

*Corps Relay is a regular bulletin designed to relay matters of high importance relating to Security, Crime, Terrorism and other related topics.*

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**CORPS**  
CONSULT

## ***The Power of Technology: For the Good and the Bad***

Dear Reader,

Welcome to the latest issue of Corps Relay. We focus on technology this time around but also providing an update of the key topic of armed policing in the UK. We discuss the apparent launching of a “superweapon” to help in the fight against Daesh, as well as recap over the Apple vs FBI debate and how that relates to WhatsApp’s new security upgrade. A look into future security concerns at the hands of quantum computers is also speculated upon before we introduce a new segment profiling some members of our staff.

### **The Transformer:**

The Corps Relay team found a promising article about the UK’s latest weapon in the fight against Daesh nicknamed ‘the Transformer’.

The V22 Osprey takes off and lands like a helicopter but flies like a plane, giving flexibility to operate in both rural and urban areas. The Osprey is almost twice as fast as the SAS’s current fleet of transport helicopters with a top speed of 360mph, and can transport at least 24 fully equipped personnel to both



London and Manchester in 30 minutes from the regimental headquarters near Hereford. This will decrease the time it takes for Special Forces to reach impact areas dramatically, potentially saving many more lives.

The Osprey takes off like a conventional helicopter, although climbing at 36ft per second it is much faster than any other helicopter, then the proprotors (19ft-long rotors attached to each wing) and engines rotate through 90 degrees to turn it into a fixed-wing aircraft. If coordinated attacks were to happen throughout the country the Osprey would be able to fly troops to all locations as it can fly for up to 1000 miles or eight hours without needing to refuel.

However, we did a little research and not all may be quite as it seems. [www.breakingdefense.com](http://www.breakingdefense.com) has challenged the article, by the Daily Mail, saying it is simply not true. According to them the Osprey manufacturers, Bell Helicopter and Boeing, have been trying for years to get the Royal Navy to buy V-22's to no avail. It is possible that SAS pilots have been training on Ospreys, but that's only because the US and the UK have a pilot exchange program in operation, and have done for years. This is not new news.

It seems the media are simply trying to appease the public by grabbing at straws and assuring them that if there were attacks on UK soil we'd be able to get support from the Special Armed Forces within a short period of time. Whilst this particular story may well be fictional, the public can be assured that all local authorities will react to an attack immediately and the SAS won't be far behind.

So unfortunately for now, the Transformer won't be taking to our skies in action any time soon...

## What's the Deal with Encryption?

*"Messages you send to this chat and calls are now secured with end-to-end encryption."*

If you're one of the 1 billion users of the instant messaging app WhatsApp you would have seen this message when you logged in on the 6<sup>th</sup> April, but what does this actually mean?

Encryption is the process of converting information or data into a code, primarily to prevent unauthorised access. For WhatsApp, this means that the message you send can only be read by you and the intended recipient, not even WhatsApp can gain access to the content of the message. That's not to say that WhatsApp won't be completely blind to what you send as they can access the date and time stamp of the message, the mobile phones numbers involved in the message, and most intriguingly, "any other information which WhatsApp is legally compelled to collect". What the last statement means is anybody's guess. Whilst most of us are happy that our nonsensical messages and pictures are no longer being viewed, many are concerned about the potential for harmful messages to go under the radar, from bullying to potential reconnaissance by terrorists.

WhatsApp have rolled out the security update at the perfect time. Unless you've been living under a rock for the last few weeks, you'll be aware of the high-profile clash between Apple and the FBI about gaining access to Syed Farook's work mobile phone. Syed Farook was one of the San Bernardino attackers who targeted a Department of Public Health training event and holiday party on the 2<sup>nd</sup> December 2015 and the FBI want to be able to gain access to his phone. Apple refused the request, quoting words such as "dangerous", "chilling" and "unprecedented". The FBI weren't asking for Apple to break the encryption on the iPhone in question though, primarily because they can't. Apple, like WhatsApp now, had removed themselves from being able to access encrypted devices back in 2014, ironically to try and avoid ethical dilemmas. What the FBI wanted to do was to ask Apple to alter the software on the device to make it act differently to other iPhones. After several instances of Apple refusing to cooperate with a court order, it was dropped when the FBI withdrew the case - the FBI had successfully unlocked the iPhone without Apple's help. This raises concerns for the rest of us; if the FBI can get into one of the most securely protected mobile phones, what's to stop people from trying to get into weaker phones?



## A Look into the Future...

Quantum computers bring a plethora of possibilities to the table, and could transform the world of finance. They promise to be exponentially more powerful than traditional electronic computers and incredibly fast, theoretically carrying out trillions of calculations per second. However we're still at the very early stages of quantum computing and the above are all just speculations.



Traditional computers rely on binary digits or bits – ones and zeros representing on and off or true and false statements. Quantum computers feature qubits which can be both one and zero at the same time, similar to Schrodinger's Cat (ask a physicist to tell you more, they'll both answer and not answer at the same time!). This gives subatomic particles the flexibility to behave differently, resulting in the incredible calculation speed quoted above.

Problems arise with how quick they are though. Banks rely on encryption to keep data about their transactions and customer data secure. Currently, a supercomputer could take hundreds of years to crack the codes. However, quantum computers could break them relatively easily putting the entire global financial services industry at risk. Ideally a mathematical breakthrough that creates an unbreakable encryption code is needed, says Marcos Lopez de Prado, senior managing director at Guggenheim Partners. It's the only way that a quantum computer won't be able to crack it.

## Policing in the UK – A Corps Relay Update

### Drones

The Surrey and Sussex Police force now has the largest drone project in the UK after being given £250k to add four more to their previous one. The Police force has already trained 38 of its members on how to fly the drones, and these officers will use them in units such as Gatwick Airport's armed response unit, forensic collision investigation and reconstruction, and down to neighbourhood response teams. Both the Information Commissioner's Office and the Office of the Surveillance Commissioner are satisfied with the plans to trial the drones after discussions about the privacy of members of the public were had with them.

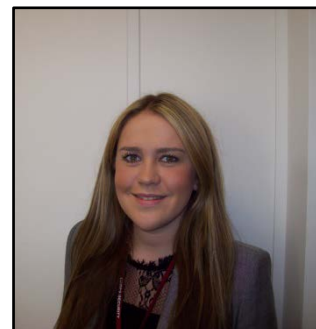
### Armed Police

David Cameron has recently pledged a further 400 armed police officers outside of London in addition to the 600 announced in January. There will also be 40 more armed-response vehicles as well as round-the-clock specialist teams based in bigger cities such as Birmingham and Manchester.

## Corps People – An Insight to our Company

Here at Corps Relay we understand the importance of understanding the business you're working with, so we're introducing a person profile to give you some information about us as a team. We start with Francesca.

Francesca Halton-Woodward, MSc joined us as a Contract Manager at the beginning of February, and says that her studies at university have been very helpful in the way that she communicates with both colleagues and customers. After studying for a BSc in Psychology, she undertook a postgraduate degree in Forensic Psychology, which detailed ways to engage with different types of people from the young to the old, and the vulnerable to the difficult. It also focused on training staff to cope with both stress and stressful situations.



Based around the question "Why do people commit crime?" a lot of her studies were centred on the real world, and this helps Francesca understand the industry that she has moved into. Once you know how and why crimes are committed it's easier to find solutions to prevent that from happening. A particular module of note was Secure Setting Management, an increasingly important subject with many prisons becoming privatised nowadays.

Francesca also does excellent work in her own time working with young offenders. She volunteers for two schemes: Aspire (part of the Safer London Foundation) and Haringey Council. At Aspire she is a volunteer mentor for young people who are either involved with crime, or are at risk of being involved in criminal activities. Aspire matches high-risk young people with a mentor who then become a part of their life. The mentor spends time with their mentee, encouraging them to give education another shot, taking up new hobbies with them and generally being a good role model that some young people don't have in their lives.



Francesca is a Community Panel Member for Haringey Council. This involves creating an action plan for young children who have committed their first non-serious crime to pay back the community. This can involve scrubbing graffiti, litter picking or even raking leaves in the local park, which Francesca also actively gets involved with. If the young offender completes their action plan, they don't get a criminal record which can seriously help career prospects in the future. Both are

excellent causes, and everyone at Corps Security wishes her the best in them.

Future issues of *Corps Relay* will continue to provide updates on policing and security here in the UK. In the meantime the terror threat level in the UK remains at severe, meaning an attack is "highly likely".

The current threat level from international terrorism for the UK was raised on 29 August 2014 and is now assessed as: **SEVERE**

The current threat level for Irish related terrorism is set separately for Northern Ireland and Great Britain

In Northern Ireland it is: **SEVERE** and in Great Britain **MODERATE**

**NOTE:**

- **CRITICAL** means that a terrorist attack is imminent
- **SEVERE** means that a terrorist attack is highly likely
- **SUBSTANTIAL** means that a terrorist attack is a strong possibility
- **MODERATE** means that a terrorist attack is possible but unlikely
- **LOW** means that a terrorist attack is unlikely

***Everyone should always remain alert to the danger of terrorism and report any suspicious activity to the police on 999 or the anti-terrorist hotline on 0800 789 321.***

***Report it!***

***You may end up saving a life or lives... and there is nothing more rewarding than that...***

For further information, or for back copies of *Corps Relay*, feel free to contact our team direct on 07773 320234 and via e-mail at [mbluestone@corpssecurity.co.uk](mailto:mbluestone@corpssecurity.co.uk) or [ebrooksbank@corpssecurity.co.uk](mailto:ebrooksbank@corpssecurity.co.uk)

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