



# (U) Stand-off Neutralization of Improvised Threats Or Lowering the Boom at Arm's Length

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HELPING WARFIGHTERS ADAPT

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JOINT IMPROVISED-THREAT DEFEAT ORGANIZATION



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# S2D2 – Same “Stuff”, Different Day



- Improvised threats haven't gone anywhere
  - Continue to evolve
  - Cheap, easy & effective
  - Hard to detect & defeat
  - They're IMPROVISED!

***Improvised threats continue to put lives and materiel in jeopardy.***

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# So, what are our options?



“And the Categories are...”

Detect	Neutralize	Mitigate	“S” words	Famous Navel Battles	Potent Potables
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“I’ll take ‘Neutralize’ for \$12,000, Trebek!”

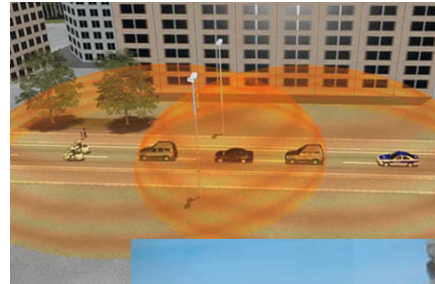


***Detection has proven extremely difficult; mitigation is too late.***



# What do you mean by “Neutralize”?

- Prevent from functioning as intended, e.g.
  - Render safe
  - Render inert
  - Disrupt, “break up”
  - “Burn out”
  - Jam or suppress
  - Pre-detonate
  - Deflagrate
  - Cause to go low-order
  - Other...



***“Neutralization” can be very context- and mission-dependent.***



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# Oh, is that all you want?



- Want to neutralize devices & components
  - From a “safe” distance
  - Safely, reliably and verifiably
  - Covered, obscured or concealed
  - W/o knowing where or what they are
  - With no collateral damage



***We want a safe, reliable, stand-off neutralization capability.***

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# Well, how hard can that be?

- You almost never
  - Have access to threat
  - Know
    - Where it is
    - How it's put together
    - What's in "the box"
- Even if you do,
  - Proximity increases risk
  - May be covered/obscured
  - Generally no two are identical
    - No "quality control"



***Even knowing the threat doesn't guarantee you can defeat it.***



# Key topics related to neutralization...

- Looking to neutralize...
  - UAS and UGS
  - VBIED, PBIED
  - HME
- Novel neutralization techniques
  - Directed Energy
  - UAS-borne
  - Biological, Chemical
  - Non-kinetic
  - “Magic”



***We're looking to expand our current neutralization capability.***



# To Summarize, in Summary...



- What we told you
  - Improvised threats are still a major concern
  - We'd like to be able to neutralize them
    - “Neutralize” is very context/scenario dependent
    - It's a hard problem (what with physics and all that)
- What we're telling you
  - We have capability; we want more (and “better”)!
  - Open to and interested in novel techniques
  - We need help from you (information, technology)

***We have to continue to improve our capability esp. as threats evolve***





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# Any Questions?



***"I love it when a plan comes together."***

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