# Iron Dome



#### **ICEBREAKER**

If you could be any world leader today. Who would you be and why?

Agenda:

- 1. The Iron Dome. What is it?
- 2. Discussion
- 3. Moving forward

## **Quick Disclaimer**

This presentation focuses exclusively on the technological/geopolitical aspects of the Iron Dome.

Other disclaimer: We are Jewish, not Israeli

# Background

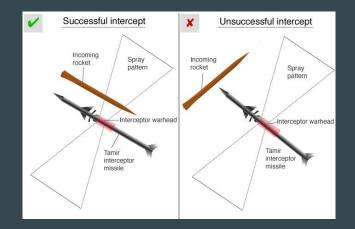
Israel - Tamir missile; Rafael David's Sling System

US - Skyhunter

Iron Dome first developed in 2007, finalized testing in 2010, and first deployed in 2011.

- Iron Dome is air defense
- 90-95% success/kill rate against incoming missiles
- US involvement began in 2011

C-Dome was developed in 2017



#### How it works in real time

Enemy missile launched  $\rightarrow$  detected by ELM 2084 MMR  $\rightarrow$ Iron Dome Missile

2 Types of Iron Dome Missiles :

- 1. Tamir (Low altitude incoming missiles)
- 2. David's Sling (High altitude incoming missiles)



#### Tamir Missile

It's the world's most-used system, intercepting more than 1,500 incoming targets with a success rate exceeding 90 percent since being fielded in 2011.

"Ten Iron Dome batteries protect the citizens and infrastructure of Israel, with each battery comprising three to four stationary launchers, 20 Tamir missiles and a battlefield radar. Each of the batteries can defend up to nearly 60 square miles, and are strategically placed around cities to intercept threats headed toward populated areas."

#### Skyhunter

- American Tamir missile
- Produced by Raytheon and Rafael (Israeli defense foreign arm)

Enemy missile launched  $\rightarrow$  detected by MRIC G/ATOR (AN/TPS-80 Ground/Air Task Oriented Radar)  $\rightarrow$  Skyhunter Missile



### Efficacy of the Iron Dome...

It's 90%, but... this number is very contentious

Why? Because...

- 1. It has not deterred Hamas from continuing to use rockets
- 2. The Iron Dome is only activated when a rocket is set to hit a "civilian population center," this could impact data reporting if Rockets are sent into more remote places (which they often are)

We should also note that Hezbollah has hundreds of thousands of rockets. Hamas sent between 2200-3000 on October 7th, which "overwhelmed" the Iron Dome... A Hezbollah attack would be horrific.

Perhaps this is why the US has a presence in this conflict now.

### Too expensive?

"Each battery in the Iron Dome costs around \$150 million, and an interceptor missile costs \$50,000.

The Iron Dome defence system is technology jointly developed by Israel and the US. The initial investment amounted to about one billion dollars, of which the US contributed about 80 per cent."

- Conclusion: Cheap for Israel, expensive for the US. But overall, its cheap-ish.
- Israel also has a bustling technology sector
  - Bang for buck

#### American reliance...

Originally Iron Dome funding was undertaken by Israel, but because of the high cost of the system, the country has had to rely on its long-time ally, the United States.

A report from the US Congressional Research Service states that the US has contributed nearly \$3 billion to Iron Dome batteries, interceptors, co-production costs, and general maintenance."

Is it worth it for the US?

Around 7% of the US' ~%50 billion foreign spending goes to Israel Annually. Worth it?

# Will the US get involved?

The US already is...

- 1. Wednesday October 18th, two one-way attack drones targeted al-Tanf military base in southern Syria. Two Dozen US servicemen were injured
- 2. The Ain al-Asad airbase, which hosts US and other international forces in western Iraq, was targeted by drones and missiles on Thursday the 19th evening.
- 3. Thursday the 19th the USS Carney, a navy destroyer in the northern Red Sea, intercepted three land attack cruise missiles and several drones that were launched by Houthi forces in Yemen.
  - a. A Pentagon spokesperson told reporters the missiles were "potentially" headed toward Israel but said the US had not finished its assessment of what they were targeting.

Apparently on Oct 22nd, the USS Gerald Ford (the Aircraft Carrier in the Eastern Med) served Lobsters and Steak.

- Usually reserved for Holidays and Bad News. Uh oh.

#### **Cool Videos**



HOW ISRAEL'S IRON DOME WORKS

<u>https://www.youtube.com/watch?v=\_eSZaC</u> <u>HXBVA</u>

https://www.youtubeeducation.com/watch?v =dNgx3o\_WKxI

## **Lingering Questions**

Israel has threatened to "cut the head of the snake" if Hezbollah attacks, as in, a retaliatory strike on Iran. Would you support this? Would the US have to get involved as well?

Is a two state solution possible now? oof

Would you date a Jew?

#### **Guest Speaker Upcoming**

Ethan Corbin

Monday November 6th at Noon

Subject: Technology Sharing in NATO Director of the Defense and Security Council at NATO



#### Message from the Merch Chair

Pick a color!

# Champion Powerblend Pullover Hoodie

# Colors:

# Thoughts?

