The December 2016 Berlin Vehicular Ramming Attack: An Analysis

The Attack

On Monday evening, December 19, 2016, at 20:02, Anis Amri, a 24-years old Tunisian who had previously pledged allegiance to the Islamic State (IS), drove a semi-truck with a trailer into the Breitscheid Christmas Market, located next to the Kaiser Wilhelm Memorial Church in the heart of Berlin. Amri steered the truck from Kantstrasse into the entrance of the Christmas market, plowing through visitors across a path between market stalls for about 60-80 meters before breaking through a row of stalls and coming to a stop on Budapesterstrasse, at the foot of the Memorial Church. Apparently, the truck was stopped by its automatic breaking system after it detected an impact. In total, 11 people were killed, and 45 wounded (30 of them seriously) in the attack. In addition, the original truck

1 Authors: Lt. Col. (Res.) Uri Ben Yaakov, Ms. Arava Lev, Mr. Michel D. Wyss
5 Ibid.
driver, a 37-year old Polish citizen, was found dead in the truck's passenger seat.

The exact circumstances under which Amri took over the vehicle and his actions prior to the attack still remain unclear. It is known that the truck had been parked at Friedrich-Krause-Ufer in North Berlin, approximately 5 km away from the targeted Christmas market, on the morning of the attacks and remained there until the afternoon. According to the haulage firm’s central monitoring system, the truck's engine started and the vehicle moved several times in the course of the late afternoon. The haulage firm speculated that this indicated that someone was trying to familiarize himself with the vehicle. According to the German authorities, Amri had shot the driver in the head while the vehicle was still in North Berlin. Apparently, the shot was fired from the driver's seat while the Polish driver sat in the passenger's seat.

At around 19:30, Amri drove towards the Christmas market. However, it looks like he instead of carrying the attack immediately, he made a loop through the

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inner city before plowing into the market.⁹ According to the German authorities, Amri sent a series of text messages shortly before the attack, in which he indicated that he was in the vehicle and asked the recipients to pray for him.¹⁰ Additionally, he took a selfie with his mobile phone. Both the phone and Amri’s wallet (containing 230 Euros) were later found at the crime scene.¹¹

After the attack, taking advantage of the chaotic scene, Amri was able to flee the area. Amid the initial confusion, German police apprehended a suspect near Siegessäule less than an hour after the attack (at 20:56), but he was released the following day. Meanwhile, investigators found Amri's fingerprints, as well as an identity document belonging to him, in the cab of the truck, establishing his culpability.¹²

Shortly after the attack, Amri was recorded by a security camera at the Zoologischer Garten train station in Berlin. Apparently aware that he was filmed, he posed for the camera by performing the Tawhid hand sign.¹³ It is yet unclear where Amri was on December 20, the day immediately after the attack, though according to German authorities, he might have been in the North Rhine-Westphalia region.¹⁴ Over the next two days, Amri travelled across Europe (see map below), before arriving at the Milan central station around 1:00 in the morning on December 23rd. Two and a half hours later, at 3:30, Amri was spotted by police officers who attempted to check his identity at the Sesto San Giovanni train station near Milan. In response, he opened fire and was shot and killed by the

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¹⁴ Ibid.
The day after the attack, on December 20, 2016, the Islamic State organization, via Amaq News Agency, claimed responsibility for the attack, stating:

…The perpetrator of the vehicular ramming attack in Berlin, Germany is a soldier of the Islamic State. He carried out the attack as an answer to the calls to harm the subjects of the states participating in the international coalition.  

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The attacker

Anis Amri, of Tunisian origin, arrived in Italy as a refugee in 2011, where he was imprisoned for a number of crimes. According to his father, he had used alcohol and drugs as a teenager and had been radicalized in prison in Italy. Italy attempted to deport Amri back to Tunisia but the latter refused to accept his return. Therefore, he was released from prison and asked to leave the country. It seems that Amri spent some time in Switzerland before he was picked up by German police in Freiburg, Germany in July 2015. At the time, Amri used several fake identities to register as a refugee and frequently changed his place of residence. In what appears to be attempts to avoid deportation, Amri presented himself as different people with different backgrounds at several refugee centers (see Appendix A). According to some reports, he had used as many as 14 different identities during his time in Germany. A German attempt to deport him in the summer of 2016 failed, as Tunisia once again refused to accept him.

Security authorities of different countries and states had information that should have (and at times did) raised suspicions regarding Amri’s connection to terrorism. For example, while in Germany, Amri was affiliated with the network of Salafi preacher Abu Walaa. Abu Walaa is considered a leading figure of IS in Germany and was arrested in November 2016.24 Amri too was considered a fundamentalist and a sympathizer of the Islamic State organization. Furthermore, the North Rhine-Westphalia State Office of Criminal Investigations had knowledge that Amri had searched the internet for manuals to build pipe bombs and had reached out to IS, offering himself as a suicide bomber.25 Because of his contact with the Islamic State organization, Amri was also observed by US intelligence and has been placed on a no-fly list.26

In February 2016, Amri took up residence in Berlin, and as of March 2016, Amri

and his communications were monitored. However, in September 2016 the monitoring was abruptly stopped. The journal Focus has speculated that the authorities in Berlin had lost interest after Amri started to neglect his religious duties and consumed drugs instead.

According to German media citing a confidential timeline, Amri had been in touch with a confidential informant of the State Office since the fall of 2015. The informant drove Amri at least once to Berlin and reported that he was talking about "doing something in Germany." On September 19, 2016 and again on October 11, 2016 German authorities received warnings, from Moroccan intelligence, that Amri was in contact with IS and that he was ready to carry out an attack. By then, however, Amri had vanished and the German authorities were not able to relocate him. His case was discussed at the Joint Counter-Terrorism Center in November 2016 and security officials apparently worried about his mobility and fundamentalism. At the same time, it was considered "rather unlikely" that he would carry out an attack.

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Germany and Terrorism

Throughout 2016, Germany endured a large number of terrorist plots, some of which were carried out successfully (see Appendix B). These plots were connected to various types of radicals; terrorists and foreign fighters who infiltrated Europe via the wave of refugees as well home-grown extremists\(^\text{33}\), though the over-representation of the immigrant population is evident.

Putting aside the social and economic implications of a wave of migrants and refugees, which are considerable but less relevant to a strictly security-oriented discussion, it is important to note the potential security threats ingrained in such a phenomenon. The large numbers of immigrants arriving in Europe will have short, mid- and long term effects. In order to understand these effects and the security threats emanating from them, it is important to understand the makeup of these migration movements. For simplicity's sake, one may distinguish between four types of immigrants:

- Individuals escaping a war zone or persecution (political, ethnic etc.)
- Individuals travelling to another country for a better life (often dubbed economic refugees)
- Returning foreign fighters; European nationals/residents who travelled to join terrorist organizations abroad and are currently returning to their home countries
- Non-European terrorists who travel to Europe to carry out attacks.

It seems that Amri can be included in the group of immigrants who travel to Europe for a better life. His story can serve as an example of the threat of radicalization after arrival in Europe. This population, as well as immigrants fleeing war zones, are extremely susceptible to radicalization, as their lower

\(^{33}\) For the purposes of this paper, home grown terrorists will be defined as one who is not part of the aforementioned groups, i.e. was born and/or raised in the country being discussed.
economic and social status, as well as lack of integration into European society, create a fertile ground for extremists to exploit. The potential of these immigrating communities to nurture extremist ideologies, which in turn could motivate individuals to carry out attacks, is a serious security risk that must be taken into consideration.

Hostile elements, returning foreign fighters as well as non-European terrorists, infiltrating Western countries by masquerading as refugees/migrants, might pose a more immediate threat. The risk rests on the fact that said populations have combat experience, the knowledge and expertise to carry out an attack on Western soil. Even more so, one cannot ignore the very real possibility that some of these fighters were given specific instructions to return to their home countries and carry out attacks.

It should be noted, that the threat of terrorism does not necessarily relate just to individuals entering Europe, but may come from what is commonly referred to as home grown terrorism. Such radicalized individuals can carry out attacks (either as lone wolves or as part of a cell) in the country or the states bordering it, an option often endorsed by the terrorist organizations themselves; IS, for example, has called for lone wolf attacks to be carried out in the west. The threat of attacks carried out by such terrorists might rise, as security apparatuses succeed in preventing these individuals from travelling abroad to join terrorist organizations. Ironically, the more successful the security organizations are in preventing would-be foreign fighters from leaving their countries, the bigger the risk of attacks by home-grown terrorists.

**Vehicular Ramming Attacks as a Modus Operandi**

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34 For the purposes of this paper, a lone wolf attack will be defined as a local/personal initiative attack, that was not organized by a terror organization. The definition applies also to cases in which the attacker was inspired by terrorist organizations.

For the purposes of this paper, the term vehicular ramming attacks (VRAs) will refer to attacks in which the modus operandi includes the use of a vehicle (car, truck, bus, heavy machinery such as tractors, etc.) to ram and run over pedestrian targets. Such attacks are predominately terror attacks. It is important to note that the term refers only to attacks in which the vehicular ramming was the main modus operandi used by the attacker, and was not a facilitator of a larger terror attack. As such, attacks in which the vehicle was used in order to carry and/or detonate an explosive, are not to be considered vehicular ramming attacks, even if pedestrians were run over during the attack. VRAs may include the use of a secondary modus operandi, such as shooting or stabbing, usually after the vehicle is no longer serviceable.

Vehicular ramming attacks, despite making headlines in recent months, are not a new phenomenon. At least in the Palestinian arena, VRAs, though not the most popular terror tactic, have been used for decades. The first Palestinian VRA occurred in 1987, with the use of the modus operandi increasing over time. The Second Intifada and the years surrounding it saw a number of VRAs, including three attacks in Jerusalem in which three civilians were killed and about a hundred injured.36 The recent media popularity regarding VRAs stems, at least partially, from the success of the June 2016 attack, in which the perpetrator drove a 19 ton cargo truck along the promenade in Nice, France during the Bastille Day celebrations. Mohamed Lahouaiej-Bouhlel, a 31 year old Tunisian, rammed through police barriers at the entrance to the promenade and deliberately accelerated as he drove the truck into the crowds. Lahouaiej-Bouhlel drove through the crowds for approximately five minutes before the truck was too badly damaged to continue. He then engaged in a shoot-out with police and was eventually killed. More than 80 people were killed and over 400 injured in the

attack. The Islamic State organization claimed responsibility for the attack.

The repeated recommendations by terrorist organizations to carry out such attacks are significant, not least because they likely have an impact on the scope and methodology of recent attacks. The third issue of Rumiyah, the successor of IS’s Dabiq magazine which is being published in various languages, included an in-depth article detailing VRAs. The article describes the usefulness of such attacks and offers instructions on choosing the ideal vehicle (and avoiding non-useful vehicles), specific target choice criteria, and comprehensive directions on planning and preparing for such an attack. The instructions include the recommendation for the attacker to bring a secondary weapon to allow him to continue the attack after the vehicle is no longer serviceable.

The VRA modus operandi has also been extensively discussed by other terror organizations. For example, in their digital magazine Inspire, Al-Qaeda has repeatedly extolled the benefits of carrying out vehicular ramming attacks. In some of the earliest Inspire publications, Issues 1 & 2 (published in 2010), the organization not only called to carry out such attacks but also explained in detail the most efficient ways to plan and conduct them. The magazine notes instructions on choosing the vehicle for the attack (at least a 4-wheel drive pickup truck), deciding on the most effective target (crowded, narrow pedestrian areas with a small amount of other vehicles), as well as countries such attacks can be carried out in (Germany, Britain, the U.S. and more).

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In more recent *Inspire* publications, Issues 13 & 16 (published 2014 and 2016, respectively), the magazine offers examples of successful vehicular ramming attacks, noting the ramming of Canadian soldiers and the attack against Bastille Day celebrations in Nice in 2016 as successful Lone Mujahid attacks.

**Interviews with ICT Experts**

**Col. (Ret.) Jonathan Fighel; Senior Researcher & Head of the Terrorism Prosecution Desk, ICT**

Col. (Ret.) Fighel argues that potential attackers may find inspiration and information for the attack via the media in general and social media in particular. On the operational level, the individual may find the information they seek on how to plan the most accessible attack without the commitment of joining a terrorist cell very easily. The internet’s advantage is the
fact that there are literal “cookbooks”- publications by Al Qaeda and IS that give specific instructions on how to carry out the attack with little investment and a large profit (a simple cost-benefit analysis). That same individual may also be influenced by the environment. They may be aware of the public opinion, understand the psychological effect of terror attacks – an added incentive. Not only is the attack simple to carry out (as social media has shown said individual), but public opinion has indicated the added value of the moral damage, the fear and uncertainty such attacks cause.

When asked to compare different modus operandi used by terrorists, Col. (Ret.) Fighel suggests that in terms of damage (physical, psychological, and moral), the following ranking may apply (ranked from most damage to least): suicide attacks, shootings, vehicular ramming attacks, and stabbing attacks.

In terms of successful execution, Col. (Ret.) Fighel argues that success is all but guaranteed in VRAs; assuming the attacker is unflappable, the attack will succeed. The number of fatalities and injuries are, he notes, not the only measure of success. The anxiety caused by such attacks, the shock waves they render on the victims’ end are also measures. If the targeted country must now expend resources (money, personnel) in defending itself, it harms both the quality of life and the economics. VRAs, he claims, send out significant shock waves.

Not only is there a high probability of success, but the abilities of targeted countries to prevent such attacks are low. Intelligence, which is used to counter terrorism, does not provide the levels of knowledge needed to prevent such attacks; intelligence cannot penetrate an individual's mind, does not allow for recognizing that individual and thwarting the attack. One instance in which security apparatuses may be able to thwart such attacks is in the cases in which the attacker announced his plans on social media, especially in cases in which that platform has many followers. Technologically, security forces may locate intent and act on it.
Col. (Ret.) Fighel reiterates that the VRA modus operandi was not invented by IS; the Palestinian terrorists have been using this MO since 1987, thus providing a role model for IS. He argues that though we cannot know with certainty that IS has specifically based these attacks on the Palestinians’ attacks, we can hypothesize that there is a measure of sharing of data and experience. We cannot know if the directive was from the organization proper, the hierarchical structure, or whether the idea came from the local level, but we cannot ignore the fact that there were successful VRAs in the past which can serve as successful example for today’s terrorists.

Dr. Liav Orgad; Senior Researcher, ICT & Assistant Professor at the School of Government, IDC Herzliya

With regard to Germany's immigration policy and the security threats that may arise from it, Dr. Orgad notes that Germany accepted a large number of refugees and asylum seekers in a relatively small amount of time, without planning ahead in terms of their integration and assimilation. He argues that the German government did not plan regarding asylum seekers' length of stay, how (and if) they'll be taught the German language, etc. He notes that the government has implemented integration courses, but it is unclear whether they are effective. In fact, he argues they may be counter-productive, as the refugee population may react with hostility, perceiving these courses as lacking sensitivity.

Regarding the successful integration of immigrants, Dr. Orgad claims that different methods are employed by different European countries, though it is unclear which of them, if any, are successful. He notes the European Union's attempt to share the "burden" of the refugees with other countries, citing the example of the payments made to Turkey in return for their preventing the entrance of refugees unchecked into Europe and Greece.
Dr. Orgad argues that the security challenge in Europe is unique; while each country creates their own immigration policy independently (and, technically, decides the number of refugees that country accepts), the free movement between the countries dictates the total number of asylum seekers in Europe as a whole. To efficiently counter this security challenge, Dr. Orgad emphasizes the need for border control (to lower the number of arrivals).

Dr. Ely Karmon; Senior Research Scholar, ICT

When asked about the significant rise in attacks in Germany in 2016, Dr. Karmon indicates the important differences between the Muslim population in Germany in the past and in 2016. He notes that in the past, the Muslim population in the country was mainly either Turkish or Kurdish; both of which were more established communities and less religious. The majority of the terrorism that occurred in Germany was carried by left wing and right wing extremists, as well as between these two groups.

Dr. Karmon also notes the large number of immigrants that Germany has absorbed lately. He stresses that such an influx of immigrants is bound to have an effect on the German society and government. Even more so, when taking into account that a number of said immigrants may be militants infiltrating the country in the guise of refugees.

Dr. Karmon points to the strong reaction by the extreme right such as arson attacks against refugee hostels. He states that such actions may actually be a trigger for the victims of the attacks (or the victimized population) to carry out terror attacks.

A democratic government is limited in its ability to act against certain situations, Dr. Karmon claims. He suggests that the German Federal Government was aware of at least some of the 800 or so foreign fighters that have travelled to Iraq and Syria, but was prevented from acting. He argues that a lack of cooperation and
data-sharing between the Federal States may obstruct counter-terrorism efforts.

**Implications**

The importance and implications of the Schengen Agreement must be taken into account. The lack of internal border controls, as advocated by the Schengen Agreement\(^{38}\), contributes to the unhindered flow of immigrants (and any and all terrorists) throughout Europe. This is not to say that the implementation of border controls will entirely prevent the transition of individuals from one country to another, but the lack of them compounds the situation. As seen in the Berlin Attack, Amri abused the lack of border controls to flee Germany after the attack, travelling through three separate Schengen countries (Netherlands, Belgium, France) before being caught in Italy (also a Schengen country). Even more so, Amri’s ability to travel from Italy to Germany, apparently via Switzerland, a number of years prior to the attack, was also made possible by the lack of sufficient border controls.

The element of inspiration and imitation must be taken into consideration. Based on past experience, terrorist organizations, though innovative, tend to mimic tactics that have been found to be successful. Such was the case with suicide bombings, and we can assume is the case with VRAs, a trend which will continue in the future. The success of VRAs (measured in terms of body count, shock value and media attention) makes them an even more attractive option. It should be noted that in a recent issue of Rumiyah, the idea of arson as a terror tactic is raised, and directly references the wave of arsons in Israel in the fall of 2016.

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38 Schengen countries may decide to close their borders temporarily as a reaction to a crisis.
The fact that an organization has taken responsibility for an attack does not indicate the level of involvement the organization had in planning and perpetrating the attack. Such involvement may come in different forms. On one end of the spectrum, an attack might be carried out by members of the organization who were sent and instructed by the organization itself. The other end might involve lone wolves in the classic sense. Along the spectrum, there are those who make use of the internet community as well as those who utilize the instructions and directions published by the various terrorist organizations. This range of possible attackers is extremely significant, as it has implications on possible counter-terrorism strategies.

Central Monitoring Systems, often used by haulage firms to monitor vehicles’ routine, may indicate any extra-ordinary situations. It is worth establishing and honing the methods of reporting to law enforcement and security apparatuses, based on these central monitoring systems, in cases in which the vehicle is used in a way outside the norm (following verification with the driver). In the Berlin Christmas Market attack, the time that passed between the first use of the vehicle
by a driver other than the Polish driver and the attack, was sufficient to have raised suspicions and pass them on to law enforcement.

The simplicity of VRAs, and the relative accessibility of digital jihad magazines which instruct on such attacks, allows lone (or non-organizationally affiliated) attackers to easily plan and perpetrate. IS, on its end, revels in attacks committed in its name, often taking responsibility for attacks that the organization, as a hierarchical structure, did not plan or organize. One can expect that the more such attacks occur (and succeed), the more they shall continue to occur, as mimicry takes place. Given this expectation, it would be prudent to prepare accordingly. Security measures oriented at preventing, or at the least-mitigating, such attacks must be employed. This, especially at events such as outdoor markets and parades, which not only serve as tempting targets for such attacks, but were specifically mentioned in IS' recommendations.
Appendix A – Amri’s Fake Identities

As noted above, Amri presented himself at various refugee and immigration centers as different people with different backgrounds, including (but not limited to)\textsuperscript{39}:


- Mohammad Hassan: born November 22, 1992 in Kafer, Egypt. Used in an absorption center in Dortmund where he was registered as an asylum seeker.

- Ahmed Almasri: born January 1, 1995 in Cafrichik, Egypt. Used at a temporary residence in Emmerich. In use until December 5, 2016 [it is unclear whether this was the same refugee center in which he used the Mohamed Hassa identity].


- Ahmed Almasri: born January 1, 1995 in Skendiria, Egypt. Used in an identity document that was issued by the foreigner’s registration office in Dortmund.


- Ahmad Zarzour: born October 22, 1995 in Ghaza, Tunisia. It is unclear where this identity was used.

Appendix B – Recent Jihadist Plots in Germany

Among the large amount of attacks in Germany in 2016, were also the following terrorist plots and attacks, the majority of which are tied to the Islamic State organization:

- February 2016: police investigated four men, reportedly Algerians, in Berlin, North Rhine-Westphalia and Lower Saxony for allegedly formed an IS-linked terrorist cell and planning to carry out an attack in Berlin. Their ringleader had been in contact with IS’ chief of external operations, Abu Mohammad Al-Adnani. Two of the men were arrested for forgery of documentation, as at least one of them entered Europe with a fake Syrian passport. The authorities also investigated a possible connection to the November 2015 Paris attacks.40

- February 26, 2016: a 16-year old female German-Moroccan attacked a police officer with a knife and injured him critically. The girl had previously attempted to travel to IS territory but was returned from Istanbul by her mother in January. Instead, her IS handlers instructed to her to carry out a "martyrdom operation" in Germany. One day before the attack, she sent a video to one of her contacts in which she claimed responsibility and discussed the attack plan.41

- April 16, 2016: two teenagers planted an improvised explosive device in front of a Sikh Temple in Essen, North Rhine-Westphalia. The detonation injured three people. The youths are sympathizers of the Islamic State organization and apparently were in contact with another member of the

aforementioned Abu Walaa network.  

- June 2016: police special forces arrested three IS sympathizers in North-Rhine Westphalia, Baden-Württemberg, and Brandenburg. A fourth suspect had handed himself in to French authorities in February 2016. According to the authorities, the attackers planned to attack the old city of Düsseldorf. Two suicide attackers were supposed to detonate themselves whereas several others would use rifles and explosives to kill as many passersby as possible.  

- July 2016: a 17-year old refugee attacked passengers in a local train in Würzburg and injured five (four of them critically). He was later killed by German police Special Forces. One day later, IS released a video of the attacker and claimed responsibility for the attack. Authorities later confirmed that the attacker had been in touch with members of IS.  

- July 26, 2016: a 26-year old refugee detonated an explosive-filled backpack in the vicinity of a music festival in Ansbach. As a result, 12 people were injured and the attacker was killed. Apparently, the attacker had been instructed by an IS handler to leave the backpack among the festival visitors but it exploded prematurely. IS claimed responsibility and published a video of the attacker.  

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• September 2016: police special forces arrested three IS members in Schleswig-Holstein. German authorities suspected that IS had sent the three Syrians to Germany and equipped them with passports, several thousand dollars, and cell phones with a special messenger service. One of them had also received training in firearms and explosive devices. According to the German Minister of Interior, Thomas de Maizière, the three relied on the same network that had previously smuggled the November 2015 Paris attackers into Europe. De Maizière also stated that they could be an IS sleeper cell.47

• September 2016: police arrested a 16-year old refugee from Syria in Cologne. He had received instructions from IS and was preparing an explosives attack.48

• October 10, 2016: police arrested a 22-years old Syrian, Jabr al-Bakr, who allegedly planned an attack against an airport in Berlin. In his apartment, police later found several hundred grams of TATP and additional chemicals.49 While authorities at first assumed that he acted on his own, German media later reported that he might have been in contact with IS. The suspect hanged himself while in custody.

• November 26, 2016 and December 5, 2016: a 12-year old German-Iraqi attempted to carry out two attacks, using homemade nail bombs, in the city of Ludwigshafen. First he placed a bomb at a Christmas market and a few

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days later he attempted to target a building housing the town hall and a shopping center. Both attempts were unsuccessful, as the first bomb failed to detonate and the second was spotted by pedestrians and was destroyed in a controlled explosion.  

- December 2016: police arrested two German teenagers (15 and 17 years old) in Mannheim and Aschaffenburg. The two had planned an attack against a public building. The two had been "motivated by Islamism" and had planned to acquire firearms. During the investigation, police seized Jihadist propaganda as well as IS flags.

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