

Colonel Daniel P. Conroy
Commandant, USAF Weapons School
cordially invites you to attend the
building dedication ceremony
in honor of

Colonel John R. Boyd
USAF Weapons School Adversary Support Facility
Nellis Air Force Base, Nevada
on Friday, 17 September 1999
at nine o'clock a.m.

Reception to follow in the Weapons School Lounge
Tours of the new Boyd Hall to follow the reception

RSVP by 14 September 1999

(702) 652-6704

DSN 682-6704

Military: Uniform of the Day

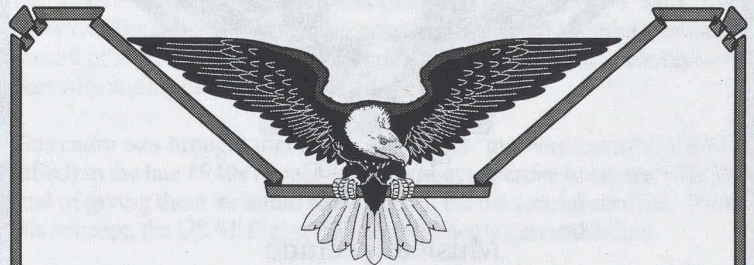
Civilian: Business Attire

*United States Air Force
Weapons School
Nellis Air Force Base, Nevada*



*Boyd Hall
Building Dedication
Ceremony
17 September 1999*

Key Personnel



Guest Speaker

Brigadier General David L. Moody
Commander, 57th Wing

Presiding Official

Colonel Daniel P. Conroy
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Program



Musical Prelude

Guests Seated

Arrival of Official Party

Posting of the Colors

National Anthem

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Air Force Song

Departure of Official Party

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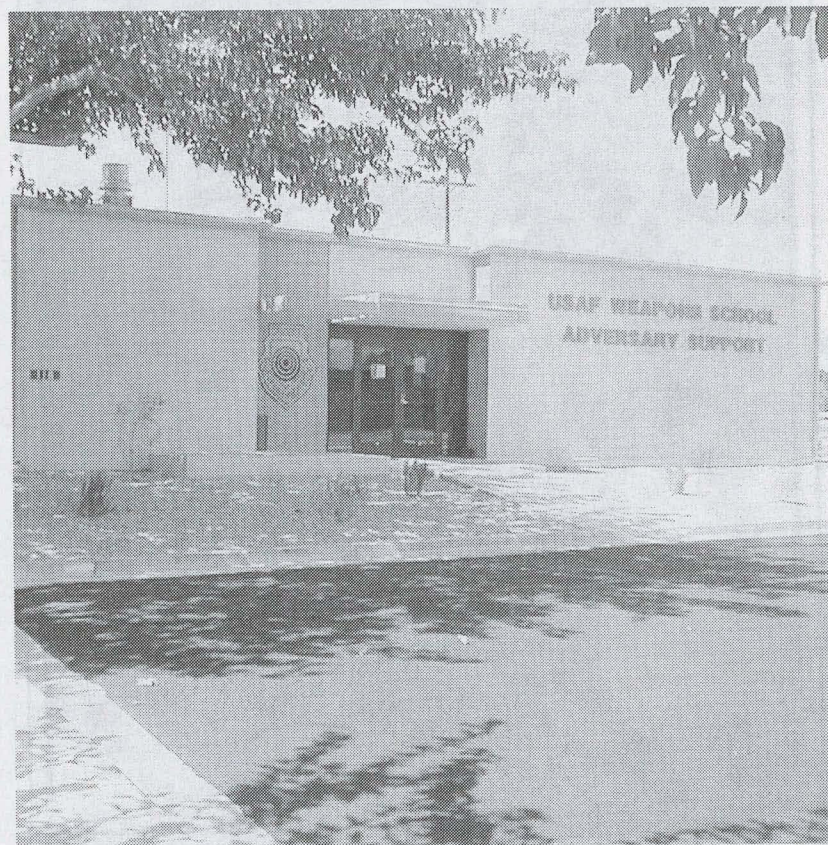
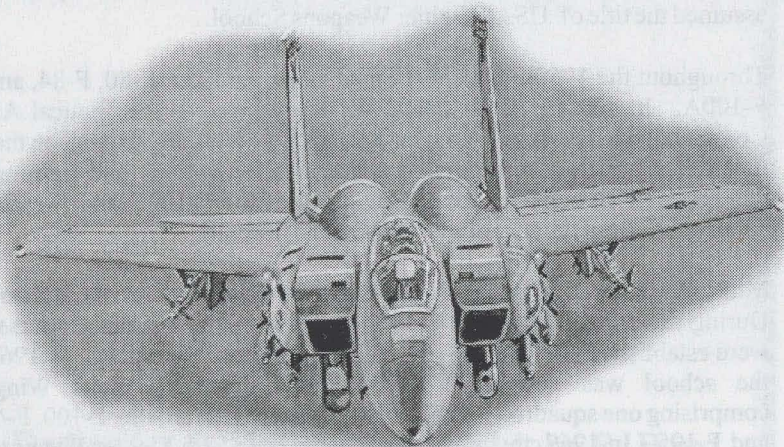
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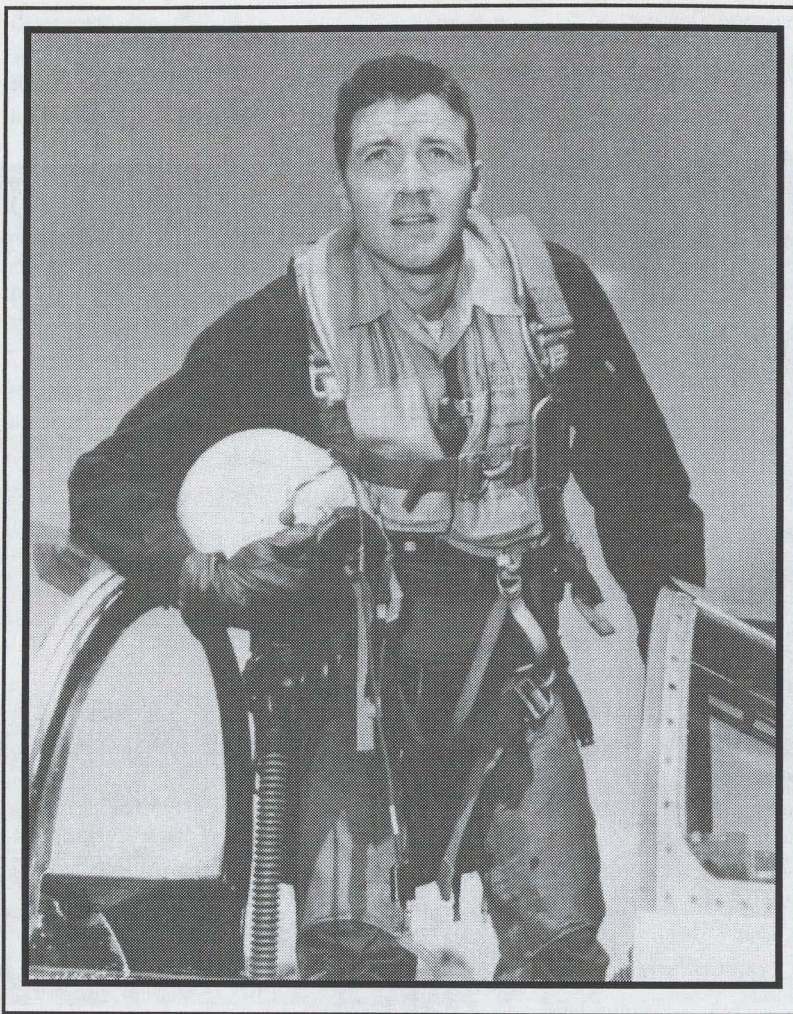
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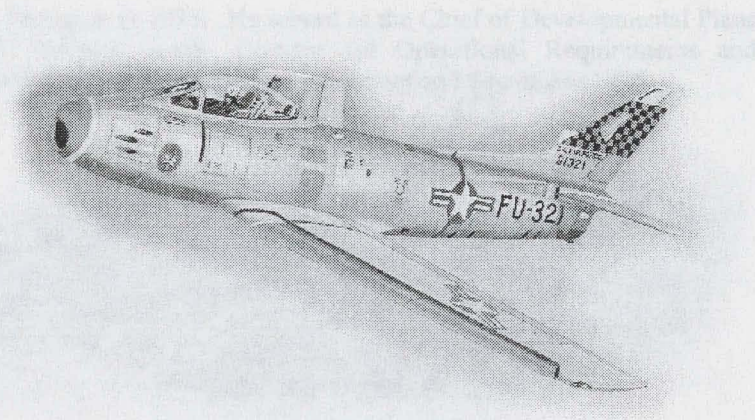


BOYD HALL
Nellis Air Force Base, Nevada



Colonel John R. Boyd

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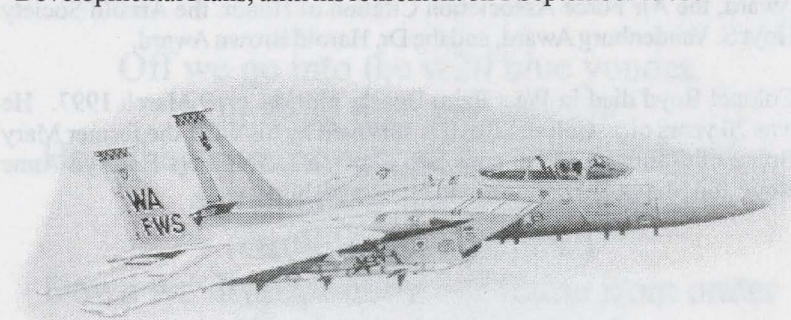
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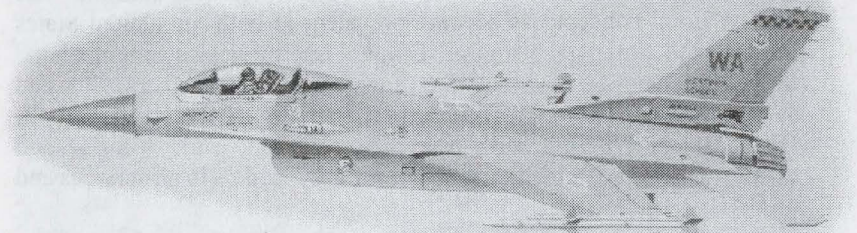
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Air Force Song

Off we go into the wild blue yonder,
Climbing high into the sun;
Here they come zooming to meet our thunder,
At`em boys, give`er the gun
(Give `er the gun now)
Down we dive spouting our flame from under
Off with one helluva roar!
We live in fame or go down in flame, hey!
Nothing can stop the U.S. Air Force!

(Additional verses):

Minds of men fashioned a crate of thunder,
Sent it high into the blue;
Hands of men blasted the world asunder;
How they lived God only knew!
Souls of men dreaming of skies to conquer
Gave us wings, ever to soar!
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Off we go into the wild sky yonder,
Keep the wings level and true.
If you'd live to be grey-haired wonder
Keep the nose out of the blue!
Flying men guarding our nation's border,
We'll be there, followed by more!
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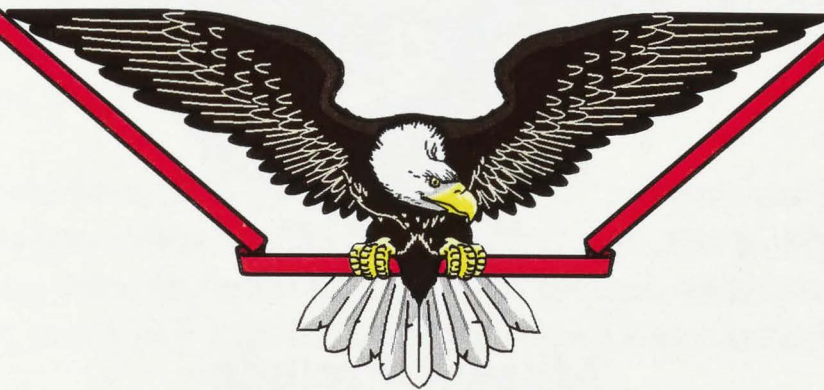


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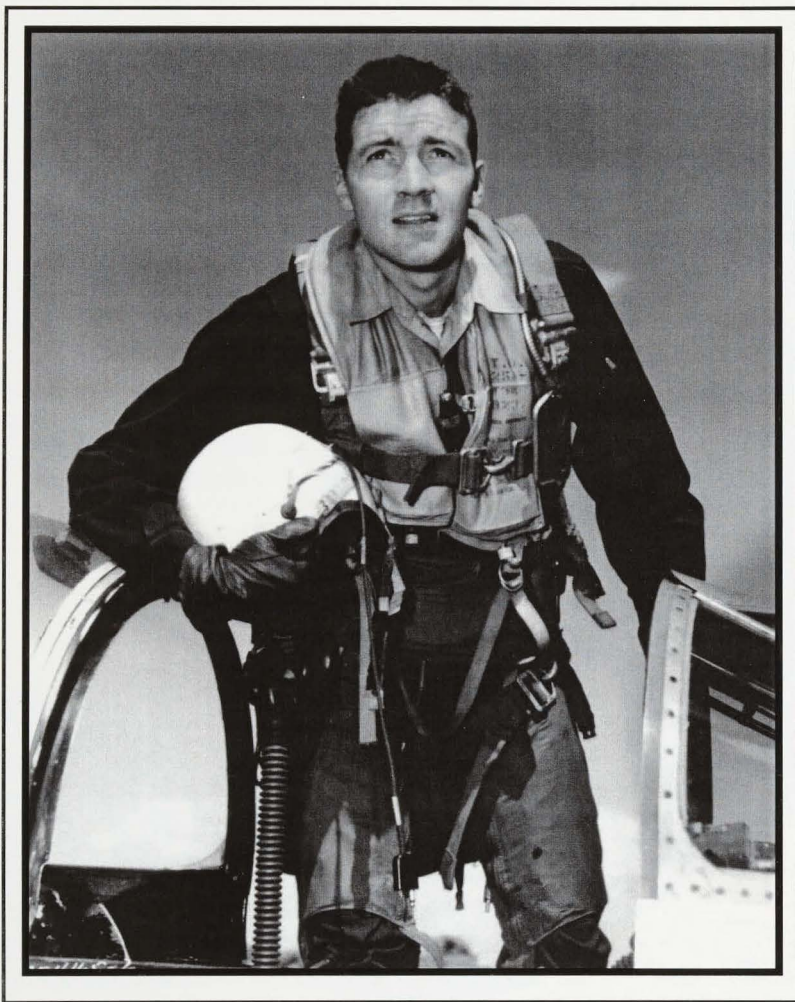
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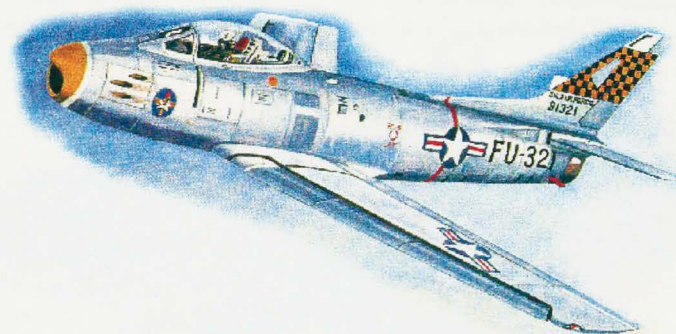


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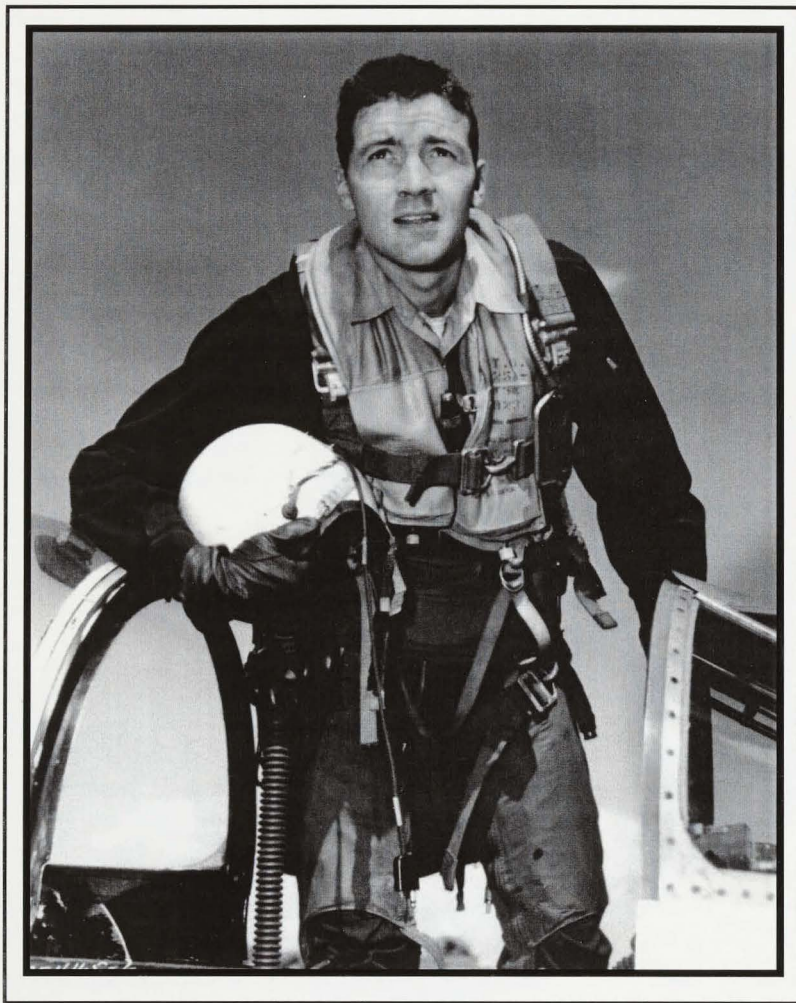
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In 1960 Colonel Boyd attended the Georgia Institute of Technology through the Air Force Institute of Technology, receiving a degree in Industrial Engineering. After graduation, Colonel Boyd was stationed at Eglin Air Force Base, Florida, from 1963 to 1966, serving in a variety of research and development positions. While at Eglin, Colonel Boyd conceived, initiated, and matured his ground-breaking work on Energy Maneuverability (EM) theory and practical applications. The EM concept received universal acclaim for providing a new connection



between tactician and engineer. This 'meeting ground' was the single most important link in the acquisition and design of the F-15 and F-16. Today, every combat aircraft tactics manual includes a set of EM diagrams, patterned almost exactly after Colonel Boyd's original work.

In 1966 Colonel Boyd was reassigned to Headquarters, USAF, as the Research and Development Director, Advanced Systems Branch, Tactics Division, Deputy Director for General Purpose and Airlift Forces. His work on EM concepts came to fruition, as he played a crucial role in the Fighter Experimental, or FX, aircraft design study. Colonel Boyd's inputs were directly responsible for transforming the proposed 60,000-pound, swept-wing, low performance, high cost fighter, into what eventually became the relatively inexpensive, 40,000-pound, highly maneuverable F-15 fighter aircraft. The F-15 has served superbly as the United States Air Force's premier air-to-air fighter for the last twenty-five years.

In 1969 Colonel Boyd moved to Andrews Air Force Base, Maryland, to become the Assistant to the Director of Aeronautical Systems, Deputy Chief of Staff for Systems, Air Force Systems Command. As one of the original leaders of the so-called "Fighter Mafia," Colonel Boyd continued his work refining the design and performance of the F-15. At the same time, Colonel Boyd became a driving force in the design of a new Lightweight Fighter--a low cost, high performance fighter which soon became the F-16's progenitor. The Fighting Falcon's capabilities and exploits over the last two decades need no further amplification.

After serving in southeast Asia as the Task Force Alpha Vice Wing Commander and Commander, 56th Combat Support Group, Nakhon Phanom Royal Thai Air Force Base, Thailand, Colonel Boyd returned to

the Pentagon in 1973. He served as the Chief of Developmental Plans and Analysis Group, Director for Operational Requirements and Developmental Plans, until his retirement on 1 September 1975.



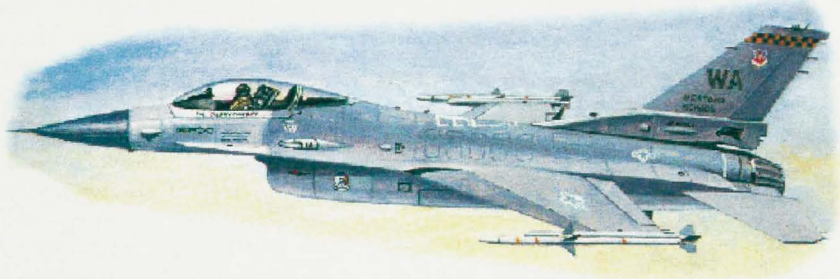
After retirement, Colonel Boyd continued to work at the Pentagon, devoting his time to a study of warfare and competition. He coined the term and developed the concept of the "OODA Loop" (Observation, Orientation, Decision, Action). While applied originally to fighter tactics, he expanded his analysis to include every form of conflict. The OODA Loop concept has become prevalent in both the United States military and American business. Colonel Boyd was also a member and founding father of the Military Reform Movement of the late 1970s and early 1980s. His famous briefings, "Patterns of Conflict" and "A Discourse on Winning and Losing," were given to many inside and outside the Pentagon including senior military leaders in all services and on Capitol Hill.

Colonel Boyd's ideas and briefings were a major influence on the United States Marine Corps and served as the inspiration for Fleet Marine Force Manual Number 1, "Warfighting," and were a part of the major rethinking of Army doctrine which led to the concept of "AirLand Battle" and further refinements in it. Using his OODA Loop concept Colonel Boyd was instrumental in explaining and disseminating the concept of "cycle time" and "getting inside the adversary's decision cycle" which figured so prominently in allied operations against Iraqi forces in Operation DESERT STORM.

Colonel Boyd was a senior pilot with over 2,100 hours in the F-86 and F-100. His awards and decorations include the Legion of Merit with three oak leaf clusters, Air Medal, and the Air Force Commendation Medal. For his work in energy maneuverability, fighter design, and

air-to-air tactics, Colonel Boyd received the Air Force Systems Command Scientific Achievement Award, the USAF Research and Development Award, the Air Force Association Citation of Honor, the Arnold Society Hoyt S. Vandenburg Award, and the Dr. Harold Brown Award.

Colonel Boyd died in West Palm Beach, Florida, on 9 March 1997. He was 70 years old. Colonel Boyd is survived by his wife, the former Mary Bruce of Ottumwa, Iowa, sons Scott and Jeff, daughters Kathryn Anne Boyd and Mary Ellen Holton, and two grandchildren.



Air Force Song

Off we go into the wild blue yonder,
Climbing high into the sun;
Here they come zooming to meet our thunder,
At'em boys, give'er the gun
(Give'er the gun now)
Down we dive spouting our flame from under
Off with one helluva roar!
We live in fame or go down in flame, hey!
Nothing can stop the U.S. Air Force!

(Additional verses):

Minds of men fashioned a crate of thunder,
Sent it high into the blue;
Hands of men blasted the world asunder;
How they lived God only knew!
Souls of men dreaming of skies to conquer
Gave us wings, ever to soar!
With scouts before and bombers galore, hey!
Nothing'll stop the U.S. Air Force!

Off we go into the wild sky yonder,
Keep the wings level and true.
If you'd live to be grey-haired wonder
Keep the nose out of the blue!
Flying men guarding our nation's border,
We'll be there, followed by more!
In echelon we carry on, hey!
Nothing'll stop the U.S. Air Force!



"There are two career paths in front of you, and you have to choose which path you will follow. One path leads to promotions, titles, and positions of distinction.....The other path leads to doing things that are truly significant for the Air Force, but the rewards will quite often be a kick in the stomach because you may have to cross swords with the party line on occasion. You can't go down both paths, you have to choose. Do you want to be a man of distinction or do you want to do things that really influence the shape of the Air Force? To be or to do, that is the question."

-Colonel John Boyd

