A picture containing text, clipart

Description automatically generatedA group of helicopters flying in the sky

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**Submitted by:**

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1. **Introduction and background**

* The drone wars are a topic that has been widely debated. The people against the war argue that it was only designed to be used against terrorism and were only meant to detect and attack specific targets, not civilians or illegal activity. While the supporters of it argue back saying that this was a necessary action, especially in places like Afghanistan.
* One of the biggest impacts that Drone Wars had on humans is the number of casualties. US government has admitted that at least 4,000 people were killed by drones between 2004 and 2014 alone that included most of the civilian’s death, which caused even more controversy within this topic.
* The drones have been used in the war to detect and attack specific targets. The problem is that these machines are still not very accurate. There have been many cases where civilians have been killed by drone attacks, even though they were not the intended targets. The issue of civilian deaths became even more prominent when a US drone strike killed 16 people in Yemen back in 2017.
* On February 24, a full-scale invasion of Ukraine was launched by Russia. This is the biggest war to have taken place since World War 2, which led to massive destruction to cities, lives and displaced millions of innocent civilians in Ukraine.
* There have been several other such attacks in past which shook the resulting in devastating demolition to territories and leading to massacre of civilians which motivated us to look in depth into Life loss and injuries to people due to these unfortunate events that took place in countries like Afghanistan, Pakistan, Yemen and Somalia.
* The are a few articles that we came across via Internet that really inspired and motivated us to work on this project dataset.

One of them is an article from BBC News titled” One of them is an article from BBC News titled”. This article discusses how drones have been used for military purposes as well as their effect on civilians. Another article is from TechCrunch titled “UAE government launches first ever drone-only airport at Dubai World Central”. This article talks about how the UAE has created its own airport solely for drones and how this will affect the aviation industry in general. From this project, we want to learn how has unmanned aerial drones changed the war and military industry. We also want to learn how they have affected the civilian population and if they are safe to use in everyday life.

* Questions we intend to answer:

1. How has lives been affected due to Air Strikes?

2. Which U.S. President had the greatest number of drone attacks in the past

decade?

3. How has the trend of Air Strikes changed over the period?

* How will our project benefit others?

As already discussed in above points the drones were only designed to be used against terrorism and were only meant to detect and attack specific targets, not civilians or illegal activity. However, there have been so many such incidents, where innocent civilians and children lost their lives or got lasting damage for rest of their lives. People will get deeper insights by looking at the data regarding how many people/children got killed over the period due to such activities and would help future generations to make decisions wisely that war has never been the only solution to tackle such problems.

1. **Datasets:**

* Dataset: Drone Wars
* Source: <https://dronewars.github.io/data/>
* [The Bureau of Investigative Journalism](https://www.thebureauinvestigates.com/about-us) collected the data from news reports, statements, documents, press releases, images, and videos, which are included in the data, when possible, from both national and international outlets. Most of this data is from news reporting. and funded the data.

**1st Dataset**

1. It contains 1696 rows and 17 columns. Variables that we are interested in: Countries, Date, Latitude, Longitude, Presidents, People killed vs Injured.
2. The dataset includes 4 Countries namely: Afghanistan, Pakistan, Somalia and Yemen in which Drone Strikes happened under the Presidency of George Bush, Barak Obama and Donald Trump. By selecting these variables, we want to analyze the Ideologies of different U.S. Presidents over the Terrorism affairs and the death toll due to the resulting Drone Strikes.
3. Variables:

* **Strike ID:** It is the unique identifier for different Air Strikes
* **Country:** Name of the Country
* **Date (MM-DD-YYYY):** Date when Air Strikes took place
* **President:** Name of different U.S. Presidents
* **Most Specific Location:** Precise location name where Air Strikes took place
* **Most Specific Lat/Long:** Precise location where Air Strikes took place
* **Latitude:** Latitude of location where Air Strikes took place
* **Longitude:** Longitude of location where Air Strikes took place
* **Minimum total people killed:** Minimum people killed due to Air Strike
* **Maximum total people killed:** Maximum people killed due to Air Strike
* **Minimum civilians reported killed**: Minimum civilians reportedly killed due to Air Strike
* **Maximum civilians reported killed:** Maximum civilians reportedly killed due to Air Strike
* **Minimum children reported killed:** Minimum children reportedly killed due to Air Strike
* **Maximum children reported killed:** Maximum children reportedly killed due to Air Strike
* **Minimum reported injured:** Minimum injuries reported
* **Ratio of Civilians to Total Killed:** Ratio of Civilians to Total Killed Civilians
* **Other (Non-civilian/children Killed):** Ratio of Non-civilian to children killed

**2nd Dataset**

1. It contains 502 rows and 34 columns. Variables that we are interested in: Countries, Date, Latitude, Longitude, Presidents, People killed vs Injured.
2. Variables:

* **Village/local area:** Name of locality
* **District:** Name of district
* **Province:** Name of Province
* **Village/Local Area, District, Province, Country:** Precise location address
* **Lat/Long of Location:** Merged Latitude Longitude points
* **Modified Location when Applicable:** Modified location for few cases
* **Lat/Long of Modified Location when Applicable:** Modified Latitude and longitude of few places
* **Type of attack:** Type of attack made
* **Reportedly drone?:** Binary data stating if it was a drone attack
* **US confirmed?:** Binary data stating if US confirmed the drone attack
* **US source?:** Binary data stating if drone attack was from US Source
* **"Counter-terrorism, force protection or strategic effects?":** Information regarding the operations that took place
* **Time:** Time at which Strike stook place
* **Reported target type:** Targets where Air Strikes were hit
* **Strike Link:** Contains link of Air Strikes
* **Timeline URL:** Contains URL of timeline
* **Index:** Contains index numbers of Air Strike Data
* **Strike ID:** It is the unique identifier for different Air Strikes
* **Country:** Name of the Country
* **Date (MM-DD-YYYY):** Date when Air Strikes took place
* **President:** Name of different U.S. Presidents
* **Most Specific Location:** Precise location name where Air Strikes took place
* **Most Specific Lat/Long:** Precise location where Air Strikes took place
* **Latitude:** Latitude of location where Air Strikes took place
* **Longitude:** Longitude of location where Air Strikes took place
* **Minimum total people killed:** Minimum people killed due to Air Strike
* **Maximum total people killed:** Maximum people killed due to Air Strike
* **Minimum civilians reported killed**: Minimum civilians reportedly killed due to Air Strike
* **Maximum civilians reported killed:** Maximum civilians reportedly killed due to Air Strike
* **Minimum children reported killed:** Minimum children reportedly killed due to Air Strike
* **Maximum children reported killed:** Maximum children reportedly killed due to Air Strike
* **Minimum reported injured:** Minimum injuries reported
* **Ratio of Civilians to Total Killed:** Ratio of Civilians to Total Killed Civilians
* **Other (Non-civilian/children Killed):** Ratio of Non-civilian to children killed

1. **Variables in dataset helping us to achieve our goals**:

Our dataset contains variables such as “The Maximum Children Killed” to show the number of children killed in all 4 countries due to Air Strikes, “President” and “Strike ID” to show the percentage of Air Strikes ordered by different U.S. Presidents, “Year” and “Strike ID” to show the Trend of Air Strikes ordered by different U.S. Presidents per year.

**Limitation**: Dataset contains missing information about few Air Strikes because Air Strikes Data is too sensitive to be shared in the public domain.

1. **Data Story:**

**1.Map Chart**

We used the variable “The Maximum People Killed” and the “Country” from Dataset 1 to show the number of people killed in all 4 countries due to Air Strikes.

Map

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**2.Donut Chart**

We used the variable “President” and the Count of “Strike ID” from Dataset 1 to show the proportion of Air Strikes per U.S. President.

Timeline

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**3.Line Chart**

We used the variable “Date” and the Count of “Strike ID” from Dataset 1 to show the trend of Air Strikes over period.

Chart, line chart

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**4.Bar Chart**

We used the variable “President”, “Maximum People killed” and “Maximum people injured” from Dataset 1 to show the comparison of people killed vs injured under different U.S. Presidents

Chart, bar chart, waterfall chart

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**5.Bubble Chart**

We used the variables “Presidents” and “Ratio of Civilians to Total Killed” from Dataset 1 to represent the Ratio of casualties to Total Casualties per U.S. President.

Chart, bubble chart

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**6.Table Chart**

We used variables “President”, “Country”,” Maximum Total People killed”,” Maximum Children Reported killed”,” Maximum Civilians Reported killed”,” Ratio of Civilians to Total Killed” from Dataset1 to show the Overall Casualties under different U.S. Presidency.

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**7.Table Chart**

We used variables “Province” and “President” from Dataset2 to show the Top 5 Air Strikes on Afghanistan’s Province by different U.S. Presidents.

Table

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**8. Dashboard**

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1. **Summary and Conclusion:**

* It could be observed from the line graph that the Air Strikes count has gradually increased over the years and has led to huge death toll of human life.
* Amongst the 4 countries from our observational study, Afghanistan has been most effected Country having almost 6000 people killed due to these strikes.
* Amongst all US Presidents, most Air Strikes were hit under Barack Obama’s presidency having 57.31% of total strikes.

1. **References**

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