

What Unites Organised Crime in Europe With Rebels in Myanmar? 3D-Printed Guns.

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LONDON – Earlier this month university lecturer Sibusiso Moyo and Christopher Gill were jailed for a total of 31 years for making 3D-printed guns with the intention of selling them to an organised crime gang.

Moyo, an expert in computer science and the “brains behind the operation” according to police, worked with Gill to build a hybrid 3D-printed gun called the FGC-9 – which stands for Fuck Gun Control-9mm. They were arrested after cops swooped on accomplice Majeed Rehman when one of the weapons was being transported for sale in his BMW last year, with two more of the guns found at Gill’s home.

Videos by VICE

That this took place in the UK – in what were the country’s [first-ever convictions for selling 3D-printed firearms](#) – might be surprising. But experts told VICE News that 3D-printed guns are popping up with increasing regularity across Europe, and are part of a global spread of this game-changing technology. Just 10 years after the first 3D-printed firearm was made by 25-year-old Texan gun enthusiast Cody Wilson in 2013, these downloadable weapons have spread from [gun hobbyists in the US](#) to an array of global extremists, armed rebel groups and urban crime gangs.



One of the 3D-printed guns found by police when they arrested Moyo, Gill and Rehman in Bradford last year. Photo: West Yorkshire Police.

Just four days after Moyo and Gill were sentenced last week, police raided an industrial unit in Merton, southwest London and found 3D printing machines [suspected of being used to print component parts for converted weapons](#). In October last year police found a gun factory in northwest London [producing 3D-printed firearms](#).

Police in Europe [fear](#) it will not be long until someone is killed with a 3D-printed weapon. Last month a Dutch teenager was sentenced to seven years after he was caught going equipped to carry out a gangland execution in Amsterdam masked-up in black clothing with a loaded 3D-printed FGC-9 and a Glock.

Like in the UK, police in the Netherlands [are increasingly coming across 3D-printed firearms](#) when arresting suspects or searching homes. On the outskirts of Rotterdam, a police raid in 2021 revealed a printed gun making factory with nine 3D printers and multiple printed plastic gun parts. The weapons have also been unearthed in [Finland](#) and [Australia](#).

Known as “ghost guns” in the US because they have no serial numbers and are untraceable, these weapons are frequently being found in the possession of violent extremists in Europe – most notably neo-Nazis.

White nationalist Stephen Balliet killed two people outside a synagogue in Halle, Germany in 2019 [while armed with homemade guns with 3D printed components](#). Since then there have been [a series of incidents worldwide of extremists making or attempting to make 3D-printed weapons](#).

In 2021, Spanish police [raided a 3D-printed gun factory](#) in Tenerife in Spain’s Canary Islands, also seizing several manuals on urban guerrilla warfare and white supremacist literature.

Far-right extremists have been found making printed guns in the [UK](#), [Sweden](#), [Iceland](#), the [Netherlands](#) and in [Australia](#). In January British far right activist Daniel Harris, whose video posts were shared by mass shooter Payton Gendron who killed 10 black people in a supermarket in Buffalo, New York in 2022, was [jailed for six terrorism offences, including attempting to make a 3D printed gun](#).

It’s not just far-right extremists building these guns. Last April balaclava-wearing members of Óglaigh na hÉireann, a dissident republican paramilitary group, appeared at an Easter Sunday commemoration in Belfast [armed with two FGC-22s](#), a smaller version of the FGC-9. In January a suspected Islamic extremist was caught at Heathrow airport in London with blueprints to make a [3D-printed MAC-10 sub-machine gun](#) on his phone, stored under the filename “KFC secret spice blend.”

But it is in southeast Asia where this technology is seeing most live action. In Myanmar rebels are [utilising an arsenal of guns created using 3D printers](#) to battle against a military dictatorship which snatched power during a 2021 coup.

“While 3D-printed firearms are generally only reported on in the media when either fascists or gang members use them, the vast majority of examples of real-use case of 3D-printed guns—specifically the FGC-9—is rebels under totalitarian regimes printing them to resist being crushed,” said Jake Hanrahan, a journalist and documentary filmmaker [specialising in war and conflict](#). Hanrahan previously worked at VICE News between 2014 and 2017.

“There are hundreds of 3D-printed guns being manufactured by anti-junta rebels in Myanmar, a place where it’s hard to get hold of conventional firearms. There are several videos of the FGC-9 actually being used in battle by these rebels. The FGC-9 is useful for close-quarters guerrilla ambushes, something we’ve seen the Myanmar rebels utilise it for. Sure, it’s not the most powerful gun, but if your oppressor has guns, it’s better than not having a gun.”

Zoltan Fueredi, a security expert interested in 3D-printed weapons, said rebels in Myanmar had been assisted by members of the 3D-printed gun community, which is primarily centred in the United States. “The 3D-printed gun movement consists of a diverse group of individuals who share an interest in firearms and utilise 3D printing technology. Many of the people involved in this movement are hobbyists or gun enthusiasts, and there is often a strong adherence to the ideology of the Second Amendment.”

Fueredi said members of this movement have openly supported and collaborated with rebels in Myanmar on online platforms dedicated to the discussion of 3D-printed guns. He said online platforms specialising on 3D-printed weapons such as the “fossCAD” subreddit or “rocket chat” on Deterrence Dispensed have shown exchanges between Myanmar rebels and members of the 3D-printed gun community. Fueredi said according to various sources Myanmar rebels “have been manufacturing relatively large numbers of variants of the FGC9, such as the Stingray, primarily produced for training purposes and for use in guerrilla or urban warfare”.

In 2020 Hanrahan made a documentary, [Plastic Defence](#), about 3D printed firearms in Europe. It focused on an interview with a German known as “JStark”, a key figure in the development of the FGC-9 and founder of Deterrence Dispensed, a global network supporting the spread of 3D-printed firearms.

JStark told Hanrahan he printed guns because he believed it was a human right to bear arms to protect freedom of speech in an increasingly dystopian world. He also said he was fascinated with the technology. A year later JStark would [die of a suspected heart attack](#) after a raid by German police in 2021.

Hanrahan said the FGC-9, which has a logo of a sword dripping in blood, is already becoming popular with gangs in the Netherlands. He predicted it would soon become fashionable with gangs in the UK “once they realise how easy the FGC-9 is to manufacture”.

According to Philip Boyce, firearms expert at British-based firm Forensic Equity, “anybody can download the files from the internet, go and buy a 3D printer and print a gun without anyone knowing about it”.

“If people can find an easy way of getting hold of a firearm they’ll take the easy way rather than smuggle or buy illegally. Initially people making them were just people interested in guns, but obviously criminals can see this technology as a window to acquiring weapons. It’s actually quite simple and it’s much easier to print a firearm than get a real one in the UK,” said Boyce. 3D printers can be bought for around £150, but “the better the 3D printer, the better the finish, and 3D printers are quickly getting better and cheaper to buy.”



Boyce said the other advantage of 3D-printed guns is that because they are mainly made of plastic they can be easily destroyed by dissolving them in solvent or simply burning them.

“Worldwide it’s a worrying factor in that people can print a firearm without anyone knowing, and if they know what they are doing, they can create a good firearm that will actually sustain quite a lot of shots before it fails.”

Blueprints are easy to find online and once a design file is uploaded onto a 3D printer, nozzles spray hot plastic, building the shape of the weapon up layer by layer.



An FGC-9 sub-machine gun made using a 3D printer. Photo: JStark.

Most guns now being made using 3D printers, such as the FGC-9 are hybrid designs – a mix of around 80 percent plastic printed parts, including the stock and magazine, alongside metal components such as the barrel and spring which are widely available to legally buy.

Some people are even printing [anti-tank rocket launchers](#), while others are making 3D-printed metal guns, although metal printers are prohibitively expensive.

According to a [report](#) by arms consultancy Armament Research Services (ARES), the FGC-9 circumvents European firearms regulations by avoiding the use of regulated component parts and “is the most capable 3D-printed firearm currently designed”.

“Viable, capable self-loading hybrid firearms such as the FGC-9 can be produced by the home gunsmith without using any regulated components. The advent of these increasingly capable, digitised technologies is rapidly turning the layperson into a de facto gunsmith or gunmaker,” said the report.

“The cost of producing capable 3D-printed small arms is rapidly decreasing, in-line with the reduction in price for 3D printers and other technologies. These technologies also allow users to obtain firearms without having to access criminal networks or legally controlled firearms distribution channels, maintaining anonymity and independence. It is highly likely that the FGC-9 is simply the first of a new wave of cheap, nearly-entirely-homemade 3D-printable firearm designs which solve material limitations by incorporating readily available metal components and unregulated firearms parts.”

Fueredi said 3D-printed guns are the future of a criminal gun trade.

“I believe that the proliferation of 3D-printed firearms will pose an increasing problem, gradually replacing or supplementing more traditional forms of illicit firearm trafficking and manufacturing.

“This trend enables the emergence of small but lucrative cottage industries within the criminal underground. With advancements in technology and design, the 3D-printed gun movement is constantly seeking ways to simplify production and manufacturing methods, making firearms more accessible.

“I also believe that extremists may find the production of 3D-printed firearms more appealing. By eliminating certain aspects of the traditional firearm logistics, they can potentially enhance their operational security and evade detection more easily.”