The Afghan Sigs (Part 2)

By Dr. Thomas Withington - October 7, 2021



A US Army soldier trains troops from the Afghan National Army on Wolfhound COMINT equipment. Some of these systems may now be in the possession of the Taliban and National Resistance Front.

Our first article examined the fallout from the capture of US-supplied military radios by insurgents in Afghanistan. This article looks at COMINT capabilities active in Afghanistan and the country's potential role in strategic COMINT collection.

Both the Taliban and National Resistance Force (NRF) have Communications Intelligence (COMINT) equipment. The NRF is largely located in and around Afghanistan's north-eastern Panjshir Valley and is fighting the Taliban. NRF sources confirmed to *Armada* that the group does possess COMINT equipment but declined to say which systems it uses. Sources close to the US and allied Signals Intelligence (SIGINT) community told *Armada* that the Taliban also has COMINT equipment. This allows either side to eavesdrop on hostile radio traffic. It may also help these groups locate and monitor the movements of their enemies via their radio transmissions.

Wolfhound

Sources continued that the Taliban may use Chinese-supplied COMINT kit thought to include backpack systems for gathering tactical COMINT. The asset of backpack COMINT equipment is that it can also be mounted on a vehicle for use as a mobile system. Alongside Chinese systems, the Taliban and NRF may have access to US-supplied Praemittias Systems Wolfhound COMINT kit. In 2014 the Afghan National Army (ANA) began receiving 30 examples. These were supplied to the ANA's 201st and 203rd Corps by the US Army's Programme Executive Office – Intelligence, Electronic Warfare and Sensors.

Wolfhound was developed in 2007. It is a backpack tactical COMINT system believed to cover Very/Ultra High Frequency wavebands of 30 megahertz/MHz to three gigahertz. Details of the system's performance in the public domain are scant. Nonetheless Wolfhound is thought capable of detecting and locating emissions from civilian handheld V/UHF radios. It may have a similar performance for cellphone transmissions. The Taliban have primarily used cellphone and civilian handheld radios for communications. Wolfhound displays the location of emitters of interest on a map. It is not thought capable of jamming these emitters or demodulating their transmissions. Nonetheless, Wolfhound provides a useful means to detect and track hostile forces through their RF (Radio Frequency) traffic. Wolfhound may have a residual benefit detecting and locating V/UHF RF emissions used to activate Improvised Explosive Devices (IEDs). Cellphones and civilian radio were favoured Taliban methods for activating such devices.

ANA COMINT expertise will be indispensable if the equipment is to make a tactical contribution to either side. COMINT systems need highly skilled operators. They are of limited value unless users not only understand how the systems work, but also understand the COMINT being collected. Semi-literate insurgents would struggle to use the equipment and interpret the raw COMINT it collects. That said, skilled COMINT personnel are thought to be in the ranks of both the Taliban and the NRF, according to our sources.

Beyond Wolfhound, the Taliban and NRF may use commercially available police radio scanners for tactical COMINT collection, says Jim Kilgallen, president and chief executive officer of COMINT Consulting. Mr. Kilgallen continues that at the Taliban also receive COMINT assistance from Pakistan's Inter-Services Intelligence (ISI) espionage organisation: "There is no doubt that the ISI has both provided equipment, training and ... shares its own COMINT with the Taliban when it suits Pakistani geopolitical interests." While the Taliban's COMINT equipment would be sufficient for basic tactical intelligence-gathering, the ISI's help may include operationally and tactically relevant COMINT. This could include information useful to the Taliban on the battlefield and COMINT regarding opponents of the regime.

Jamming

Question marks hang over the Taliban's ability to perform electronic attack against NRF communications and vice versa. Either organisation may have tried to reconfigure counter-IED RF systems as crude jammers, but this might be easier said than done: "Converting them depends on talent and original equipment, as they are often too narrow a focus (bandwidth) to be effectively converted into broadband or barrage communications jammers." It is possible that third parties may provide jamming systems to the Taliban: "If the ISI, People's Republic of China or Russia assist the Taliban ... they can provide the system they perceive a need for," says Mr. Kilgallen.

All three actors may be keen to access Afghanistan's natural resources and may offer battlefield and political COMINT assistance to the Taliban as payment in kind. The country possess an estimated \$1 trillion of untapped minerals according to figures from Afghanistan's Ministry of Mines and Petroleum. Given the Taliban's pariah status in the West, the Islamists may try to deepen relations with countries with discernible moral elasticity: "There is no doubt that both Russia and the PRC, in addition to the ISI, will provide advice and ... intelligence gear to the Taliban in order to curry favour, gain access to the mineral wealth or whatever other objectives they have."

Strategic SIGINT

Beyond the Taliban and NRF's tactical and operational COMINT postures, there is the wider question of Afghan territory being used as a base for third-party SIGINT collection. A report in September stated that Beijing is improving and deepening its relationship with the Taliban. Specifically, the Chinese government is contemplating a deployment to Bagram airbase, north of Kabul. This facility was famously the focal point of the US-led military deployment to Afghanistan. The Chinese government has denied it is planning any such move. Any covert or overt deployment of Chinese SIGINT capabilities to Bagram or elsewhere would yield a base from which to collect intelligence in Central Asia and possibly as far southwest as the Persian Gulf. The US maintains a military presence in the latter region most notably at Al Udeid airbase, Qatar. The Middle East is also home to several US allies like Saudi Arabia and the United Arab Emirates. Furthermore, a Chinese military and/or intelligence presence in Afghanistan potentially increases the political and military costs for any future Western military intervention there. The NRF may also benefit from foreign COMINT *materiel* and/or intelligence. Much as the PRC and Russia may determine it is in their interests to help the Taliban, other nations may have similar ideas regarding the NRF. Countries within and without Central and South Asia may perceive a distinct threat from the Taliban's extremist ideology. For example, both India and the Islamic Republic of Iran may worry that the Taliban might try to inflame hard-core Islamist cadres in their own countries. The government of India may fear that the Taliban's resurgence could have repercussions in Kashmir. Although further overt Western action against the Taliban seems unlikely, the NRF could be a useful bulwark against the Taliban. In fact, the Taliban are fighting not only the NRF but also the Islamic State of Iraq and Syria – Khorasan (ISIS-K). ISIS-K is the movement's Afghan franchise.

The NRF may already be receiving highly covert assistance in the form of special forces from sympathetic countries aiding the COMINT effort. It would be surprising if intelligence organisations from countries hostile to the Taliban are not covertly active in Afghanistan. The organisation had form in hosting the late Osama bin Laden and his Al Qaeda organisation. The Taliban may be tempted to offer hospitality to similar outfits in the future. Over-watch assets like US SIGINT satellite constellations will play their part in hoovering up relevant signals intelligence from Afghanistan. Nonetheless, on-the-ground human intelligence and COMINT can have a high value supplementing this trawl.

The Taliban and the NRF have access to tactical COMINT equipment. This aids both organisations on the battlefield. The Taliban is likely to have secured access to third party battlefield and political COMINT. To a lesser extent, the NRF may have done the same, or may do so in the future as Afghanistan's political situation develops. Similarly, Afghan territory may host the SIGINT collection assets of Western rivals in the future. It may also be hosting covert COMINT collection teams deployed by states hostile to the Taliban. These will give early warning should the country once again become home to violent organisations. SIGINT, particularly COMINT, is unlikely to diminish in importance in the Afghan theatre, in the coming years this importance may only increase.