



Singular Purpose: Calculating the Degree of Ethno-Religious Over- representation in the US No-Fly List

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Abstract

In January 2023, a partially redacted version of the controversial US No-Fly List was retrieved during a hacking event and made available to journalists and academics. With access to this unique dataset, it is possible to confirm or deny longstanding critiques of whether the No-Fly List features a discriminatory over-representation of certain ethno-religious groups, namely those of Islamic faith and Middle Eastern heritage. As the partially redacted list does not contain ethnic or religious data, the author of this article categorised each name by ethno-linguistic and religious origin to create a proxy with which to analyse claims of discrimination. The research outlined in this article finds that individuals of broadly Islamic and Middle Eastern heritage are vastly overrepresented on the List relative to their proportion of the US population, as well as overrepresented relative to their propensity to engage in terrorism. Only in the narrow analysis of lethality of terrorist attacks committed by this group does the No-Fly List demonstrate fair representation.

Keywords: 9/11, Islam; racial discrimination; religious discrimination; Terrorist Screening Center; US No-Fly List.

Introduction

The US No-Fly List, while inherently linked to the 9/11 terrorist attacks, remains a pertinent issue more than two decades after its creation. Alongside topics such as the Patriot Act and the Guantanamo Bay detention facility, the No-Fly List seems to represent a permanent change to the American legal and political landscape, having remained in place long after the exigencies that birthed it are no longer of significant public concern. As a result of this permanence, critiques made of the List 20 years ago remain relevant and are accentuated as new information is slowly released over time.

One of the most common critiques of the No-Fly List is that it disproportionately targets individuals of Arab, Middle-Eastern and Islamic ethno-religious identity (ACLU 2021; Nagra and Maurutto 2020; Roe 2019). In the absence of direct data from the No-Fly list, substantiating these claims becomes difficult. However, since the List's inception in 2001, a small handful of data leaks have occurred, providing limited tools to the public with which to either critique or defend the List. The most recent and significant of these leaks occurred in 2023 (Crimew 2023) and provides academics with the most complete glimpse yet into the contents of the List. With this data, it is possible to provide key insights that may be of value in the ongoing national discussion surrounding the No-Fly List and its merits.



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Background

History of the No-Fly List

Prior to the events of 9/11, it has been reported that the Federal Bureau of Investigation (FBI) maintained a list of 16 individuals who were not permitted to fly on commercial aviation. However, the full nature and structure of this list is not well-known to the public (Donohue 2008). What is known today as the U.S. No-Fly List is a database administered by the Terrorist Screening Center (TSC), an executive office multi-agency organisation run jointly by the FBI, the Department of State, the Department of Justice, the Department of Homeland Security, the Department of Defense and the US Postal Service. The TSC is organised under the FBI National Security Branch and is commanded by FBI Executive Assistant Director Larissa L. Knapp (FBI 2023). The Transportation Security Administration (TSA) and major airlines are provided limited access to the No-Fly List to prevent those listed in the database from accessing commercial air travel. Those listed in the No-Fly List database are not notified of their inclusion and are not provided with an official channel to challenge it (Sharkey 2008).

The No-Fly List is a separate database from the reportedly larger and less restrictive Terrorist Screening Database (TSDB), also administered by the TSC, although names from the TSDB are used to populate the No-Fly List (US Department of Justice 2007). On 19 July 2021, security Researcher Volodymyr ‘Bob’ Diachenko uncovered a security flaw that allowed him to access the full TSDB. Diachenko did not share data from the TSDB with any third parties and instead reported the security vulnerability to the Department of Homeland Security, which subsequently closed it (Diachenko 2021).

The only significant leak of the No-Fly List prior to 2023 occurred in 2006 when the producers of the CBS program *60 Minutes* received a then-current copy of the List from a third-party organisation referred to as the National Security News Service. Neither CBS nor the National Security News Service published the contents of the List publicly, although CBS did divulge limited information. Notably, the leak confirmed that the names of approximately 44,000 individuals were present on the List at that time (Croft 2006). With such limited releases of information, both academic researchers and the broader public have remained significantly constrained in their ability to analyse the No-Fly List. Interested parties would have to wait until 2023 to gain access to anything resembling the complete database.

Maia Arson Crimew Hacking Event

The individual known as Maia Arson Crimew was born as Tillie Kottmann on 7 August 1999 in Lucerne, Switzerland. Kottmann/Crimew has expressed on its website a desire to be referred to by ‘it’ pronouns (Crimew 2021), so this article will interchangeably refer to it by its preferred terms as either ‘Maia Arson Crimew’ or ‘it’.

Crimew is a well-known figure among hacking and cybersecurity circles. It has either taken credit for or been attributed to hacks from several major multinational corporations, including Nintendo, Intel, Nissan and Verkada (Harwell 2021). In March 2021, Crimew was indicted by a US grand jury for its role in several of these hacking events and arrested by Swiss police at the behest of US authorities, who subsequently seized many of Crimew’s physical and digital assets. Swiss authorities ultimately chose to neither extradite Crimew to the United States nor prosecute it under Swiss law, leading to Crimew’s release from detention with charges against it dropped (Rusch 2021).

On 19 January 2023, Crimew gained access to a version of the US No-Fly List dated 2019. This version of the List belonged to US regional airline CommuteAir and was discovered by Crimew while searching for unsecured databases on the Amazon Web Services cloud computing platform. Crimew noted what it believed to be an explicitly ethnic character to the No-Fly List, stating that ‘it’s just crazy to me how big that database is and yet there is (sic) still very clear trends towards almost exclusively Arabic and Russian sounding names throughout the million entries’ (Crimew 2023).

Crimew did not release this copy of the No-Fly List to the general public, but instead provided it to the third-party organisation Distributed Denial of Secrets (DDoSecrets) with instructions that the List be provided to “journalist(s), researcher(s), or other part(ies) with legitimate interest” (Crimew 2023). This paper is written using a copy of the partially redacted 2019 No-Fly List provided by DDoSecrets (2023).

Academic Context

Prior Literature

The No-Fly List features occasionally in peer-reviewed studies and other academic literature. Much of this literature focuses on legal and constitutional issues surrounding the List, with some focusing on issues of demographic discrimination. Florence

(2006) argues that the No-Fly List illegally circumvents the due process rights of individuals listed on it. Moreover, Florence contends that the removal of these due process rights is particularly egregious due to the lack of tools (if they exist at all) available for individuals to discover whether they are on the List and have their names removed. Hamner (2009) extrapolates how the case of *Ibrahim v. Department of Homeland Security* opens the doors for potential legal challenges to the No-Fly List. Creta (2016) largely reinforces the findings of Florence (2006). Furthermore, Creta emphasises potential constitutional challenges against the No-Fly List, as well as a lack of systems for redress.

The primary academic literature that specifically addresses issues of ethno-religious discrimination in the No-Fly List is Nagra and Maurutto (2020). This article collects testimony from Muslim community leaders in Canada, expressing anecdotal evidence of ethno-religious discrimination faced by community members regarding the Canadian No-Fly List. According to documents obtained by *The Guardian*, Canadian border crossings and airports prevent access using a large database of names provided by US authorities. This database appears to be either the US No-Fly List or the TSDB (Ling 2018). Therefore, accusations of ethno-religious discrimination made by Canadian Muslims should be seen as nearly – if not entirely – equivalent to those made by US Muslims. Nagra and Maurutto (2020) report a consistent belief among study participants that their ethno-religious community is overrepresented in the Canadian/US No-Fly List and that the presence of community members on this list leads to negative economic and social impacts.

Legal Challenges

The work of journalistic, legal and advocacy organisations concerning the No-Fly List is heavily focused on issues of ethno-religious discrimination. Notably, the American Civil Liberties Union (ACLU) has charged that the No-Fly List is explicitly racial in nature, stating that ‘lists like these fail to make us safer, lack procedural protections for the rights of those listed, and disproportionately target people of color’ (Roe 2019). For these reasons and others, the ACLU has been active in legal attacks against the No-Fly List, such as its funding of the 2019 case *Kashem et al. v. Barr et al.*, which led to limited redress concerning plaintiffs’ requests for notification of their placement on the List (ACLU 2021). The partial success of *Kashem et al.* came in the wake of 2018’s *Baz v. U.S. Department of Homeland Security*, which argued on similar grounds but was dismissed for lack of standing (Nichols 2019).

The single most successful legal action against the No-Fly List thus far has been 2020’s *Tanzin v. Tanvir* (Justia Law 2020). In this case, three petitioners (whose names have been sealed by the court) alleged that the FBI threatened to place their names on the No-Fly List if they refused to act as confidential informants against their Islamic communities. The men refused and the FBI followed through on its threat in 2013. The US Supreme Court ultimately ruled in favour of the petitioners, determining that the FBI had violated the Religious Freedom Restoration Act of 1993 (Justia Law 2020). While the petitioners received monetary damages in their case, it remains to be seen whether and to what extent this ruling will impact the No-Fly List in the future.

Analysis

Legal and Ethical Considerations for the Use of Hacked Data

The use of hacked data by this article may raise important concerns among readers regarding legality and ethics. Although this author stands by the use of such data, he welcomes discussion on its merits. As this author is a US citizen and is using US government materials hacked from a US corporation, the legality of this article is determined by US court precedent. While several higher court and Supreme Court cases have addressed this topic, the most frequently cited is 2001’s *Bartnicki v. Vopper* (Justia Law 2019), which broadly upheld First Amendment freedoms regarding the publication of illegally seized information. Under the precedent set by *Bartnicki*, individuals and organisations may publish information that was originally obtained illegally by a third party so long as three criteria are met: 1) the publisher played no role in the illegal acquisition; 2) the publisher received the information lawfully; and 3) the information relates to a matter of public concern (Justia Law 2019). This author contends that all three criteria have been met here. This author was not involved in the No-Fly List’s acquisition and he obtained it through legal means.

This author also holds the firm belief that publishing data from the List is of significant public concern. While this article is not the first to raise questions of ethno-religious discrimination in the No-Fly List, it is the first to offer empirical, primary source evidence supporting such claims. Providing such evidence would be impossible without use of the hacked data. This data may provide support for individuals bringing lawsuits related to the List in the future, as *Kashem* and *Tanzin* have done previously. These data may be of use to academic researchers on a wide range of topics, from government policy and surveillance to anti-terrorism techniques and civil liberties. They may be valuable for civil rights campaigners seeking to challenge the existence

of the List, or they may alternatively be valuable for supporters of the Terrorism Screening Center to build arguments in favour of the List. In short, there are many parties who may be impacted positively by the publication of this data, so the ‘public concern’ criteria of *Bartnicki v. Vopper* is met.

While the legality of using this data can be ruled on conclusively, the morality of doing so is a much more subjective topic. A fair amount has been written by academics on this issue, with two notable examples being Ienca and Vayena (2021) and Boustead and Herr (2020). While the exact arguments laid out in these two articles differ, they ultimately reach similar conclusions that the publication of hacked or leaked data is morally permissible by academics so long as: 1) there exists a compelling public concern, and 2) efforts are taken by the publisher to minimise harm that may be done to individuals by the publication. This author has already addressed the question of public concern, and efforts have been made by this author to protect individuals whose names are found on the List. First, this article does not publish the full No-Fly List dataset; researchers who are interested in obtaining it are directed to DDoSecrets, where they may acquire it legally. Second, the small handful of individuals mentioned by this article (Darren Anthony Byrnes, Azar Amani and so on) are public figures and acknowledged terrorists. In light of these measures, this author feels that the moral standard for publishing data from the No-Fly List has been met.

Content of the No-Fly List

The copy of the US No-Fly List provided by DDoSecrets for use in this article is not fully complete or current, but it is the most extensive version of the List that has yet been made available to public researchers (DDoSecrets 2023). The List is dated as a 2019 version, although no month or day is stated. In total, the database includes 1,048,575 entries. It should be noted that one entry does not indicate one individual, but rather one potential name or pseudonym. Seemingly, every individual included in the database has several alternate names listed, including prior names and alternate spellings. For example, the well-known Russian arms dealer Viktor Bout has approximately 70 entries encompassing alternate names. As a result, it cannot be stated with certainty exactly how many individuals are found on the List. Based on the frequency of alternate names, this article estimates that the number of individuals on the List is in the vicinity of 80,000–120,000. This estimate is in line with statements made by US Senator Diane Feinstein, who revealed on 23 June 2016 that the No-Fly List contained 81,000 individuals at that point in time (Feinstein 2016).

In the same statement, Feinstein claimed that only 1,000 of the 81,000 individuals in the database were US citizens (Feinstein 2016). Frustratingly, the contents of the List appear to be partially redacted in such a way that it is impossible to test Feinstein’s claim. The list as provided contains 11 columns: ID, CLEARED, LASTNAME, FIRSTNAME, MIDDLENAME, TYPE, DOB, POB, CITIZENSHIP, PASSPORT/IDNUMBER and MISC. Of these categories, data are only included for ID, first name, last name, and date of birth. Therefore, researchers cannot directly determine the citizenship of a listed name, nor their place of birth or passport country of issue. In direct correspondence with the author of this article, DDoSecrets claimed the redaction was not made by either Crimew or DDoSecrets; rather, the organisation speculated that the redaction was completed either by CommuteAir or by the TSC prior to providing the List to CommuteAir.

Methodology

As it is the intention of this article to analyse potential ethno-religious discrimination in the No-Fly List, the redaction of place of birth and citizenship data presents methodological difficulties. The data as presented provides only limited options for classifying entrants into ethno-religious categories. In light of this limitation, this article utilises a more time-consuming – and ultimately less accurate – methodology to categorise names found in the No-Fly List. For the small number of names that correlate to well-known public figures, ethno-religious identity is determined based on information known about the individual. For the names that do not meet this standard (the vast majority of those on the List), ethno-religious identity is determined based on the historical/linguistic identity of the name. For instance, the last name ‘Al Juburi’ is historically/linguistically derived from the Jubur tribe of Iraq. Therefore, instances of ‘Al Juburi’ or alternate spellings of this name are counted by this article as belonging to the ‘Broadly Islamic/Middle Eastern’ ethno-religious categorisation. These categorisations may be prone to human error as they were conducted ‘by hand’ without the use of an algorithm or specialised software. The categorisations were completed – rather laboriously – by this article’s author alone, although he encourages future researchers to work collaboratively if conducting similar work.

This article sorts names in the No-Fly List into one of seven ethno-religious categories: Broadly Islamic/Middle Eastern, African, East Asian, Subcontinent Asian, Western European, Russian/Eastern European and Latin American. These categories – like the methodology of this paper – are imperfect but represent the best available method of research in light of redacted No-Fly List data.

Likewise, the terminology ‘ethno-religious’ is imperfect but is used deliberately by this article to best capture the exigencies of the data. While many of the names on the List can be categorised by ties to ethnicities or locations, many are instead tied to religious affiliation, namely Islam. For instance, the single most common name on the List is Muhammad (including alternate spellings such as Mohammed and Mohammad). This speaks to the common misunderstanding in American culture that Arab or Middle Eastern peoples are inherently Islamic and that Muslims are inherently of Middle Eastern origin (PBS 2002). So prevalent is this perception that the literature surrounding the No-Fly List often describes alleged discrimination within the List interchangeably in either ethnic or religious terms (Roe 2019). Therefore, to account for the broadest possible interpretation of discrimination, this article sorts all names of Islamic, Arab, Turkish, Saudi, Persian or other Middle Eastern origin into the intentionally broad ethno-religious category of ‘Broadly Islamic/Middle Eastern’. This decision is practical in light of Islam’s significant presence in the Middle East, but it is particularly practical in light of the nature of the No-Fly List, which is alleged to target Islamic terrorism specifically. A preliminary investigation of the most publicly known names on the List found that all the most significant names of non-Islamic Middle Eastern heritage correlate with individuals identified as Islamic terrorists.

However, it must be noted that Islam is not a religion that is inherently tied to race/ethnicity, and that individuals of all genealogical backgrounds are capable of converting. Often these converts will adopt Islamic names to represent their faith. For instance, British-born al-Shabab terrorist Darren Anthony Byrnes is included in the No-Fly List under alternate names ‘Assim Byrnes’, ‘Aleem Byrnes’ and ‘Aymah Byrnes’. By including all Islamic or Middle Eastern names in one category, this article intends to most accurately establish the degree to which discrimination exists towards either group in the No-Fly List.

Demographics of the No-Fly List

This article can confirm the belief of Maia Arson Crimew that the No-Fly List trends ‘towards almost exclusively Arabic sounding names’. The top 20 most frequently found last names in the dataset can all be categorised as Broadly Islamic/Middle Eastern, as shown in Table 1.

Table 1. Top 20 most common last names on the No-Fly List

Name	Count	Origin
Ali	9,045	Arabic
Muhammad	7,084	Islamic
Khan	5,552	Turkish
Ahmad	4,998	Arabic
Ahmed	4,284	Arabic
Ibrahim	3,493	Arabic
Mohammed	3,388	Islamic
Mohammad	3,276	Islamic
Al Juburi	3,103	Iraqi
Mohamed	3,051	Islamic
Al Utaybi	2,951	Saudi
Hassan	2,934	Arabic
Abdullah	2,840	Arabic
Abdallah	2,727	Arabic
Al Qahtani	2,646	Arabic
Rahman	2,393	Arabic
Al Shammari	2,322	Saudi
Al Dulaymi	2,310	Arabic
Al Harbi	2,304	Arabic

The distribution of names on the No-Fly List based on ethno-religious origin is shown in Table 2.

Table 2. Ethno-religious breakdown of names on the No-Fly List

Ethno-religious category	No.	%
Broadly Islamic/Middle Eastern	98,2242	93.674
African	156	0.015
East Asian	1,094	0.104
Subcontinent Asian	1,081	0.103
Western European	23,598	2.250
Russian/Eastern European	13,769	1.313
Latin American	26,635	2.540
Total	1,048,575	100.000

The distribution of ages within the No-Fly List is shown in Table 3.

Table 3. No-Fly List age statistics

	Mean	Median	Mode
Date of birth	2/4/1976	7/9/1977	1/1/1980
Age as of 2019	43	42	39

The oldest individual listed in the database is Azar Amani, born 8 June 1910. Given that public information cannot be found for a terrorist suspect by this name – and given that this individual would have been 109 years old as of 2019 – this entry likely reflects a pseudonym.

The youngest individual listed in the database is Quodama Ahram Perez, born 25 January 2009, making him 10 years old as of 2019. Quodama Ahram Perez appears to be either a pseudonym for – or perhaps even a child of – Islamic State member Muhammad Ahram Pérez. If the name Quodama does in fact refer to the son of Muhammad, it would make him the third generation in his family to be included on the No-Fly List, which also includes his grandfather Abdelah Ahram (Puentes 2017).

Degrees of Over- and Under-representation: Federal Statistics

Racial and ethnic categories within the US Census are quite wide and tend to be imperfect at capturing the heritage of respondents, as even the US Census Bureau will admit (US Census Bureau 2021). This presents particular difficulties in assessing issues of over- and under-representation for those within the Broadly Islamic/Middle Eastern category, as no well-defined option exists that covers them at a national level. The Census instructs individuals in this category to place themselves under the ‘white’ classification (US Census Bureau 2021), so when discussing federal statistics, this article will utilise categories as laid out in in Table 4 (US Census Bureau 2022).

Table 4. Conversion key between Census and study categories

Census category	Study categories
White	Broadly Islamic/Middle Eastern
	Western European
	Russian/Eastern European
Black or African American	African
Asian	East Asian
	Subcontinent Asian
Hispanic, Latino or Spanish	Latin American

Note that the Census categories of ‘American Indian or Alaska Native’ and ‘Native Hawaiian or Other Pacific Islander’ have been removed from calculations as there appear to be no names on the No-Fly List with ethno-linguistic origins from either group. Additionally, the Census categories of ‘Other’ and ‘Two or More Races’ have been removed due to an inability to accurately match these categories to the No-Fly List data. The category ‘Hispanic, Latino, or Spanish’ is treated by the Census as a category separate from race but it will be treated as equitable to the study’s category of ‘Latin American’.

Bearing in mind these classifications, this article finds that the category of ‘White’, which contains those classified as Broadly Islamic/Middle Eastern, is significantly over-represented within the No-Fly List compared with their percentage of the US population. Moreover, this degree of over-representation is due exclusively to the presence of Broadly Islamic/Middle Eastern names within the category, rather than names of Western or Eastern European descent. All other racial categories are significantly under-represented in the No-Fly List, most significantly those names of African descent. This discrepancy is likely the result of African Americans largely utilising names of European, rather than African, descent and the population of native-born African Americans exceeding the population of African-born individuals in the United States. The full degree of general population over- and under-representation is shown in Table 5.

Table 5. US population vs No-Fly List names

	% of population	% of No-Fly List	Degree of representation
White	60.62	97.24	60.40% over-represented
Black or African American	12.63	0.01	84,799.59% under-represented
Asian	7.11	0.21	3,329.34% under-represented
Hispanic, Latino, or Spanish	19.63	2.54	672.90% under-represented

Of course, over- or under-representation within a dataset measured against the total population is not inherently an indicator of bias or discrimination. Indeed, very few datasets are perfectly balanced compared with the wider population, as groups naturally display differences. Rather, this significant disparity between the No-Fly List and the general population is an indication that the No-Fly List likely is not meant to be equally representative, but instead is meant to serve as a counter-terrorism tool. If certain categories of people engage in terrorism more frequently than their percentage of the broader population, then the No-Fly List may not feature genuine over-representation for these groups.

The US federal government does not maintain a singular, publicly accessible database of events classified as terrorist attacks. The closest that can be found to such a database is the FBI Unified Crime Report (UCR), which compiles an extensive list of all crimes – especially violent crimes – reported by local, state and federal law enforcement agencies for any given year. Violent crime is not directly equitable to terrorism but, given the breadth of the Unified Crime Report and given that both are administered by the FBI, it may be valuable to compare degrees of ethnic representation between the UCR and the No-Fly List. The values in Table 6 are calculated using the combination of UCR values for Murder and Non-Murder Violent Crime for which the race of the offender is known. The data is of 2018, the last full year prior to the 2019 dated version of the No-Fly List (Federal Bureau of Investigations 2019; US Department of Justice 2021).

Table 6. Violent crime rate vs No-Fly List names

	% of violent criminals	% of No-Fly List	Degree of representation
White	45.75	97.24	112.53% over-represented
Black or African American	33.18	0.01	222,907.35% under-represented
Asian	3.54	0.21	1,607.91% under-represented
Hispanic, Latino or Spanish	17.53	2.54	590.00% under-represented

Similar results are seen when comparing the No-Fly List to both the general population and the population of violent criminals. ‘White’ (inclusive of Broadly Islamic/Middle Eastern) is significantly over-represented, while all other ethnic groups are significantly under-represented. The degree of over-representation for the ‘White’ category is noticeably higher here, caused by the relatively low share of criminality for this population compared with their percentage of the population. Much like the

general population values, it is important to note that the ‘White’ category cannot be broken down between those of European and Middle Eastern ancestry, and the ‘Black’ category is difficult to compare with the No-Fly List due to the limited nature of the data.

Degrees of Over- and Under-representation: Terrorism

The use of federal statistics is valuable insofar as datasets like the US Census and UCR are large and well maintained. However, neither database can address the key question of whether Muslims and/or those of Middle Eastern descent are overrepresented in the No-Fly List relative to their propensity to engage in terrorism. To determine this, the most comprehensive publicly available tool is the University of Maryland’s Global Terrorism Database (GTD). The GTD lists 209,707 terrorist attacks globally since 1970. Of these, 3,121 have been recorded in the United States, of which 694 have taken place on or since 10 September 2001. The GTD is designed to be intentionally broad in an effort to be inclusive of a wide range of definitions of terrorism (University of Maryland 2023). For the purposes of this article, the definition of terrorism will be more narrowly defined, and must include all the following elements:

- 1) The attack must have been committed by a non-state actor.
- 2) The attack must feature a clear social/political intention.
- 3) The attack must feature clear intent to instil terror or harm to one or more groups or to society at large, rather than being narrowly aimed against an individual.
- 4) The ethno-religious status of the perpetrator(s) must be known.

Inclusive of these factors, the GTD lists a total of 206 terrorist attacks that have occurred in the United States since 10 September 2001. Thankfully – unlike federal statistics – GTD data can be broken down in a way that more closely matches the ethno-religious categories of this article. This allows researchers to separate individuals of Islamic/Broadly Middle Eastern heritage from the overly broad Census category of ‘White’. For the purposes of GTD data, the categories of Western European and Russian/Eastern European have been combined as ‘White’. Additionally, the categories of ‘East Asian’ and ‘Subcontinent Asian’ have been combined as ‘Asian’. The number of terrorist attacks attributable to each ethno-religious group can be seen in Table 7 and the comparison of frequency between the GTD and No-Fly List Data can be seen in Table 8.

Table 7. US terror attacks since 10 September 2001 by ethno-religious identity of perpetrator(s)

Ethno-religious identity	No.	%
Broadly Islamic/Middle Eastern	46	22.33
White	113	54.85
Asian	7	3.40
African/African American	22	10.68
Latin American	18	8.74
Total	206	100.00

Table 8. Percentage of terrorist attack perpetrators since 10 September 2001 vs No-Fly List names

	% of terrorists	% of No-Fly List	Degree of Representation
Broadly Islamic/Middle Eastern	22.33	93.67	319.50% over-represented
White	54.85	3.56	1,439.30% under-represented
African/African American	10.68	0.01	71,684.38% under-represented
Asian	3.40	0.21	1,538.21% under-represented
Latin American	8.74	2.54	243.99% under-represented

As shown in Table 8, individuals of Broadly Islamic/Middle Eastern heritage have committed 22.33 per cent of terrorist attacks in the United States since 10 September 2001. This value is higher than their percentage of the general population, meaning that members of this group commit terrorism at a disproportionately high rate. However, the percentage of the No-Fly List that is Broadly Islamic/Middle Eastern (93.67%) is significantly larger than the percentage of US terrorist attacks committed by

Broadly Islamic/Middle Eastern peoples (22.33%). Therefore, members of this group are over-represented on the No-Fly List relative to their likelihood of committing terrorist attacks. By contrast, all other ethno-religious categories are under-represented on the No-Fly List to a significant degree. Therefore, it cannot be said that the No-Fly List includes different ethnicities in proportion to the terrorist threat that they pose. If a defender of the Terrorist Screening Center and its policies were to argue that the large number of Broadly Islamic/Middle Eastern names on the No-Fly List is justified by the group's propensity to commit terrorist acts, the data would not support this conclusion. If the purpose of the List were to accurately track potential/active terrorists, then it has failed to do so.

However, as the exact purpose of the No-Fly List has never been conveyed by US authorities, there is room to question whether tracking potential/active terrorists by raw numbers is in fact the intention of the List. One alternate explanation might be that the List places more significant weight on tracking individuals and groups based on the severity of their terrorist attacks rather than simply the number of attacks in which they engage. If terrorist attacks committed by Broadly Islamic/Middle Eastern peoples are on average more lethal, then the No-Fly List may not over-represent them in a discriminatory way. To determine this, the GTD data are used to chart the number of people killed in terrorist attacks perpetrated by individuals of different ethno-religious categories, as not all terrorist attacks result in fatalities. Of the 206 attacks included in this study, the vast majority feature either zero or one death (excluding the perpetrator), and only a small fraction feature death totals exceeding 10.

This test of the data is run in two sets. The first set – demonstrated in Table 9 – excludes the Al-Qaeda terrorist attacks that occurred on 11 September 2001. The second set – demonstrated in Table 10 – includes these attacks. The reason for this separation is due to the nature of the 9/11 attacks as inordinately large outliers to the data. For reference, the three 9/11 terrorist attacks killed an average of 987 people each, while the fourth most lethal attack in the dataset (the Pulse Nightclub Shooting) killed 49. (The more lethal 2017 Las Vegas Shooting is not counted in this dataset as authorities never identified any social/political intentions related to the attack.)

Table 9. Number killed in terrorist attacks by category of perpetrator (not including 9/11) vs No-Fly List names

	% of terrorists	% of No-Fly List	Degree of Representation
Broadly Islamic/Middle Eastern	44.49	93.67	110.57% over-represented
White	39.54	3.56	100.66% under-represented
African/African American	7.98	0.01	53,570.80% under-represented
Asian	1.52	0.21	633.24% under-represented
Latin American	6.46	2.54	154.47% under-represented

Table 10. Number killed in terrorist attacks by category of perpetrator (including 9/11) vs No-Fly List names

	% of terrorists	% of No-Fly List	Degree of representation
Broadly Islamic/Middle Eastern	95.53	93.67	1.98% under-represented
White	3.18	3.56	11.95% over-represented
African/African American	0.64	0.01	4,220.61% Under-represented
Asian	0.12	0.21	69.41% over-represented
Latin American	0.52	2.54	388.15% over-represented

As seen in Table 9, those in the Broadly Islamic/Middle Eastern category have a relatively high degree of lethality when committing terror attacks. Excluding 9/11, terrorists in this category have killed 44.49 per cent of US terror victims while having committed 'only' 22.33 per cent of terror attacks. This means that terror attacks by those of Broadly Islamic/Middle Eastern origin are more lethal on average than those committed by White, African/African American, Asian or Latin American terrorists in the United States. However – crucially – this high level of lethality is still not commensurate with the group's representation on the No-Fly List. When accounting for the lethality of terrorist attacks *excluding* 9/11, Broadly Islamic/Middle

Eastern peoples are placed on the No-Fly List at a rate that is still orders of magnitude above what is appropriate given their lethality. This finding continues to imply that members of this group have been unduly targeted by the TSC/FBI. However, this conclusion changes when discussing the lethality of attacks since September 2001, *inclusive of* the 9/11 attacks. So significant was the death toll of the 9/11 attacks that – for the first and only time in this article – Broadly Islamic/Middle Eastern peoples are actually under-represented in the No-Fly List. Under these conditions, the percentage of deaths caused by terror attacks committed by Broadly Islamic/Middle Eastern peoples in the United States is roughly equal to the presence of these peoples on the No-Fly List. Thus, proponents of the List could argue that the high presence of Broadly Islamic/Middle Eastern peoples is justified under this single, particularly narrow interpretation of the List's purpose. Of course, making this argument would require seeing the 9/11 attacks not as outliers but instead as a fair indicator of the lethality of Islamic terror.

Conclusions

Ethno-Religious Over- and Under-representation on the No-Fly List

Upon releasing the 2019 No-Fly List to press and researchers, Maia Arson Crimew stated that the List contains 'very clear trends towards almost exclusively Arabic and Russian sounding names' (Crimew 2023). While this article finds that 'Russian sounding names' are the third largest category in the No-Fly List, their representation is still relatively low, at only 1.313 per cent. By contrast, there exists a tremendous gulf between the representation of 'Arab sounding names' and those in any other category. Names of Broadly Islamic/Middle Eastern origin account for an overwhelming 93.674 per cent of the database.

The question must then be asked: is there truth to the claims made by academics and civil society organisations that the No-Fly List discriminates against Muslims and people of Middle Eastern origin? Rather than looking at the presence of this group in terms of raw numbers, answering this question instead requires comparing their prevalence to other factors in order to tease out whether they are over-represented, to what degree they are over-represented and in what circumstances they are over-represented. The analysis of this article finds the following:

- The combined category of White/Broadly Islamic/Middle Eastern is over-represented on the No-Fly List relative to its proportion of the US population by 60.40 per cent.
- The combined category of White/Broadly Islamic/Middle Eastern is over-represented on the No-Fly List relative to its proportion of violent criminals by 112.53 per cent.
- The category of Broadly Islamic/Middle Eastern is over-represented on the No-Fly List relative to its proportion of terror attack perpetrators in the United States by 319.50 per cent.
- Discounting the 9/11 attacks, the category of Broadly Islamic/Middle Eastern is over-represented on the No-Fly List relative to the number of victims killed in terror attacks committed by this group by 110.57 per cent.
- Including the 9/11 attacks, the category of Broadly Islamic/Middle Eastern is under-represented on the No-Fly List relative to the number of victims killed in terror attacks committed by this group by 1.98 per cent.

Singular Purpose

In the absence of these findings, a wide range of answers can be given to the question 'What is the purpose of the US No-Fly List?' Highly placed proponents of the program – such as Senator Diane Feinstein – have argued that its purpose is to protect against current and future terrorists living in the United States. In Mrs Feinstein's words, "It's clear we're facing a new kind of attacker, who's already here, able to hide in plain sight, and we need to think about new defenses ... the no-fly list itself is one of our best lines of defense' (Shane 2010). With access to data from the List, however, Mrs Feinstein's conclusion appears likely to be incorrect. Were the purpose of the No-Fly List to accurately guard against domestic terrorists, then the proportion of Broadly Islamic/Middle Eastern names would be decreased by 319.50 per cent and the proportion of White, African/African American, Asian and Latin American names would be increased by 1,439.30 per cent, 71,684.38 per cent, 1,538.21 per cent and 243.99 per cent respectively.

These findings may not support the List's advocates, but they also do not necessarily support the List's detractors. For instance, the ACLU has fought the No-Fly List on the grounds that it 'disproportionately target people of color' (Roe 2019). Were this statement true, then the List would not so significantly under-represent individuals of African/African American, Asian or Latin American heritage. Indeed, under nearly every measure, the degree of under-representation is greater among people of color than it is among Whites (excluding the Broadly Islamic/Middle Eastern category).

Based on this data, it can be determined that the No-Fly List does not accurately reflect US population statistics, nor the likelihood that ethno-religious groups will commit violent crimes, nor the likelihood that ethno-religious groups will commit

terrorist attacks, nor the average lethality of terrorist attacks committed by different ethno-religious groups. This author actively encourages further research on this topic to discover other possible explanations, but in the context of this analysis, only one explanation for the purpose of the No-Fly List appears likely.

The only measure by which the composition of the No-Fly List approximates reality is that of average lethality of terror attacks committed by different ethno-religious groups, *inclusive of* the 9/11 attacks. In short, when asking the question ‘What is the purpose of the U.S. No-Fly List’, the most obvious answer is also the most accurate: the No-Fly List is a direct reaction to the 9/11 attacks. The contents of the No-Fly List only make sense if one assumes that the massive death toll of the 9/11 attacks and the ethno-religious origins of the attackers are the new norm of terrorism, rather than a unique outlier. If the trends of US terror attacks post-9/11 indeed continued this astronomical level of lethality caused by Islamic terrorism, then the No-Fly List would accurately reflect reality and would be a useful national security tool. Therefore, it is the belief of this author that the US No-Fly List was created with only a singular purpose in mind: as a tool to counter not terrorism broadly, but exclusively 9/11-style Islamic terrorism.

Unfortunately for the TSC – and for those wrongly placed on the List – two decades later, the existing data do not support the validity of this singular purpose. When observing US terror attacks following 9/11, no attack has ever approached anything even remotely near the death toll of that day. The combined death total of all US terror attacks since 9/11 under the definition employed in this article is 263, equal to only 8.75 per cent of the death total of the 9/11 attacks alone. The 9/11 attacks represent outliers, and these outliers skew the data of terror attack lethality by ethno-religious groups in such a way as to improperly and negatively impact Islamic and Middle Eastern peoples. If the FBI/TSC seeks to use the No-Fly List as a correctly proportionate tool against potential terrorists, then the presence of Broadly Islamic/Middle Eastern people needs to be lessened by a significant margin.

Significance of Findings

The significance of these findings lies not in this article’s analysis so much as in the fact that this analysis is the first conducted using primary source data from the US No-Fly List. To this author’s knowledge, no such academic study has been conducted with similar data prior to this point. It is hoped that these findings can serve as a starting point for future study of the No-Fly List specifically, and government anti-terrorism policies more broadly.

As evidenced by the lawsuits filed by those improperly placed in this database, the No-Fly List has impacts that reach beyond the abstract and into the daily lives of real people. Decisions made in the halls of power – often hastily and shortsightedly – will cause knock-on repercussions for decades. It is the responsibility of individuals in democratic societies not only to encourage wise decision-making from their leaders, but also to guard against their leaders’ worst impulses. Research, open discussion and the open flow of information are key tools to make these aspirations a reality.

Data Availability Statement

The US No-Fly List dataset is available by special request through DDoSecrets at: https://ddosecrets.com/wiki/No_Fly_List. The Global Terrorism Database is available by special request through the University of Maryland at: <https://www.start.umd.edu/gtd/contact/download>.

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References

- ACLU (2021, 7 April) *Kashem, et al. v. Barr et al.*: ACLU challenge to government No-Fly List. American Civil Liberties Union. <https://www.aclu.org/cases/kashem-et-al-v-barr-et-al-aclu-challenge-government-no-fly-list>.
- Boustead A and Herr T (2020) Analyzing the ethical implications of research using leaked data. *PS Political Science & Politics* 53(3): 505–509. <https://doi.org/10.1017/s1049096520000323>.
- Creta C (2016) The No-Fly List: The new redress procedures, criminal treatment, and the blanket of ‘national security’. *Washington and Lee Journal of Civil Rights and Social Justice* 23(1).
- Crimew M (2021) Home page. maia.crimew.gay.

- Crimew M (2023) How to completely own an airline in 3 easy steps. <https://maia.crimew.gay/posts/how-to-hack-an-airline>.
- Croft S (2006, 5 October) Unlikely terrorists on No Fly List. *CBS News*. <https://www.cbsnews.com/news/unlikely-terrorists-on-no-fly-list>.
- Diachenko V (2021, 16 August) America's secret terrorist watchlist exposed on the web without a password: Report. LinkedIn. https://www.linkedin.com/pulse/americas-secret-terrorist-watchlist-exposed-web-report-diachenko/?_ga=2.68694546.2038757569.1673977369-402314082.1673977369.
- Distributed Denial of Secrets (DDoSecrets) (2023) *No Fly List*. https://ddosecrets.com/wiki/No_Fly_List.
- Donohue LK (2008) *The Cost of Counterterrorism: Power, Politics, and Liberty*. Cambridge: Cambridge University Press.
- Federal Bureau of Investigations (FBI) (2019) Expanded homicide data. Uniform Crime Reporting. <https://ucr.fbi.gov/crime-in-the-u.s/2018/crime-in-the-u.s.-2018/topic-pages/tables/expanded-homicide-data-table-3.xls>.
- Federal Bureau of Investigation (FBI) (2023) About the Terrorist Screening Center. <https://ucr.fbi.gov/nsb/tsc/about-the-terrorist-screening-center>.
- Feinstein D (2016, 23 June) Feinstein statement on Collins Amendment. <https://www.feinstein.senate.gov/public/index.cfm/press-releases?ID=F02871C5-A023-4DEF-AEC3-EDAF34BEA2BF>.
- Florence J (2006) Making the No Fly List fly: A due process model for terrorist watchlists. *The Yale Law Journal* 115(8): 2148–2181. <https://doi.org/10.2307/20455686>.
- Hamner J (2009) No-Fly List: The Ninth Circuit misapplies Congressional Intent of 49 U.S.C. Sec. 46110, a decision that opens the doors of District Courts to No-Fly List challenges. *Journal of Air Law and Commerce* 74(1). <https://scholar.smu.edu/jalc/vol74/iss1/4/>.
- Harwell D (2021, 10 March) Massive camera hack exposes the growing reach and intimacy of American surveillance. *Washington Post*. <https://www.washingtonpost.com/technology/2021/03/10/verkada-hack-surveillance-risk>.
- Ienca M and Vayena E (2021) Ethical requirements for responsible research with hacked data. *Nature Machine Intelligence* 3(9): 744–748. <https://doi.org/10.1038/s42256-021-00389-w>.
- Justia Law (2019) *Bartnicki v. Vopper*, 532 U.S. 514. <https://supreme.justia.com/cases/federal/us/532/514>.
- Justia Law (2020) *Tanzin v. Tanvir*, 592. <https://supreme.justia.com/cases/federal/us/592/19-71>.
- Ling J (2018, 21 June) Revealed: Canada uses secretive anti-terrorist database run by US. *The Guardian*. <https://www.theguardian.com/world/2018/jun/21/canada-us-tuscan-anti-terrorist-database-at-borders>.
- Nagra B and Maurutto P (2019) No-fly lists, national security and race: The experiences of Canadian Muslims. *The British Journal of Criminology* 60(3): 600–619. <https://doi.org/10.1093/bjc/azz066>.
- Nichols C (2019, 11 October) *Baz v. U.S. Department of Homeland Security*. Leagle. <https://www.leagle.com/decision/infdc020191011s24>.
- PBS (2002) Global connections: Stereotypes. <https://www.pbs.org/wgbh/globalconnections/mideast/questions/types/index.html>.
- Puentes P (2017, 25 August) *El Cordobés, the Spanish face of Islamic State*. El País. https://english.elpais.com/elpais/2017/08/25/inenglish/1503659430_853709.html.
- Roe A (2019, 19 July) Airline 'no-fly' lists trample the rights of people of color. ACLU Washington. [https://aclu-wa.org/story/airline-"no-fly"-lists-trample-rights-people-color-seattle-should-not-allow-hotels-create--0](https://aclu-wa.org/story/airline-).
- Rusch M (2021, 20 October) Hackerin Tillie Kottmann: Tillie gegen die Vereinigten Staaten. *Zeit Magazin*. <https://www.zeit.de/zustimmung?url=https%3A%2F%2Fwww.zeit.de%2Fzeit-magazin%2F2021%2F43%2Fhackerin-tillie-kottmann-usa-justizministerium-klage-aktivismus-schweiz>.
- Shane S (2010, 11 May) Senators demand tighter rules on No-Fly List and addition to Terror Group List. *New York Times*. <https://www.nytimes.com/2010/05/12/world/americas/12investigate.html>.
- Sharkey J (2008, 30 September) Not too small to appear on a big no-fly watch list. *New York Times*. https://www.nytimes.com/2008/09/30/business/30road.html?_r=1.
- University of Maryland (2023) Global Terrorism Database. <https://www.start.umd.edu/gtd>.
- US Census Bureau (2021, 1 March) About the topic of race. <https://www.census.gov/topics/population/race/about.html>.
- US Census Bureau (2022, 6 December) *Data*. <https://www.census.gov/data.html>.
- US Department of Justice (2021, January) *Race and ethnicity of violent crime offenders and arrestees, 2018*. <https://bjs.ojp.gov/content/pub/pdf/revcoal8.pdf>.
- US Department of Justice – Office of the Inspector General – Audit Division (2007, September). *Follow-up audit of the Terrorist Screening Center*. <https://oig.justice.gov/reports/FBI/a0741/final.pdf>.