



AMA Chapter #3798

# Chino Valley Model Aviators

## Official News Letter



January 25, 2016

Volume 19 Issue 1

[www.chinovalleymodelaviators.org](http://www.chinovalleymodelaviators.org)

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

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## MARC ROBBINS 3D HOBBIES EDGE 540 HEADS FOR THE BIG "X" IN THE SKY



### FAA Motto:

*"We're not happy until you're not happy."*

### Support Our Local Hobby Shop



The Safeway Center  
Prescott Valley, AZ  
MAX & CINNIMON BANDY  
THEY SUPPORT OUR CLUB  
Please support them as well.

## Member Terry Steiner's Electric Beaver



Terry's DHC-2 Beaver is from Fly Zone and is transmitter ready. It comes with floats and landing gear. It has a 59.5 inch wing span and weighs 3lbs. The motor is a 41-19-850 out-runner brushless with a 40A ESC. He uses a 11.1 volt 2100mAh LiPo battery for about 10 minutes flying time. A nice looking foam rendition Terry.



*Field Chatter from CVMA President, Michael Kidd: No Kidding!*

The big issue that seems to be hitting a nerve in most of us is the FAA Registration issue. The AMA has stated that the flying club is not responsible for The big issue that seems to be hitting a nerve in most of us is the FAA Registration issue. The AMA has stated that the flying club is not responsible for monitoring members registration.

**The AMA has stated that we "need" to register, this statement came out in an email from AMA 19th of this month.** If you have not received this email, I am sure you will soon. At the January meeting we discussed this issue and this is

what I stated as Club President. "We are all adults, do what you feel you need to regarding registration, however, keep the clubs best interest in mind".

That said there will be no more discussion on whether we should or shouldn't register. We will discuss any issues that AMA or the FAA put forth.

The other topic that we discussed was the runway. If we are going to move it would be in the best interest of the club to not spend \$11,000 to \$13,000 on the old section of the runway. However, we do need to oil the new section, so we might as well have the old section done as well. We have collect-

ed runway donations of about \$4500. What we will do, when the weather warms up, is have the complete runway oiled and re-stripped. This will be awesome for the new section, which is due for re-oiling. And hopefully it will "some what" help preserve what is left of the old section.

The club will also be doing some grading work near the bleachers and the pass-through driveway as well as the area just East of the blue 6x6's. This will be to prepare for delivery of pre-emergent and delivery of 3/4" gravel to solve the mud problems we are having. I am counting on help from our members as there will be a bit of shovel/rake

work needed when the gravel is delivered. We will not be moving the gravel all by hand, we will have a tractor to do the majority of the work, but shovel/rake work is still going to be needed to smooth out the gravel. We shall let you know when this will be done. I hope to get this kicked off by end of February. So stay tuned for an email asking for volunteers.

Our next regular meeting will be February 17, 2016 hope to see you there.

Well, that is all for now, safe flying.



**IF YOU BROUGHT IT, YOU TAKE IT HOME**

**There are no trash cans at the field.**  
**Take your trash home members and lock the gate when you leave!**

**CVMA MEMBERS Kick In Your Afterburner...**



**BUILD SOMETHING, BRING IT TO OUR NEXT MEETING!**

**CAN YOU NAME THIS PLANE?**



See Page 8

**CVMA NEWSLETTER**

Published Monthly

AMA Chapter # 3798



- President — **Mike Kidd**
- Vice President — **Jack Allen**
- Treasurer — **Don Crowe**
- Secretary — **Bob Steffensen**
- Safety Officer — **Charlie Gates**
- At Large Members — **Bob Noulin**  
**Randy Meathrell,**  
**Walt Findley,**
- Newsletter Editor — **Bob Shanks**
- Activities Director—**Don Ferguson**
- Chief Flight Instructor—**Steve Shephard**

# MONTHLY CLUB MEETING HIGHLIGHTS



*Sparky Thornton's WWII Dornier twin 335*

Meeting opened at 7pm with pledge to the flag by President *Mike Kidd*. Minutes for November 2015 meeting were approved with no corrections.

President Mike provided a series of agenda items: Burnt LIPOs were left in the sand bucket...please take them home; close the gate when you leave... new lock code to paid members only; need a temporary Vice President as *Jack Allen* is out of commission for a while...thanks for stepping up *Dennis O'Connor*; *Randy Meathrell* will take the next Gymkhana event for V.P. *Jack*.

The Club Christmas party was well attended and enjoyed for all who attended. The food donated for Chino Valley Food Bank was a full pickup load, way to go members.

You are encouraged to register your "UAS" (all RC models) with the FAA, this was the last guidance given by the AMA. The club will not check whether you do or don't.

We will gravel the parking lot with members approving up to \$1500 for the job. Our runway funds will be used to re-oil and re-stripe entire runway. There will be no repaving of old section

pending decision to move to a new field that is being considered by Chino Valley. The re-oil and re-striping was approve by members.

For this year's Warbird Races, CVMA will provide \$125 for the 2015 Warbird Race trophies...it is our turn. Treasurer *Don Crowe's* Report was (unanimously!) approved. We have 93 paid members to date.

Safety Officer *Charlie Gates* said to think safety always when at the field. Chief Flight Instructor *Steve Shepherd* reported 2 student pilots in training.

We broke at 8:03pm for coffee and goodies provided by *Carol Meathrell*, thanks Carol!

Meeting resumed at 8:15pm with CD *Don Ferguson* outlining Club events for 2016 (see details in Don's email from last week). Show and Tell: *Dennis O'Connor* demonstrated a digital servo programmer with his vertical stabilizer and rudder from a B24 he is building and *Bob Noulin* showed off his beautiful 3D Hobby Slick 580. Meeting adjourned 8:40pm.

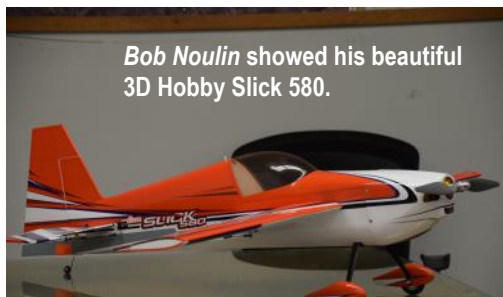
Respectfully, *Bob Steffensen* Secretary.



*Dennis O'Connor's* digital servo programmer for his vertical stabilizer.



Good attendance.



*Bob Noulin* showed his beautiful 3D Hobby Slick 580.



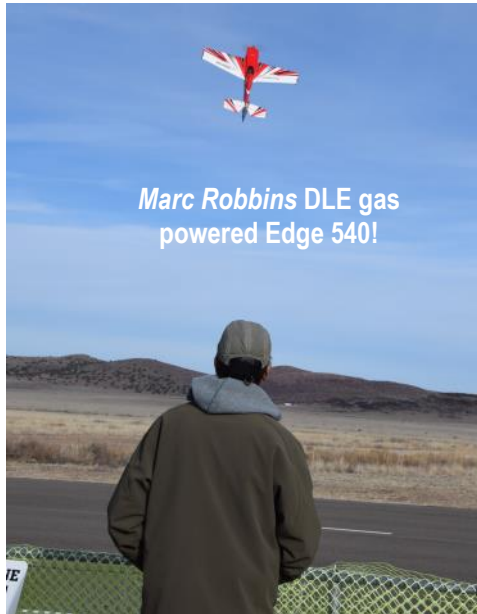
More club hats are now available, if you want one see *Don Crowe*, they are \$15.



# CLUB PILOTS AIRCRAFT AT THE FIELD



Bob Shanks' UFO



Marc Robbins DLE gas powered Edge 540!



Tom Wells T-28.



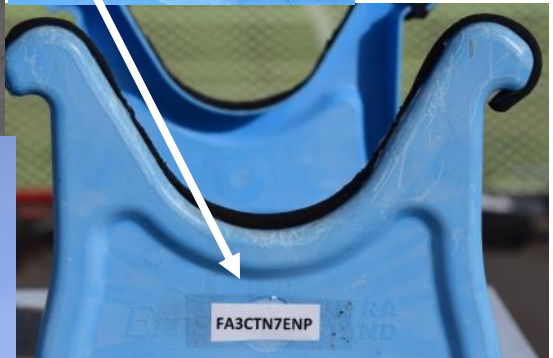
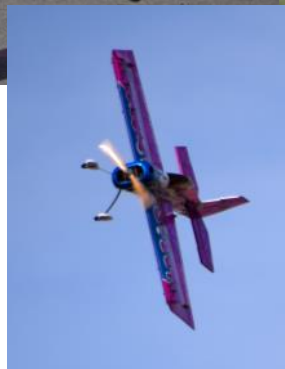
Don Ferguson has internal wheels on his foam glider. It was cold so he has a transmitter muff to keep his hands warm!



Mike Kidd's Piper Cub!



Jerry Lang's Precision Aerobatics 3D electric.



Our club has a sense of humor, someone put their FAA number on the set-up stand in the pit area!



Marc Robbins has the sky to himself.

# AMA and the FAA Registration Soap Opera

OP ED by Bob Shanks

There has been a lot written about the FAA registration rule that went into effect in December. Right now the legal deadline to register is February 19. Most modelers, as well as the AMA, feel the federal government is interfering on a hobby that is well managed for safety and security not only here in the U.S. but worldwide and has been for many years. The AMA has kept its members informed along this rocky registration debacle road. What has been most troubling is the FAA's apparent complete disregard for the AMA's recommendations.

At this writing, the AMA had told all members to not register but that has been rescinded. **We all have to register**. The AMA continues to work with the FAA to try to have our AMA numbers used for registration. This is logical, but when dealing with the federal government logic doesn't often apply at all.

Many modelers have lodged their complaints at the federal web site and many others, your editor included, have written their congressional representatives as well.

We all know the registration requirement is counter to what Congress has already provided for our hobby in Section 336 of the FAA Modernization and Reform Act of 2012. The Congressional **"Special Rule for Model Aircraft"** specifically prohibits the FAA from making rules and regulations for model aircraft. The AMA believes its members already meet the intent of the registration. Why should we register twice? If we can use our AMA numbers then we won't have to register again in three years as the FAA rule now reads. In all their wisdom it seems the FAA cannot tell the difference between a quad copter (so called drone) and a model airplane with fixed wings!

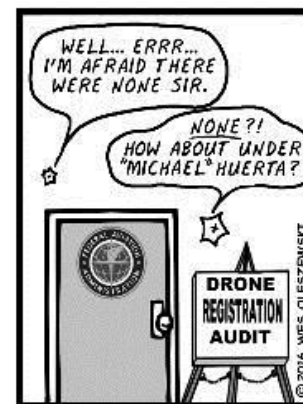
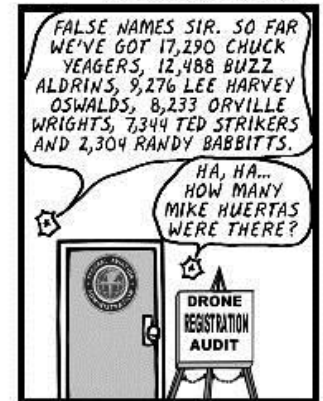
The sudden proliferation of quad copters and their misuse around airports and populated areas by untrained and unformed individuals that for the most part have little to no understanding of aviation or flying; is the root of the problem.

I am predicting that many who buy or have a quad copter will not bother to register, why waste five bucks, their logic will be "No one will catch me!" However, those in the RC hobby will follow the rules, as we all do, and abide by AMA recommendations. If plans proceed, our AMA numbers will be our registration number in the future. However, in the meantime we all have to register and should do so go on-line to register at: [www.faa.gov/uas/registration](http://www.faa.gov/uas/registration).

Klyde Morris



by Wes Oleszewski



www.klydemorris.com

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# AEROSPACE COMPANY STUDY ON DRONE SAFETY

By Bob Shanks



Max Bandy flying his Quadcopter at our "Steve Crow Fun Fly" evening banquet in September.

A new study on the hazards of toy drones (actually quadcopters) mixing with manned aircraft concludes there are safety risks deemed even greater than those of bird strikes. The study is from Aero Kinetics and is entitled *"The Real Consequences of Flying Toy Drones in the National Airspace System."* An interesting note for RC modelers is the term "Toy Drone". Our aircraft we fly safely are "models" not toys! Quadcopter is a better descriptive term than "drone" for RC modelers.

The study concludes that helicopter pilots are at the highest risk of dying from a head-on "toy drone" collision. The reason cited in the study is that the "toy drone" is made up of batteries, carbon fiber, metal and other materials more catastrophic than a collision with a bird.

The study recommended standards be set for drones to go along with the pending registration now required by the new FAA rules to be required later this year. The study compared data on aircraft bird strikes and calculated the comparative physical force of a toy drone collision could have on engine ingestions and other potential damage and injury that could result on commercial or private aircraft and especially helicopters that often fly low continually.

According data from 2013, there were 444 damaging bird strikes, and that these collisions cost an estimated \$951 million annually, the study said. Meanwhile, hundreds of thousands of "toy drones" are expected to be in consumers' hands in the coming months, that could pose a large-scale risk, says Aero Kinetics, which also develops unmanned aerial systems for businesses to use.

Aero Kinetics CEO W. Hulsey Smith was interviewed for an AVweb article recently. CEO Smith wants to see a consortium formed with toy drone makers, the FAA, and other parties to have "an honest conversation" on ways to prevent drone strikes. The proposed registration rule for drones as light as a half a pound, submitted by an FAA-appointed task force, is a step in the right direction according smith. "It's a good idea to register drones. Our cars are registered. Airplanes are registered. Boats are registered. For some reason registration brings some form of accountability along with it," he said. "We stand behind FAA policy, and would like to see some form of reasonable airworthiness certification in place for toy drones that provides for public safety." <https://aerokinetics.com/toy-drone-risk-more-costly-and-dangerous/>

This study was brought to my attention by member *Randy Meathrell*. Thanks Randy!

## USAF — SR-71 at Sunset



## MARK YOUR CALENDARS

### CVMA 2016 EVENTS

May 7	Gymkhana I Fun Fly & Swap meet
June 3-4	Steve Crowe Fun Fly
July 9	Gymkhana II Fun Fly & BBQ
August 27	Pro War Bird Pylon Race
Sept. 22—24	Thunder in Chino Valley
Oct. 21-22	CVMA Electric Festival Fun Fly

## BORN IN A BARN?

### IMPORTANT NOTICE:

IF YOU ARE THE LAST ONE TO LEAVE THE FIELD —  
PLEASE REMEMBER TO LOCK THE GATE.  
 SPIN THE LOCK A FEW TIMES AFTER FASTENING TO INSURE  
 IT IS FASTENED, AND NOT ON THE OPENING NUMBER.

## SAFETY: ALWAYS A CRITICAL ISSUE

The new year is upon us and with many of our members taking a long break for the holidays and traveling, its time to remind everyone about workshop safety.

Keep your shop as neat and uncluttered as you can. A good rule is to clean up after each session in the shop putting back tools where they belong.

Since we have so many modelers going into electric power it's always prudent to remind folks to take the prop off your model in your shop when testing or setting up your ship. It's all too easy to have the control

throttle reversed on a new model. Gas powered models also start up a lot easier for the most part than glow engines. The power system you are using needs to be fully understood. Seems like every year we hear of a modeler getting sliced up in his or her shop testing the engine because they didn't take off the propeller.

Always do a safety check of your models before coming out to the field, especially on models you haven't flown for a long time. Check the condition of the covering as well, it can dry out.

After a long break from flying, a

holiday or a long vacation one can leave out a simple procedure used before flying and a safety incident can occur.

Our January *Model Aviation* safety column highlights a neat method used to keep the throttle lever down when getting ready to fly, a simple rubber band looped around the stick to hold the throttle down. Electrics can jump to full throttle instantaneously as we all know so consider whatever safety protocol works for you depending on your engine and fuel source.

Complacency too, can cause an oversight and result in an accident.

## Name That Plane: Sikorsky S-72 "X" Wing

The X-Wing circulation control rotor concept was developed in the mid-1970s by David W. Taylor Naval Ship Research and Development Center under DARPA funding. In October 1976, Lockheed Corporation won a DARPA contract to develop a large-scale rotor to test the concept. However the S-72 never had a chance to be tested in actual flight.

Intended to take off vertically like a helicopter, the craft's rigid rotors could be stopped in mid-flight to act as X-shaped wings to provide additional lift during forward flight, as well as having more conventional wings. Instead of controlling lift by altering the angle-of-attack of its blades as more conventional helicopters do, the craft used compressed air fed from the engines and expelled from its blades to generate a virtual wing surface, similar to blown flaps on a conventional platform. Computerized valves made sure the compressed air came from the correct edge of the rotor, the correct edge changing as the rotor rotated. The estimated top speed was to be 230mph with auxiliary jets. Cruise speed was to be 160mph. The aircraft had two GE 400 turbofans.

In late 1983 Sikorsky received a contract to modify one S-72 RSRA into a demonstration test bed for the X-Wing rotor system. The modified airframe was rolled out in 1986, but never flew before the program was cancelled in 1988. (Wikipedia)

In another NASA/US Army program the S 72 helicopter was used to test various integrated rotor and propulsion systems. After the first flight on 12 October 1976, the S-72 helicopter completed the first experimental phase in February 1977. The fuselage was entirely new compared with the other models by Sikorsky. It had traditional, airplane-type swept tail surfaces with a five-blade main rotor and five-blade tail rotor. Various types of blades (rigid, articulated) and transmission systems were tested.

A small, swept wing was fitted to one of the S-72 prototypes, plus two General Electric TF-34 turbofans, in two outboard nacelles. An interesting detail was the fact that the entire crew of the helicopter had ejector seats. With the supplementary turbojets, the S-72 increased its speed to about 450km/h. In late 1983 Sikorsky received a contract to modify one S-72 for X-wing "stopped rotor" research, a concept whereby a rigid rotor is stopped in cruise flight with the blades then acting as wings to provide lift, while engine power is diverted from the rotor system to give pure jet thrust.

(The Illustrated Encyclopedia of Helicopters, 1984)



NASA high speed taxi test of the Sikorsky S-72 "X" Wing in 1987. The earlier S-72 helicopter did fly in 1976 see picture in article at left. This was before the "X" wing concept design.

## Global Hawk Gets Award



The fifth of this month the Global Hawk Northrop Grumman UAS system received the prestigious William W. Otterson Connect Innovation award. Member *Tom Jeffrey's* son Tom junior used to work for a Global Hawk contractor.

CONNECT, is an innovation company in San Diego. They awarded its highest honor for a technology or product developed in San Diego to the Global Hawk unmanned aircraft system (UAS), manufactured by Northrop Grumman Corporation (NYSE:NOC). The William W. Otterson Award was given in recognition of Global Hawk's significant impact on society and quality of life.

Global Hawk earned the award for its record-breaking endurance, vital intelligence, surveillance and reconnaissance (ISR) capabilities, its support to science missions and its disaster relief responses to wildfires, hurricanes, tsunamis and earthquakes.

"Global Hawk has always been on the cutting edge of innovation, from its first flight in 1998, to our current efforts to fly any current or future sensor at any time," said *Mick Jagers*, vice president and program manager for Global Hawk, Northrop Grumman.



S-72 helicopter in flight.



# FAA REGISTRATION PROCESS

## A Brief Recap

The FAA announced plans for a model aircraft registration process to begin December 21. AMA was a member of the task force that helped develop recommendations for this registration rule and argued throughout the process that registration makes sense at some level but only for those operating outside the guidance of a community-based organization or flying for commercial purposes.

Unfortunately, the new FAA registration rule does not include any of AMA's recommendations. The rule is counter to Congress's intent in the Special Rule for Model Aircraft and makes the registration process an unnecessary burden for all of our members who have been operating safely for decades.

The AMA is disappointed with the new registration rule and still maintains that AMA members should be exempt from registration. However the FAA in all its stupidity is implementing the rule anyway over AMA objections. Here's the main points to consider: All aircraft that are flown using a ground control system, such as a transmitter, are required to participate. This includes fixed-wing aircraft, not just multi-rotors or drones.

Any pilot flying models weighing between .55 pounds (or 250 grams) and 55 lbs. is required to register. However AMA members will not be required to register every aircraft individually. Each member needs to register once and then they can affix one registration number to all of their aircraft. Modelers must mark all aircraft with their registration number. The number can be inside the aircraft, such as a battery hatch - but should not require tools to access.

The FAA launched the online registration website on Monday, December 21. There is a \$5 fee to register, which is waived if modelers register within the first 30 days. Modelers only need to register once every 3 years. As of late in December, the AMA said to hold off on registering, while they are wrestling with the "pea sized brains" of the FAA. The AMA is seriously discussing with the FAA a system where ones AMA number could be used as the registration number. Whether the FAA will take this recommendation seriously is anyone's guess.

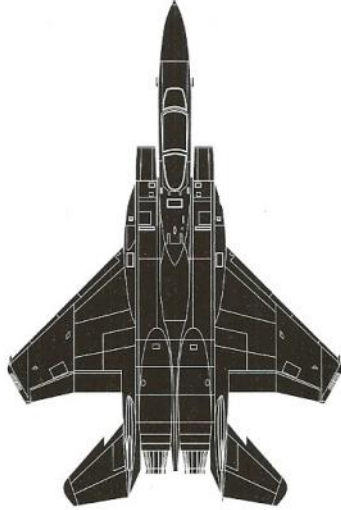


This registration debacle, which is entirely not logical or needed, is an ongoing process the AMA is working to streamline. The AMA may bear some responsibility for this registration nonsense since they looked at all these prospective "drone pilots" as potential members and more cash for the AMA coffers. However members, we have been advised by the AMA to register. [Do so by February 19.](#)

# Air Power Classics

## F-15 Eagle/Strike Eagle

USAF "Air Force" Magazine.



The F-15—a twin-engine, all-weather tactical aircraft—was, without doubt, the world's top air superiority fighter between 1974 (when it entered service) and 2005 (when the F-22 achieved IOC). The McDonnell Douglas fighter scored 104 aerial victories with zero losses. A later E-variant, optimized for ground attack, dominated in that mission. It was exported to Israel, Japan, Saudi Arabia, South Korea, and Singapore.

McDonnell Douglas gave the Eagle an all-metal fuselage with large, shoulder-mounted wings, thin tailplanes, and two potent turbofan engines. The F-15's dominance stemmed from an unprecedented mix of acceleration, maneuverability, versatile weapons load, and advanced avionics. A high

thrust-to-weight ratio let the F-15 turn tightly without losing airspeed. Its "look-down/shoot-down" radar distinguished moving targets from ground clutter. The airplane was constantly upgraded.

First kills were recorded by Israeli F-15s against Syria in 1979-82. The first major combat by USAF F-15s came in the 1991 Gulf War, when the Eagle scored 34 kills against Iraqi warplanes and struck key ground targets. F-15s have flown in every major US operation since, from the Balkans to Iraq, from Afghanistan to Libya. New models are being produced for export; plans call for keeping the production line open until 2019—47 years after first flight.

—Robert S. Dudley with Walter J. Boyne

This aircraft: USAF F-15C Eagle—#80-0030—as it looked in 1986 when assigned to 57th FIS, NAS Keflavik, Iceland.



### In Brief

Designed by McDonnell Douglas (now Boeing), built by MD and Mitsubishi  
 ★ first flight July 27, 1972 ★ number built 1,724 ★ crew of one or two ★ armament one 20 mm cannon; up to eight AA missiles ★ span 42 ft 10 in ★ length 63 ft 9 in ★ height 18 ft 6 in ★ service ceiling 60,000+ ft ★ **Specific to F-15C:** function air superiority ★ two Pratt & Whitney F100-PW-100 or -220 engines ★ max speed 1,650 mph ★ cruise speed 570 mph ★ combat radius 1,061 mi ★ weight (max T/O) 68,000 lb ★ **Specific to F-15E:** function strike ★ two P&W F100-PW-220 or 229 engines ★ load 23,000 lb ordnance ★ max speed 1,875 mph ★ cruise speed 575 mph ★ combat radius 790 mi ★ weight (max T/O) 81,000 lb.

### Famous Fliers

**Silver Star:** Thomas Dietz, Robert Hehemann, Kirk Rieckhoff, Christopher Russell. **Distinguished Flying Cross:** Jamie Damsker, Eric Das, John Easton, Mike Caudle, Daren Sorenson, Kevin Flood, Christopher Anthony, Jon Kelk, William Watkins. **Mackay Trophy:** 1974—Roger Smith, Willard MacFarlane, David Peterson; 1999—Jeffrey Hwang; 2010—Donald Cornwell, Dylan Wells, Leigh Larkin, Nicholas Tsougas. **Multiple US Victories:** Three—Robert Hehemann, Cesar Rodriguez, Thomas Dietz; two—Rhory Draeger, Jeffrey Hwang, Robert Graeter, Ben Powell, Jay Denney, Anthony Murphy. **KIA:** Peter Hook, James Poulet; Thomas Koritz, Donnie Holland; Eric Das, William Watkins; Mark McDowell, Tom Gramith. **CSAFs:** Tony McPeak, Ronald Fogleman, John Jumper, Buzz Moseley. **Notables:** Jeanne Leavitt (USAF's first female fighter pilot), Wilbert Pearson (only pilot to destroy a satellite). **Israeli Notables:** Moshe Melnik (first F-15 kill), Zivi Nedivi (landed after loss of wing). **Saudi Notable:** Ayedh Al-Shamrani (two kills). **Test Pilots:** Irv Burrows, Gary Jennings.

### Interesting Facts

Has never been shot down in air-to-air combat ★ was first US fighter with thrust sufficient to accelerate vertically ★ destroyed satellite with ASM-135 missile ★ set eight time-to-climb records in 1975 ★ reached 98,425 ft altitude in 3 min, 28 sec ★ downed 41 Syrian fighters (zero losses) in 1982 Lebanon War ★ destroyed 18 Iraqi jets on ground at Tallil in Gulf War ★ downed Iraqi Mi-24 helo in flight with a 2,000-lb bomb ★ flew longest-ever fighter mission (15.5 hours, Afghanistan) ★ escorted Israeli strike against Iraq's Osirak nuclear plant in 1981.



USAF photo by MSgt. Thomas Menegatti

An F-15E Strike Eagle from the 333rd Fighter Squadron, Seymour Johnson AFB, N.C., flies on Aug. 25, 2000.