America’s Weapon Systems

“Our Safety Net”

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Updated for Spring 2019
Course Outline

• Intro Comments, Objectives, Big 3, Threats
• Overview of DoD and Resources/$$$; Acquisition-Technology-Logistics Process
• Operating Forces, C4ISR/ISTAR, EW, Logistics
• Strategic Forces/Nuclear Weapons, The TRIAD, National Missile Defense
• Space Systems
• Air Systems
• Air to Surface Weapons
• Sea Systems
• Land Systems
• Conclusions
• Future Weapon Systems
  – Triad Modernization and Upgrades
  – Space Systems
  – Early Warning/Surveillance/Targeting/UAVs/Drones
  – Bombers, Strike Fighters, Helos and More Drones
  – Standoff Air to Surface Weapons
  – Sea Systems
  – Land Systems
  – Summary of New Big Programs
Threats to the U.S.

• Most Unpredictable in 40 years – General Dempsey (Previous CJCS)
• **Russia** our biggest existential threat – General Dunford (Present CJCS) General Milley (Army COS)
• **North Korea** our biggest threat for next President – John Brennan (CIA Director) and President Obama to President Trump
• Major Nation States/Organizations
  – Russia
  – China
  – North Korea
  – Iran
• **Islamic State (Down but not out in Afghanistan, Iraq, Syria and other areas)**
• Worldwide Terrorism (Estimate of 80 to 100K terrorists worldwide)
• Weapons of Mass Destruction and especially with terrorists
• Cyber warfare
• Worldwide Religious War inside Islamic religion (Sunni vs Shia)
• Threats to Allies (Especially Israel vs Hezbollah and Iran)
• Increasing upheaval in the Middle East (Especially Syria and Saudi Arabia)
• Use of Drones and Artificial Intelligence (AI)
• Electro-Magnetic Pulse (EMP) and Hypersonic weapons
• **National Debt (Now 21.994T + 1.5T from 2017 tax reform act)**

Sources: U.S. Joint Strategic Plan – Released February 12, 2018 and National Military Strategy 2018
FY18/19 Budgets

- Total Spending - ($4.094T/$4.340T) (+$32B above FY17/+$45B above FY18)
  - *Pensions - ($1.062T/$1.146T) (Social Security, Fed Employee Retirement)(26%)
  - *Health Care - ($1.120T/$1.203T) (Medicare, Medicaid Grants to States)(27%)
  - Education - ($108B/$107B) (PrePrimary, Secondary, Student Aid, etc.)(3%)
  - *Defense - ($.886T/.916T) (Military, Veterans, Foreign Mil/Economic Aid)(22%)
  - Welfare - ($353B/$355B) (Food and Nutrition, Unemployment, Housing, Other)(9%)
  - Protection - ($41B/$41B) (Federal Police Services, Law Courts)(1%)
  - Transportation - ($92B/$92B) (Highways, Airports, FAA, Water)(2%)
  - General Government - ($52B/$51B) (Exec and Legislative, IRS, the FED, etc.)(1%)
  - Other Spending - ($64B/$58B) (NASA, Basic Research, Classified, Forestry, etc.)(2%)
  - *Interest – ($262.8B) (Treasury Debt Securities)(8%)

- *Sum Non-discretionary accounts including Defense – $3.331T/$(81%)
- Sum Discretionary accounts - $763B/19%

- Estimated Year’s Deficit - ($440B/$525B)

The 2019 Budget

- Full year appropriations signed by POTUS for Defense, Labor, Education and Health and Human Services Departments
- Continuing Resolution (CR) signed by POTUS for funding through Dec 7, 2018 for the rest of government. Follow-on appropriations for all other departments not approved by POTUS. Government shutdown in place.

- Revenue Enhancement Items:
  - National Economy/GDP increase for additional taxable revenue
  - Reduce budgets of all departments other than Defense and DHS
  - Border import trade taxes (tariffs)
  - Repealed ACA cost

- Spending Increase Items:
  - Major increase in Defense and VA budgets
  - Increased DHS budget
  - Program expenses to build border wall
  - Infrastructure programs

- Revenue Reduction Items:
  - Tax reduction/reform programs (Corporate and Individual)

- Major Obstacles/Enablers
  - Sequestration law (back on in FY19) Action must be taken to waive DoD
  - Congressional fiscal conservatives
  - Repealing the ACA
  - GDP growth at 3% to 4%
Comparing U.S. Armed Forces

- **Manpower** (Second only to China)
- **Land Systems** (Russia overwhelmingly leads)
- **Air Power** (U.S. overwhelmingly leads)
- **Naval Power** (U.S. overwhelmingly leads)
- **Transports and Trainers** (U.S. overwhelmingly leads)
- 39% of World’s Military Expenditures
  - FY2018 Budgets: U.S. ($647B), China ($151B), Russia ($47B)
- 70% of NATO’s Military Expenditures

Source: Global Firepower – [www.globalfirepower.com](http://www.globalfirepower.com)
Online resources for keeping up with the U.S. Defense

Headlines and Articles:

• www.Breakingdefense.com
• www.DefenseNews.com
• www.Defense.gov
• www.realcleardefense.com
• www.nationalinterest.org
• www.defenseone.com
• www.stripes.com
• http://news.usni.org
• http://www.defensetech.org
• www.aviationweek.com/defense
• http://www.heritage.org/issues/national-security-and-defense
Online resources for keeping up with the U.S. Defense

**Major Reports and Budgets that shape policy:**


2019 Index of U.S. Military Strength


The Evolution of Precision Strike –
Online resources for keeping up with the U.S. Defense

Fact Sites:
United States Armed Forces
https://en.wikipedia.org/wiki/United_States_Armed_Forces

Air Force – www.af.mil
Fact sheets: http://www.af.mil/AboutUs/FactSheets.aspx

Army – www.army.mil

Navy – www.navy.mil

American Special OPS - www.americanspecialops.com

Global Firepower – www.globalfirepower.com


Equipment of the Army – http://en.wikipedia.org/wiki/Equipment_of_the_United_States_Army


List of active United States military aircraft - https://en.wikipedia.org/wiki/List_of_active_United_States_military_aircraft

List of currently active United States military land vehicles
https://en.wikipedia.org/wiki/List_of_currently_active_United_States_military_land_vehicles
Online resources for keeping up with the U.S. Defense

**Imagery/Videos:**
Defense Media Activity - [http://www.dma.mil](http://www.dma.mil)

Defense Video and Imagery Distribution System (DVIDS) – [http://www.dvidshub.net](http://www.dvidshub.net)

DoD Sites on YouTube - [https://www.youtube.com/user/DODvClips](https://www.youtube.com/user/DODvClips)

YouTube – [http://www.youtube.com](http://www.youtube.com) Search & choose many options using:
- Defense Department
- U.S. Armed Forces
- U.S. Military Power

**Defense Acquisition**

Defense Acquisition University: [https://www.dau.mil](https://www.dau.mil)

Defense Acquisition Guidebook: [https://www.dau.mil/tools/dag](https://www.dau.mil/tools/dag)

Communities of Practice: [https://www.dau.mil/community-hub#All||title_asc](https://www.dau.mil/community-hub#All||title_asc)


Tools and Resources: [https://www.dau.mil/tools/#All|All|Show%20All|recent](https://www.dau.mil/tools/#All|All|Show%20All|recent)

**Other Sites**