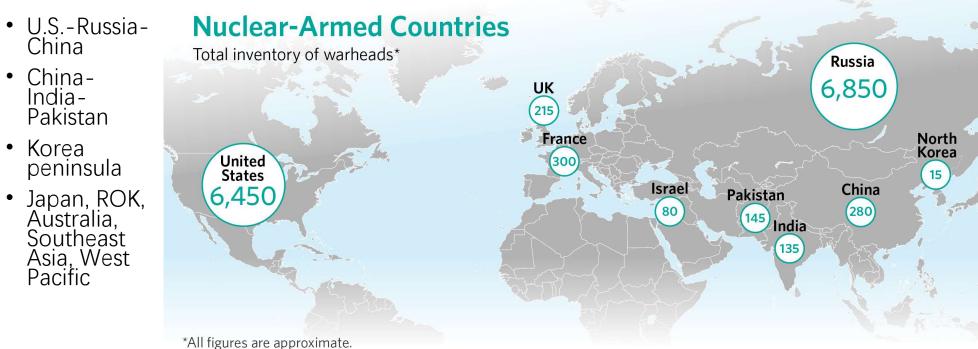
## China and Arms Control

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## China and international arm control



**Source:** SIPRI Yearbook 2018.

## Minimum nuclear deterrent

- Basic means of reprisal
- Strategic stability, mutual assured destruction (MAD)
- Credible deterrence based on a small arsenal:
  - Ambiguity: numerical & geographical
  - Protective measures



## Nuclear modernization

- Mobile platforms
- Central objective: increase survivability, maintain MAD







## Challenges with maintaining MAD

- Lack of consistent U.S. policy on mutual vulnerability
  - Obama; Trump
- Perceived U.S. interests in building counterforce capability
  - Accuracy; super-fuse for SLBMs; low-yield, low casualty nuclear weapons; better sensors.

## Challenges with maintaining MAD

- Nuclear weapons used to be vulnerable only to nuclear attacks.
- New non-nuclear strategic military technologies:
  - Missile defense
  - Conventional precision strike weapons: hypersonic weapons
  - Unmanned and autonomous technologies
  - Cyber
  - Others

## Missile defense

- Worst-case scenario thinking
- China:
  - ~60 ICBMs (DF-5A, DF-5B, DF-31A)
  - ~4 operational SSBNs (48 SLBMs)
- Even a small U.S. missile defense system can be perceived as a threat.
- Future development of U.S. missile defense
  - Multi-Object Kill Vehicle
  - Better distinguishing capability
- Shift of offense-defense balance
- Already driving nuclear investment
  - MIRV, SSBN

## Political distrust

#### • THAAD dispute

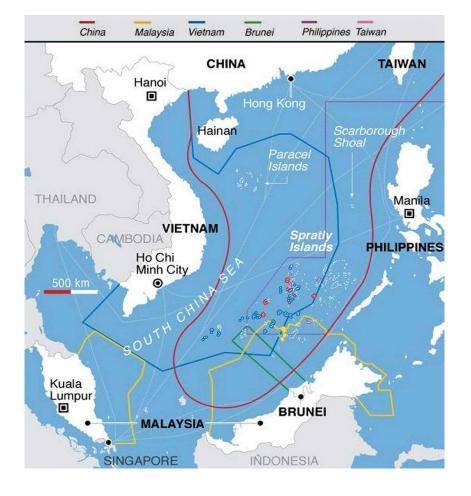
- Political distrust interacts with genuine technical disagreements
- Chinese perception
- U.S. perception
- What shaped China's perception?
- Radar, decoys
- Lack of technical debate
- Distrust  $\rightarrow$  disagreement  $\rightarrow$  distrust
- Future:
  - Greater strategic rivalry
  - Domestic check & balance

## Challenges with maintaining MAD

- Extremely hard to reach common U.S.-China understandings on missile defense
  - How many more Chinese nukes are justifiable, due to the impact of U.S. missile defense?
- Equally or more difficult for other non-nuclear strategic technologies
  - Conventional precision weapons
  - Unmanned vehicles
  - Cyber
- A major challenge for nuclear stability in the future
  - No good solutions so far. More intense nuclear competition likely.

# Efforts to maintain MAD and conventional arms race

• SSBN



## Additional risks of nuclear modernization

- Preoccupation with building secure second-strike capabilities
  - Risks of crisis instability may not receive sufficient attention
- Following each other's example
  - MIRV
  - SSBN
  - Launch on Warning
  - Small yield tactical nukes
- Comingling, entanglement

## Domestic factors

- Implication of U.S.-China strategic rivalry on domestic environment
  - Liberal voices
  - Understanding of nature of international relations
    - U.S. statements not helpful:
      - Peace through Strength
      - 2018 NPR: a strong nuclear force "ensur[es] that our diplomats continue to speak from a position of strength on matters of war and peace."
      - Nuclear weapons translate into diplomatic leverage
    - Growing nationalistic view: nuclear weapons translate into international respect and status
      - South China Sea, Taiwan
      - Global Times: economic status; multiple editorials; impact on general public.
    - Equal negotiations require equal/similar capabilities

### Domestic factors

- Implication of U.S.-China strategic rivalry on domestic environment
  - Top level attention
    - New leadership
    - Bureaucratic interests
  - China's self-perception about military modernization
    - History
    - Empathy, self-reflection, introspection

## Promote arms control/contain arms race

- Systematic problem
  - Genuine belief: Others (the U.S.) are containing China. China needs stronger nuclear capability for defensive purposes
  - Domestic factors
- What can be done?
  - Change of perception is a long process
  - Starting with narrowing perception gap over each individual cases of dispute
    - THAAD
    - Shelving the disputes not helpful for the long run
  - Help China develop nuanced understandings of U.S. and others' policies and thinking
    - Missile defense as an example
  - Introduce domestic debates to Chinese experts
    - Entanglement: Conventional Trident Modification

## Promote arms control/contain arms race

- Develop good understandings about China's policy and thinking
  - 2018 NPR, China subsection
- Develop common understandings about shared risks
  - Substantive, in-depth exchanges, simulations, table-top exercises.
    - Conventional-nuclear entanglement
    - Nuclear or dual-capable hypersonic missiles
    - Cyber on nuclear
    - Al on nuclear
    - Launch on warning
    - SSBN and conventional military conflicts
- For the long run, the hope to escape security dilemma rests with younger generations
  - Distrust is always a result of lack of nuanced understandings about each other.
  - Younger generations are better equipped to develop such nuanced understandings.
  - But also need deliberate efforts to:
    - Avoid superficial understandings; develop professional, nuanced understandings;
    - Cultivate the capacity of empathy and of conducting introspection/self-reflection;
    - Be open-minded, always prepared to learn new perspectives.
  - You can all make a great contribution to peace.