

# CSBA

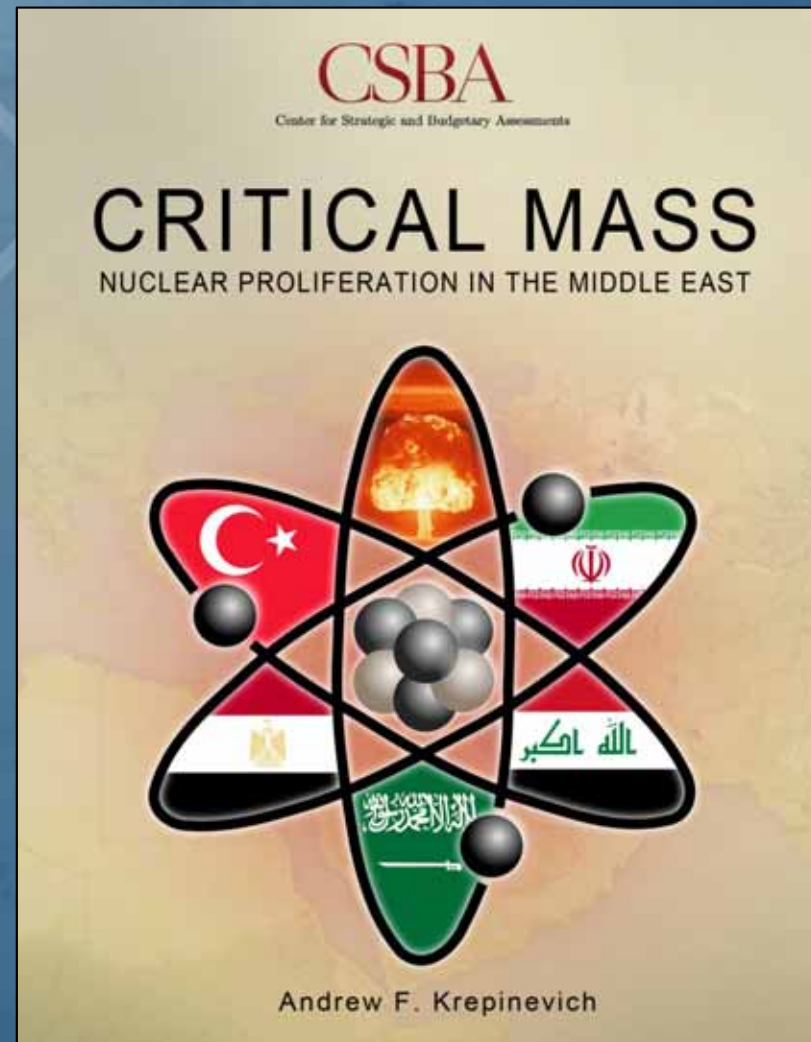
Center for Strategic and  
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## Critical Mass Nuclear Proliferation in the Middle East

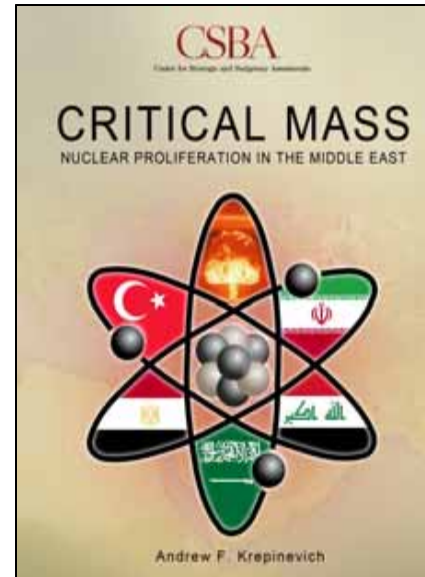
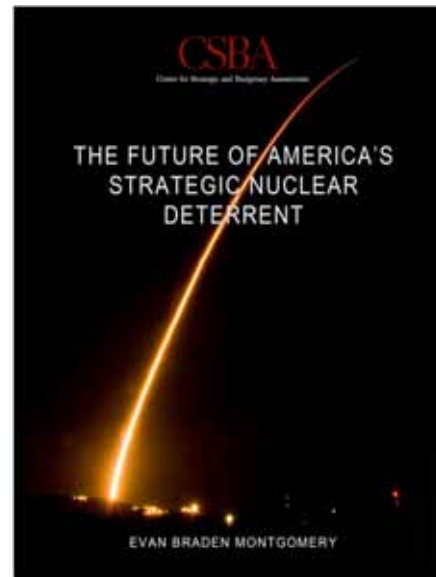
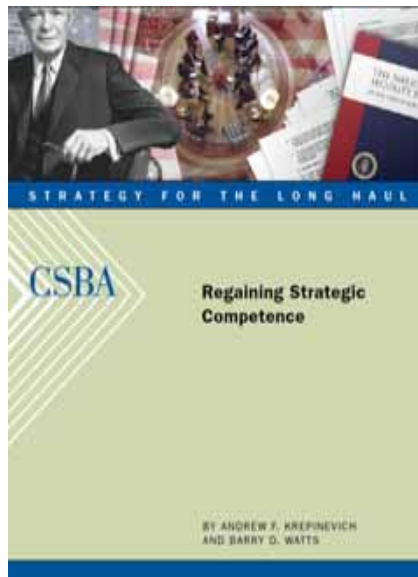
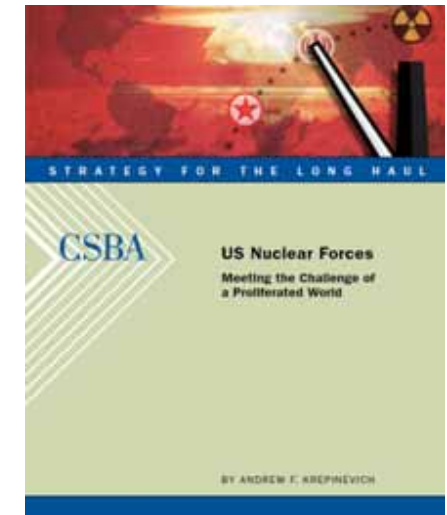
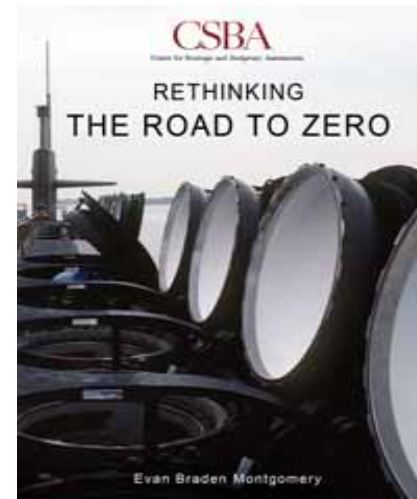
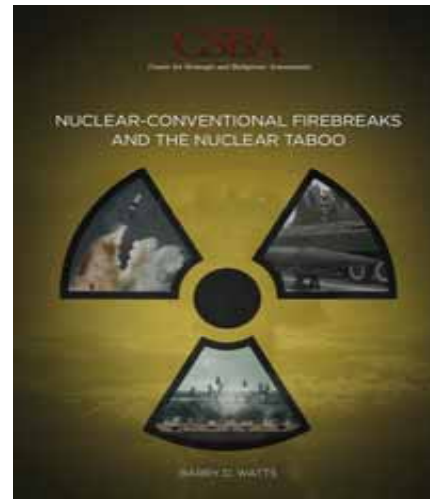
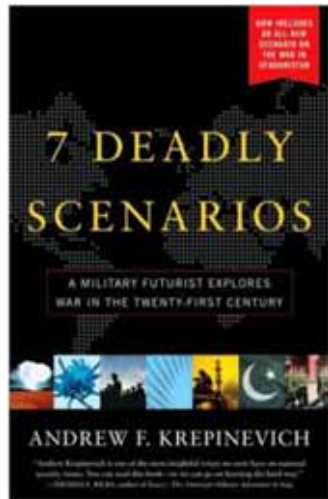
Dr. Andrew F. Krepinevich

President

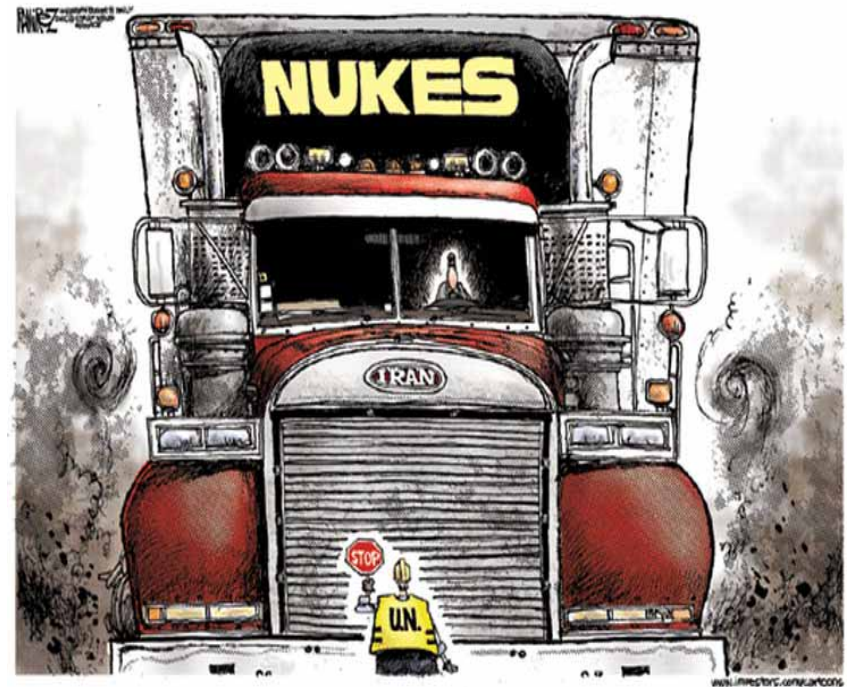
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# CSBA Assessing the Second Nuclear Era



- The Underexplored Option: A Proliferated Middle East
- Deterrence: The Default Option
- Deterrence: The Cold War Experience
- Deterrence: Israel and Iran
- Cascade: The “N-Player” Problem
- A Nuclear “Great Game?”
- Summary of Findings



## The Underexplored Option

### A Proliferated Middle East

“If you ask me what is the likelihood that we’re able to arrive at the end state . . . I wouldn’t say that it’s more than 50-50.”

President Barack Obama, December 7, 2013



- Negotiations and sanctions preclude Iran from acquiring a nuclear weapons capability
- Military action precludes Iran from acquiring a nuclear weapons capability
- Iran acquires a nuclear capability



Useful to explore a representative set of plausible scenarios to facilitate assessing strategic options

# Deterrence

## The “Default” Option

- Some observers have employed deterrence theory to argue that stability in the Middle East can be maintained if Iran acquires a nuclear weapons capability

“A country that possesses the bomb does not use it and automatically enters the system of deterrence and doesn’t take absurd risks.”

Hubert Vedrine, former French Foreign Minister

“The logic of nuclear deterrence has not yet failed in the 64 years since the world acquired its second nuclear power.”

George Will, Washington Post, Dec 8, 2013

- Cold War deterrence theory was based on a number of assumptions, and on the geostrategic context of the U.S.-Soviet competition
  - *Were these assumptions sound?*
  - *Will they hold in a different geostrategic, political, and military-technical context?*

***What risks may the United States and the international community confront in relying on deterrence to prevent nuclear use in a proliferated Middle East?***

# **Deterrence**

## **The Cold War Experience**

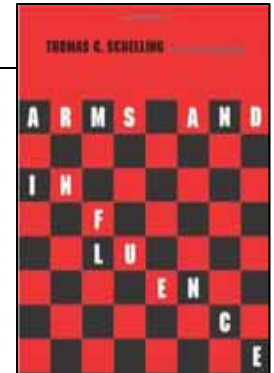
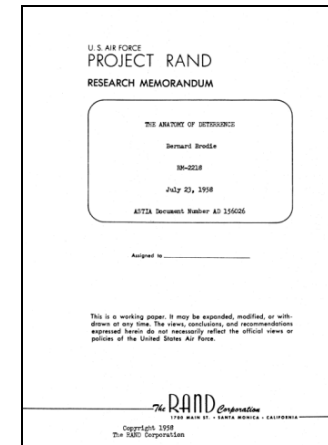


Cold War deterrence theory based on the assumptions that both sides would:

- Have full knowledge of circumstances
- Calculate costs, benefits, and risks in a similar manner
- Be able to execute their decisions as intended

The Superpower nuclear competition had unique geographic, political and military-technical characteristics

- Among the world's largest countries—yet thousands of miles apart—enabled relatively long warning time
- The two largest economies; both at the leading edge of military technology—both “paced the competition”
  - Sophisticated early warning and command and control systems
- Strong civilian control of military and nuclear forces
- Great deal of thought given to these matters—Brodie, Kahn, Kissinger, Marshall, Schelling, Wohlstetter, etc.



We now know that Cold War nuclear decision makers . . .

- Took seemingly “absurd” risks: Khrushchev, Castro, Mao
- Were not always “rational”
  - Khrushchev: “mercurial” and a “harebrained schemer”
  - Chernenko: seriously ill at times having “no idea what he was saying”
  - Kennedy: was on a “cocktail” of drugs
- Assessed costs, benefits and risks differently
  - Castro valued *dignidad* over personal and national survival
  - Mao: “If we lose 300 million people, what of it?”

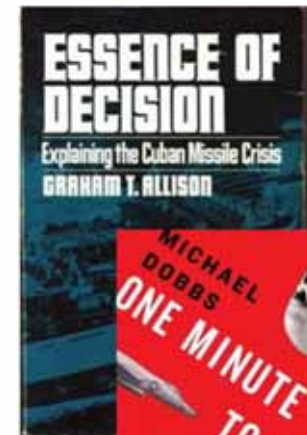


“Plain dumb luck”

Dean Acheson

We now know that Cold War nuclear decision makers . . .

- At times were given unreliable intelligence and early warning
  - KGB Operation *RYAN* suggested war imminent and ABLE ARCHER '83 as preparation for war
  - Both U.S. (1979) and Soviet (1983) early warning systems falsely reported missiles inbound
- Didn't always have positive control over nuclear forces
  - 10 of 10 U.S. bombers didn't receive/heed recall order during 1957 nuclear exercise
  - Officers on Soviet Submarine B-59 may have voted on whether to employ nuclear torpedoes (1962)
  - U.S. Pershing II deployments led to Soviet fears of decapitation strike—and “Dead Hand”/“Perimeter”
  - U.S. nuclear release authority



“We lucked out”

Robert McNamara

# **Deterrence**

## **Israel and Iran**

# CSBA A Different Geostrategic Context

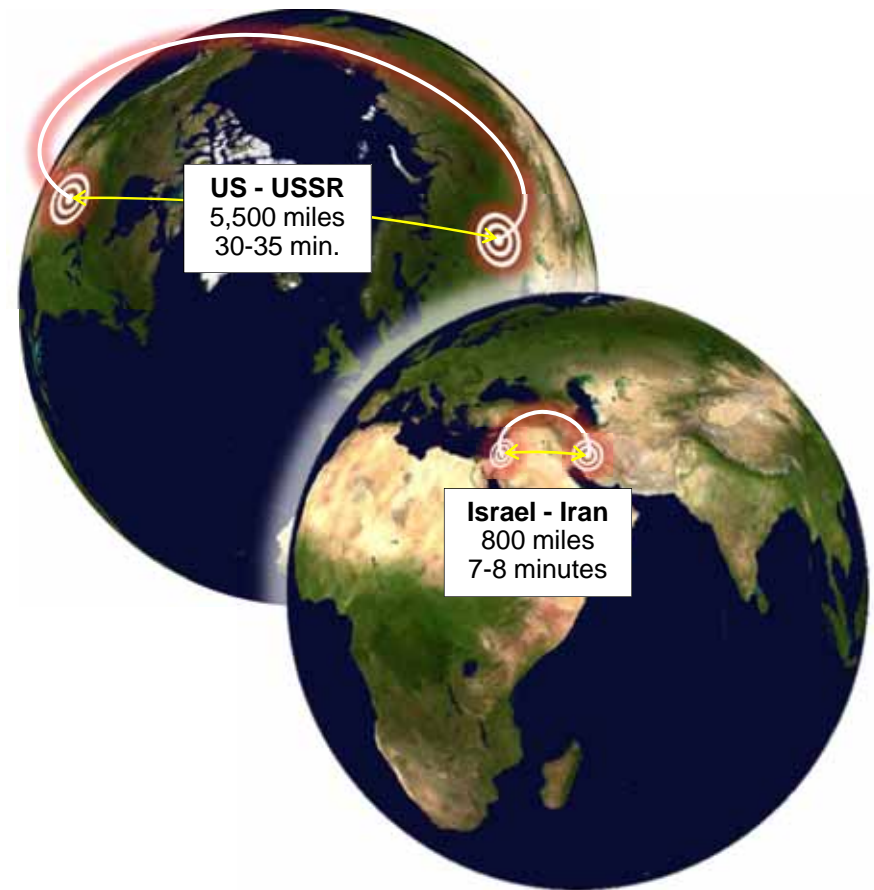
**Distance and missile flight times:** US/USSR had 30-35 minutes warning; Iran/Israel 5-8 minutes

**Size and Strategic Depth:** Israel's small size limits dispersal options; ability to tolerate "leakers"

**Early Warning and Command & Control:** Iran lacks know-how, both Iran and Israel likely lack resources

**Command & Control:** Tension owing to lack of early warning

**Character of the Competition:** Middle East states may confront an "N-Player" competition



*Distances and times are approximate. Flight time determined using the Tsiolkovsky rocket equation and modest assumptions regarding missile payload and engine specific impulse.*



# CSBA Deterrence: Structural Problems

Both sides will have strong incentives to preempt enemy attack or launch on warning:

- Short missile flight times could necessitate 24/7 alert
- A “One-Bomb” State: Even a “single-digit” nuclear attack poses existential threat to Israel
- Iran’s arsenal could be small and vulnerable (initially); fielding a secure second-strike capability could prove difficult
- Many “Fingers on the Trigger:” Iran may have strong incentives to delegate release authority



# CSBA Deterrence: Structural Problems

False Alarms and Catalytic War: Due to cost and geographic proximity, neither side is likely to have reliable early warning and command and control systems

- Cyber attack capabilities will further undermine reliability
- Both sides at risk of acting on a “false positive” early warning

“Missile Plenty” trumps Missile Defense

- Unlike the Cold War, “missile plenty” precedes “nuclear plenty” creating the problem of saturation attacks
- Cruise missiles pose a different problem for defenses
- The defender is on the wrong side of the cost equation
- Moves to introduce air and missile defenses in a crisis could be destabilizing



# The “N-Player” Problem

- Iranian nuclear weapons capability appears likely to prompt a proliferation “cascade” across the region
- A key issue may be whether states can effect proliferation “short cuts” such as the “Islamabad Option”

“If Iran developed nuclear weapons... everyone in the region would do the same.”

King Abdullah, Saudi Arabia

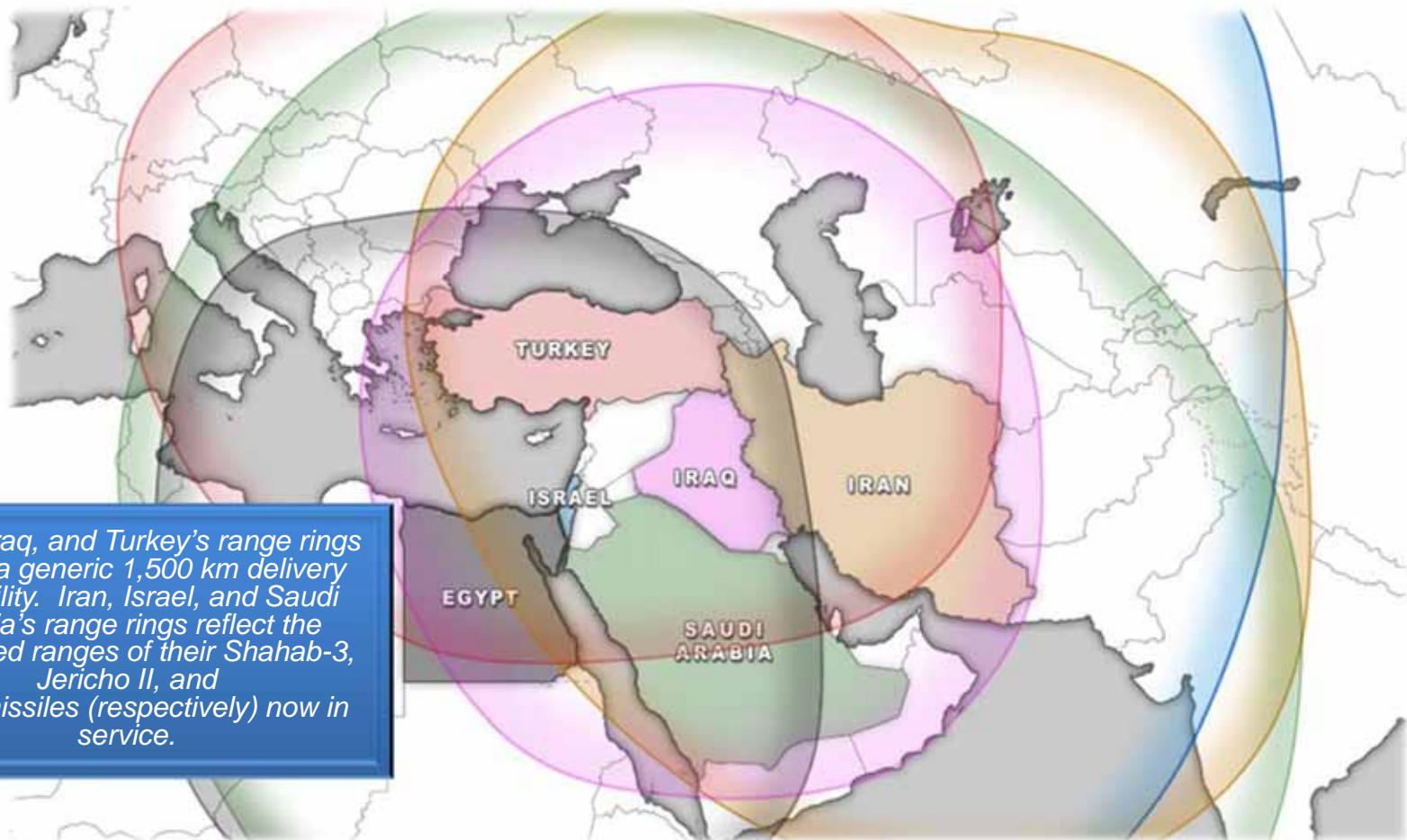
“It is our duty toward our nation and people to consider all possible options, including the possession of these [i.e., nuclear] weapons.”

Crown Prince Turki al-Faisal, Saudi Arabia

# CSBA The “N-Player” Competition

Proliferation cascade could produce an n-player nuclear competition

- Cold War-style parity will not be an option in such a competition
- Each player would be challenged to maintain assured destruction capability
- Attack attribution could be difficult—risk of “catalytic war”



*Egypt, Iraq, and Turkey's range rings reflect a generic 1,500 km delivery capability. Iran, Israel, and Saudi Arabia's range rings reflect the estimated ranges of their Shahab-3, Jericho II, and DF-3 missiles (respectively) now in service.*



# A Nuclear “Great Game”?

- A nuclear cascade could be shaped significantly by states external to the region
- Competition for influence could draw external powers into a nuclear “great game”
- The nuclear powers could all be players, as well as other states with advanced military technology
- Democracies might be disadvantaged due to nonproliferation/export control policies



*Potentially attractive technologies:*

- *Intelligence: early warning*
- *Infrastructure & maintenance support*
- *Missile defenses*

*Relatively attractive technologies:*

- *Nuclear weapons technology (especially miniaturization)*
- *Delivery systems/technology (especially missile guidance)*
- *Cyber attack and cyber defense capabilities*

*Less attractive technologies:*

- *Thermonuclear weapons*
- *MIRVs*
- *Depressed trajectory missiles*
- *Submarines*

- Cold War deterrence thinking may not apply to a proliferated Middle East
- In reality, the U.S.-Soviet “balance of terror” was “delicate” indeed
- “Structural” problems threaten to make an Israeli-Iranian competition unstable
- A nuclear Iran risks triggering a proliferation cascade, further threatening stability
- External powers could be drawn into a “great game,” further undermining stability
- Efforts need to be made to better understand the implications of a nuclear-armed Iran, both to inform near-term policy options and to hedge against failure
  - Explore range of plausible scenarios as “stress tests”
  - Identify “N-Player” metrics associated with stability/instability
  - Assess the requirements for extended deterrence under new circumstances

***Deterring nuclear use will likely be more difficult in a proliferated Middle East than it was during the Cold War***

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## Questions?

