

Space Force, a ballistic missile defense nightmare

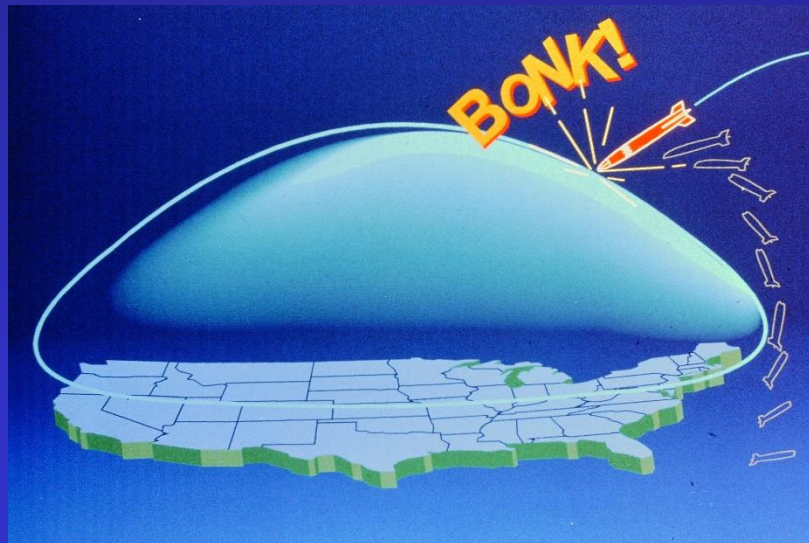
12 October 2020

**Robert Goldman and Bill Yang, OR PSR
OPHA Annual Meeting**



Disclosures

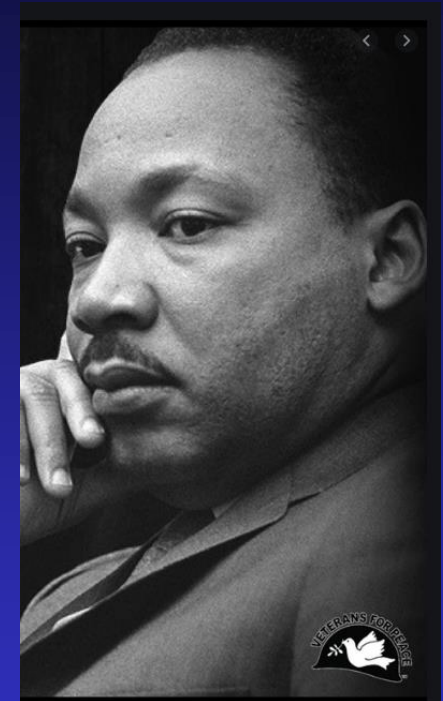
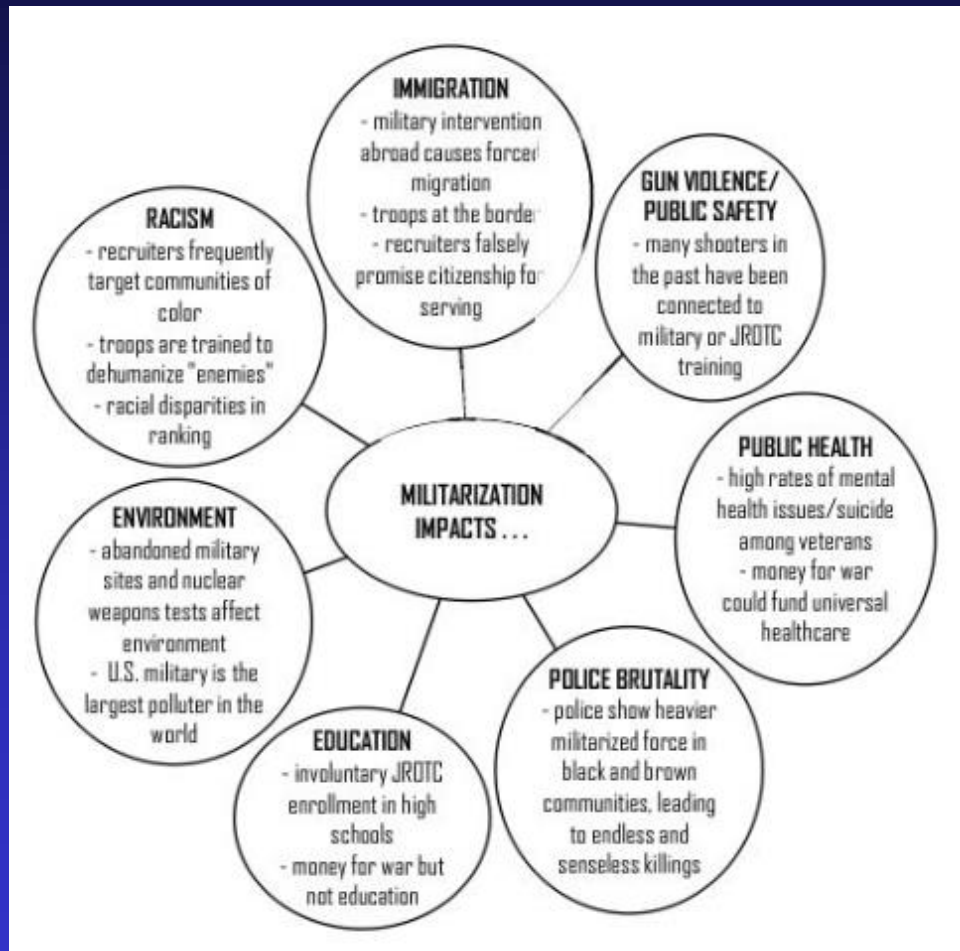
- No financial disclosure
- Graphics from the Nuclear War Project, Northfield MN (Mike Casper)



Objectives

- 1) Paradox that defensive weapons can be destabilizing
- 2) Opportunity costs high (COVID)
- 3) Fallacy of technical solution

Militarism and Public Health



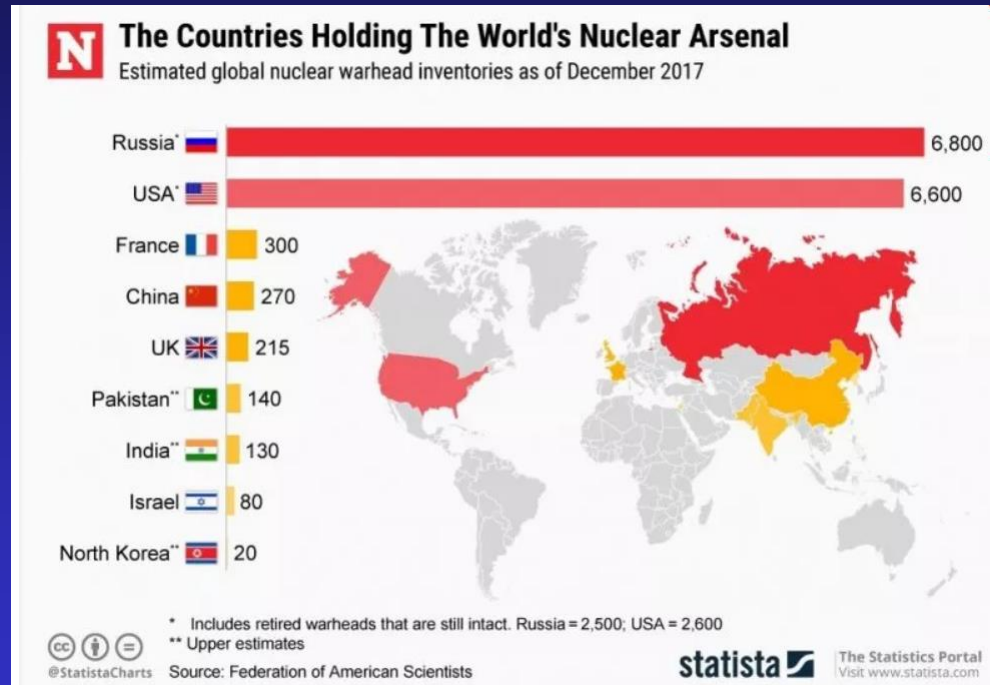
http://comdsd.org/oldsite/article_archive/Militarism_intersectionality.html

Nuclear Weapons

- Deterrence & MAD & Triad

- Arsenals (9 countries)
~13,400 warheads

- How many needed?
 - 1 warhead
 - 100 small warheads
 - 200 warheads
 - Large scale



<https://fas.org/issues/nuclear-weapons/status-world-nuclear-forces/>

<https://www.psr.org/blog/resource/regional-nuclear-war-global-health-consequences/>



Space Force & BMD



- Ground-based Midcourse Defense
 - 44 Ground-based interceptors (2018; additional 20 requested 2019)
- Develop new GBI kill vehicle
- Expand sensors
- Evaluate space-based kill vehicles
- Bolster (D.C.) and evaluate broad defenses for cruise missile attacks
- Command and Control

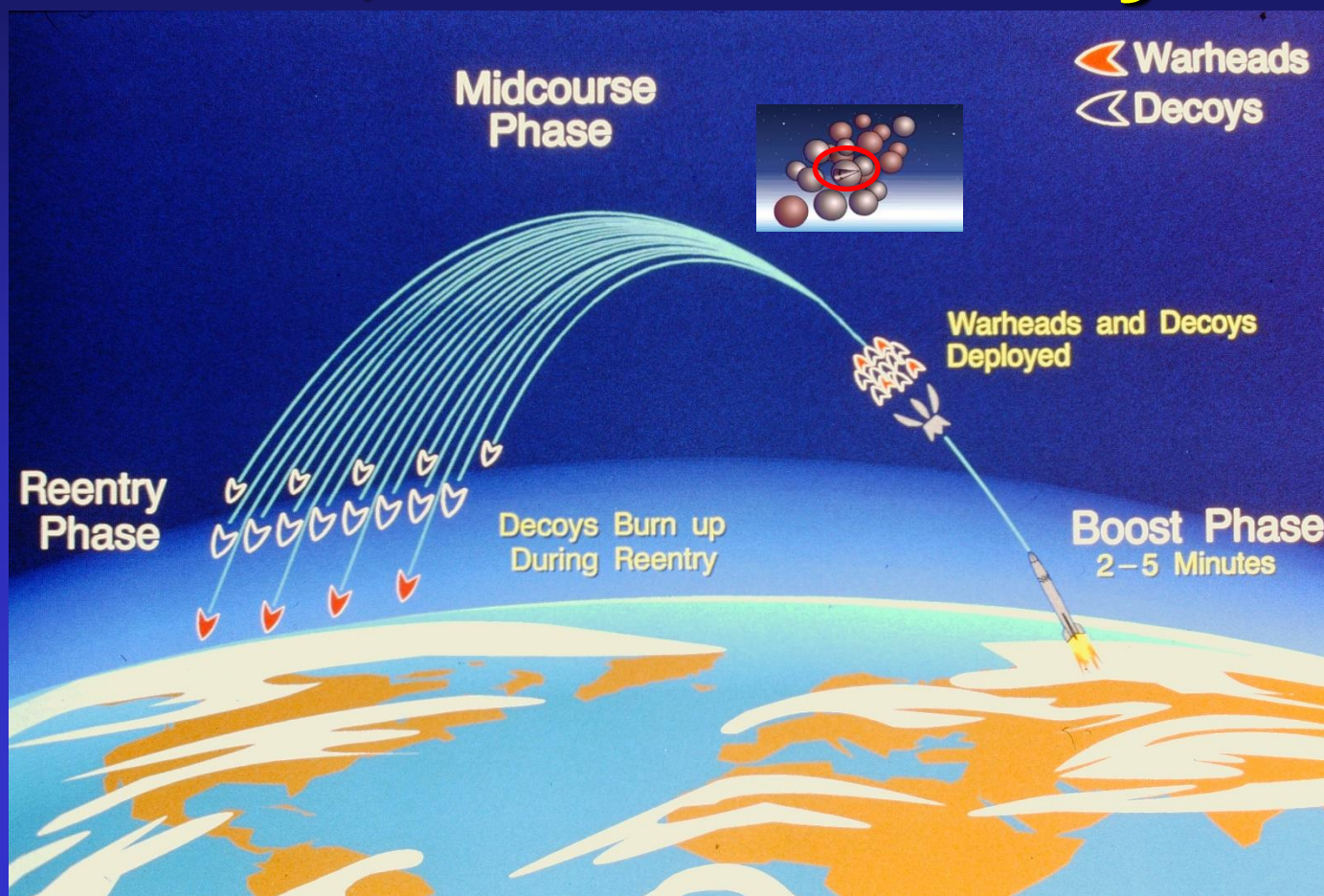


Grego L. Bull Atom Sci 2018;74:220-226.
<https://www.mda.mil/system/gmd.html>

2019 Missile Defense Review
 Bulletin of the Atomic Scientists 2018,
 Vol 74, No 4
<https://www.spacecom.mil/Mission/>

**“We have missiles that can knock out a missile in the air 97% of the time, and if you send two of them, it’s going to get knocked down”
President Trump, Fox News Oct 11, 2017**

ICBM, MIRV & Decoys



Unworkable

Effectiveness

+

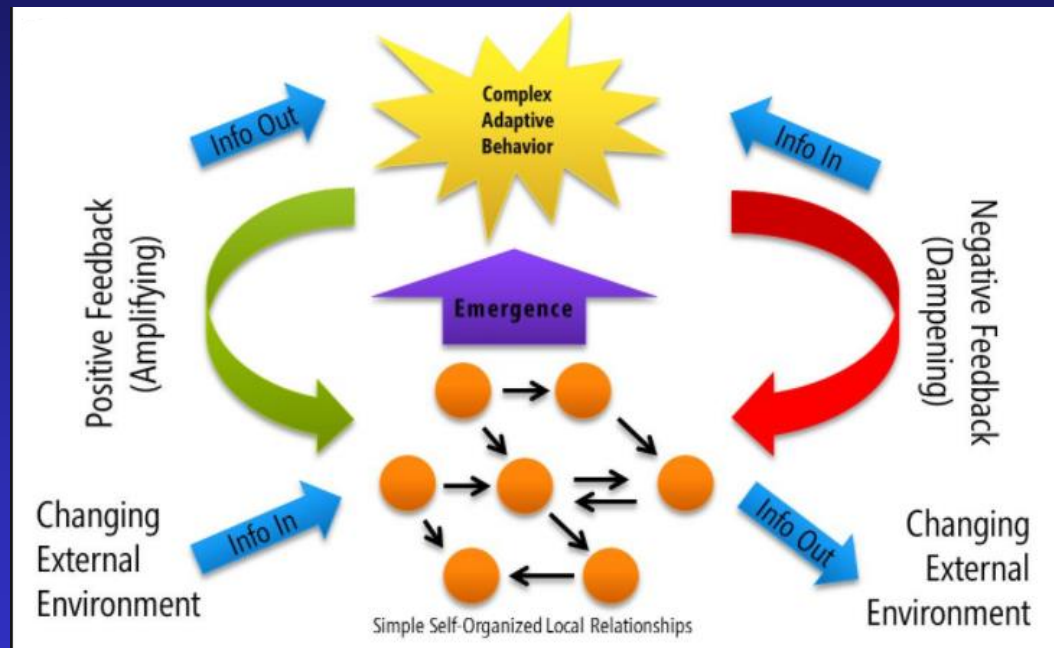
Complex adaptive system

=

Unworkable

Emergence (purple arrow)

- 'easily' overwhelmed
- 'easily' circumvented

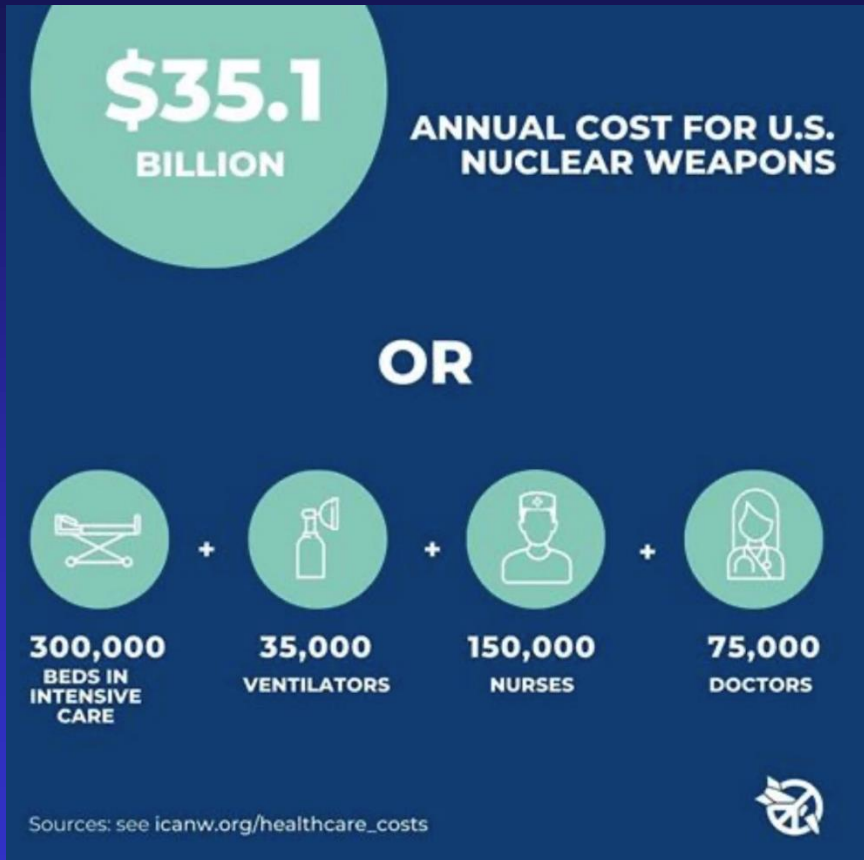


<https://thebulletin.org/2013/02/does-missile-defense-work/>

Dangerous

- **Miscalculations**
 - False sense security
 - Viewed as a threat (part of 1st strike plan)
- **Missed alternative safer opportunities**
 - Obstacle to arms reduction
- **Destabilizing**
 - New weapons systems & build up
 - Antisatellite weapon

Expensive



<https://thebulletin.org/2020/09/why-does-missile-defense-still-enjoy-bipartisan-support-in-congress/>

Alternatives

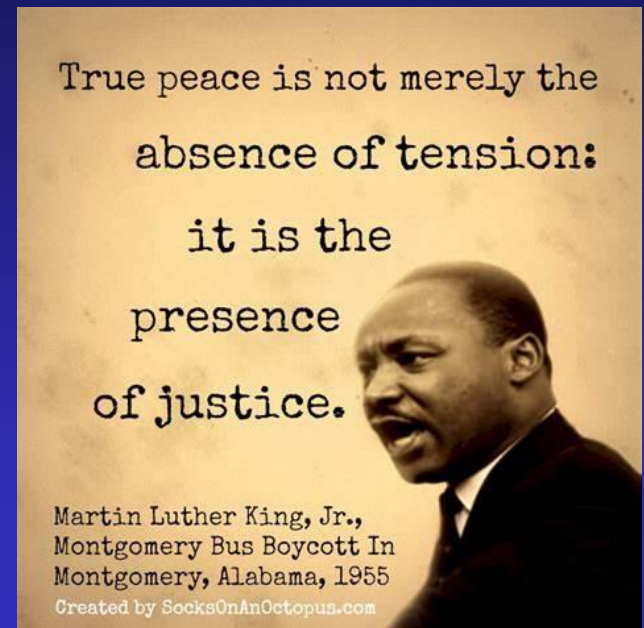
- **Proliferation: address underlying motives**
- **International efforts**
 - **Reduce international tension**
 - Iran & N Korea
 - India & Pakistan
 - **UN Treaty Prohibition NW (TPNW, 2017)**
- **Consider their symbolic value**

Kuhn U. Deterrence and its discontents. Bull Atom Sci 2018;74:248-254.)

<https://thebulletin.org/2020/09/the-hidden-stumbling-block-to-progress-on-nuclear-weapons/>

Conclusions

- **BMD fatally flawed**
- **(Nuclear) war is a political problem**
 - What does the US want?
 - America first?
 - TPNW
- **Injustice**



Bacevich AJ. Foreign Affairs 2017;96:57-67.