alarmist) views. A year prior, the late physicist Stephen Hawking was similarly forthright when he told an audience in Portugal that Al's impact could be cataclysmic unless its rapid development is strictly and ethically controlled. *"Unless we learn how to prepare for, and avoid, the potential risks," Hawking explained, "Al could be the worst event in the history of our civilization."*

Control Line Combat Flying is Very Exciting

https://brodak.com/combat By James McKinney

Control Line Combat is the most exciting of all the model flying events to fliers and spectators alike. Two models have a string and crepe paper streamer attached to their tails and the object of the event is to cut the streamer from your opponent's plane. The speed and quickness of the models is unsurpassed by any other modeling event. The models fly at speeds up to120 MPH, and are capable of turning in a 10-foot radius loop, requiring instant reflexes from the pilots to keep up with the action. The event is scored by the number of cuts obtained on the streamers and the amount of time in the air during the fiveminute match. Currently, there are four officially recognized AMA combat classes: 1/2A, FAI (.15), Slow and Fast (AMA) .36 combat, with the unofficial 80 MPH events rapidly gaining favor throughout the country.



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Half A (1/2A) Combat is flown with models of approximately 200 sq.in. that weigh between 4.5 and 6 ounces. These models reach75 MPH and are actually the quickest of all combat models. The lap times with the 35' lines are equal to the times flown by the Fast models on 60' lines. The speed and quickness make these models the most difficult to fly, and are not recommended for beginners.

FAI Combat is the internationally recognized version of the event. By international rules, two models are allowed per match, so the matches are generally much more destructive than the domestic events. Many strange rules dominate the class; consequently it has a very small, but hard-core following. This is the event flown at the World Championships. Engines used in this class are very high tech .15s, while models are 400-500 sq. in. while keeping the weight well below one pound. The top speeds approach100 MPH. The event is the most expensive of all the combat classes.

Slow Combat is flown with profile models and suction engines. The original concept of the event was to provide an entry-level event for beginners in combat by using the standard Flite Streak or Ringmaster kits. Unfortunately, the high-tech competitors became interested in the event and turned this one into a very specialized affair. The speeds approach 100 MPH, while the model designs have gravitated toward the foam winged Fast Combat models with long



profile-fuselages, and high-performance engines.

Fast (AMA) Combat is the ultimate event, with the high-tech engines and airframes combining to provide an extremely high performance model. The .36 engines develop close to 1-1/2 HP while pulling models that weigh less than 1-1/2 pounds, providing 120 MPH speeds. The performance of these models is truly awesome. Modern Fast combat models are constructed with foam, wings generally from 400 to 500 square inches and use many composite parts such as fiberglass or graphite tail booms and engine mounts.

The event gaining popularity the fastest is the relatively new 80 MPH event. This speed-limited, unofficial event has become the most popular event on both the west coast and New England. The models are usually based on current Fast Combat designs with detuned engines to hold them down to the 80 MPH speed limit. The attractions of the event include the use of lower-cost engines; even the lowly Fox Stunt engine can be competitive, along with other strange-sized engines between .15and .36. Many old combat designs are still competitive in this class for those fliers who prefer balsa models. This event is the best for beginners to enter the combat fray as no high-tech equipment is required, so no large outlay of cash is required to get involved in the action. The events contestants have a more laid-back attitude while the destruction level is much lower; midair collisions are less prevalent and contact with the ground at a much lower speed allows the model to survive.

Teddy Roosevelt's Rough Riders Taken in 1898 The Rough Riders Were Born in Prescott, AZ *



When news arrived of the explosion and sinking of the USS Maine in February of 1898, William "Buckey" O'Neill was Mayor of Prescott. Buckey, like most Americans, he was infuriated by the disaster and hungry to join the fight.

While discussing the situation with Alexander Brodie and James McClintock, both veteran officers

and prominent Prescott citizens, an idea occurred to them to raise up a volunteer cavalry from the Arizona territory. Buckey wanted to raise a regiment of hardcore Arizona frontiersmen. He would call them "The Rough Riders," and they would become the origin and core of the First U.S. Volunteer Cavalry.



Buckey wired President McKinley for authorization to muster 1,000 Arizona "rough riding" soldiers. McKinley wired back authorizing a number he thought was more realistic for the sparsely populated territory, 250 men. O'Neill was named captain of Troop A of the 1st Volunteer Cavalry and immediately resigned his position as Prescott's Mayor. The three had little trouble recruiting the allotment of men.



Throughout the spring of 1898, the volunteers trained at Prescott's Fort Whipple. Then on May 4, 1898, the troops shipped out. For the City of Prescott, the departure day was a well-attended, bittersweet affair. "The entire town seemed to be on the streets, in the Plaza and at the depot to see the brave boys off," the local paper reported.

It would be the first time that Arizona sent its citizens outside the territory to fight for its country. Arizona was the first in the U.S. to muster in its men and the first to have its volunteers leave for the conflict.

During the send-off ceremony, the troops were not only presented with a battle flag, but a young mountain lion named "Josephine" also was presented as a mascot. Over \$500 (a very large sum in 1898) was raised in a matter of hours to outfit the volunteers with supplies, including hams, mutton, pigs feet, pickles, three

barrels of bottled beer and other items far too numerous to mention.

A Farewell to be Remembered

"As the train was about to depart, the volunteers expressed themselves as being overwhelmed with the rousing farewell demonstration accorded them by its people and said they would be forever remembered wherever the fate of war might carry them," said the paper.

The train's engineer "pulled out very slowly until the train had passed through the cut in the yards, while a perfect sea of handkerchiefs and parasols were waved in the air and a chorus of shouts went up from hundreds of voices," the paper wrote.

First, they would go to San Antonio, Texas, where their number swelled to 1,250 and they met their new Lt. Commander Teddy Roosevelt. Roosevelt wholly embraced the idea of "rough riding" horsemen going to war and instructed all his men to behave as such. After a stop in Florida, they went to Cuba to fight with great distinction and glory still well remembered to this day, but the name and concept of the "Rough Riders", well that's pure Prescott.

*

Article By:

Drew Desmond, Secretary, Prescott Western Heritage Foundation Arizona Weekly Journal-Miner 5/11/1898, Prescott Courier April 11, 1975.https://prescottlivingmag.com/the-rough-riders-were-born-in-Prescott/

Additional Sources:

https://militaryhistorynow.com/2017/09/28/the-rough-riders-seven-things-you-didnt-know-about-teddy-roosevelts-legendary-volunteers/

Concerns Raised Over a Possible Future Chinese or Russian Electromagnetic Pulse Attacks (EMP) *

A future Electromagnetic Pulse Attack (EMP) on the U. S. has been raised for many years. Our country is vulnerable according to several "Think Tanks" and others in a recent article that appeared in the *Epoch Times* newspaper dated December first 2021.

China and Russia are working on several possible scenarios that could severely cripple our country and economy and at the same time take countless American lives and plunge the country into a panic mode. An EMP pulse weapon deployed above the U.S. in space as an example could decimate the country's power supply triggering mass chaos. An EMP attack centered over New York City would cover the entirety of the eastern U.S. according to a statement to Congress by Peter Pry, and EMP expert and the executive director of the Task Force on National and Homeland Security advisory body.



Electromagnetic Pulse weapons offer Russia, China, and the ICBM armed rogue states a fast, cheap and effective means to make most Americans feel immediately the horrors of war according to Rick Fisher, senior fellow at the International Assessment and Strategy Center. At a 2015 hearing before two House sub committees on Oversight and Government Reform, George Baker, a professor emeritus of applied science at James Madison University said "there is no one in charge" at the Federal Energy Regulatory Commission (FERC) and North American Electric Reliability Corporation (NERC), which collectively overseas and ensures the bulk transmission of power in the U.S.

When Chief of Staff of the U.S. Air Force General Charles Q. Brown Jr. asked the NERC officials about EMP protection they informed him that they don't do EMP, that's DoD's responsibility. The DoD then told him EMP protection for civilian infrastructure is the responsibility of the Department of Homeland Security (DHS). When asking DHS they said that EMP protection should be done by the Department of Energy since they over see sector-specific infrastructure.

<u>So the question has to be raised, who is in charge and what is being done to counter and research EMP for the future protection of the U.S.</u>? Apparently no one!

Research has shown few Americans have any idea what it is like to live without electricity, constant digital communication, or immediate access to medical or transportation services, which can be taken way by EMP weapons and for a considerable length of time.

The damage form an EMP attack destroys anything with an electrical circuit, and that means electrical systems and infrastructures that we rely on as a society. These critical systems would no longer be intact or usable. An EMP attack could create societal chaos and unpreparedness in a society that would be transitioned back to a 19th-centrury way of life.

An EMP attack has been referred o as a "new Blitzkrieg", referencing the Nazi strategy of lightning warfare during WWII in which German tanks, planes and artillery would quickly swarm and incapacitate allied defenses.

The hypersonic weapon recently tested by the Chinese regime also reportedly launched a second missile while in hypersonic flight, for example, and it's possible such a system could be used in an EMP attack by concealing a surprise EMP strike, but was unlikely to be used to directly launch an EMP strike because the hypersonic vehicle travels at a lower altitude than is required by an EMP detonation.

One thing is certain, EMP's have been recognized as a serious threat to the U.S. for decades. Little meaningful action has been taken to prevent or mitigate their destructive capacity. Air Force General Brown said earlier this year that the U.S. military has "been asleep at the wheel" since Desert Storm in the early 1990's on the issue of electromagnetic warfare.

In the future, Chinese leaders could use a limited demonstration of nuclear weapons to create an EMP. This could be a strategy during a crisis to shock U.S. political leaders and demonstrate the Chinese resolve to escalate to higher levels of nuclear violence should the U.S. fail to "back down" over whatever the issue is currently at hand.

Club Christmas Banquet



Your editor couldn't make the banquet this year, however, *Bob Steffensen* took these photos above and our President *Bill Gilbert* updated me on the two key awards given out this year.

A special award was given to *Mark Lipp* for his outstanding contributions to our club last year and of course we can't leave out his wife Jane she was there at our field regularly especially at our major events helping with food preparation and whatever needed to be done. Our spouses are really key members of our club and just as important as any member.



The other key award (at left) given out each year, is our traveling perpetual trophy. This year it went to *Dan Avilla* for his long range strategic planning and thinking about where our club should be headed in the future. Dan is an "At Larger Member" of Directors (BoD) and came regularly to our board meetings and gave us very timely inputs and ideas.

These awards were the highlight of the banquet. There were some other awards given out as well by our yearly Master of Ceremonies *Rick Nichols.* We will be including more information on these awards in next month's newsletter.

Rick has been our MC for a number of years and he always keeps us laughing at what might come next at each Christmas Banquet. (A past banquet photo of Rick is at right.)

So next time you see Mark Lipp or Dan Avilla let them know how much we all appreciate what they continually do and have done for our club.







Banquet Photos by Bo**b** Steffensen



