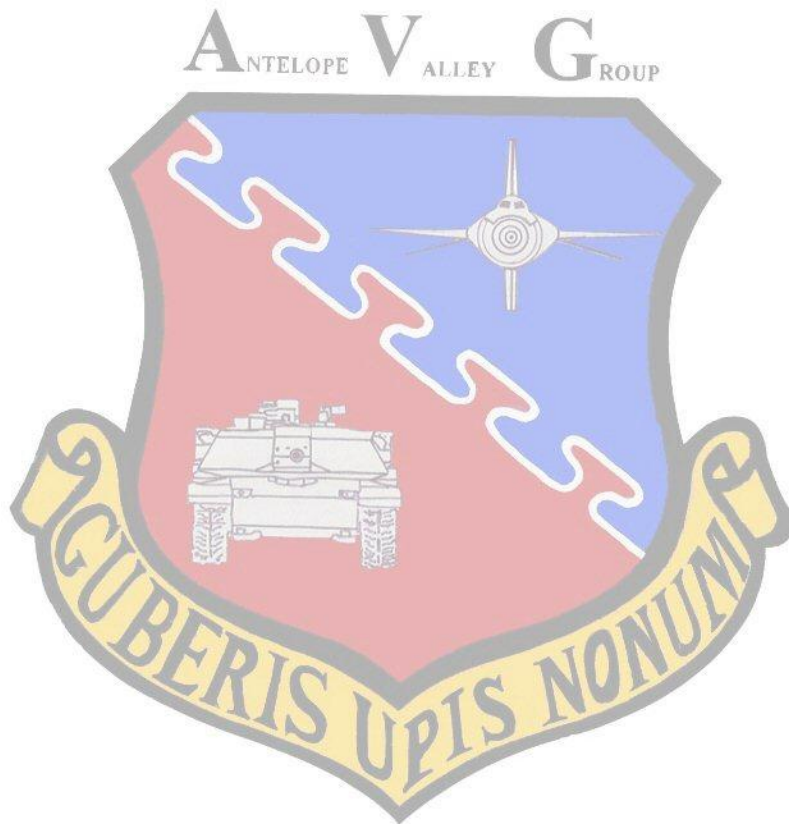


# The Smoking Hole

A Publication of the Antelope Valley Group IPMS  
**Volume 17, Number 11**



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## 2012 Club Officers

President	Vice President	Treasurer	Secretary
Nick Kiriokos	Mike Otis	Curtis Stidham	Mike Marchioli
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## From the President's Pen

Gents, we had another successful Desert Classic Contest, thank to each and every one of you.

The general buzz is that none of us heard any complaints, which is always good, other than perhaps the one overhead by Larry that "AVG doesn't go for the over weathered stuff, just the basics". Perfect, ....we are known for quality judging and awards. Tip of the hat to Larry and Robbie for photography, what I've seen is nothing short of professional! The numbers will be crunched at tomorrow's meeting to determine where we are financially, but early indications are we made a small amount. In size we were right on our average, if I recall correctly 230 models for competition. Not bad. There is the possibility that San Diego will not be the IPMS Regional so discuss whether we want to host the Region 8 Regionals for 2013.

Remember next month is our Christmas Potluck and gift exchange, please sign up for a dish.

The new contest season starts early next year, with Valley Con in January, the 9<sup>th</sup> I believe, in Pasadena. Then Petaluma (IPMS Santa Rosa) in February and the Kick Off Classic in March.

I won't be at the meeting as most of you know, I'm in Hawaii, so Mike Otis will be the man in command! See you in December, stay safe and bring in those finished kits or masterpieces in progress! Start thinking about demo's you want to see or perform and as always Rich's Tool Time is interesting. Feel free to sign up for refreshments through the next year too.

## Club News and Business

**NEXT MEETING NOVEMBER 17, 2012, 1 PM AT ROSAMOND LIBRARY**

### General Meeting Notes:

First off the club would like to thank Dave and Stephanie Newman for putting together the annual Halloween refreshments! It was a fantastic spread!



There are plans for entering a large group order in the annual Squadron Black Friday Sale. If you're interested please provide a shopping list to Curtis, no latter then the 17 November club meeting.

2012 Desert Classic

This year's trophies will be the same style as last year but will be vertical instead of horizontal. The trophies have been ordered through Palmdale trophy, if all goes well they may become our permanent supplier. Most of the final details are coming together. All the supplies for the raffle are available so we should be set there. Also the insurance information has been provided to the college and Dave Newman will verify that the PA system will be available for us during the show.

New Club Shirts:

If you still have not picked up your new club shirt, get with Curtis.

**2012 Meeting Schedule**

We still need volunteers for both demos and refreshments. Please review the open months and let one of the officers know if you want to sign up for either a demo, refreshments or both.

<b>Primary</b>	<b>Activities</b>	<b>Refreshments</b>	<b>Demo</b>	<b>Review</b>
21 Jan	Member Dues Collected	Rich Ribauda	Photo Etch Curtis S.	Riveting Tool Curtis S.
18 Feb	2012 Contest Theme Discussion	Nick Kiriokos	Tom Hamel Dry Brush	3M Respirator
17 Mar		<del>Greg Saccoccio</del>		
21 Apr		Rick Reinert	Mike Marchioli Wiring Radial Engines	
19 May	Club Barbeque	All Members	Airbrushing	
16 June				
28 July	Club Swap Meet	Jim Abercromby		
18 Aug				
15 Sept		Tom Hamel		
20 Oct	Judge's Clinic	David Newman		Bill Pressley Plastic Cement
3 Nov	Desert Classic			
17 Nov		John Pearce		
15 Dec	Christmas Potluck & Gift Exchange	All		

## The Tool Crib

The tool crib is the place where we find our tools. This section will be for anyone with a new product or tool review.



This month Bill Pressley has some information on the Testors Non-Toxic Model Glue. Bill says this new Testors glue seems to be the same formula as the old Ambrose Non-Toxic Glue and has the same quality as the Ambrose product. Thanks for the Tip Bill!

## Member Show and Tell

There was no member show and tell for October as that time was dedicated to the judging clinic.

## Club Demo

There was no club demo for September. If you're interested in doing a demo, let Mike Marchioli know and he can schedule it.

## 2012 Modeling Goals

Members are encouraged to set modeling goals for 2012. As each goal is accomplished we will track it and see how we all do at the end of 2012. If you would like to set goals for 2012 please provide your goals to Mike Marchioli ([mmarchioli1@yahoo.com](mailto:mmarchioli1@yahoo.com)) for inclusion in the member goals data base. Please look at the January 2012 edition of the smoking hole for examples.

## ***“So, There I Was.....”***

Aviation stories provided by John Pearce.

This is a very condensed bit on a few guys known in the military fighter jet world as the Fighter Mafia. A few guys that had a very well defined idea of what fighter aircraft should be. Controversial in today's politics, their ideas and theories were instrumental in the designs of the F-15 and F-16 jet fighters.

## The Fighter Mafia

The Fighter Mafia was a group of U.S. Air Force officers and civilian defense analysts who, in the 1970s, advocated the use of Col. John Boyd's (retired) Energy-Maneuverability (E-M) theory to develop fighter aircraft.

The theory enabled quantitative one-to-one comparison of the performance of aircraft in terms of air combat maneuvering, and identified deficiencies with both designs in service and proposed designs of the time. They influenced the specifications of the F-X, and went on to independently develop specifications for the Light Weight Fighter. The nickname, a professional jest coined by

an Air Force member of Italian heritage, was a rejoinder to the "Bomber Mafia", theorists at the Air Corps Tactical School in the 1930s whose ideas led to the primacy of strategic bombing over the fighter within the Air Force.

The Fighter Mafia was instrumental in a return to air-combat maneuverability as the defining quality of fighter planes after the Vietnam War showed that long range missiles were unlikely to be the deciding factor in air combat. This led to a new generation of warplanes such as the F-15, F-16 and F/A-18.

In the 1960s, both the U.S. Air Force and U.S. Navy were in the process of acquiring large, heavy fighters designed primarily to fight with missiles. Project Forecast, a 1963 Air Force attempt to identify future weapons trends, stated that a counter air force must be able to destroy aircraft in the air at long ranges using advanced weapon systems. The Air Force felt that these needs would be filled for the next twenty years by missile-armed variants of the F-111 and F-4 Phantom II. Their F-X fighter acquisition program, initially merged into the TFX program (which developed the F-111), was written along those lines.



TFX winner was the F-111, shown here YF-111

Real-world combat during the Vietnam War demonstrated that the entire "Missileer" concept did not work in practice. Rules of engagement, limitations in communications, poor performance of the missiles and a wide variety of other problems conspired to make air-to-air combat devolve into dogfights in almost every situation. In spite of a huge technical superiority on paper, the US Navy and Air Force F-4s found themselves fighting at close quarters with the "inferior" MiG-21, and losing the fight all too often. The heavy and poorly maneuverable fighters imagined as part of F-X would be even worse off in these situations.

John Boyd's work with E-M theory demonstrated that the F-111 was poorly suited for the role of a fighter aircraft, and the Air Force F-X proposal was quietly rewritten to reflect his findings, dropping a heavy swing-wing from the design, lowering the gross weight from 60,000+ pounds to slightly below 40,000, and the top speed to Mach 2.3, from 2.5. The result was the F-15 Eagle,

an aircraft that was far superior in maneuverability to the F-111 fighter variants. The Air Force had also been studying a lighter day fighter; starting in 1965, the Air Force had pursued a low-priority study of the Advanced Day Fighter (ADF), a 25,000 pound design. After they learned of the MiG-25 in 1967, a minor panic broke out and the ADF was dropped in order to focus work on the F-15. The F-15, originally a lighter aircraft, grew in size and weight as it attempted to match the inflated performance estimates of the MiG-25. While Boyd's contributions to the F-15 were significant, he felt that it was still a compromise.



McDonnell Douglas F-15

Boyd, defense analysts Tom Christie and Pierre Sprey, and test pilot Col. Everest Riccioni and aeronautical engineer Harry Hillaker formed the core of the self-dubbed "Fighter Mafia" which worked behind the scenes in the late 1960s to pursue a lightweight fighter as an alternative to the F-15. Riccioni coined the nickname, a joke on his Italian heritage that harkened back to the "Bomber Mafia" (whose acolytes still occupied the upper command positions of the Air Force), and dubbed himself the "godfather". In 1969, under the guise that the Navy was developing a small, high-performance Navy aircraft, Riccioni won \$149,000 to fund the "Study to Validate the Integration of Advanced Energy-Maneuverability Theory with Trade-Off Analysis". This money was split between Northrop and General Dynamics to build the embodiment of Boyd's E-M theory - a small, low-drag, low-weight, pure fighter with no bomb racks. Northrop demanded and received \$100,000 to design the YF-17; General Dynamics, eager to redeem its debacle with the F-111, received the remainder to develop the YF-16.

Defense Secretary Melvin Laird and Deputy Defense Secretary David Packard, who entered office with the Nixon administration in 1969, were interested in these studies and threw their support behind the notion. In May 1971, Congress issued a critical report of the F-14 and F-15 and advocated spending \$50 million on developing an alternative lightweight fighter. This was followed by the assignment of \$12 million in the 1972 fiscal year budget for the LWF. On January 6, 1971, an RFP was issued to industry for a 20,000 pound fighter to complement the F-15.<sup>[1]</sup> Sprey insisted on a fly-off between two prototypes, as he had earlier on the A-X program,

putting the planes against MiG-17s and MiG-21s secretly maintained in Nevada, as well as an F-4. Furthermore, the evaluating pilots would not be test pilots, and each would fly both airframes.



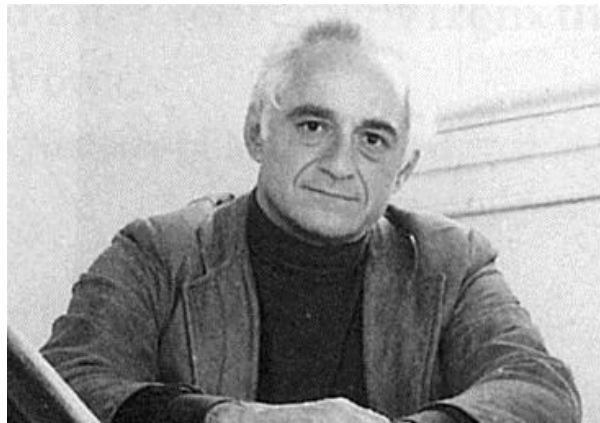
General Dynamics YF-16 and Northrop YF-17

In retrospect, the group's greatest contribution was in the introduction of Energy Maneuverability (E-M) as a basis for evaluating and designing aircraft for air combat maneuvering. However, their disdain of "gold-plating", or technological add-ons, would prove wrong, as the same technology would protect aircraft from missiles in an increasingly sensor-saturated battlefield, and would enable the multi-mission capabilities of modern aircraft (though, they often argued that the ground attack mission should be handled by more appropriate aircraft such as the A-10, which has had an outstanding record in that area).

The Mob



John R. Boyd, retired Air Force colonel, air combat theorist, consultant to PA&E, and the spiritual leader of the Reformers.

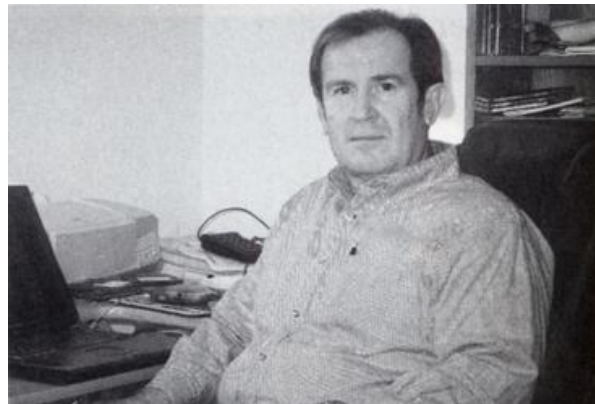


Pierre M. Sprey, engineer and PA&E systems analyst, who, along with Boyd, had been a key instigator of the Lightweight Fighter program in the 1970s.





Tom P. Christie spent almost 50 years inside the DOD acquisition apparatus, concluding his career as a top level civilian professional directing DOD's office of Operational Test and Evaluation. Since the 1960s, he has seen every single stab at reforming how we develop and buy weapons come and go – and fail. Today, as measured by GAO and many others, cost overruns are higher, deliveries are later, and the biggest DOD budget since the end of World War II buys us the smallest, oldest force structure and weapons inventory since 1946.



Franklin (Chuck) Spinney retired from the Defense Department in 2003 after a military-civilian career spanning 33 years. The latter 26 of those years were as a staff analyst in the Office of the Secretary of Defense. During this period, he appeared as a witness in many congressional hearings before the Budget, Armed Services, Defense Appropriations and Government Affairs or Reform and Oversight committees of the U.S. House and Senate. Spinney, who had worked for Boyd as a captain and followed him to PA&E. His briefing, "Defense Facts of Life," became the manifesto of the reform movement.

Col. Everest Riccioni... Well except for him being very out spoken about what a boon-doggie the F-22 and the CV-22 Osprey are, there's not a lot about him (his life) out there other than a few books he's reviewed.

**Calendar**

2/24/2013	Modelfest	Seaside Park (Ventura Fairgrounds) 10 West Harbor Blvd Ventura, California 93001
3/3/2013	ValleyCon	PASADENA CIVIC CENTER 300 East Green Street Pasadena, California