AMA Chapter #3798

Chino Valley Model Aviators
Official News

April 25, 2021 | Volume 24 Issue 4 | www. chinovalleymodelaviators.org

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

Inside This Issue

Quote of the Month:

"Living at risk is jumping off a building and building your wings on the way down!"

Ray Bradbury

DANE O'BRIEN'S BUSHMASTER GASER

Dane's very nice Bushmaster moves around the sky with .70 Gas Engine.

GLENN HEITHOLD'S TWIN CESSNA SKYMASTER

Glenn's Cessna is powered by two OS-25 FSR glow engines.

Bill Gilbert: CVMA President's Message

We have been enjoying the warmer, if breezy springtime weather. But it's finally shorts season again!

Our last meeting at the field was very productive with good member dialogue, and a vote was held for the proposed club expansion. The membership has decided to move forward with Phase 1 of the long-term expansion proposal. We will get started by laying down some concrete; extending the walkway at the west end, adding a BBQ pad, and Porta-Potty pad.

In the future we will come back and revisit Phase 2, which is an additional cabana and its associated concrete slab. This is the start of some great additions to the club! It should make the club more enjoyable for all our members.

We were presented with a proposal from the Control Line interest group to alter the wording of Article II Objective in our constitution. From "…encourage and develop *Radio Controlled (R/C) model flying*…" to "…encourage and develop *model aviation*". They would like to have the club encourage all types of model aviation, and to protect any investment they make on the Control Line circle.

I have begun working with the AMA Government Affairs team to position our club for an altitude variance request. While we expect to be part of a blanket increase for clubs in uncontrolled airspace to have altitudes up to the floor of Class E, our overlying class E floor is 700'. We will request as a club a higher limit to be able to safely practice flight with large scale airplanes, turbines, and gliders.

We have added a couple of new events to our season with May 15 being our first; a Float Fly! Bring your water-capable creations out to Willow Lake boat ramp and let's enjoy a different type of flying in a beautiful setting. Also, on May 22 we will hold our second event; the Spring Fling Fun Fly and Swap Meet. We plan on having a pancake breakfast, be sure to come out and take advantage of good deals to be had, and have some hot cakes right off the grill!

We have more events in June and we have added a new Glider Endurance event for July 24. A lot of you have added gliders to your fleet; this will surely be a fun event with some cash prizes. Don't forget to get started on your Build N Fly project for the October challenge.

Maintenance of the field has some minor maintenance issues that we need your help with; Please volunteer to tackle the items that we have on our sign-up list that was posted at the meeting. Our preventative maintenance has provided dividends in that we haven't necessitated work parties, but smaller maintenance items need addressing by one or two person teams.

We have had a good safety record do far this year, but there's a couple of safety issues that we can do better on; please do not disturb or distract pilots while they are flying. Most of us need full concentration just to get down in one piece! Another issue is flying far south of the runway at the western (uphill) approach end. A mild "flare" such as in overshooting the turn is tolerable, but please do not extend the pattern into a south lobe.

Let's get back to flying and honing those skills. We still have breezy mornings to contend with for another few weeks- bring out those practice planes!

See you at the field

Bill

CVMA Flight Instructors

•Steve Shephard
Chief Flight Instructor

•Al Marello-basic
•Lloyd Oliver-basic
•Riley Harley-basic
•Jack Potter-gliders

CVMA NEWSLETTER

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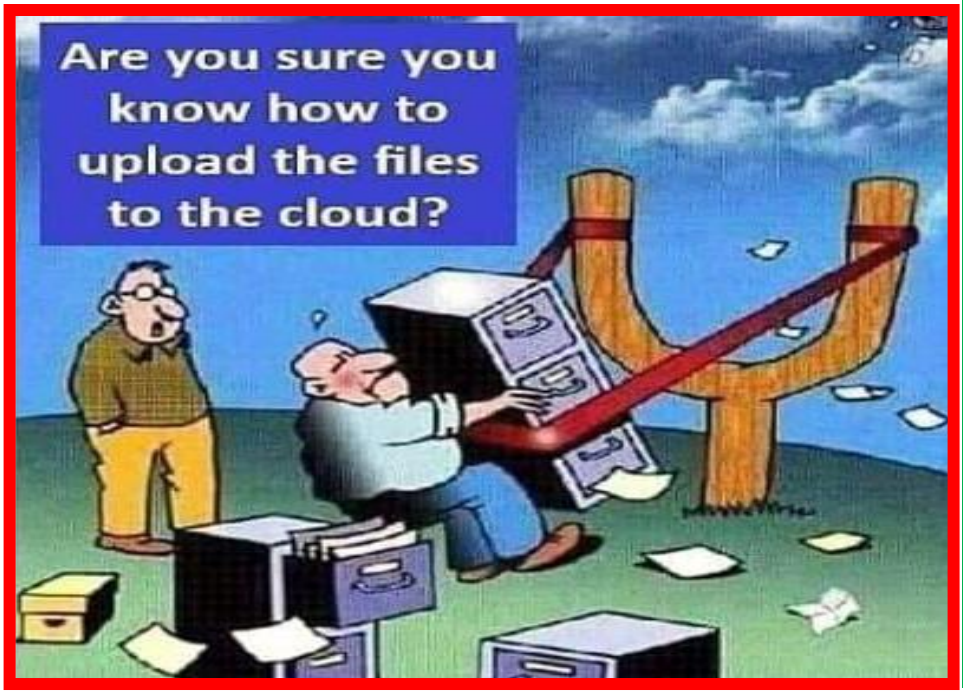
Published Monthly

What Bomber has a Side-by-side Cockpit?

See Page 10



2021 — MARK YOUR CALENDARS

May 22 - Spring Fling Fun Fly & Swap Meet

June 12 - E-warbird Races

June 19- Delta Wing Combat Event

July 4 - Pot Luck Fun Fly & Chino Valley Fireworks (watch from our field)

Aug 20-21 IMAC Southwest Region Shootout Held at our field.

Sept. 25 Annual Steve Crowe Memorial Fun Fly

Oct 23 Fourth Annual Build & Fly Challenge

Dec 3 Annual Christmas Banquet

BORN IN A BARN ?

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

SAFETY IS ALWAYS A CRITICAL ISSUE

By Rick Nichols, Club Safety Officer

A couple of new items this month and some timely reminders. First, I would like to remind every pilot at the field that I am not the only safety officer on the flight line Each of us has a responsibility to make a kind and tactful suggestions or corrections to any pilot observed flying in an unsafe manner.

Please do not make remarks or corrections if the pilot is in the air unless absolutely necessary! Wait until the pilot is on the ground and clear of the runway before making any necessary suggestions. Do so in a polite manner.

It is warming up again and be advised and aware that we do have an occasional rattle-snake as our guest at the airfield.

It is recommended that you use the emergency cart to retrieve your airplane or airplane leftovers from the field.

Remember that batteries ignite, and we have water and extinguishing equipment on the cart. Do not hesitate to jump at the opportunity to head yourselves to that small source of smoke from a downed airplane and battery.

Each of us have a combination to the lock on the gate and the lock on the hangar, they are identical. It should be a good practice, especially during the warmer months for the earlier members arriving to position the rescue cart at the flight line upon arrival. Please remember that the area South of the runway is a no fly-over zone, both to the East and the West ends of the field.

We have Town gun ranges and police ranges to be aware of. We are permitted a sliver of overfly area in this zone. Consult the chart on the club information board at the field. We have had complaints from the Town Gun Range as well as the Police Gun Range of overflies in these areas.

There have been complaints of concern from a few pilots on the flight line that have been approached by uninvited well wishers offering uninvited and distractive conversation as they are flying. To some of our flyers this is a cause of concern. On one occasion one of our instructors had a student in the air and a well meaning person dropped an item in his pocket to return it to him. The instructor was distracted and as a result the student made a unplanned landing.

Even if there is a distraction, always, always, keep your attention on your airplane, never glance away talk to the distractor, do not look at him! Your plane should always be your main concern.

Please be aware that the pilots on the flight line may not need your company unless requested as a spotter or an invited aide.

As I have observed, 99% of our members and pilots have performed an exceptional job of making our Chino Valley Model Aviators a venue that is among the greatest place in the State of Arizona to fly RC.

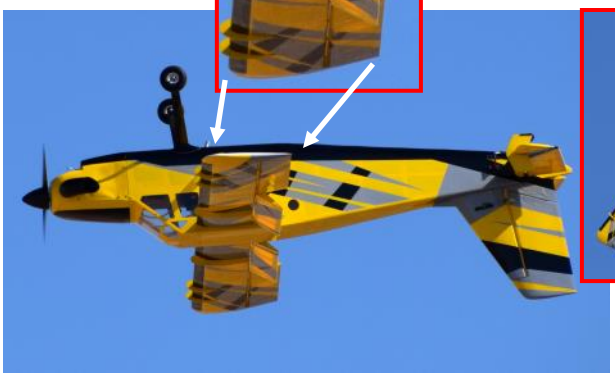
Our facilities are exceptional. If any of our members have any thoughts of topics, or items of safety that I should address in this column, please let me know. No item of safety is deserving of being omitted or skipped over.

Members' Cool Planes

Steve Zingali's Swing Wing F-14

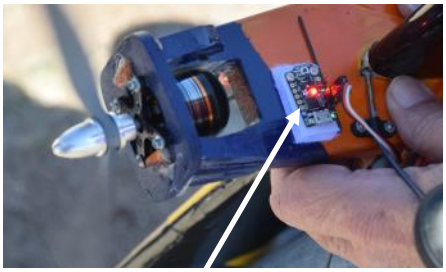
Dane's very nice Bushmaster gaser is a beautiful flyer.

Dane O'Brien did an upside down fly-by with full flaps, he has full range of motion on his flaps, very impressive!



Dane at right talking to *Dan Availa.*

Bill Gilbert's Carbon Cub



Rick Nichols' timer light indicates it's ready to fly on this test of flight time for his little C/L Ringmaster at right.

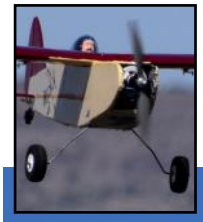
Dan Avilia's Turbine Bandit with son Chad assisting.

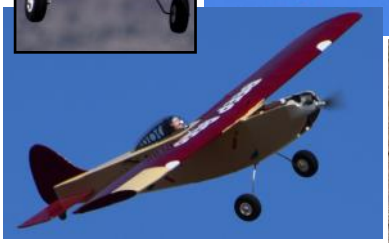
Riley Harley's very nice gas powered Spitfire.

More Member Flying Machines!

Matt Hinshaw's **Cub (L) with Tundra wheels that are functional just like those used on full sized aircraft for rough field take off and landings.**

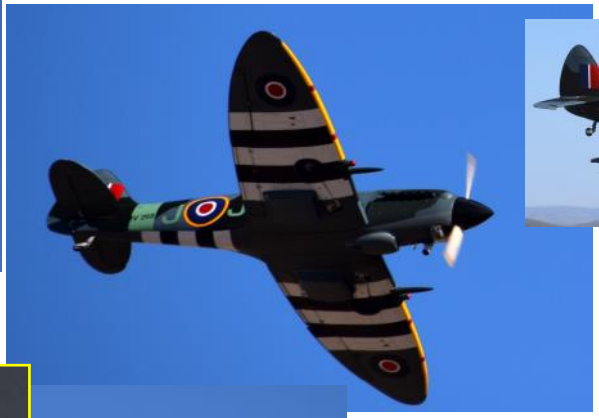
Rich Nichols **ready to launch** ***Randy Meathrell's*** **C/L German Messerschmitt BF-109**





Rick Nichols **"Beep-Beep" Old School Model.**

Jack Potter **above launches** ***Ray Landry's*** **Phoenix with a Gentle Lady wing.**



John Stewart's **scale WWII gas powered Spitfire.**

Riley Harley's **very nice Balsa USA scale rendition of the iconic WWI Bristol.**

Harold Ellis WWI Elder

Drone Technology has Entered the World of Science and is Saving Lives

By Bob Shanks

The wonderful but pesky drone is becoming common place with the technology seen in various fields from real estate to serious scientific uses, however, in the world of modeling the road has been bumpy and for a time a real threat to the radio control modeling hobby due to their misuse and threat to aviation. The misuse of this technology could still be a threat to RC if all serious modelers don't register and spend $5 register and place the number on all models. The fee is good for three years and must then be renewed.

Drones are now heavily regulated as they should be and because of this technology we know all register our RC models and carry an FCC number! It's a good idea to not only have the FCC number but also your AMA number on all models. Scale models have a lot of places where these numbers can be placed and not ruin the scale presentation. One simple method is to print out some small mailing labels and place them somewhere on the model for easy identification.

It took over 53,000 letters to the Federal government and Congressional representatives but finally some the political bureaucrats have finally acknowledged there is a difference between a model airplane and a drone, duh!

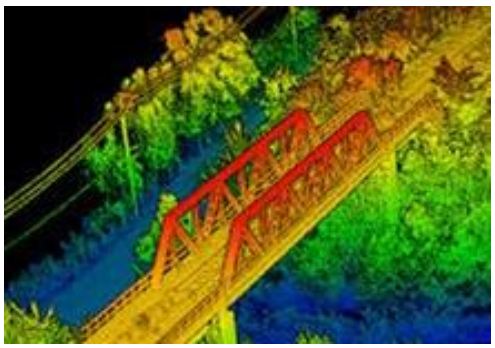
In the May 2021 issue of *Model Airplane News*, the editors outlined 12 major positive impacts the use of drones are having. The one that caught your editor's eye was the use of drones for landmine detection developed by a 15-year-old Indian student Hashwardhan Zafla.

This young teenager was inspired when he saw a You Tube video of soldiers in Afghanistan getting injured and killed by landmines. Zafla's drone sends out radio waves over an 86 square foot area while flying at two feet of altitude. The information is sent back to a base station. This drone can also be set to detonate landmines.

The whole area of drone uses in unmanned aircraft systems is changing quickly with new ideas emerging almost daily. From the size of a bumblebees to airplanes, drones are everywhere it seems.

The FAA requires drones to remain within the operator's line of sight. Exceptions involve detailed licenses allowing for flight outside the line of sight. From LiDAR uses (*LIDAR is a remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth*) to 3D mapping. The evolution with drones for scientific advancement seems almost unlimited. However, we must all comply and insure all our models are marked. Will "Big Brother" come by our field to check our compliance? The chances are slim, but it is the law so let's all protect our hobby, register and get that number on your models.

As a reminder here's the link to the FAA Registration site that has been sent out to all modelers in various ways as well as by our club's Board: https://faadronezone.faa.gov/#/



Drones come in all sizes from the very tiny to drones bigger than some aircraft. The center photo is a sample LIDAR image.

"Why did the De Havilland Comet keep crashing?" History of the "Black Box" Flight Recorder *


British De Havilland Comet

In 1934 eight -year-old David Warren was tinkering with his prized crystal radio set his father had given him. His father, thirty-three-year-old Rev. Hubert Warren was serving as an Anglican Missionary in Australia with his wife Ellie, David's mother. His father was flying to his new church posting in Enfield, Australia. He left his four children and wife behind to come later. Tragically, Rev. Warren's passenger plane crashed near the island of Tasmania just off the coast of Australia. The plane was never found.

The last present to young David was the little crystal radio the boy treasured deeply. David was a student and boarded at the Launceston Boys' Grammar School in Tasmania. David Warren tinkered with his little crystal radio machine after lessons, learning what made it work. He charged friends a penny to listen to cricket matches, and within a few years was selling home-made copies of the radio at five shillings each.

David Warren studied his way to a science degree from the University of Sydney, as well as a diploma in education from Melbourne University and a PhD in chemistry from Imperial College, London. His specialty was rocket science. He went to work as a researcher for the Aeronautical Research Laboratories (ARL), a part of Australia's Defence Department that focused on airplane research and development.

In 1953 ARL loaned him to an expert panel trying to solve a costly and distressing mystery. Why did the British de Havilland Comet, the world's first commercial jet airliner and the great hope of the new Jet Age, keep crashing? The now Dr. Warren recalled some 50 years later that he found himself in a group discussing pilot training, vertical fins, possible pilot errors, all sorts of aeronautical designs and terms he nothing about.

Dr. Warren said of that time, he found himself daydreaming about something he had seen the week before at Sydney Australia's first post-war trade fair. He was intrigued with what was claimed at the time to be the first pocket recorder, the German device called the Miniphon. This was an entirely new device and was marketed as a dictation machine for businessmen who could record from just about anywhere and have letters and correspondence typed up later.

David, wanted one so he could make bootleg recordings of the jazz musician Woody Herman, David was an avid musician and played the clarinet. However, when one of his fellow scientists suggested the latest doomed Comet might have been hijacked, something clicked in Dr. Warren's head. What if by chance a recorder had been on board - and survived the fiery wreck – This was basically nil of course but what if every plane in the sky had a mini recorder in the cockpit? If a recorder was tough enough, accident investigators would never be this confused again, because they'd have audio right up to the moment of the crash. At the very least, they'd know what the pilots had said and heard.

The idea fascinated him. Back at ARL so he rushed to tell his boss about his idea. However, his superior didn't share his enthusiasm. Dr Warren said he was told: "It's nothing to do with chemistry or fuels. You're a chemist. Give that to the instruments group and get on with blowing up fuel tanks." But David knew his idea for a cockpit recorder was a good one. Without official support, there was little he could do about it - but he couldn't get it out of his mind.

When his boss was promoted, David pitched his invention again. His new superior was intrigued, and so was Dr Laurie Coombes, ARL's chief superintendent. They urged him to keep working on it - but discreetly. Since it wasn't a government-approved venture or a war-winning weapon, it couldn't be seen to take up lab time or money. Dr Warren said the chief superintendent had cautioned him: "If I find you talking to anyone, including me, about this matter, I will have to sack you. (fire him)!"

It was a sobering thought for a young man with a wife and two children. But his boss's backing extended to letting Dr. Warren quietly buying one of the precious new dictation recorders, chalking it up as "an instrument required for the laboratory…" Encouraged, Dr Warren wrote up his idea in a report, titled *"A Device for Assisting Investigation into Aircraft Accidents"*, and sent it out across the industry.

The pilots' union responded with fury, branding the recorder a snooping device, and insisted "no plane would take off in Australia with Big Brother listening". That was one of his better reviews. Australia's civilian aviation authorities declared it had "no immediate significance", and the air force feared it would "yield more expletives than explanations".

Dr Warren was tempted to pack it all in. However, Dr Warren took to his garage and started assembling his idea into a current device using some of his 20-year-old radio parts in his workshop. He'd decided the only way to overcome his critics' mockery and suspicion was to build a solid prototype. It would be the first ever "black box" flight recorder.

More on pate 8

✤ ***Sources:***
https://www.planeandpilotmag.com/article/why-did-the-de-havilland-comet-keep-crashing/
This little-known inventor has probably saved your life - BBC News (https://www.bbc.com/news/world-australia-49012771)

History of the "Black Box" Flight Recorder (Continued from page 7)

One day in 1958, when the little flight recorder had been finished and finessed, the lab received an unusual visitor. Dr Coombes, the chief superintendent, was showing round a friend from England.

"Dave!" he said, "Tell him what you're doing!" Dr Warren explained: his prototype world-first recorder for aircraft, he said it used steel wire to store four hours of pilot voices plus instrument readings and automatically erased older recordings, so it was reusable.

There was a pause, then the visitor said: *"I say Coombes old chap, that's a damn good idea. Put that lad on the next Courier, and we'll show it in London."* (The Courier aircraft is a British troop-carrier and freight transport aircraft the Handley Page HP.67 Hastings)

Handley page Courier

The courier made a regular flight to England. You had to know somebody pretty powerful to get a seat on it. Dr Warren wondered who this man was who was giving away tickets round the world to somebody he'd never met. The answer was Robert Hardingham (later Sir Robert), the secretary of the British Air Registration Board and a former Air Vice-Marshal in the RAF. In David's words: "He was a hero. And he was a friend of Coombes, and if he gave away a seat, you took it."

A few weeks later, Dr Warren was the Courier bound for England - with strict instructions not to tell Australia's Department of Defence what he was really doing there, because "somebody would frown on it". In a near-unbelievable irony, the plane lost an engine over the Mediterranean.

Dr Warren recalled: "I said, 'Chaps, we seem to have lost a donk (engine) - does anyone want to go back?' But we'd come from Tunisia and it was about 45 degrees overnight. We didn't want to go back to that hellhole." They flew on completing the flight.

He recorded the rest of the flight, thinking that even if he died in that limping transport plane, "at least I'd have proved the bastards wrong!" "But unfortunately, we didn't prang (crash) - we just landed safely" In England, Dr Warren presented "the ARL Flight Memory Unit" to the Royal Aeronautical Establishment and some commercial instrument-makers. The Brits loved it. The BBC ran TV and radio programs examining it, and the British civil aviation authority started work to make the device mandatory in civil aircraft. A Middlesex firm, S. Davall and Sons, approached ARL about the production rights, and kicked off manufacturing.

Though the device started to be called "the black box", the first ones off the line were orange so they'd be easier to find after a crash - and they remain so today. Peter Warren believes the name dates from a 1958 interview his father gave the BBC. "Right at the end there was a journalist who referred to this as a 'black box'. It's a generic word from electronics engineering, and the name stuck."

In 1960, Australia became the first country to make cockpit voice recorders mandatory, after an unexplained plane crash in Queensland killed 29 people. The ruling came from a judicial inquiry and took a further three years to become law. Today, black boxes are fire-proof, ocean-proof and encased in steel. And they are compulsory on every commercial flight. It's impossible to say how many people owe their lives to data captured in the death throes of a failing plane - to the flaws exposed, and the safety innovations that followed.

So Why did the Comets Keeping Crashing?

By testing the structure of an existing Comet in a water tank under repeated pressurization cycles, the truth became clear when the fuselage of the test article came apart in an explosive decompression. This was after just over 3,000 pressurization cycles. The cause of the two planes breaking up in mid-flight was found. It was metal fatigue. Engineers redesigned the structure of the plane for what became the Comet 2, and that was the end of that issue. The company went on to produce 114 of the aircraft, ending with the Comet 4 model, which was last produced in 1959. Sadly, the Comet, even after the cause of its mystery woes was diagnosed, had a terrible safety record, with 26 hull losses during its short operational life, resulting in more than 400 fatalities. But its role as a pioneer helped pave the way for future airliners, and De Havilland's engineers' discovery of the dangers of metal fatigue from pressurization cycles made future airliners far safer from that danger than before.

David Warren worked at ARL until his retirement in 1983, becoming its principal research scientist. He died on July 19, 2010, at the age of 85.

At left is a young David, right, is David holding one of the prototypes of his flight recorders.

Just Keeping Sticking with a Problem
The Surprising Development of CA Glue

By Bob Shanks

Editor's Note: Member *Rick Nichols* gave me a copy of his March 2021 "Elks Magazine" and in it was the article about CA glue. We all take for granted items we use to build great RC and/or control line planes, here's the background along with other surprising discoveries.

A PhD's surprising discovery, some of with these "Piled Higher and Deeper" doctoral degreed folks come up with some great ideas we use everyday. One of these we depend on in RC modeling is CA glue often called "super glue" a cyanoacrylate pronounced, *(sai·a·now·a·kruh·leit)*. One of these PhD's was Harry Coover who worked for Eastman-Kodak.

During early experiments to manufacture clear plastic gun sights for the military in the 1940's, CA proved to be far too adhesive for the plastics Eastman-Kodak wanted to create but Harry Cover didn't forget about the good adhesive property cyanoacrylate offered. In 1951 he was assigned to a team investigating the development of heat resistant coatings for airplane canopies. Coover immediately thought about CA. However, the team found it was not useful as a heat resistant shield for aircraft, but he thought it might have other commercial values so he experimented and glued various items together in his laboratory as a test and discovered the CA had some excellent permanent bonding characteristics on a wide range of materials that didn't require heat or pressure making it ideal for a host of other manufacturing and assembling uses. Coover went on to patent CA as a Alcohol-Catalyzed Cyanoacrylate Adhesive Compositions/Superglue.

Eastman-Kodak released the product as a general-use adhesive in 1958, calling the product Eastman 910. Most buyers, however, referred to the adhesive as superglue, and eventually, this was adopted as the official name. Coover went on to enjoy a successful career in the chemical industry. He was awarded more than four hundred patents during his career, and in 2004 he was inducted into the National Inventors Hall of Fame.

One can find a number of products we use in everyday life that came about when another problem was being worked on for a solution. Percy Spencer, an engineer at Raytheon, was working on a magnetron tube when he noticed that a candy bar in his pocket had started to melt due to the microwaves. Eureka! Spencer developed a box for cooking and found that indeed, when food was placed in the box with the microwave energy, it cooked well and fast, the first oven was introduced in 1967.

Here's a Few More Accidental Inventions/Discoveries

Sir Alexander Fleming's accidental discovery of penicillin in1928 while he was investigating staphylococcus bacteria that causes boils in patients with weakened immune systems. In 1826 British pharmacist John Walker noticed a dried lump on the end of a stick while was stirring chemicals and when he tried to scarp it off it sparked, now we all use matches to start fire. Potato Chips came about In 1853 when restaurant cook George Crum was exasperated with a customer who kept complaining about his French style potatoes not being cooked to his satisfaction (French style potatoes was a common dish during that time) so the exasperated Crum sliced the potatoes as thin as he could, over fried them and covered them in a prohibitive amount of salt. Much to his surprise the complaining patron loved them, and they quickly became the house specialty changing snacking forever.

Lucky blunders made by dedicated scientists, engineers and others with insatiable curiosities has led to discoveries that have benefitted people all over the world.

Sources:

March 2021 "Elks Magazine" page 32

https://www.treehugger.com/accidental-inventions-that-changed-the-world-4864131

BOEING B-1B LANCER *

The B-1B Lancer is a variable-sweep, supersonic bomber. An icon of the latter decades of the Cold War, the B-1B Lancer was originally designed as a strategic nuclear bomber with a mission to fly at low altitude in order to avoid Soviet early warning radars. With the end of the Cold War, the B-1B Lancer has been adapted to carry conventional munitions and has been used extensively in close air support and tactical bombing missions.

Carrying the largest payload of both guided and unguided weapons in the Air Force inventory, the multi-mission B-1 is the backbone of America's long-range bomber force. It can rapidly deliver massive quantities of precision and non-precision weapons anywhere in the world.

The B-1B's blended wing/body configuration, variable-geometry wings and turbofan afterburning engines, combine to provide long range, maneuverability and high speed while enhancing survivability. Forward wing settings are used for takeoff, landings, air refueling and in some high-altitude weapons employment scenarios. Aft wing sweep settings - the main combat configuration -- are typically used during high subsonic and supersonic flight, enhancing the B-1B's maneuverability in the low- and high-altitude regimes. The B-1B's speed and handling characteristics allow it to seamlessly integrate in mixed force packages. These capabilities, when combined with its substantial payload, excellent radar targeting system, long loiter time and survivability, make the B -1B a key element of any joint/composite strike force.

The B-1 is a highly versatile, multi-mission weapon system. The B-1B's synthetic aperture radar is capable of tracking, targeting and engaging moving vehicles as well as self-targeting and terrain-following modes. In addition, an extremely accurate Global Positioning System-aided Inertial Navigation System enables aircrews to navigate without the aid of ground-based navigation aids as well as engage targets with a high level of precision. The Combat Track II radios provide a secure beyond line of sight reach back connectivity until Link-16 is integrated on the aircraft. In a time sensitive targeting environment, the aircrew can use targeting data from the Combined Air Operations Center over Combat Track II, then to strike emerging targets rapidly and efficiently. This capability was effectively demonstrated during operations Enduring Freedom and Iraqi Freedom.

The B-1B's onboard self-protection electronic jamming equipment, radar warning receiver (ALQ-161) and expendable countermeasures (chaff and flare) system and a towed decoy system (ALE-50) complements its low-radar cross-section to form an integrated, robust defense system that supports penetration of hostile airspace. The ALQ-161 electronic countermeasures system detects and identifies the full spectrum of adversary threat emitters then applies the appropriate jamming technique either automatically or through operator inputs.

Current modifications build on this foundation. Radar sustainability and capability upgrades will provide a more reliable system and may be upgraded in the future to include an ultra high-resolution capability and automatic target recognition. The addition of a fully integrated data link, or FIDL, will add Link-16 communications capability. FIDL combined with associated cockpit upgrades will provide the crew with a much more flexible, integrated cockpit, and will allow the B-1 to operate in the fast-paced integrated battlefield of the future. Several obsolete and hard to maintain electronic systems are also being replaced to improve aircraft reliability.

The B-1A was initially developed in the 1970s as a replacement for the B-52. Four prototypes of this long-range, high speed (Mach 2.2) strategic bomber were developed and tested in the mid-1970s, but the program was canceled in 1977 before going into production. Flight testing continued through 1981.

The B-1B is an improved variant initiated by the Reagan administration in 1981. Major changes included the addition of additional structure to increase payload by 74,000 pounds, an improved radar and reduction of the radar cross section by an order of magnitude. The inlet was extensively modified as part of this RCS reduction, necessitating a reduction in maximum speed to Mach 1.2.
The first production B-1 flew in October 1984, and the first B-1B was delivered to Dyess Air Force Base, Texas, in June 1985. Initial operational capability was achieved on Oct. 1, 1986. The final B-1B was delivered May 2, 1988.
The B-1B holds almost 50 world records for speed, payload, range, and time of climb in its class. The National Aeronautic Association recognized the B-1B for completing one of the 10 most memorable record flights for 1994. The most recent records were made official in 2004.

The B-1B was first used in combat in support of operations against Iraq during Operation Desert Fox in December 1998. In 1999, six B-1s were used in Operation Allied Force, delivering more than 20 percent of the total ordnance while flying less than 2 percent of the combat sorties.

During the first six months of Operation Enduring Freedom, eight B-1s dropped nearly 40 percent of the total tonnage delivered by coalition air forces. This included nearly 3,900 JDAMs, or 67 percent of the total. In Operation Iraqi Freedom, the aircraft has flown less 1 percent of the combat missions while delivering 43 percent of the JDAMs used.

* https://www.military.com/equipment/b-1b-lancer

General Membership Club Meeting for April

The General Membership meeting for April 25, 2021 opened at 10am at the field. We began with the Pledge of Allegiance. Club membership stands at 118. Members present for the meeting were 32. New member present was *Steve Satterwhite*. Minutes of March 27th meeting were unanimously approved by members.

President's Agenda:

Treasurer *Harold Ellis* presented the Treasurer's report. The total of all accounts is now $25381.08. This includes all accounts and CD's. The report was approved unanimously.

President *Bill Gilbert* stated that the Board had revisited the requirement to look at the East end for expansion. Because the East end is not level it would add additional costs to the project and was just not feasible. We reviewed of field improvement plans: concrete work to extend the sidewalk, pad and install two additional run up stations on the West end; a new cabana; a concrete pad in front of the shed door; and a concrete pad with tie downs for the porta potty. There was additional discussion on the need for the improvements with some opposition. A motion was made to proceed with Phase I concrete work and the project was approved by members with 23 yay and 9 nay votes.

Long Range Planning Committee (LRPC) will help identify and prioritize club improvements. If you have any inputs for maintenance or improvements, please contact the LRPC members: Doug McBride- dougmcb@live.com, Don Crowe- bigchinodon@gmail.com. Mark Lipp- jflipp@aol.com.

Scheduled Events:

The first club Float Fly is schedule for 10am May 15th Willow Lake. The Spring Fling and Pancake Breakfast is just around the corner on May 22. The Glider Event is July 24th and will include any 2 meter glider. A nominal entry fee will produce cash prizes for the winners. Check your club calendar for this year's events. Interest remains high amongst a group that wants to make a control line circle. Efforts to fund the project without club funds is underway. Indoor flying at the Prescott HS gym, from 2-4pm on the 4th Saturday, is available through April and will resume in July through November.

Safety Officer *Rick Nichols* reminded dog owners to keep their pets off the flight line and runway and especially to pick up after the dogs. Be safe! Secretary *Bob Steffensen* will request December 3 for the Christmas Party.

Member Comments:

Randy Meathrell thanked Bill Gilbert for his donation of a nice nitro heli…sale of which may yield about $400. Rick Nichols read a proposed amendment to the Club constitution, which will re-state the purpose to include all kinds of model aviation. This will be discussed further by the Board, published for comment and voted on at the next General Meeting. Newsletter editor, *Bob Shanks* stated that this was a great time to get ahead of a build for the October Build and Fly. Get your balsa stick kit out and get started! We took a break about 10:54am for cookies provided by *Gary Consentino* and resumed about 11:05 am for Show and Tell.

Show & Tell: Planes and Projects:

Jack Potter showed his Space Walker that he won in last October's raffle and *James Comey* showed his float plane.

Door Prize/Raffle:

Rick Nichols won the door prize consisting of a lanyard, cable ties and of course glue. *Jean Greear* won the Kaos in raffle.

Club Action Item: Please Read

Proposal for an Amendment to the Chino Valley Model Aviators Constitution

April 24, 2021

PROPOSAL

- Amend Article II – Objective.
- The purpose of this club shall be a non-profit club to practice, encourage and develop Radio Controlled (R/C) model flying and to provide facilities to accomplish such.

AMEND TO:

- The purpose of this club shall be a non-profit club to practice, encourage and develop model aviation, and the facilities to accomplish such.
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1. I am proposing this change verbally and in writing at the April 24 general meeting of the Chino Valley Model Aviators.
2. This will be published in the April Edition of the Club Newsletter and will be eligible to be voted on at the May general meeting.

Rick Nichols, Safety Officer, 4-24-2021

For Show & Tell: top left is *Jack Potter* and his Space Walker. Right is *James Cowley* with his float plane.

Left is *Rick Nichols* won the door prize of Yes, glue and a few other items.

Door Prize

Jean Greear wins raffle prize a Kaos 60