
H4DIPLOMACY

HACKING 4 DIPLOMACY

DS-17: GUARDIANS OF THE EMBASSY

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Canva Link

U.S. Consulate Jeddah Attack 2004

WHAT WENT WRONG?

In Jeddah, the TG Guard system was the Marine's only option.

Deployment

One-time usage, difficult to re-load & re-deploy

Chemical Compounds

Black Powder Charge & Chlorobenzylidene Malononitrile (CS)

Placement

Due to interior and exterior locations, placement of TG Guard is limited

MEET THE TEAM

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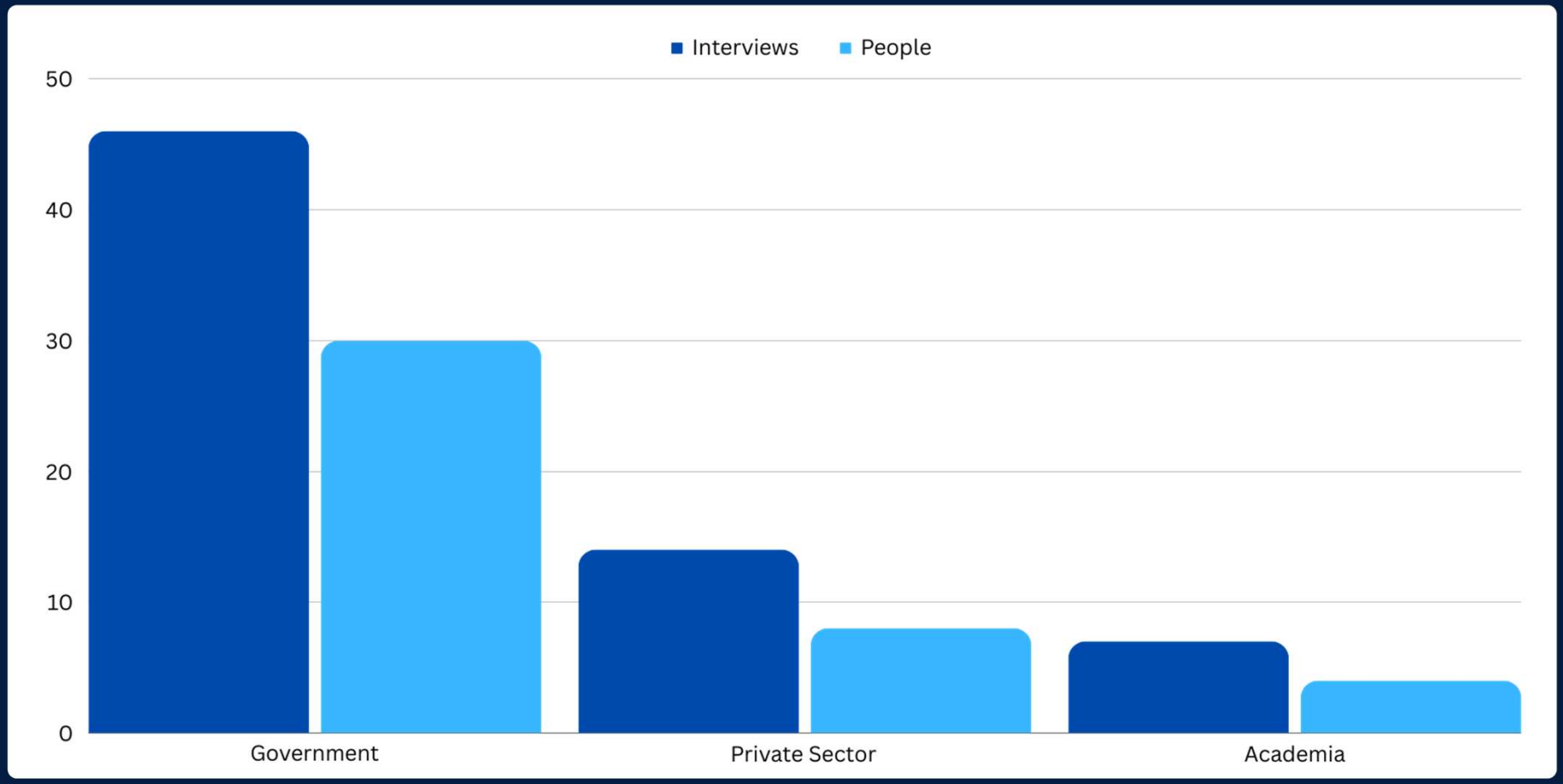
67 TOTAL INTERVIEWS
42 PEOPLE

Government

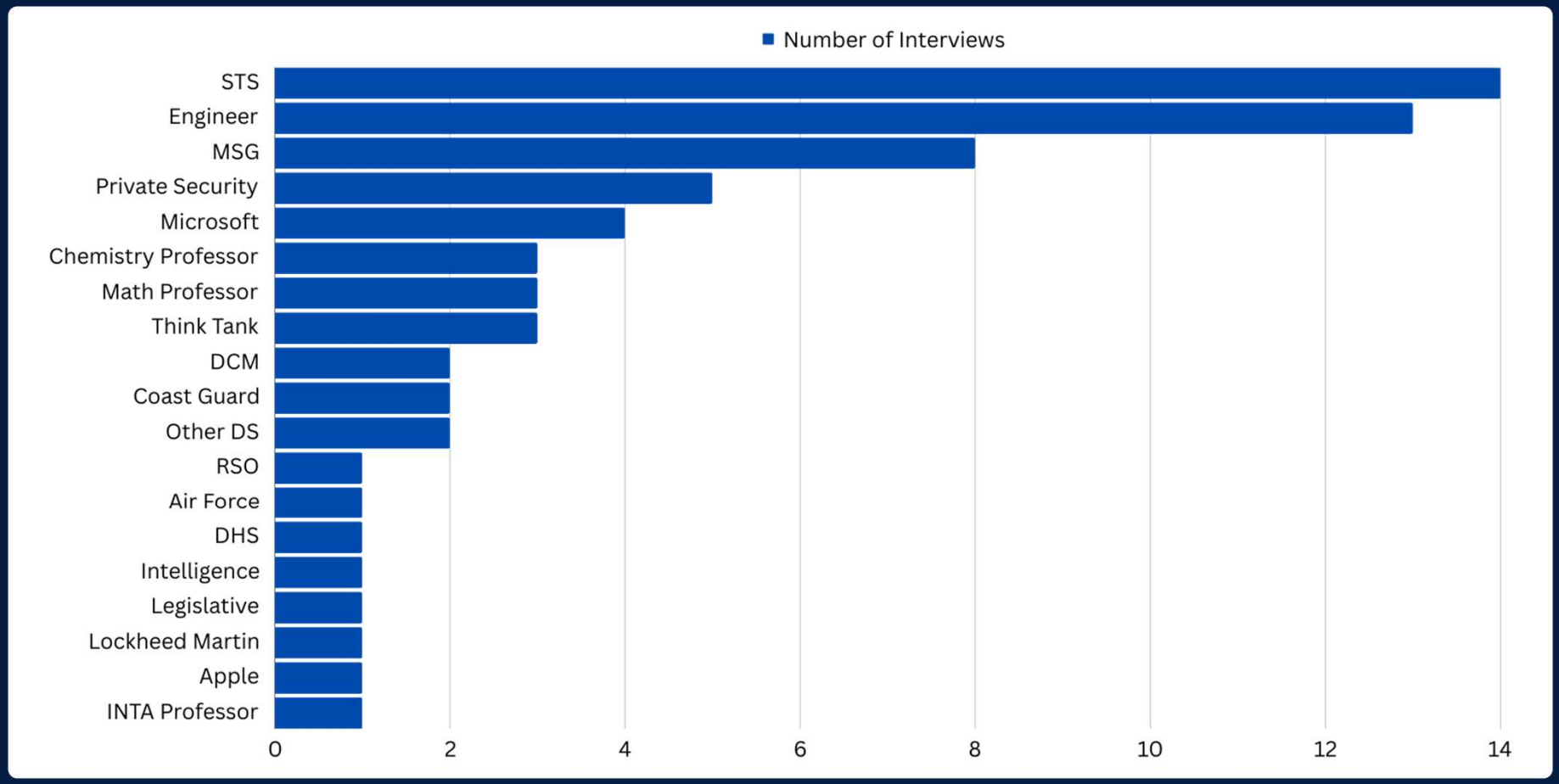
Private Sector

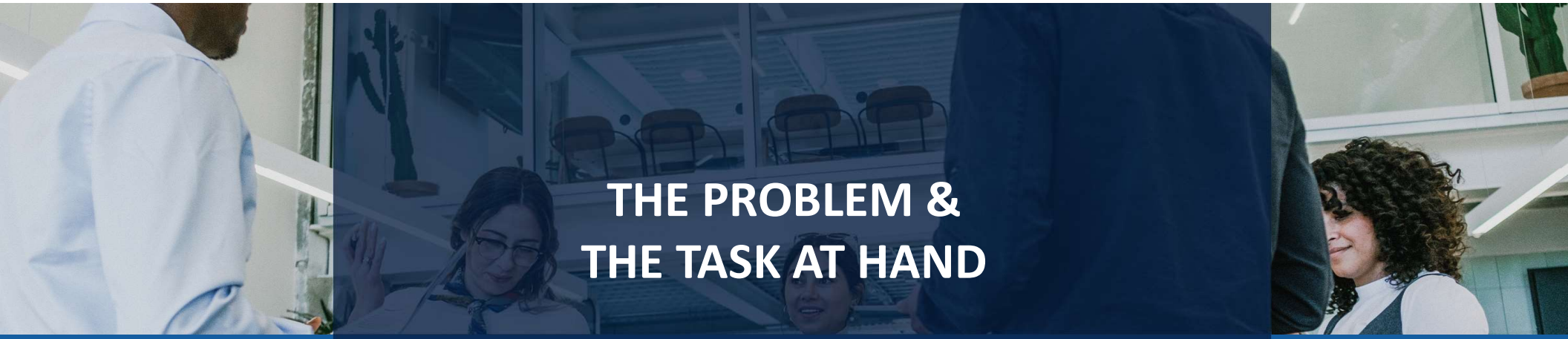
Academia

AGGREGATE INTERVIEWS



INTERVIEW BREAKDOWN





THE PROBLEM & THE TASK AT HAND

178 Embassies and 88 Consulates

Over 60 attacks on U.S. diplomatic facilities

New Less-Than-Lethal System Criteria

01 Accessible: Easier to obtain & transport

02 Standardized: Across all facilities

03 Continuous: Repeatedly deployable & continuous dispersal

04 Mountable: Cannot be tampered with


Introduction to problem statement
Idea of a multilayered system
• Active Denial System (ADS)
• Acoustic
• Loud Speaker System
• OC Nozzle System
On the ground experience
• Quantico
• Costa Rica
Refocused project parameters
Final Product
OUR JOURNEY

MULTILAYERED RESPONSE TO AGGRESSIVE ESCALATION

1

Step 1: Angry crowd begins to form on outside of perimeter fence

2

Step 2: Perimeter breach & targeting entry points

3

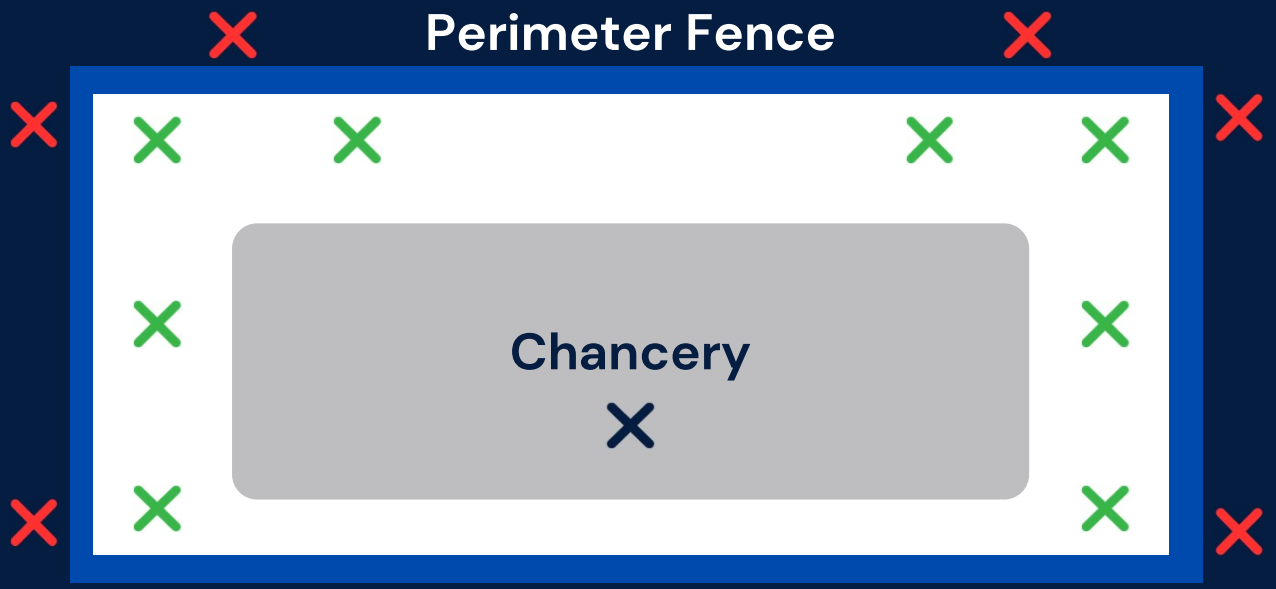
Step 3: Hardline threat escalates

LEVEL 1

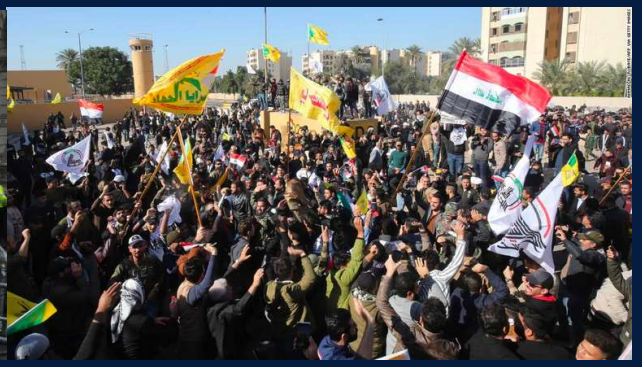
ANGRY CROWD BEGINS TO FORM ON OUTSIDE OF PERIMETER FENCE

<u>Response:</u> Establish a Physical Presence (Current Procedure)

- **Host nation police force will be alerted in advance or called in to be stationed around the exterior perimeter**
- **Local Guard Force (LGF) contracted by the embassy stationed around the inside perimeter**



X : Host Nation Force
X : Local Guard Force
X : Marines

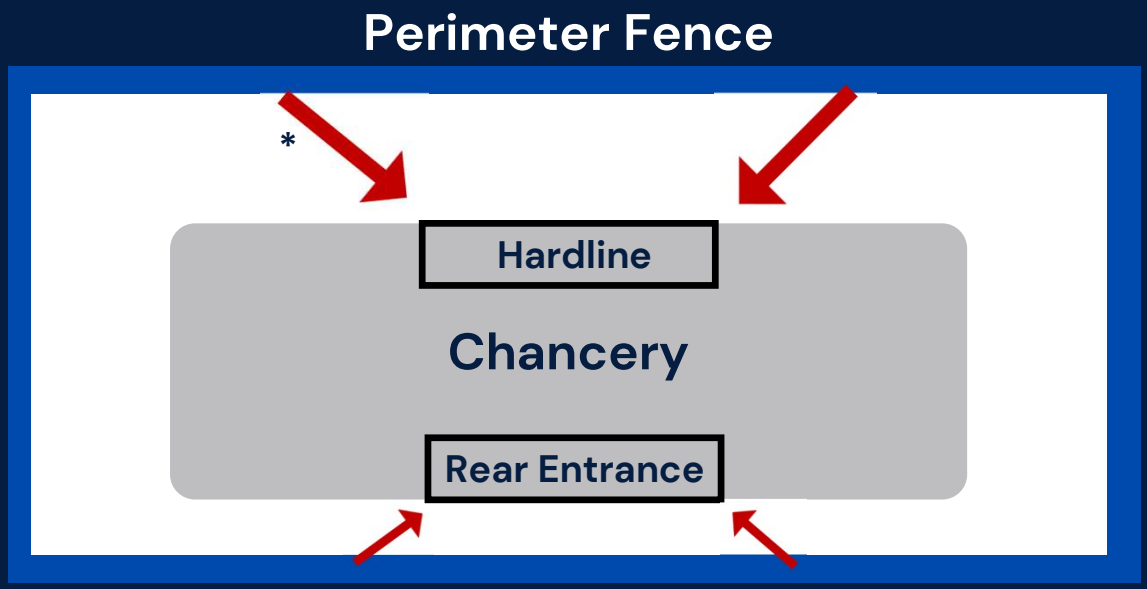


LEVEL 2

PERIMETER BREACH & TARGETING ENTRY POINTS

<u>Response:</u> OC System Deployment

- Crowd breaches perimeter and gains access to the compound
- OC – Oleoresin Capsicum
  - Chemical compound that comprises pepper spray
- Mounted continuous dispersal OC system is deployed



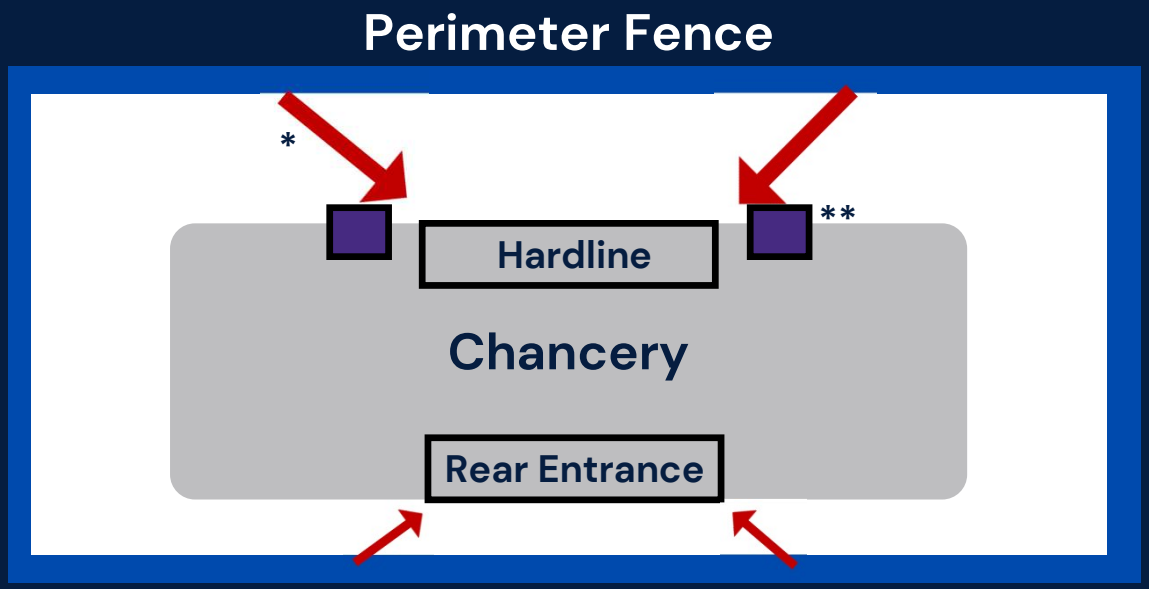
* Indicates placement of OC system

LEVEL 3

HARDLINE THREAT ESCELATES

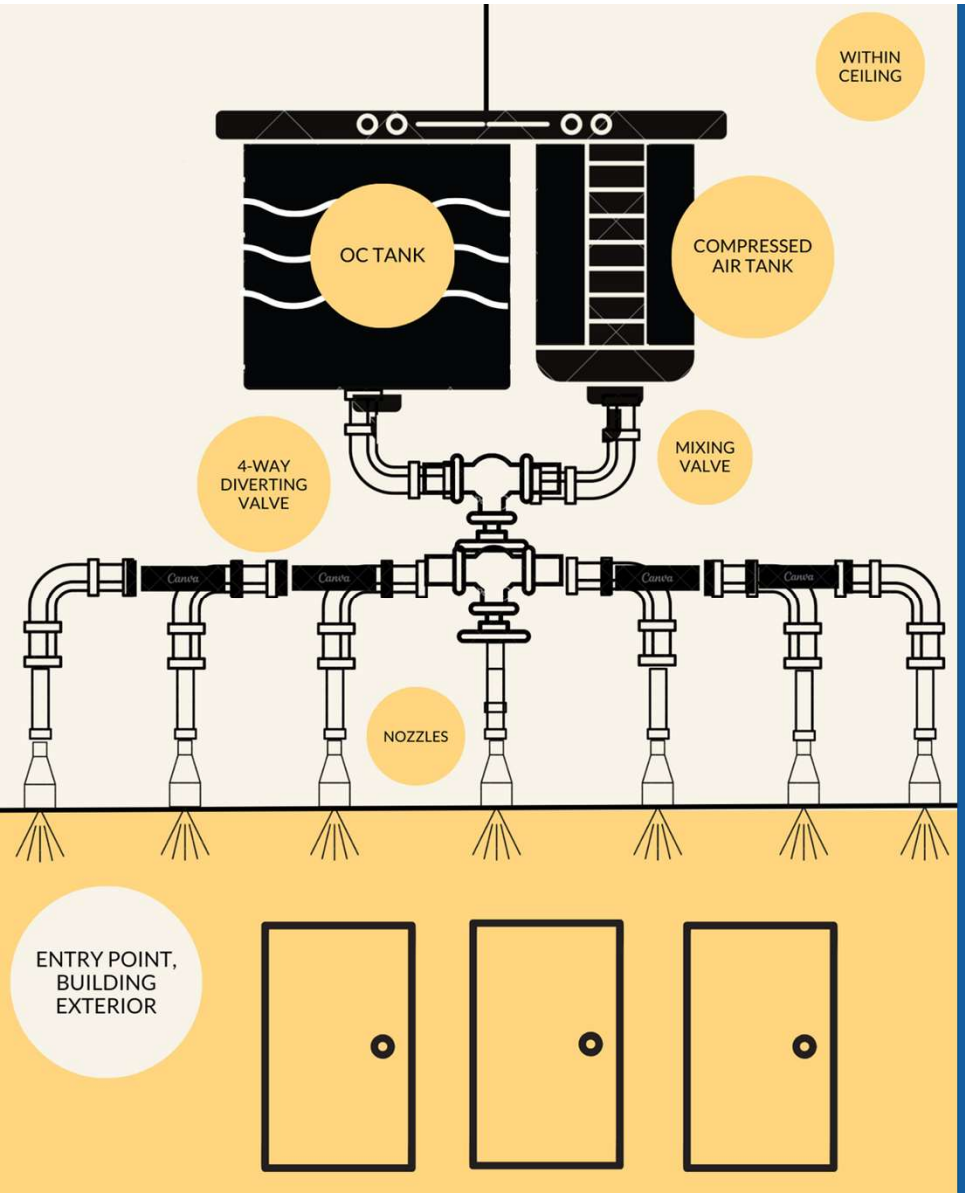
Response: Acoustic Deterrent System Deployment

- 1st Hardline – First entry point into the chancery
- Effects:
  - Nausea
  - Discomfort
  - Balance disruptions
- In the process of Beta testing by TDB



* Indicates placement of OC system

** Indicates placement of acoustic system



CONCEPT DESIGN A: TOP-DOWN VIEW

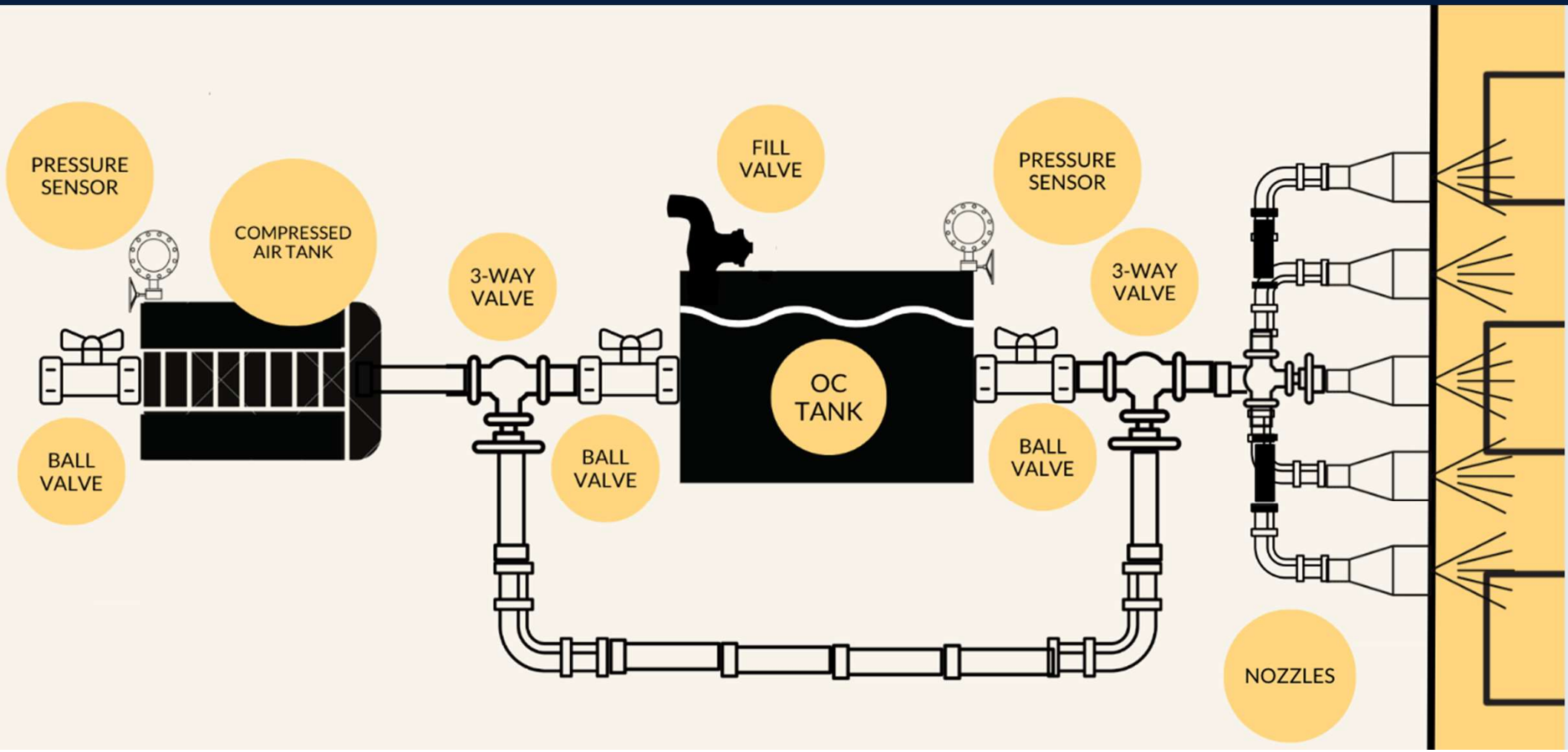
Design Elements:

01 Localized Tanks: OC tank & compressed air tank

02 Mixing valves & diverting valves

03 Nozzles: fan spray nozzle design

CONCEPT DESIGN B: TOP-DOWN VIEW



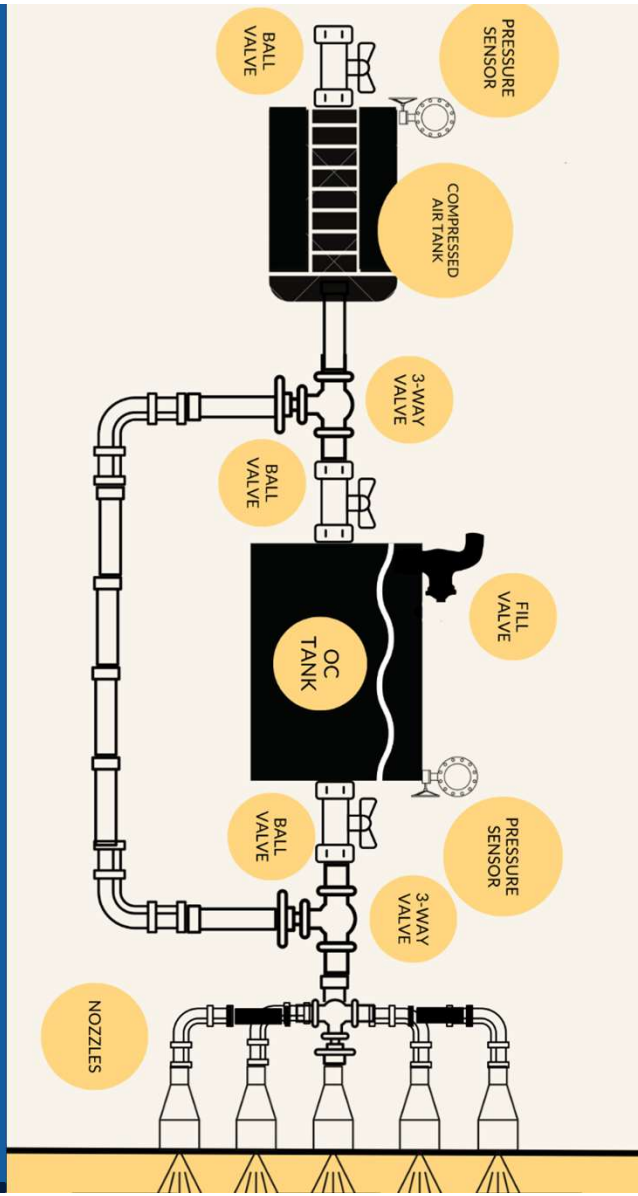
CONCEPT DESIGN B: TOP-DOWN VIEW

Additional Elements:

04 Sensors: pressure sensor for air tank & level sensor for OC tank

05 Ball Valves: for quick disconnects & fill point

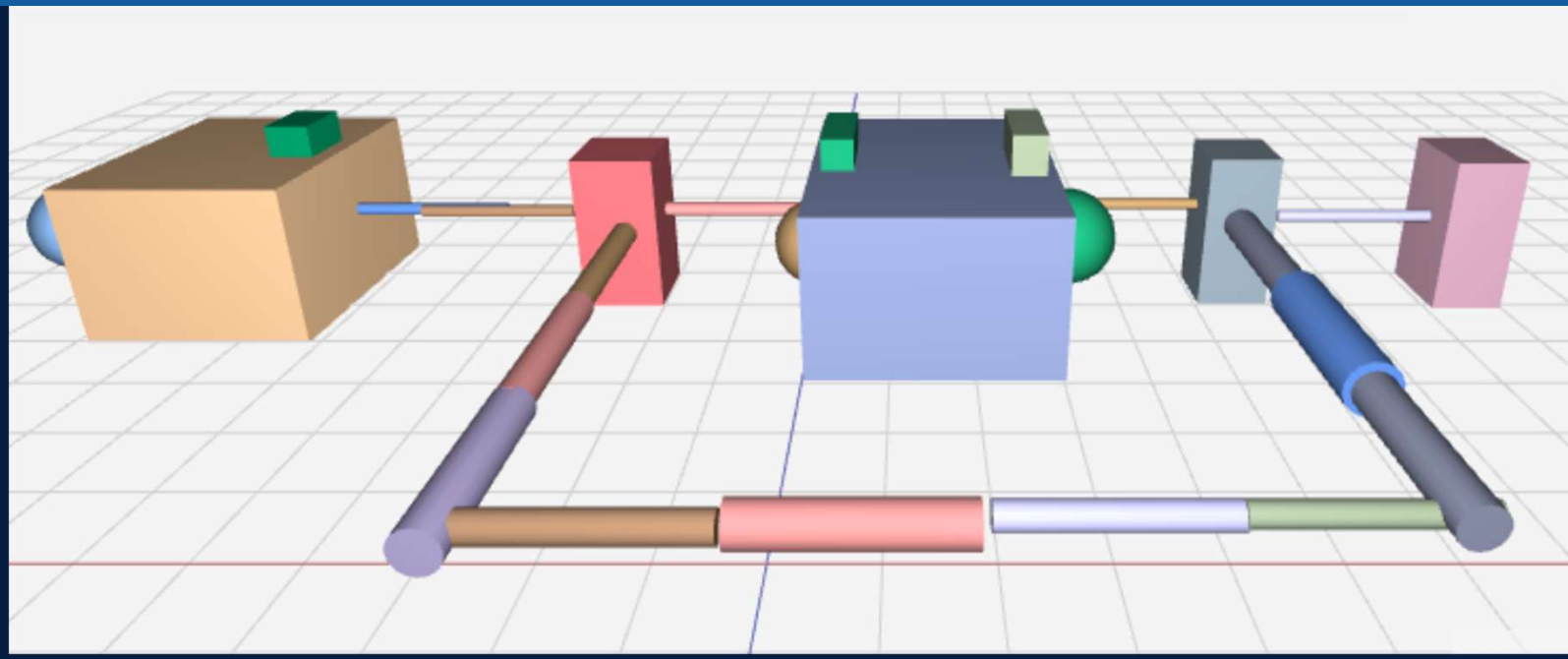
06 Mixing valves & diverting valves



CONCEPT DESIGN B: LATERAL 3D VIEW

Basic 3D Model demonstrating the pipe placement above the ceiling tiles

Lateral pipeline structure maximizes ceiling space, demonstrates re-route for testing purposes



BENEFITS

01 ACCESSIBLE

02 STANDARDIZED

03 CONTINUOUS

04 MOUNTED

LIMITATIONS & FUTURE DEVELOPMENT

LIMITATIONS

- Suggestions for placement
- Vulnerable to extreme weather
- Extremely motivated attackers
- Potential tank capacity
- Not a complete denial system

FUTURE DEVELOPMENT

- TDB approval, begin process of development
- With building-specific information, STSs and SEOs can determine:
  - Volume of the tanks
  - Calculate the flow rate
  - Dispersal range
  - Duration of dispersal
- Final Design Concept
  - Alpha/Beta testing


The Guardians of the
Embassies Present:
The MVP Presentation

Thank You!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