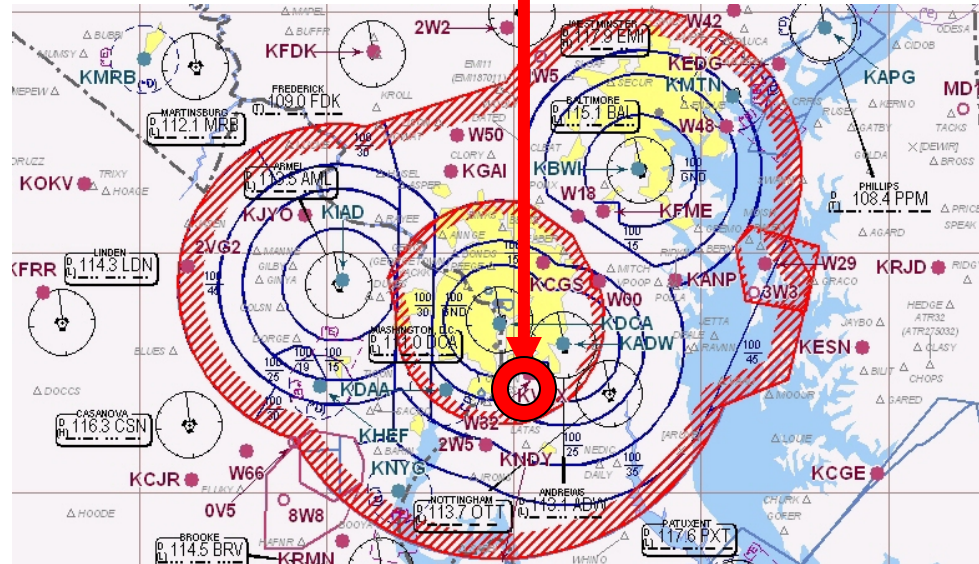


David Wartofsky POTOMAC AIRFIELD

Before the FAA ADIZ Hearings – Jan 2005

“Serving no whine”



Just solutions

TO BE ADDRESSED:

- **IS THERE A THREAT?**
- **DOES ADIZ REDUCE ANY THREATS?**
- **WHAT IS A BETTER SOLUTION?**
- **NEXT STEPS?**

IS THERE A THREAT?

- **Not very likely**

- DIA Threat Analysis on www.potomac-airfield.com
- TSA's Statement before NASAO in IOWA

“Just looking for a good story for Congress”

But **THERE STILL MIGHT BE...**

- No one is willing to assume that risk
 - Government Security Agencies
 - General Public
 - Aviation Industry

**SINCE ‘AIR ATTACK’
LIKELY TO REMAIN**

“OF CONCERN...”

(Until Congress or Executive Office says it is not)

DO SOMETHING

- Effective
- Efficient
- Sustainable
- Credible
- Reasonable

“DEMONSTRATE GOOD STEWARDSHIP OF PUBLIC RESOURCES”

Achieve Real Security Objectives

+

Address Public Concerns

+

Protect (Aviation) Commerce

THEN “GET ON WITH YOUR LIVES”

- **ENHANCE SECURITY**

- **MAXIMIZE** the **PHYSICAL THREAT**
- Against any real terrorist

- **PROTECT FREEDOM & COMMERCE**

- **MINIMIZE** sanctions or impediments
- Against legitimate pilots

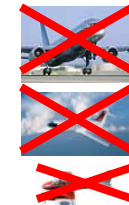
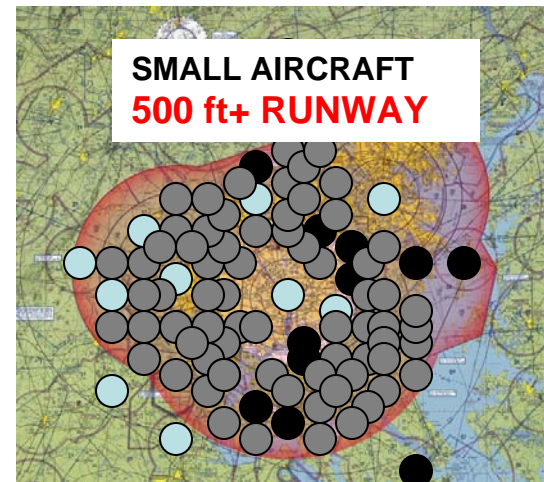
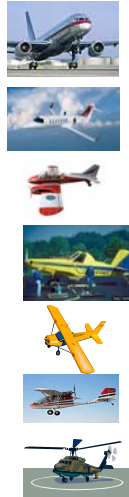
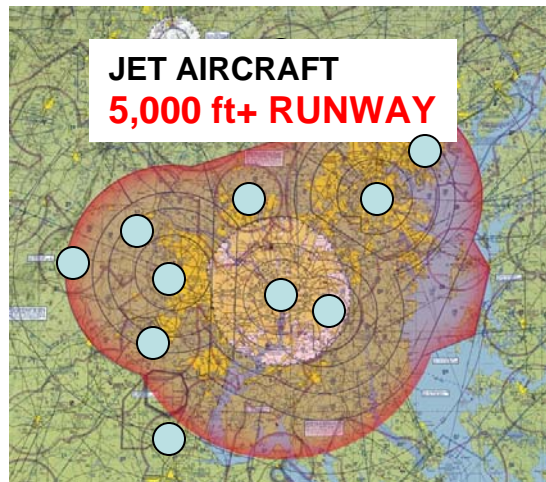
**START
WITH THE BASICS**

QUESTION #1:

***WHERE CAN A HOSTILE
AIRCRAFT COME FROM?***

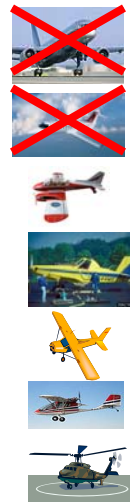
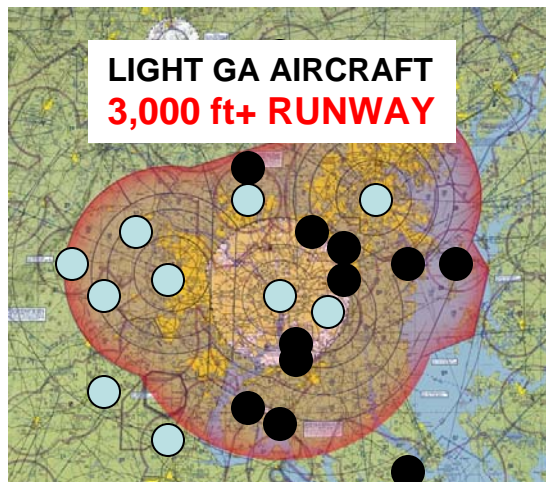
Nearby Takeoff Locations By Type of Aircraft

500ft or more of level grass or road or... 'Runway' required



<600ft

<1500ft

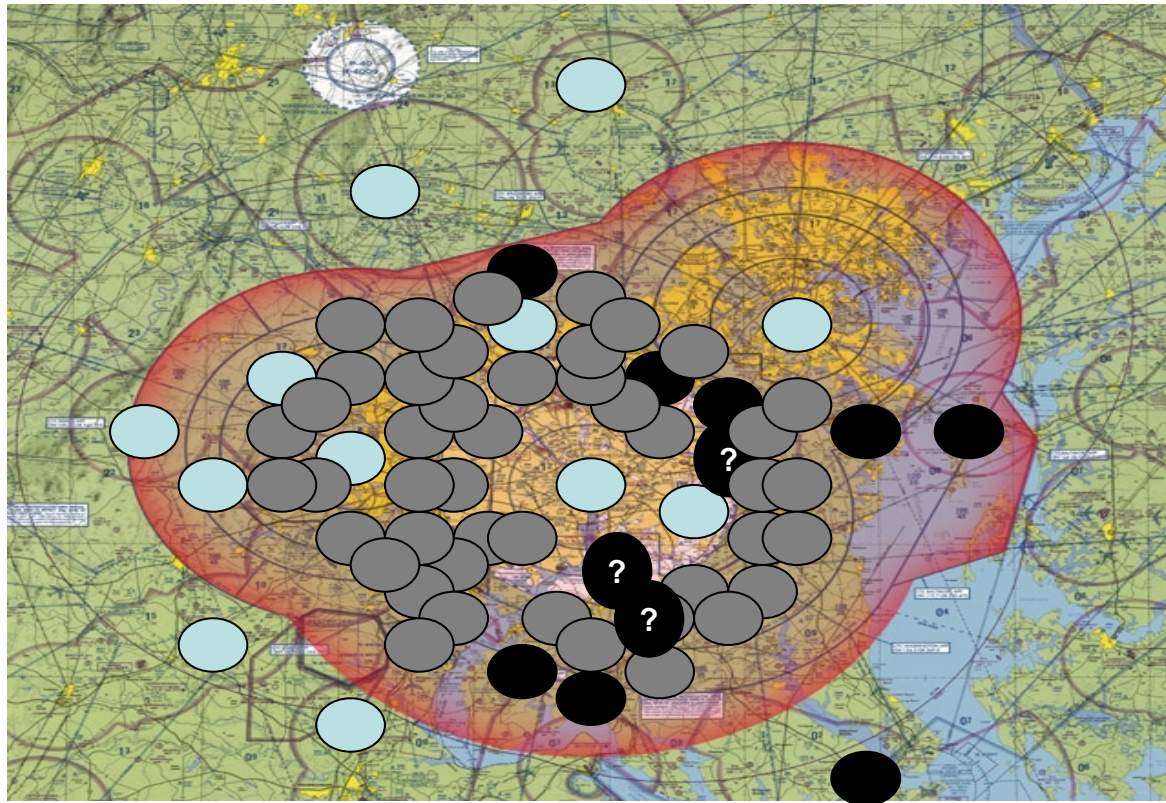


LEGEND

- Runways > 5,000 ft
Commercial & Private Jets and smaller
- Runways >2,000 <5,000
Light General Aviation
- Takeoff Areas >500 <2000
Small GA, Experimental Helicopter or Ultralights

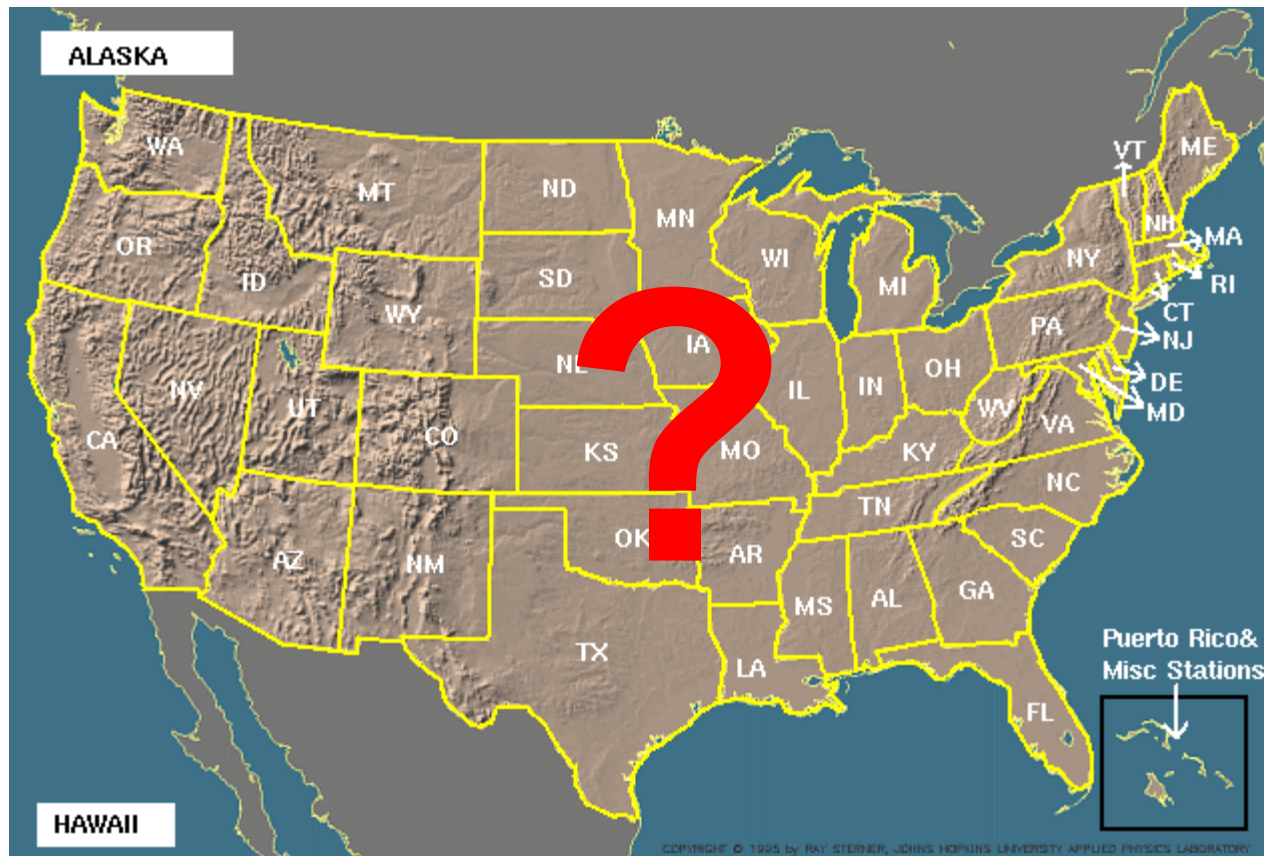
‘Airport’ Security? Which Airport?

MD-3 AIRPORTS = ?



WHAT ABOUT EVERYWHERE ELSE?

WHERE CAN THEY COME FROM?



ANSWER: FROM ANYWHERE

CAN 'AIRPORT SECURITY' CONTROL THREAT?

ONLY legitimate pilots are constrained by ground security



Securing against Air Attack Through Airport Security..?



Not against this aircraft you're not...

ANSWER TO QUESTION #1

- A HOSTILE PILOT USING A SMALL AIRCRAFT
- REMAINS FREE TO TAKEOFF
 - From ANYWHERE
 - At ANYTIME
- AIRPORT SECURITY
 - Cannot control threat – *Not even at that airport*
- GROUND SECURITY
 - Easily by-passed
 - Easily over-flown

SO NOW WHAT?

QUESTION #2:

**HOW TO DETECT
A POSSIBLE AIR ATTACK?**

REAL ATTACKER

- **MUST BE AIRBORNE**
AND
- **MUST BE ATTACKING**

**REQUIRES
FLYING TOWARD
THEIR TARGET**

REAL DEFENDER **WATCHES AIRSPACE**

- **AIRBORNE MOVEMENTS**
- **APPROACHING AREA**
WITH OR WITHOUT A TRANSPONDER



**APPROACHING
defended area**

NEXT TASK BECOMES:
‘SORTING’
Nearby Radar
“Targets of interest”

WHEN THE ALARM GOES OFF



IDENTIFIED – Trusted agent in control of their aircraft
Don't worry about them, they are NOT A THREAT



UNKNOWN – Might be a threat, MOST LIKELY JUST LOST (>2,000+)



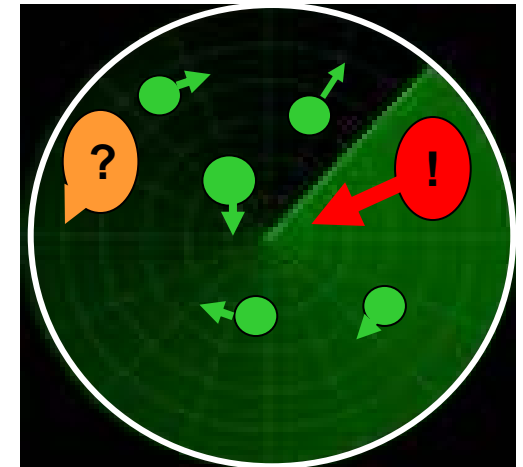
or



?

HEAD THEM AWAY

- Cooperation with air-traffic control
- Chased off by air interdiction



THREAT = *Unidentified intruder
Determined to Approach
Despite All Challenges
THEN GO TO HIGH ALERT*



QUESTION #3:

**HOW TO DEFEND
AGAINST POSSIBLE
AIR ATTACK?**

***IF* a threat is inbound WHO can DEFEND?**

AIRBORNE DESTRUCTION

AIR-TO-AIR DEFENSE

USAF AIR NATIONAL GUARD
USCG CUSTOMS



SURFACE TO AIR DEFENSE

AIR-DEFENSE BATTERY



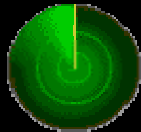
***TO THE REAL ATTACKER
NOTHING ELSE MATTERS***

SECURITY STRATEGY DETECTS & SORTS TARGETS

- KEEPS INNOCENTS FROM COMING TO HARM
- MAKES DEFENSE SUSTAINABLE

DETECTION

**PROBABLE
DETECTION**



+

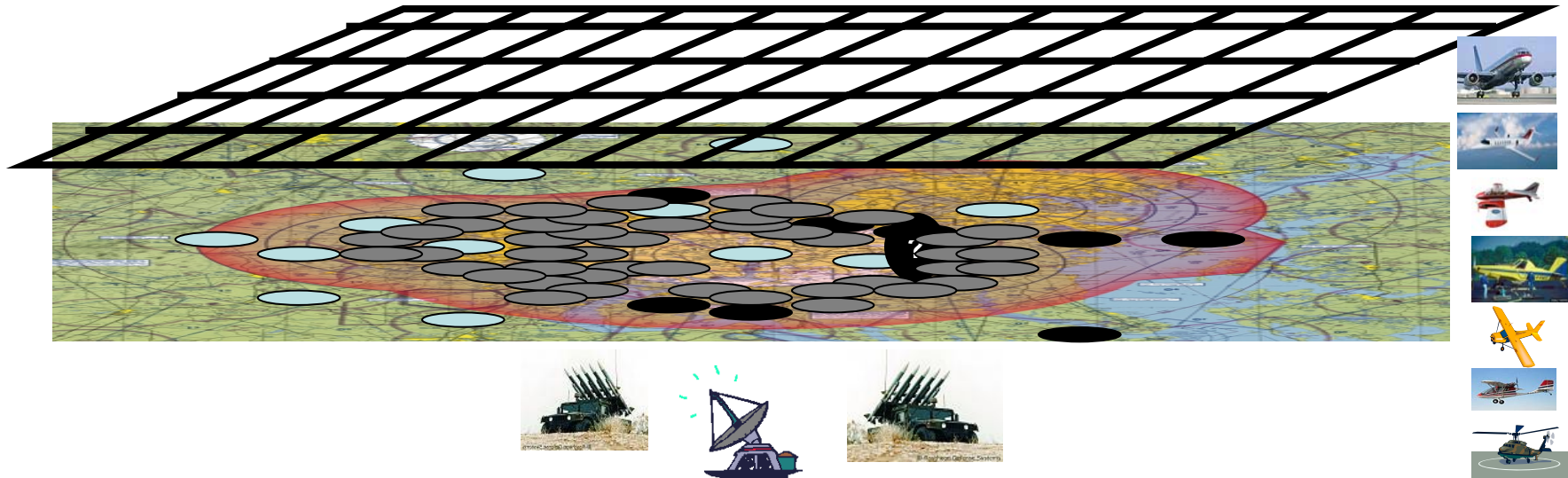
DEFENSE

**POTENTIAL
DESTRUCTION**



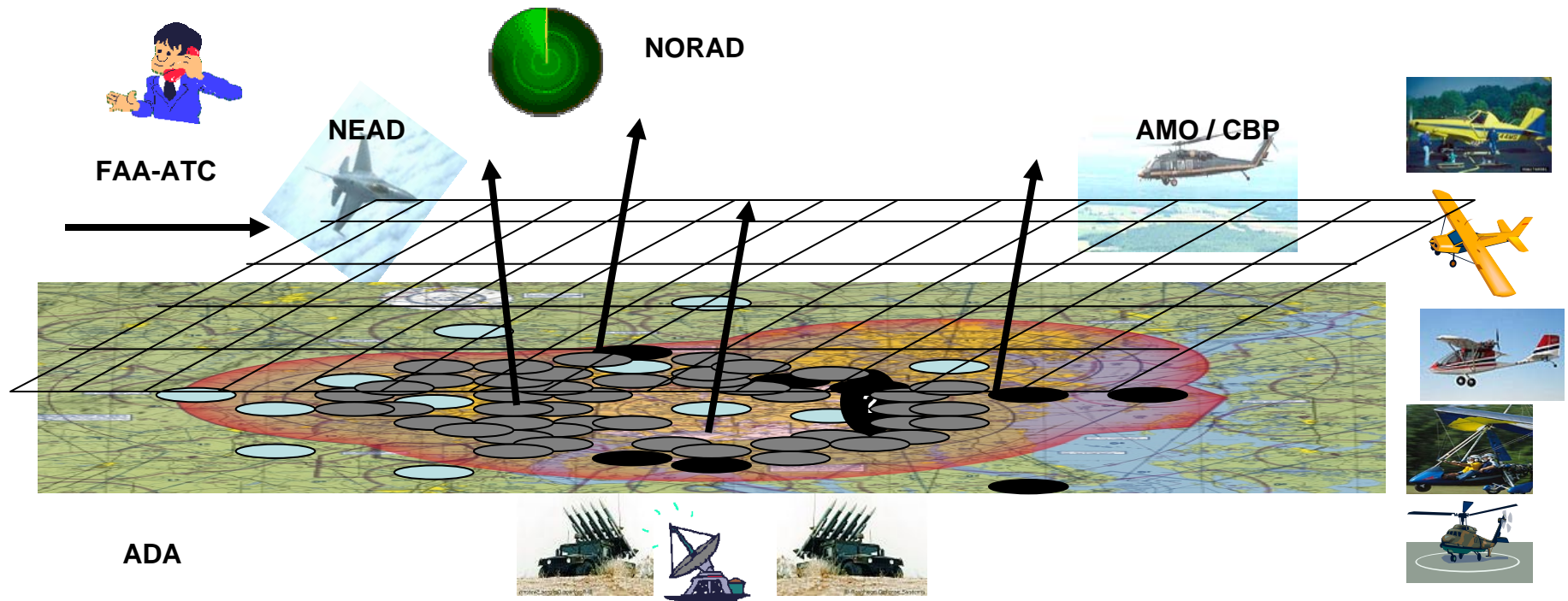
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**BAD GUY
ELIMINATED**



NOW MAKE IT
SUSTAINABLE

'CLOSING' AIRSPACE IS NON-SUSTAINABLE



NEXT QUESTION #4:

HOW DO YOU MAKE SECURITY SUSTAINABLE?

OPTIONS:

- CONTINUE THE ADIZ
- EXPAND THE FRZ
- *OR SOMETHING ELSE...*

THE ADIZ
DOES NOT SORT
AIRBORNE TARGETS

ADIZ DEFENDERS CANNOT TELL FRIEND FROM FOE



FRIEND

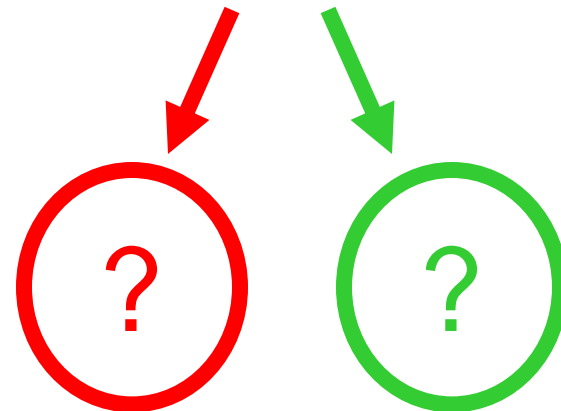


FOE

CURRENT ADIZ PROCEDURES

- Fill out FAA paperwork correctly
- Keep FAA documents current
- File flight-plan (**No authentication**)
- Follow PUBLIC procedures

**WHICH RADAR TARGET
IS WHICH ?**



FRIEND & FOE FOLLOW THE SAME PUBLIC RULES

THE ADIZ

- **FAILS** as motion detector
 - Detects everything without discrimination
- **FAILS** to sort targets
 - Cannot distinguish **FRIEND** from **FOE**

THE NOTORIOUS FRZ...

FRZ DEFENDERS CAN TELL FRIEND FROM FOE

- FRIEND

- Pre-approved for security clearance
- Approved pilot authenticates

CURRENT FRZ
PROCEDURES

‘SAFE PASSAGE’

ASSURES IN-COCKPIT CONTROL BY TRUSTED AGENT



- FOE

Without prior security clearance

- Cannot authenticate airspace clearance
- Cannot obtain ‘safe passage’ past defenses



DEFENDED AIRSPACE REMAINS TOO DANGEROUS

FRZ 'Safe Passage' Procedures

- **ONLY** given to pre-approved pilots
- **ALL** pilots are welcome to apply
- **SIMPLE** to use for approved pilots

DEFEND THE CAPITAL, THE ECONOMY and FREEDOM

THE FRZ

SUCCEEDS

- Discriminates as a detector of airborne movements
- Reduces unknown targets within an area of concern
- Separates FRIEND from FOE

BUT....

**A CONTINUOUS 30 MILE ADIZ or FRZ
WOULD BE ECONOMICALLY CATASTROPHIC**

OR SOMETHING ELSE...

NEXT STEPS

Replace something Not secure (ADIZ)

...With something More secure

National Security Airspace (aka FRZ)

***But ONLY
When you really need it***

NATIONAL CAPITAL AREA **NATIONAL SECURITY AIRSPACE** *EAA ALMOST GOT IT RIGHT!*

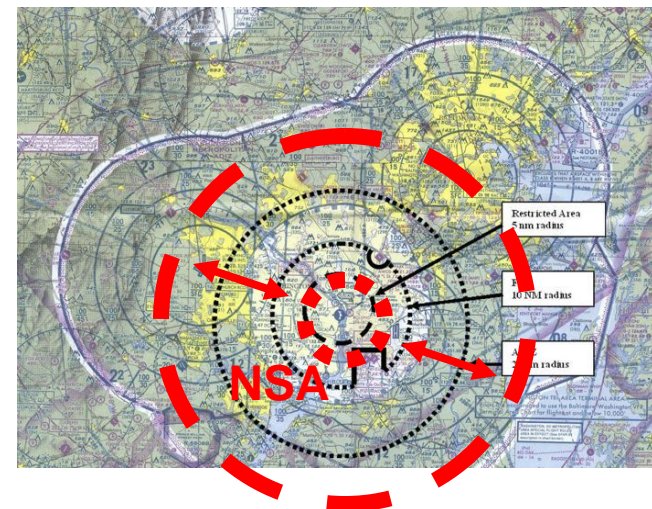
EXCEPT

- Replace 'ADIZ' with National Security Airspace (NSA)
- NSA CIRCLE is PREDICTABLE & NAVIGABLE boundary for EMERGENCY
- Pilots welcome to apply for clearance, in case FRZ expands

**FRZ only expands during DECLARED emergencies
NOT CASUALLY NOT PERMANENTLY**

- WHEN NO EMERGENCY
GOOD GUYS COME AND GO NORMALLY
- WHEN DECLARED EMERGENCY
GOOD GUYS COME AND GO NORMALLY
BAD GUYS DARE NOT COME OR GO

EFFECTIVE & SUSTAINABLE



ADDRESSED:

- **IS THERE A THREAT?**
 - ANSWER: MAYBE
- **DOES ADIZ REDUCE ANY THREATS?**
 - ANSWER: ADIZ ADDS NO SECURITY
- **WHAT IS A BETTER SOLUTION?**
 - ANSWER: POP-OUT NSA / FRZ DURING EMERGENCY
- **NEXT STEP**
 - ANSWER – REPLACE ADIZ WITH NATIONAL SECURITY AIRSPACE

**NATIONAL SECURITY AIRSPACE
TO BE EXERCISED AS FRZ
ONLY DURING AN EMERGENCY**

THANK YOU

David Wartofsky

bigcheese@potomac-airfield.com

www.POTOMAC-AIRFIELD.com