Dr Michael Mair, Alex Holder and Elizabeth Minor – Submission to the APPG on Armed Drones, 5 December 2017

Submission of Written Evidence to the APPG Inquiry into the Use of Armed Drones: Drone Strikes, Legal Reasoning and the Need for Transparency

Executive Summary

As researchers involved in studying the specific ways in which drone strikes are conducted in real-time, in this submission we suggest there are two areas where the APPG might conclude much greater information is needed on the use of armed drones. First, more information is needed on the role that legal considerations actually play in decisions around targeting in the context of drone strikes. Legal frameworks do not interpret themselves and it is important, therefore, to investigate how they are being interpreted as part of the work of conducting drone operations. Second, in order to properly understand how legal frameworks are being interpreted during missions, much more information is needed on the operational context than is currently publicly available. In the case of the UK's drone operations, there is a great deal that simply is not known. Greater disclosure in both of the above areas – i.e., in relation to interpretations of legality in combat situations and the wider operational context such interpretations are undertaken within – would enhance accountability and transparency around those operations and begin to address concerns around the secrecy and erosion of democratic oversight that have been raised with respect to them. At a minimum, this would require the release of all data relating to at least a sample of successful and unsuccessful strikes including audio, video, imagery, digital communications and available intelligence alongside much more extensive information about the operational infrastructures including

legal governance arrangements that those drone strikes were enabled by. If the UK's drone programme is to become more publicly accountable, we believe these are areas the Inquiry should treat as priorities.

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Introduction

This submission is based on collaborative research, funded by the Economic and Social Research Council's North West Social Science Doctoral Training Partnership, involving Mair and Holder at the University of Liverpool and Minor at Article 36. The aim of the joint project is to explore battlefield legal reasoning in the context of drone strikes and it follows up on earlier projects that analysed combat misidentifications in cases of friendly fire and civilian deaths[1]. What differentiates the kind of research Mair, Holder and Minor are engaged in is its 'micro' or interactional focus. Using audio, video and transcript data, the aim is to painstakingly reconstruct engagements action by action, communicative exchange by communicative exchange as they unfold in real time. This form of highly focused research provides insights into drone operations that cannot be arrived at in any other way. Among other things, research of this kind makes it possible to examine how military personnel work together to frame and organise their actions in practice with respect to a range of legal and quasi-legal frameworks: these include rules of engagement as well as the military codes and regulations that govern the conduct of combat missions; memoranda of understanding between armed forces of different nations about their respective roles and their limits during joint operations; and overarching frameworks such as national legal systems and International Humanitarian Law. By analysing how armed drone strikes are actually conducted with a

[1] See, e.g., Elsey, C., Mair, M. & Kolanoski, M. (forthcoming) 'Violence as Work: Ethnomethodological Insights into Military Combat Operations', *Psychology of Violence*; Mair, M., Elsey, C., Smith, P.V. & Watson, P.G. (2016) 'The Violence You Were/n't Meant to See', pp. 425-443 in McGarry, R. & Walklate, S. (eds.) (2016) *The Palgrave Handbook on Criminology and War*, London: Palgrave Macmillan; Elsey, C., Mair, M., Smith, P.V. & Watson, P.G. (2016) 'Ethnomethodology, Conversation Analysis and the Study of Action-in-Interaction in Military Settings', pp. 180-95 in Williams, A.J, Jenkings, N., Woodward, R. & Rech, M.F. (eds.) *The Routledge Companion to Military Research Methods*, London: Routledge

focus on targeting practices and legal reasoning, Mair, Holder and Minor hope to contribute to discussions on the ways they can be made more publicly accountable.

Legal Reasoning in the Context of Drone Strikes

There can be little doubt that greater clarity is needed on the role that legal considerations play in decisions around targeting and the use of force in drone strikes. As things stand, how decision-making during drone strikes is shaped *in situ* by legal considerations remains largely unknown. Central aspects of the local rules and overarching legal frameworks governing drone operations have been made public. However, no rule or legal framework is sufficiently detailed to take into account all the real-world contingencies that surround its implementation in practice. In determining how the rules and frameworks should be applied in any given case, military personnel have to work out what the law says they should and should not, can and cannot do in the context of ongoing operations. Competence in determining such matters is something we expect service personnel to continuously demonstrate. Nonetheless, the practical ways in which legal issues are addressed during drone operations and service personnel exercise this competence is far from clear. This gap in our knowledge of the actual ways in which drone warfare is prosecuted is important for at least two reasons.

First, it is important because of the contentious legal status of the use of armed drones. As evidence previously submitted to the APPG Inquiry amply demonstrates[2], there are good grounds for questioning whether many drone strikes, particularly as part of targeted killing operations, are in fact legal at all. Having access to the actual processes involved in deciding to engage specific targets – routinely captured by the military in transcripts, audio and video

[2] As set out, e.g., in the June APPG Inquiry submissions from the Bureau of Investigative Journalism, Drone Wars UK and Reprieve, among others.

but not made available by them – is the only way such questions can be answered in a systematic and evidenced way.

Second, and linked to the first, the gap in knowledge is important because it speaks directly to the secrecy that seems to be a built-in feature of drone operations[3]. It is not just that we do not know how in practice decisions to undertake drone strikes within the parameters of the rule of law are arrived at, we are not permitted to know. As such, in authorising them, we are being asked to take a great deal on trust. However, given the known harms that are brought about by routine mistargeting, it is unclear why such matters should be taken on trust. Rather than allay concerns, the demands of secrecy effectively shield the use of armed drones in theatres of war from proper scrutiny and oversight. That is a difficult situation to defend. Contemporary targeting practices do regularly result in unintended, unnecessary and unacceptable harms. It is therefore critical that the public and its representatives are in a position to examine how legal reasoning might be entwined with the technologies and targeting practices those harms are brought about by.

Access to the forms of legal reasoning bound up with targeting in drone strikes remains difficult for anyone outside government and the military to secure. The only extended look inside drone operations the wider public has yet been afforded is a transcript released by the Los Angeles Times in 2011 which detailed interactions between US military personnel in the run up to a coordinated air attack, led by a drone, which resulted in the deaths of 27 Afghan civilians in the province of Uruzgan in 2010[4]. While a detailed analysis of that transcript provides an initial empirical anchor for a wider examination of the technologically-mediated

[3] See here again previous submissions to the APPG Inquiry.
[4] See Cloud, D.S. (2010) 'Anatomy of an Afghan War Tragedy', *Los Angeles Times*, April 10; Data Desk (2010) 'Transcripts of U.S. Drone Attack', *Los Angeles Times*, April 10

work of military personnel actively engaged in identifying 'threats' and the part legal reasoning plays in their targeting decisions, it is not enough. That the British public and their representatives do not have access to equivalent materials relating to the UK's drone operations means they lack important information about a major element of their country's current involvements in military conflict. Truncated, highly edited footage of the moment a strike is launched, typically released as part of official press conferences, conceals as much as it discloses. At the very least, when information is released so sparsely to the public it becomes difficult to understand which of the practices they reveal are considered to be normal, which are deemed unacceptable, or why. Furthermore, it is reasonable to assume that the heavily edited footage has been selected on the grounds that it is suitable for public consumption. At present, the public has no notion of what the criteria defining footage 'acceptable for public consumption' might be. In order to remedy these shortcomings data from at least a sample of complete missions, indeed complete drone patrols, and including failures as well as successes, i.e. instances where operations went wrong, is needed if we are to build an evidenced picture of armed drone use in practice.

Understanding the Wider Operational Context

The figure of the armed drone remains most closely associated with the US in the public imagination and the US drone programme continues to attract criticism around the globe for its secrecy and lack of transparency. It is a serious concern, therefore, that we know less about the details of the UK's use of armed drones than we do about their use by the US. While the complex, globally distributed network of systems that underpins US drone operations has gradually been brought into view, and we better understand how it is organised in practice than at any time in the past, the UK's operations have not been opened

up to view in the same way. That the fictional scenario presented in the thriller *Eye in the Sky* is the closest the UK has to a documentary like *National Bird* is troubling on several levels. Among other things, it suggests not only that the erosion of oversight mechanisms that has been a marked feature of the US drone programme has carried over into the development of its UK counterpart, but that the UK has been more successful in keeping its operations secret.

It can sometimes appear as if we have been told more about the UK's drone operations than we actually have. In fact, there are whole areas we know very little about. This is not just in relation to the details of specific strikes – successful and unsuccessful – but the operational infrastructures and attendant arrangements that make it possible to undertake those strikes at all. As the Task Force on US Drone Policy noted in 2015, when it comes to armed drones it is misleading to focus narrowly on the technology alone because drones cannot be meaningfully separated from the systems they are embedded in or from the actions pursued using them[5]. As Greene has put it, the armed drone is "an entire [distributed] apparatus, not just … [any given] machine in the air"[6]. The machine in the air relies on a network of connections in order to function – without those connections it could not fly, it could not even take off. At the same time, while the machine in the air relies on a network of connections, it is also what gives coherence to that network and allows it to come together at the moment of attack.

Although it was more focused on RAF drone operat*ors*, in his submission to the APPG Inquiry in June, Lee provided a useful initial overview of the architecture of the networks

[5] Task Force on US Drone Policy (2015) *Recommendations and Report of the Task Force on US Drone Policy, Second Edition*, Washington, DC: Stimson, pg. 21
[6] Greene, D. 2015. "Drone Vision". *Surveillance & Society* 13(2): 233-249, pg. 243

involved in RAF drone operat*ions*[7]. Lee had the opportunity to observe the work of three-person drone crews at both of the RAF's drone units: 39 Squadron at Creech Air Force Base, Nevada and XIII Squadron at RAF Waddington, Lincolnshire. Lee notes that a crew consists of "the pilot, the sensor operator, and the mission intelligence coordinator … [who are] continually observed by a duty Authorising Officer and duty Senior Mission Intelligence Coordinator in the Operations Room of each squadron". Drone operations are thus revealed to involve a minimum of five people. Lee next notes that there are "three flying phases in any Reaper flight: take off, mission phase, and landing. The actual Reaper aircraft is physically located at an air base in the Middle-East – and previously in Afghanistan – where take-offs and landings are carried out by a Launch and Recovery Element. Once the Reaper is airborne, control of the aircraft is passed by satellite link-up from the Launch and Recovery Element (which will also land the aircraft at the end of a sortie) to the UK or US-based crew". The network of connections and its distribution continues to grow: it now covers units for launch and recovery as well as, by implication, those responsible for maintaining satellite link-ups so control can be passed between units at different points in a flight. In a final remark on the operational set-up, Lee expands the scope of the networks further still: "[The] Authorising Officer …. and Senior Mission Intelligence Coordinator … are continually available in each squadron Operations Room to provide advice and backup as required to the duty crew(s). They watch the same live, full motion video feed that the crew sees inside the Ground Control Station. In addition, a senior designated officer at the appropriate command centre – say, in the Middle East – provides authorisation for each weapon release. Legal approval is incorporated into this authorisation but specific legal advice is available any time to a crew that requests it." It is important to note here that neither the Authorising Officer nor the

[7] Lee, P. (2017) 'Submission of Evidence to the All Party Parliamentary Group Inquiry on the Use of Armed Drones: How are RAF Reaper (Drone) Operators Affected by the Conduct of Recent and Ongoing Operations?', 12 June

Senior Mission Intelligence Coordinator work entirely alone but rely on a range of support staff. Some may be on-site but many others are involved off-site, engaged in ensuring that imagery, sensor readings, signals intelligence and live video feeds can be transmitted, shared and analysed by drone crews and others alike – an intelligence, communications and computing operation of formidable sophistication enabling military personnel to collaborate in real-time across three continents. Moreover, we also learn that a senior designated field officer is on-duty during missions as are legal advisors. Lee, however, does not provide additional details about the arrangements which ensure legal advice can be guaranteed on-demand, presumably a considerable undertaking in its own right.

Useful as Lee's account is, in trying to understand the networked character of drone operations better, we quite quickly come up against the limits of an operator-centric perspective. If drone crews are the primary focus, elements of the network which are relatively distant from the crew drop from view because there is little direct interaction between them. They are, in effect, rendered invisible. This can lead us to underestimate the scale of what is involved. Thanks to organisations like the Bureau of Investigative Journalism and Drone Wars UK as well as researchers working in this area[8], however, we have a better sense of where the gaps in our knowledge may lie as we now know more about the wider networks of connections and so can partially fill in the picture. We know, for instance, that a 24-hour US drone patrol requires somewhere between 180-200 people undertaking interconnected tasks as part of a transcontinental division of military labour and it would seem reasonable to assume the UK's patrols, undertaken using the same equipment often from the same bases, would operate similarly. Fielding-Smith and Black[9] have undertaken a

[8] See, e.g., Gregory, D. (2014) 'Drone Geographies', *Radical Philosophy*, 183: 7-19
[9] Fielding-Smith, A. & Black. C. (2015) ''When You Mess Up, People Die': Civilians Who Are Drone Pilots' Extra Eyes', *The Guardian*, 30 July

deeper investigation of the three main areas involved, adding detail to and extending Lee's initial sketch: launch and recovery operations, for example, involve aircraft, pilots, sensor operators, maintenance crews and a ground station; mission control operations involve a different set of pilots, sensor operators, maintenance crews, mission coordinators and leadership personnel; and processing exploitation and dissemination operations involve full motion video crews, signals intelligence operators, additional maintenance crews, a weapons tactics team and additional leadership personnel. These in turn connect outwards to, among other things, mechanisms of political and legal oversight as well as military research and development and commercial arms manufacturing. As Greene has put it, all these elements "come together just-so at the point of the [armed] drone"[10].

When we think about the armed drone, then, we cannot just restrict ourselves to weapons, vehicles, munitions, sensors and cameras plus their operators, we have to turn attention to intelligence gathering and communication systems, decision making arrangements as well as the large numbers of other individuals with different roles, training, expertise and conditions of employment inside and outside government services who are engaged in drone operations either directly or indirectly besides the drone crews. Given this, we would also suggest that holding to an operator-centric perspective on drone strikes, will lead to problematically narrow understandings of where accountability for operations lies. Where things go wrong, operators may find themselves held primarily responsible for mistakes: i.e., if drone strikes are understood to be compact, tightly knit operations orchestrated by a small group of individuals, then in those cases where strikes do result in friendly or civilian casualties, the operators may find investigations begin and end with them. This is because the involvement of those actors less publicly visible up and down the chain of command are systematically

[10] Greene (2015), pg. 237

downplayed by unduly restricted understandings of who and what is involved in a drone strike. Accountability, therefore, requires a proper accounting and, in the case of armed drones, that has to include the whole operational network.

As an additional complicating factor, the law is deeply implicated in this network of connections too. Contemporary target 'clearance' practices around drone strikes represent a major shift in the role of the law in situations of armed conflict. In particular, the case by case, moment by moment involvement of military lawyers and/or legal support personnel in conducting drone strikes – noted but not explored by Lee – represents a tightening of the operational links between law and warfighting. The use of armed drones in contemporary conflicts is thus closely bound up with the legal frameworks invoked to sanction strikes during missions. Law and warfighting are not separate, here, but interlinked, channelling the use of force and its outcomes in particular directions[11].

Military legal scholars writing about this are remarkably candid. As DiMeglio for one puts it, the role of an embedded "operational law attorney" is to "enhance the legitimacy of military operations in environments where evolving rules and a fluid situation require them not only to understand the underlying law and policy, but also to be innovative and nuanced in their legal analysis"[12]. In the words of a previous Commander of US Special Forces in Afghanistan: "Honestly I don't take a shit without one [a legal assessment], especially in this

[11] A development researchers have sought to capture using the term 'lawfare' to denote the degree to which law and warfare have merged. For further discussion see, e.g., Voetelink, J. (2017) 'Reframing Lawfare', pp. 237-254 in: Ducheine P., Osinga F. (eds) *Netherlands Annual Review of Military Studies 2017*, The Hague: T.M.C. Asser Press.

[12] DiMeglio, R.P. (2013) 'Training Army Judge Advocates to Advise Commanders as Operational Law Attorneys', *Boston College Law Review*, 54(3): 1185-1206, pg. 1189

business"[13] – a frank statement of the entanglement of legal and military considerations. It is important, therefore, to recalibrate our understanding of where the law fits into drone operations: if legal advice is as critical to a drone strike as a trigger on a gun is to firing it or a launch key for a missile strike, it is a much a part of the drone system as the trigger is to the gun or the launch key to the missile. Like other elements of the network, legal frameworks are less constraints on the use of drones than they are one of its enabling conditions.

This is relevant to the deliberations of the AAPG Inquiry in several ways. Take the following statement from the RAF's website, broadly in line with Lee's provisional sketch:

> "The Reaper RPAS … is operated by a pilot, [and] a sensor operator aided by a non-aircrew Mission Coordinator (MiC). In support of current operations the Reaper RPA is launched from an airfield within Afghanistan by crews deployed in theatre. Once airborne the mission is flown by the crews of 39 Squadron from Creech Air Force Base in the USA by secure satellite communication before control is handed back to the crew in theatre for landing."[14]

While this looks informative, it does not reveal very much. If we take the say two to three three-person crews involved in a single drone patrol shift, they constitute only a fraction of the personnel collaborating together to make the patrol possible. The others remain out-of-view. The statement lets us know that launch and recovery is handled 'in theatre' but we are not told by whom. If the US model has been adopted, a large number of those involved will be private contractors, perhaps even those working for the US. Moreover, while it may be

[13] Cited in Gregory, D. (2015) 'Angry Eyes', *Geographical Imaginations: War, Space and Security*, October 17
[14] RAF (2017) Reaper MQ9A RPAS

literally true that three people are involved in controlling the drone, its cameras and weapons at any given moment in time, they depend on a whole host of additional personnel to assist them. Given their secondment to Creech Air Force Base, it seems very likely that the UK's operations will be reliant on US technological capacity. Real-time video analysis for US drone operations, for instance, is handled via the US's Distributed Common Ground System, or DCGS, a massive communication, information and signals intelligence processing apparatus with centres across the US. Thousands of civilian screeners are recruited and employed by the DCGS in order to examine real-time video feed and imagery from drones as they come in. The UK does not have the resources or capacity to build a similar apparatus so we should ask whether US civilian personnel and contractors are participating in UK drone operations via the DCGS and the legal frameworks it works under. Of course, a separate interface and legal framework may have been devised for UK operations or we may be looking at a complex hybrid legal regime that is continually being adapted in practice. If UK operations operate at least in part under US legal frameworks or a hybridisation of US and UK law due to the complexity of the networked connections that are the defining features of drone operations, that would raise serious questions about the extent to which UK authorities could exercise control over them, having no jurisdiction over US nationals and service personnel. The point is we do not currently know: we do not who is involved, how, on what (operational and legal) terms and at what costs – financial and human. As a result, the picture currently projected of UK drone operations, i.e. that they involve relatively small groups of pilots who oversee operations and determine on their own when to undertake strikes, is wildly inaccurate. It is an image that belongs to a pre-digital era of warfare. As drone operations are said to be undertaken on behalf of the British public, the public requires a much more accurate account of drone operations and the arrangements they rest upon than

they currently have – another important argument for releasing information and increasing transparency.

Conclusion: The Need for Transparency

The contemporary battlefield or 'battlespace', as the fragmented field of contemporary warfighting has come to be called, is as much a digital as physical setting. Whatever the rhetoric, drones do not look, search or make discriminations between combatants and non-combatants, legitimate targets and illegitimate ones. That work is undertaken and those judgements made by the geographically distributed teams of individuals, collectively numbering in the hundreds, who operate these systems as part of finding targets and coordinating military action against them.

It is critical to establish an evidence-base that examines the emergence of new digital systems in warfighting, assumptions around their capacities in the context of targeting and the way both materially shape ideas and interpretations of legality. With ongoing conflicts across the world in which the UK's service personnel and its partners are involved, the role of law in war is set to remain a major focus of public and political concern. Providing information on how legal concerns and legal reasoning in combat translate into decisions to employ the use of force in the specific ways advanced weapons systems like drones allow will help ground debates around the legal frameworks that guide military action in evidence.

The call that has been articulated by civil society, international organisations and some states for greater transparency around drone strikes, recently reiterated by Reprieve[15] and Moorehead, Hussein and Alhariri[16], is a critically important first step towards addressing these issues. Drone strikes should be subjected to thorough empirical examination and the UK needs to release comprehensive information about the actual workings of its armed drone operations for that to be possible. Greater knowledge of the practices, equipment and infrastructures associated with drone warfare would in turn help establish a better understanding of their legal status and whether greater restrictions on armed drone use are needed. At the moment, drone operations are poorly understood and that situation should change. The release of information relating to the two areas we have focused on in this submission would contribute greatly to this and help to move the debate on.

[15] Reprieve (2016) *Opaque Transparency: The Obama Administration and Its Opaque Transparency on Civilians Killed in Drone Strikes*

[16] Moorehead, A., Hussein, R. & Alhariri. W. (2017) *Out of the Shadows: Recommendations to Advance Transparency in the Use of Lethal Force*, New York, NY: Columbia Law School Human Rights Clinic and Sana'a Center for Strategic Studies