

# Making the Wrong Connection: The Determinants of Terrorist Targeting of Airplanes and Airports

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# Why Worry About Targeting Aviation?

- Very Juicy Target
- Protecting them absorbs an enormous amount of resources
- Extant literature focuses on:
  - Substitution effect
  - State level factors related to events
  - Game theoretic models
- But why do organizations target aviation?

# *Ideology*

- when planes falls out of the sky you kill a lot of people
- Those who do not like to kill are unlikely to target aviation ...
  - Environmentalists should be less likely to target aviation
  - Anarchists should be less likely to target aviation
- Those who like to kill are likely to target aviation
  - Religious organizations should be more likely to target aviation

# Experience and Knowledge

- Aviation is in some ways one of the most protected targets and to do so successfully takes knowledge.
  - Age brings knowledge
  - Practice brings knowledge
  - Connections bring knowledge
- All of these factors should increase the likelihood that an organization will target aviation

# State Sponsorship – Sometimes Allies Can Constrain You

- Much of the literature sees state sponsorship as a tremendous asset - We see it as a gift with a string.
- Governments don't want to get in too much trouble so they are likely to attach caveats on behavior when they giving support – they do not want retribution
- Given the high value nature of aviation we believe that state sponsorship should make targeting aviation LESS likely

# The environment

- Democracy – or civil liberties can get you killed argument
  - The more open a society the easier it is for organizations located in that society to plan difficult attacks making aviation attacks more likely
- Militarization can save you – from some things anyway
  - The more militarized a society the harder it is for organizations located in that society to plan difficult attacks making aviation attacks less likely

# Data: BAAD v.1

- Organizational characteristics, relations and behaviors
  - One observation per organization 1998-2005
- Start by converting textual data collected by the Memorial Institute for the Prevention of Terrorism into quantitative and social network analysis (SNA) format
- Fill in missing data
- Add new variables

# The eclectic set of groups that have targeted aviation

<b>Basque Fatherland and Freedom (ETA)</b>	<b>National Liberation Army (Colombia)</b>
<b>Battalion of the Martyr Abdullah Azzam</b>	<b>People Against Gangsterism And Drugs</b>
<b>Communist Party of Nepal-Maoists</b>	<b>Real Irish Republican Army (RIRA)</b>
<b>For a Revolutionary Perspective</b>	<b>FARC</b>
<b>Free Aceh Movement (GAM)</b>	<b>Riyad us-Saliheyn Martyrs' Brigade</b>
<b>Kakurokyo</b>	<b>Saif-ul-Muslimeen</b>
<b>Kayin National Union (KNU)</b>	<b>Taliban</b>
<b>Moro Islamic Liberation Front</b>	<b>UNITA</b>
<b>al-Qaeda Organization in the Land of the Two Rivers</b>	<b>al-Qaeda</b>

<b>Variable</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max value</b>
<b>Binary variable indicating if organization targeted aviation</b>	<b>0.046</b>	<b>0.209</b>	<b>0</b>	<b>1</b>
<b>Binary variable indicating if organization is religious</b>	<b>0.294</b>	<b>0.456</b>	<b>0</b>	<b>1</b>
<b>Number of years the organization has been in existence</b>	<b>11.271</b>	<b>12.165</b>	<b>1</b>	<b>87</b>
<b>Binary variable indicating if organization has committed more than 20 attacks</b>	<b>0.081</b>	<b>0.273</b>	<b>0</b>	<b>1</b>
<b>Number of connections to other terrorist organizations</b>	<b>1.387</b>	<b>2.543</b>	<b>0</b>	<b>33</b>
<b>Military personnel divided by total population</b>	<b>0.010</b>	<b>0.009</b>	<b>0</b>	<b>0.032</b>
<b>Polity2 score</b>	<b>5.192</b>	<b>6.679</b>	<b>-10.000</b>	<b>10</b>
<b>Binary variable indicating if organization is environmentalist</b>	<b>0.0127</b>	<b>0.1119</b>	<b>0</b>	<b>1</b>
<b>Binary variable indicating if organization is anarchist</b>	<b>0.0886</b>	<b>0.2845</b>	<b>0</b>	<b>1</b>
<b>GDP per Capita</b>	<b>10459.050</b>	<b>8801.983</b>	<b>478.708</b>	<b>29884.990</b>
<b>Binary variable indicating if organization has state sponsorship</b>	<b>0.081</b>	<b>0.273</b>	<b>0</b>	<b>1</b>

	Coefficient	robust Standard Errors
Religious?	-0.032	0.594
Age	0.040*	0.021
More than 20 attacks degree	2.833***	0.567
	0.201*	0.109
Military Personnel per Capita	-157.638***	40.612
Polity2	-0.174***	0.051
GDP per Capita	0.000	0.000
State Sponsorship	-1.387**	0.663
_cons	-3.503	0.695
*** significant at p<.01 using a one-tailed ** significant at p<.05 using a one-tailed * significant at p<.05 using a two-tailed test		Number of obs = 394 Wald chi2(8) = 41.86 Prob > chi2 = 0.0000 Pseudo R2 = 0.3510

# Probabilities from min to max

Variable	Change in
Age	0.151*
More than 20 attacks	0.105
degree	0.238*
Military Personnel per Capita	-0.047
Polity2	-0.112
State Sponsorship	-0.008
Note Anarchist and Environmentalist had to be dropped since no variance	

# Discussion

- Ideology
  - Religious?
  - Environmentalist and Anarchist (the times have clearly changed)
- Knowledge and Experience
  - Yes but....
- Environmental Factors
- Militarization
- What is up with democracy?