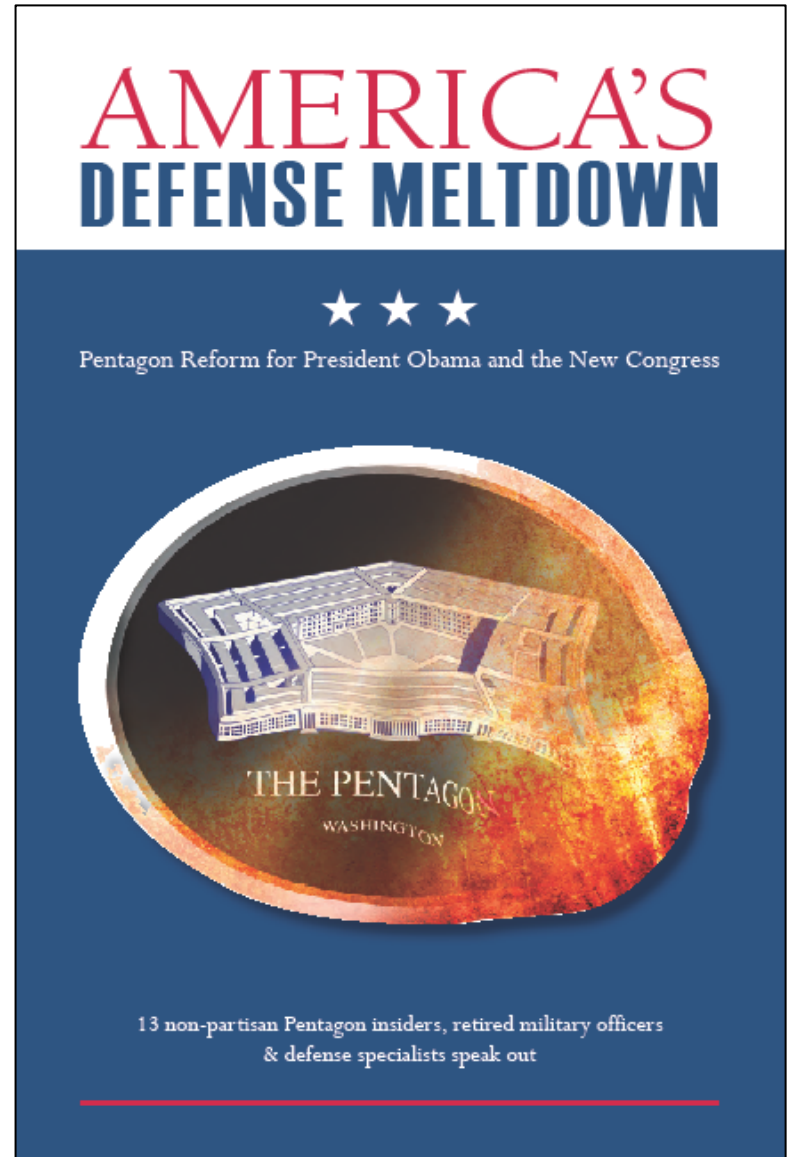


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# Reversing the Decay of American Air Power



# Roots of the Air Power Rot

- **Wrong Missions:** Dominance of Strategic Bombing and Douhet
- **Wrong Aircraft:** Too Few, Too Ineffective, Too Expensive
- **Wrong Incentive:** Maximize Budget

**BUSINESS-AS-USUAL WILL LEAD TO TINY,  
ANTIQUATED, IRRELEVANT FORCES  
THAT FAIL IN COMBAT.**

**LACK OF MONEY IS NOT THE PROBLEM!**

# CURING THE ROT

- In depth, examine combat results and money spent over last seventy years
- Distill what works in combat
- Design austere aircraft and forces around what works in combat

## **RESULT:**

**THE COMBAT HISTORY-BASED FORCE  
IS ASTONISHINGLY LARGE,  
EFFECTIVE AND AFFORDABLE**

# Combat Results and Costs: WWII in Europe

- Douhet and strategic bombing shaped the WWII Air Force
- 80% spent on bombers, 20% on fighters. Half of war effort spent on air
- 8 of 9 strategic bombing campaigns failed (Strategic Bombing Survey)
- Allied bombing lost 150,000 airmen (10x the fighter losses)
- Unescorted bombers failed; German fighters won (Fall 1943)
- Reversed in Spring 1944: 1100 P-51s gained air superiority (essential for D-Day landings)
- Gen. Quesada's 1200 P-47s in close support saved the Normandy Beach head
- Same P-47s proved crucial for St. Lo breakout and Patton's plunge across France (600 miles/2 weeks)

# **Combat Summary: WWII in Europe**

**Overall, strategic bombing stiffened  
German resolve and strengthened the  
regime  
(just like German bombing did to UK)**

# Combat Results and Costs: WWII to Korea

- USAF bomber generals slashed fighters down to 1000(265 P-47s left out of 16,000 produced) and forced Quesada out
- Korea 1949: US Army Task Force overwhelmed. USAF sent 90 B-29s yielding 13 “close support” sorties/day
- USAF deployed a token 150 P-150s: Too vulnerable, huge losses. Gen. Vandenberg refused to replace with survivable P-47s
- USMC/USN prop-driven Corsairs and A-1 Skyraiders provided brilliant close support. Saved Marine division trapped by 7 Chinese divisions at Chosin
- 1000 Mig-15s cripple B-29 bombing. 90 F-86s gain air superiority with 10:1 exchange ratio

# **Combat Summary: WWII to Korea**

## **Strategic Bombing Results:**

- Laid waste to every large North Korean City (with huge bomber losses)**
- Completely failed to prevent resupply**
- Never forced North Koreans to the peace table**

# Combat Results and Costs: Korea to Vietnam

- 1950-1960: USAF built 3000 bombers and nuclear interceptors but slashed fighters to 1000
- Vietnam air war starts (1964): USAF deployed 227 old F-100s and 110 F-105s as strategic bombers. Highly vulnerable to AAA and MiGs; Lost 243 F-100s and 397 F-105s
- No USAF fighter in production: SECDEF imposed Navy's F-4 nuclear interceptor on USAF. Equally vulnerable; deployed 285, lost 445
- Token close support effort in the south (100 sorties/day) but 55 prop-driven A-1s achieved spectacular successes due to pinpoint accuracy of 20mm. 3-4 hr loiter time, invulnerability and slow speed maneuverability. Troops loved the A-1.



# **Combat Summary: Korea to Vietnam**

**6 years of strategic bombing failed:**

- **Did not stop resupply of South**
- **Never forced North Vietnam to negotiating table**
- **Stiffened civilian resistance and strengthened Ho Chi Minh regime**

# Combat Costs and Results: Gulf War

- Gulf War I: USAF planned 39 day strategic bombing campaign. Predicted surrender in 6 days (DOUHET!)
- Targeting blunder, killing 300 women/children, ended Baghdad bombing in 20 days. No effect on Iraqi army in Kuwait
- 132 A-10s killed more tactical targets than all the 2000 high speed jets (F-16, F-111, F-15, F-117, etc)
- 2 A-10s destroyed the spearhead of Iraqi armored invasion of Saudi Arabia. In 2 days, 100s of A-10 sorties mauled the whole 2 division force
- After war, USAF bomber generals rewarded A-10s by mothballing half – simultaneously funding huge over runs for the B-1, B-2 and F-22

# Combat Costs and Results: Kosovo

- In Kosovo, USAF planned strategic bombing campaign with 720 NATO planes. Predicted surrender in 2 days
- 78 days and 38,000 sorties later, only destroyed 3/80 SAM Sites, 14 armored vehicles and 387 military casualties
- After 78 days, Serbs, undefeated, accepted better NATO terms than Serbia wanted before war.

# Combat Costs and Results: Summary

- Strategic bombing failed in WW II, Korea, Vietnam, Gulf War I and Kosovo (and in subsequent wars)
- Close air support has succeeded, wherever tried, in moving battles in WW II, Korea, Vietnam, Gulf War I and Afghanistan
- Air crew and aircraft losses in strategic bombing are huge, typically 10x the losses in close support. Costs are equally huge: No US air war has spent even 10% on close support
- Ever since 1949, US airpower has had decreasing effects on the outcome of each war, applying smaller and smaller forces at higher and higher costs

# Business-as-usual in Procurement

- Air Force presents an impossibly expensive wish list of programs (currently \$1 Trillion over next 20 years)
- SECDEF (and Congress) haggle this down, year by year, to around \$12 Billion/year in R&D + Procurement
- That will buy 50 or less planes per years – mostly for nuclear or non-nuclear strategic bombing
- Today's Air Force: 4,000 aircraft, on average 20 years old

# **The Business-as-usual Air Force in 20 years:**

**2000 aircraft, average 25-30 years old, and no air power option except strategic bombing**

# An Alternative:

## The Effectiveness-based Air Force

Replace “Wish List” with four austere designs based on what works in combat

- **New Close Support A/C:** 55% the size of the A-10 and significantly more lethal/maneuverable/survivable
- **Forward Controller Plane:** Lands right next to troops but far more survivable/maneuverable/long-loitering than helicopter
- **Dirt Strip Airlifter:** 5-10 ton emergency resupply to beleaguered battalions in boonies
- **New Super-agile Dogfighter:** 30% smaller than F-16; Far higher acceleration and turn; all-passive electronics/weapons for real, not “pretend” stealth; out-fights any fighter in the world, including F-22

# An Alternative:

## The Effectiveness-based Air Force (con't)

- Keep spending same over next 20 years: \$12 Billion/year
- Program and cost out a complete, balanced force: Fighters, airlift, close support, forward control, tankers



# **The Effectiveness-Base Force Delivers**

- **10,000 new aircraft**
- **Devastating close support**
- **Overwhelming air superiority**
- **All available right at the beginning of a war – a first in US air power history!**