All Party Parliamentary Group on Drones

Oral evidence: APPG Inquiry into '[The Use of Armed Drones: Working with Partners]'

Wednesday 12 July 2017

Witnesses: Larry Lewis; Chris Woods

Inquiry Members present: Clive Lewis MP; Baroness Stern; Lord Hodgson

Chair: Professor Michael Clarke

Q1 Prof Clarke (Chair): welcome to the first evidence session of the new parliament of the all-party parliamentary group on drones inquiry into the use of drones, in particular in relation to coalition politics and the use of drones with partners. In this session, we have Larry Lewis with us, and thank you, Larry for coming from the States for this session, and also Chris Woods, who I think will be very well known to many people here. We're going to start with Larry, and Larry, I'd ask you first, if you would, please, just to tell us just a little bit about your background in the subject, and then to move on to say something about the written submission you sent us in advance. Would you just begin, please, by telling us a little bit about your background?

> ***Larry Lewis:*** most certainly. So, right now I'm with CNA, which is basically a US think tank that supports the government. I've been there for about twenty years. With CNA, I've been detailed to DoD, and I was with DoD for about ten years, looking at operations in Iraq and Afghanistan, and my career then, kind of, goes into two parts. The first part I worked on, how to provide effective fires, how to use lethal force effectively, and then the second half, we got to the point where we were using lethal force effectively, but harming civilians, so I was asked to help, how can we better protect civilians in armed conflict. So, I did seven different studies to look at how we can do that more effectively. Then I also spent two years in the State Department, after working on the practice of civilian protection, I went and worked on the policy of civilian protection, and worked on our US national policy, as well as some implications for security systems and arms sales.

Q2 Prof Clarke: thank you, Larry. Could you go on and just give us a brief summary of the main conclusions in the written statement that you helpfully sent us?

> ***Larry Lewis:*** sure, absolutely. So, I'll focus a lot on the US Government, US military experience in Afghanistan because that was a long campaign, and there was a lot of learning involved in that process. One of the things that was essential to the progress that we made was using raw operational data to give us insights into what was actually happening, why so many casualties were

happening, and then changing our approach, changing our tactics, changing our guidance to adjust to those problems that we were seeing. So, it was a very evidence-based approach, and we've then taken all the things we've learned in Afghanistan and applied them more broadly to US operations. So, we've tried to codify those lessons and best practices and apply them in other theatres. Of course, I mentioned the national policy that we have, the Executive Order. That actually is also an encapsulation of many of those best practices that we've made a policy commitment to as a country. Also, in my view, it's very important to learn from the operational data because the history of the Afghanistan campaign shows, kind of, the first half of us really struggling with the issue of civilian casualties and trying to put measures in place, and they were ineffective. It turns out that the reason they were ineffective was because we were trying to fix the wrong things. We had common assumptions about why civilian casualties occurred that were wrong, and so when we put measures in place, they didn't fix the problem.

So, when we challenged those assumptions then we were able to put measures in place that were more effective. So, some assumptions that I think are useful for this forum, one is-, and we can talk about this in more detail if you want, there's an assumption that armed drones are more surgical than other forms of attack. I've definitely heard that in the press, I've had US Government leaders say this officially. Another one is there's a basic assumption about the mechanism for how civilian casualties occur. There's an assumption that they occur because we engage a valid military target and there are civilians in the area and so inadvertently we kill civilians that way. So, that's, sort of, an assumed mechanism for civilian casualties. There's another thing we've heard our own congress say, and that's restrictions in guarding the use of force to help protect civilians costs soldiers their lives. Then finally, measures to protect civilians keep us from succeeding against our enemies. Those are a number of different assumptions that have been said, and if you believe any of those are correct then I have actual data to show that they're not. It's one nice thing about having data. So, again, overall there's a lot we can learn, and I think one thing the Afghanistan example shows us is that there's more we can do, that we can challenge ourselves to take on additional things we can do to better protect civilians.

I mentioned the national policy on civilian casualties that has been very helpful to the United States. It's helped galvanise some progress as well as unify different elements of the Government, because civilian casualties are not just a tactical issue, it's not just a legal issue, it's a strategic issue. It affects our national interests and when we work with partners, it affects their national interests. So, it's an important issue for us to grapple with and make progress on. That national policy has helped us make progress towards that goal. We've long said as a country that we do everything possible to avoid

civilian casualties, as a matter of policy and as a matter of our principles, but what we found is, combining practice and policy is a good way to actually make that happen in practice.

Prof Clarke: thank you. The big takeaway from the written material provided is that the concept of collateral damage, the idea that weapons can go wrong, isn't the main problem with drones. It's not the drone technology itself that's defective, but that the way in which they're used, and in particular the misidentification of targets, you say, seems to account for about 50% of the civilian casualties that you looked at.

Larry Lewis: yes, that's what we found. So, when we first did the first study we were looking at 84 incidents. I mean, I've looked at hundreds and hundreds of incidents in detail. The very first study we did, there was this assumption that collateral damage is the mechanism, but we found about half the time it was actually that we were misidentifying civilians as combatants and engaging them in the mistaken belief that they were enemy targets.

Lord Hodgson: when we went to RAF Waddington, quite a lot of the things you have mentioned came up in our discussion. They pilots were very clear that they were extremely careful before a strike was made, and that a drone, unlike a manned platform, as one pilot put it, when you're travelling in an aircraft at 800 miles an hour you don't have much time, and you're always in the back of your mind thinking, you might just have a ground to air missile, and if you're going out over that territory, it's not going to be good for us. So, there's a tendency to go in, do it and come out, but they would, practically, I think, strongly contest what you've said in your evidence here. But you're sticking to it?

Larry Lewis: yes. So, it's data. So, that's helpful, right? I'd say, finding the relative rate is helpful, but what was really important in this study was looking at why. So, you know what, just looking at the rate itself is not really that useful, but why was that rate different? So, yes, unmanned platforms have advantages, and I agree with that, but they also have disadvantages. So, there were three areas of vulnerability when I looked at this specific incident. So, you know, look at the rate, but then actually look incident by incident, what are the reasons why civilian casualties happen with drones. So, there were three things. One is the soda straw effect, and that's been talked about a lot, so it's not really a surprise, but you're going to target something, so you, kind of, zoom way in, and then people walk in unobserved. So, that's one mechanism, but there are two others that are subtler but were actually probably more important. They convolve too, so they can provide feedback to each other. So, one is a matter of training, so we definitely saw issues where you had the crew for the drone where we had the imagery analyst, and they may not necessarily be as conversant with the area of operations, or they also can be more aggressive than you would typically see from a pilot. So, they can use, what we call, leading language to bias the person on the ground, or the person that's calling in the drone to action. So, some of the language that

they use makes it sound like they're is hostile intent, or a hostile act, when that's not necessarily the case. So, there's a training element there. There's also increased complexity. So, you have the imagery analyst, and they're in one location, then you have the predator crew, they're at a different location, then you have the user at a third location. Usually it's just the predator crew that is talking to the end user, and then you have the imagery analyst that's talking to the predator crew but not to the end user. So, you have, I talked about this earlier, a, kind of, Chinese whispers effect. So, you can have information that you know at this one location, it's communicated to the predator crew, and then something different goes to the operator. So, you actually have information that would have stopped the engagement if the operator had known, but he doesn't know because of this convoluted process. That's unique to armed drones.

Q3 Clive Lewis: can I just ask very quickly, would you contest then that it's possible to achieve a technological capability where some of those time lags, those technological hiccups, if you want, which perhaps contribute to the increased number of civilian casualties could be overcome? Are these technological barriers, or, as far as you can tell, no overcoming of the technological gaps, so to speak, could ever, kind of, reduce the number of civilian casualties?

Larry Lewis: they can easily be fixed, yes. You know, the full report has specific ways to mitigate that.

Clive Lewis: so, what was the outcome, given that civilians are presumed, all those people down on the ground are presumed to be civilians, what was the outcome in terms of what the US Government said in terms of what your findings concluded and what you found?

Larry Lewis: so, things have gotten somewhat better, but there are still issues with regard to training and coordination.

Clive Lewis: so, how does it ensure that it complies with international standards? You gave evidence, you know, your findings were quite shocking. What are they doing now? What are they putting in place to ensure that they're basically complying with their international obligations?

Larry Lewis: sure. I'd say in pretty much all I'm going to be talking about is really operational process kinds of issues, so each one of these things that I've looked at, you know, have also been looked at by lawyers and by investigations. So, in almost no case did they find that there was an IHL violation, which is actually, I think, a really important point as we talk about civilian casualties. Another common assumption is that civilian casualties equals an IHL violation, but for modern militaries that are like-minded, like us, that's usually not the case. So, we're trying very hard to comply with IHL, but, you know, with IHL, it's possible to still kill a lot of civilians and comply with IHL. So, IHL compliance is necessary but not sufficient in itself, that's another

take-home. There are other things we can do, and that includes, kind of, fixing some of the operational vulnerabilities and deficiencies in our processes. So, some of those things have been fixed, some communities have done additional things like co-locating the imagery analyst with the operator. You can also use several platforms in concert, so one may zoom in and another one has an over-watch function. So, there are different things that have been done to fix this, but I also won't say it's fixed completely.

Clive Lewis: you worked under the Obama administration and did this work there. Before you left, were you seeing these things change in a way that you would like to share with us, under the new administration?

Larry Lewis: sure. So, I'd say, yes, actually, I just left the State Department a month ago, so I've had some work in both administrations. What was notable in the Obama administration is this, kind of, big picture idea that it's a strategic issue. So, civilian casualties are a strategic issue. That's what drove the Presidential Policy Guidance for counter-terrorism operations. That is the driver for creating a national policy. Then there was a lot of resolve in following through on the policy commitments to that national policy. For the current administration, I mean, it's early in the administration so you guys know how chaotic it can be in a new regime, though we're not yet seeing those same policy commitments being acted out, we're still pressing for those things to happen but we haven't seen them. I'll also say there was an Executive Order very early in the new administration on countering ISIL, sorry, now it's ISIS. There was a remark in that executive order talking about taking away the policy level restrictions on rules of engagement which, to me, shows a misunderstanding of civilian casualties, more of a short-term view of the value of military action without considering the longer-term view.

Clive Lewis: so, civilian casualties are moving away from being seen as a strategic consideration?

Larry Lewis: at least judging from the one Executive Order, that would be my concern is that there's a shift away from seeing it as a strategic issue.

Q4 Baroness Stern: thank you. I'm coming back to what we were talking about with Lord Hodgson about the surprising conclusion from the assessed data from Afghanistan where growing strikes were up to ten times more likely to cause civilian casualties. You said a little bit about-, you said, in response to Lord Hodgson, you have some explanation as to how this could be explained. I wonder if you could say quite a bit more about that, because that's really quite important for us to hear from you exactly how this could be the case when it's so much believed by so many people that it's not the case.

Larry Lewis: okay. So, I mentioned the three mechanisms, right, but I think you're pointing to a larger issue, and the larger issue is that there's a widespread view that the use of these platforms leads to fewer civilian

casualties. The problem with that belief is that it's predicated on an understanding that civilian casualties are determined by a platform, when really, it's determined by an operational process. So, what we really need to be thinking about is, not how does the platform lead or not to civilian casualties, how does the operational process lead or not lead to civilian casualties. We need to be more holistic about understanding the risks and understanding how to fix remedies for that larger process. So, we need to open the aperture as we try to pursue better civilian protection. We need to not think in terms of platforms, but think in terms of, okay, what is the training, what is the guidance, and how do the coordination mechanisms happen, as well as the individual capabilities such as a predator or reaper.

Baroness Stern: what would you do to the training?

Larry Lewis: so, I started doing these studies for General McChrystal, and we found a bunch of different ways to help forces in Afghanistan get better. We changed the tactical directive, so General Petraeus's tactical directive actually has some things from our analysis in it. There's a bunch of guidance for checkpoint operations that was revised, you know, artillery fire. So, we were able to be very specific and evidence-based about procedures and tactics and so forth. When General Petraeus came in, he said he was concerned because he felt like they were getting things about right within theatre, but then units would come in and out. The units that came in, they would cause problems for, like, the first 90 days until they acclimated and figured out what the guidance actually was saying. So, there was a problem institutionally with the training. So, his next ask was, 'Okay, figure out how to fix the institutional training.' So, that was my first study for him in Afghanistan. So, what we found is, again, fixing some of these assumptions was really helpful, because if you're operating under the wrong assumptions then you're preparing for the wrong things, and that's important. One thing I started doing, and actually, I was asked to start doing road trips and briefing, presenting to some of these units before they went out, giving vignettes.

So, I built a number of operational vignettes that went through some real civilian casualty incidents, and then I even had some animation that was kind of cool. Then some lessons that you can learn from those that I had four or five. I found if I started with that, it gave the units this understanding and almost an empathy for this issue that they just didn't have before. It was very powerful. So, to me, the training to give these operators, it'd be a combination of, give them several vignettes so they can really understand how these incidents happen, and then a really focused treatment on the specific causes and the breakdowns that can happen with incidents that involve drones. So, I'd do, sort of, a combination. Later on, when I was the State Department, I was helping with the Saudi coalition in Yemen, and that's one of the things that I did with them very early on is I used some of those same vignettes, and again they were really surprised

because they thought, 'This is very different than what we thought.' It helped spur on more conversation and helped the operational learning piece.

Baroness Stern: could you tell me in maybe three or four sentences what the content of a vignette would look like?

Larry Lewis: sure, yes. So, basically, all the structure would be similar. So, usually the first slide would be the context. So, you know, on a certain day in a certain part of Afghanistan, this is, sort of, the operational context, was it a ground unit, was it an air operation, what was the expectation? Like, if they were expecting an attack, that's very important, right? So, let's understand the mindset for the force. When you're giving it, it helps the audience put their frame of reference in the right place. So, you get the context and then you walk them through. Okay, so they think there's a threat here, and they have this amount of intelligence, they get this intelligence report, they have full motion video, and the full motion video is telling you this. Sometimes I even build and have a Google Earth kind of thing, and you can see what's happening over time, and then talk through the decision that was eventually made to engage the target. Then, after that you go, 'But they were civilian.' Then the next part would be, okay, so these are the problems. Usually, there are four or five different breakdowns that all happen, so it's not just one thing, there are many things that actually contribute to this. So, you step through the different factors that all led to this incident. I also include the response, so how did the unit respond after this happened, because that's very important too. Did they do a battle damage assessment? Did they think that they'd just killed enemies? How did the reports look? Then also, the strategic communication piece, so what did the coalition say, what did news reports say and try to keep that piece in mind as well. That illustrates to whoever you're presenting to, again, this is not just a tactical incident, this is a strategic issue that we need to get right.

Baroness Stern: I have a question about Pakistan and Yemen. The work you have described focussed on Afghanistan, and I presume that that's different from, and I'm sure you'll know how to describe it, different sorts of activities going on in Pakistan and Yemen. Have you done any research on that and the differences and the outcome?

Larry Lewis: so, for US activities in Pakistan and Yemen, I've not done formal assessments. I've talked to some of the units that have been involved in things to, sort of, get a general understanding. So, what I've found is there are two levels of understanding that are helpful for reducing civilian casualties. There's this general principle level and that seems to apply wherever, even when I was with the Saudi coalition, and I also went over and visited with the Afghans, talking about, you know, general use of force. What I found is that the overarching principles just seem to apply, and so that's actually good. So, I could go over to the Saudis and start presenting to them at this first basic

level, and there was immediate progress. Also, what I found, even in Afghanistan, I did a number of different studies because some of the details of what specifically needed to happen would change. You have changes in environment, changes in the threat, changes in the way we were partners. Then there's also, you start to fix some things and then you go to the next layer of the onion, 'Oh, well now we have this other issue that arises that we never had the opportunity to have before because we had this other problem.' So, you need this iterative process to really stay on it and be as good as we can.

Prof Clarke: for the avoidance of doubt, the rather startling statistics that you've produced apply to Afghanistan. We should be clear about that.

Larry Lewis: yes, absolutely.

Prof Clarke: there's no statistical analysis so far on US operations in Yemen and Pakistan, although you're saying that many of the procedures will still apply.

Larry Lewis: yes. In fact, I've verified that some of those same breakdowns still apply in other areas, yes.

Q5 Lord Hodgson: so, you talked about process, and when you get two countries, two different nations, and how the processes fit together. When we look at the intelligence and security committee report on the RAF drone strikes that kill UK citizens, the majority of the things they are testing are severity, imminence, necessity and proportionality. Now, in your experience of the US, would those four sets be familiar, would they be offered equal weight or would we have a situation where the operational process bases don't match at all? What about other drone strikes in other countries, how has this all been coordinated so that we have a seamless hub, hopefully a seamless hub?

Larry Lewis: so I can't speak directly to UK versus US counter-terrorism policy. I mean, obviously there's the PPG and it has a very set policy and process along with it. So, that's a very deliberate process, right? I can't speak to the maturity of the UK process. I mean, certainly you don't seem to have as many activities as we do, but I just don't know personally. What I do know is I did another study, I was the lead for a US-UK study on US, UK operations in Helmand province, because in Helmand, Afghanistan, that was the first time that US and UK forces worked together tactically since China, and before World War 2. So, it was a rare opportunity to look at the, sort of, US-UK practice policy and how they work and sometimes don't work. So, there were some friction points between the US and the UK in terms of rules of engagement, and they generally stemmed from two things. One was national caveats, so typically the UK had some national caveats that they introduced in terms of rules of engagement. The other piece was the interpretation of imminence. So, you know, the US interpretation of imminence is much broader than the UK and that created some differences of

opinion, and there were some cases where UK intelligence couldn't support US operations because of that difference. One of the recommendations out of that study by the way was that we should have this policy discussion where we try to close the gap a little bit on these definitions. I think there could be some benefit to that.

Lord Hodgson: if you have a difference in, say, imminence, and the UK have supplied information that US strikes are carried out pursuant to, where does that leave the UK?

Larry Lewis: well, so my understanding is that that doesn't happen because of that very concern.

Lord Hodgson: so is there a prohibition on the information being used by the US? Does the UK have a veto attached to the use of the information it's supplying that would provide the basis for a drone strike?

Larry Lewis: yes, that's what we saw in Helmand.

Prof Clarke: thank you. We don't have so much more time on this section of the evidence, but we do want to move onto this question of the Executive Order, the US Executive Order that you drafted, and to get some sense of that and the possible capability. Let's just probe it a little bit. Baroness Stern?

Q6 Baroness Stern: could you tell us what were the reasons behind the decision to produce the Executive Order? Does it apply similarly to strikes such as those in Iraq and Syria as well of those taken outside active hostilities in places such as Pakistan and Yemen?

Larry Lewis: certainly. So, the Executive Order was published in July 2016. It was actually started in late 2015, so it was a long effort to develop it. Ultimately, it was out of a recognition that civilian casualties aren't just a tactical issue, not just a legal issue, it's a strategic issue that the US Government needs to address at the national level. So, you know, recognising that our military takes this very seriously, does a lot of things, invests a lot of resources, but ultimately, it's not just a military issue, it's a national issue. It goes into a number of different areas, right? So, there's military operations but there's also arms sales goes into this, I mean, working with partners, so there are diplomacy elements. There's also the intelligence community. So, the national policy is this recognition that really this is a government problem, it's not just a military problem. After putting this policy in place, we found it's really been helpful to get different parts of the government on the same page and working together in support of those national policy commitments. For the second part of your question, the Executive Order applies to all cases where the United States Government uses force in an armed conflict context. So, it would apply to Pakistan, Yemen, Somalia as well as Iraq and Syria.

Q7 Clive Lewis: the Executive Order commits US forces to work with NGOs. I just wanted to talk a little bit about that policy. I wondered how that worked, trying to enforce it?

> ***Larry Lewis:*** yes, and I'll definitely leave a lot of room for Chris because, I mean, that's his ground zero, and he has a lot of insight into that. So, I'll just speak a little bit on two things. So, one is there's a policy commitment to do that, and that's in section two of the Executive Order, and it's there, just like all the other pieces are in there because those are best practices that we've seen promote effectiveness. So, the US has done this in some cases and not done this in others, and what we've found is that the US is better when we combine our knowledge with NGOs, or with ICRC, or with the UN, or even with the media. The US doesn't have a monopoly on truth, it doesn't have a monopoly on data. So, the US has specific information that's very useful, it has intelligence information, it has operational information and that is very important to draw conclusions from. NGOs have other information that's equally useful. So, if you can put all of that on the table and then try to make sense of all of those things then we find we get a better answer than if we're just sub-optimised on the set of data that the military alone has. So, that's, sort of, the lesson that we've learned. I shouldn't say learned because we go back and forth. It's a lesson that we learn more than once, unfortunately, but it's something we've seen. The second piece is, DoD and State started working together in the context of Iraq and Syria, basically because the state has some unique contacts with other organisations. So, we've started this process where state would receive allegations about civilian casualties from different groups and then we'd package it together and push it to our Centcom, and then they'd include that in their analysis of allegations. Sometimes, it would be the first time they have heard of the allegation, other times they would have received the allegation, but having other information makes it a more credible assessment, it help them to be more accurate.

Clive Lewis: you mentioned best practice so I'll pick up on that. The Executive Order commits to looking at best practice and sharing best practice. I just wanted to know, who has the best practice? Which countries? What's been the outcome of the sharing?

> ***Larry Lewis:*** sure, yes. So, in the Executive Order, there are a few things that are new, and you're pointing out one of them, and that's in section 2(b)(c), which is, that we're going to work with foreign partners to help them to reduce civilian casualties. You're right, the language includes the fact that the US can learn from others too, right, so it's not just us promoting best practices to others, although that is part of it. Also, just a commitment for us to work with other countries together to get better. We did a pilot effort with the Saudi Coalition for Yemen Operations, I also went to Afghanistan for a little bit before I left State.

Clive Lewis: so you were sharing your own best practice?

Larry Lewis: yes, so there was a policy commitment to share best practices with other countries, and help them to better protect civilians, although there is openness to also hearing best practices from those other countries. So, I went to Saudi Arabia five times to work with them, to help them to better protect civilians and also be more transparent, improve their operational learning. You asked about the UK, so, I started going over and the UK became aware of some of the things that I was doing, and so they joined in. So, the last few times that I went over, it was me, US State Department, and then two UK military folks also working, so we were working side by side with the Saudi Coalition. I will say the UK military is excellent at this kind of work, they did a great job. One of the things that, one of the last things I was doing at the State Department, before the new administration, was working on a larger strategy. So, you had that one line in the Executive Order, this policy commitment, so how do you actually do it? So, I developed this overarching strategy with four different lines of effort and lots of possible activities that we can do, and part of that approach talks about how we, the US can work with likeminded partners, and specifically mentions the UK as a good candidate for working on this as well.

Q8 Prof Clarke: thank you. Larry, I'll give you an opportunity to come back at the very end for any final comments, but we should move on now to Chris Woods, and the second part of this session. Could I ask you first Chris, just to give us very briefly a summary of your interest in this topic and your background in this topic, and then I'll ask you to say something about the work you're presently working on.

Chris Woods: yes, so I've spoken before the APPG a few times, so in a previous incarnation I used to run the Bureau of Investigative Journalism's drones project, so I actually have a view of the US administration prior to the Executive Order, when it was incredibly difficult to get these issues engaged on. For the last few years I've been running the Airwars project which is UK based but an international project, which is focused on international air strikes, not just drones, but all airpower in Iraq, Syria and to a lesser extent, Libya. Looking there, particularly at reports of civilian casualties from the ground, and that began as a similar modelling project to the Bureau, very much an outside perspective but over time, through the impact of the Executive Order that Larry was so instrumental in getting off the ground, we started to get quite significant engagement with the work that we did. Not just with Centcom, but also with the Coalition, with the State Department, and other allies and the UK has been significant on that as well. So, for example, we had a formal reporting mechanism in place for the British, I think eleven months before we got it from the State Department. Just to pick up on where things are now with the

Executive Order, just very briefly, to address that, we still have our engagement, our formal engagement with the Statement Department, it's still in place.

I think there were concerns that under the new administration we might see transparency take a tumble, the Executive Order get pushed back. For the moment it's still in place. At a tactical level it's much better, we have much better engagement with the Coalition, with Centcom, with UK MoD. At a strategic level we are starting to see it fall away, which is unfortunate. So, we do have regular outreach from the State Department, but our understanding, Larry's old team has been very much scaled back now, that there's not the same kind of interdepartmental engagement that we saw in the back end of the Obama administration. So, unfortunately, some of those very strong benefits that we saw at under that administration do seem to be falling away.

Prof Clarke: thank you. Airwars studies have challenged the assumption which the MoD and the government has repeatedly made, that they are not aware of civilian casualties in the battle against Daesh. Would you like to comment on that in light of your work?

Chris Woods: yes, I mean Airwars, in a sense, began from a philosophical position, which was a concern with an emerging military narrative in recent conflicts. We all know the benefits of relative precision in Western war fighting, weapons have got better, they've got more accurate, they do less harm to non-combatants. We'd seen this creeping narrative of absolute precision, that somehow our military campaigns were no longer harming civilians. We saw the CIA claiming in Pakistan, no casualties, we saw NATO, at the end of Libya in 2011 make a similar claim, Russia making the same claim today in Syria. We didn't feel that the evidence in the battlefield was bearing that out, and we thought, with the technologies available today, most Iraqis, most Syrians are online, they are able to post information, the concept of the anonymous civilian casualties is maybe not something that's as relevant as it used to be. Perhaps we could test that by actually seeing what Iraqis and Syrians themselves were reporting out. So, primarily, Airwars gathers, at a very local level, hyperlocal is the hip term for this, so hyperlocal, local media and social media, because Iraqis and Syrians, this information may not be being reported in conventional news but they are reporting it to each other by sharing this information among themselves. So, our researchers are primarily Iraqis and Syrians, they work 99% in Arabic and they gather this information together.

It turns out it builds a very different image of the battlefield, but one built from the civilian perspective up, rather than from the air campaign down. I think the interesting thing about Airwars and our engagement with the military has been a recognition on both sides that there is a gap between these positions, and both sides being willing to explore the space between. Militaries have,

particularly the Americans and the British, have ventured into that space and decided to sit down with Airwars, and engage with the kind of material that we're generating, and to illustrate that, the Coalition now has a monthly civilian casualty report that it puts out. We think it's a very good thing that it does. One third of all the cases conceded by the Coalition this month in the report that they put out were direct referrals from Airwars, so clearly they are taking notice of outside organisations, they're stepping outside their own comfort zones, and we think that's a good thing. Still a very big gap though, our estimate, we think the coalition has killed a minimum of between 4,500 and 6,000 civilians, the coalition places its own estimate at a minimum of around 600, so there is a significant gap between our position and the Coalition's.

Q9 Baroness Stern: you recently revealed that non-US coalition partners were responsible for eighty civilian deaths, but nobody seems to be prepared to take responsibility for those. Can you tell us a bit more about that?

Chris Woods: yes, absolutely. So, American officials, military officials have indicated for quite a while to Airwars their concerns that their allies were not stepping forward. We have been working with Centcom, for example, for more than a year on their practice. There's been a lot of engagement, the Americans admitted their first civilian casualties more than 2 years ago, and have admitted more than 400 fatalities. There was, I think, concern among American officials that the Coalition was creating this space where the other allies did not have to report out their own civilian casualties. It mattered, I think, for two reasons that they did, the first is that each nation under the terms of the Coalition was individually liable for the civilians it harmed, and for compensation or solatium payments. Then there is also a moral question about individual nations accepting responsibility for the harm that they have done, just to echo Larry's point by the way, in almost all cases we think the civilians who died have not been unlawfully killed, our engagement with the coalition has been around mitigation. We don't really frame our conversations around IHL, and I think that's one of the reasons that we've had the space at the table, because the traditional NGO response has been to engage an attack around IHL issues, and the military response to that is always very defensive.

Whereas we find that by framing it more around mitigation, which is actually the terms of the Executive Order, that creates a space I think for both sides to talk. So, there's also the question of the individual allies owning up, and also telling their own populations at home that perhaps the real consequences of the war that they're involved in. So, there was very curious wording in the April coalition report, where the coalition used a very strange bit of phrasing to say that there were 80 deaths admitted, but they were not linked to any particular event. We just asked American officials straight out, 'Were these American fatalities?' They came back and said, 'No, these were non-American fatalities as part of

the Coalition.' So, we then reached out as Airwars to all twelve of the allies, and each of them either refused to answer, fudged the answer, the French found three separate ways of not answering the question, very politely. Or, in the case of allies like Britain, they came forward and said categorically they had not harmed civilians. But here was the problem. We were told by the Americans that there was a document in which these 80 deaths were listed, and that document listed the event, the date, the circumstances, and crucially, which nation had, in the US view, been responsible for those fatalities, and that document had been shared with the nations responsible.

I think this is where we get into more troubling territory, because it's clear that some nations are deliberately withholding this information from their publics, there's no doubt in my mind that that information is being withheld. Which nations is the difficult question.

Q10 Clive Lewis: so it didn't say anything particularly to the UK? And you're talking about which countries withhold that information and which countries share it. Air Commodore Stringer recently told the BBC that the US have not shared any information suggesting that the UK may have been involved in civilian casualties. Do you think the UK would have been aware of, or involved in the allegations, the investigations and the conclusions?

Chris Woods: I have to be somewhat careful how I answer this, because I've had conversations with British officials which have been confidential and they should be confidential. We talk with people on the operations side fairly frequently. If I can say that I was surprised by that response. As I say, we are aware that individual nations were shown this document, and we have been made aware of a number of nations which have been shown that document. Another nation, not the UK, has categorically told us that it has harmed civilians in a specific event, but is still publicly stating that it has not harmed civilians. So, there is a real tension here. But I was surprised to hear that British officials, in the view of Air Commodore Stringer, had not seen that document, that may be something he was not personally aware of, but that may be a question to ask more widely within the MoD, would be how I'd raise that.

Baroness Stern: why do you think this is?

Chris Woods: I think that civilian casualties are hugely controversial. They have an ability to sap national support for conflicts, understandably, they are not popular. There's been quite a lot of opinion poll modelling in the United States that shows that if you ask people about drone strikes on terrorists there's about 60% support. If you say that those strikes might result in civilian casualties and ask the same question, support falls away by 20, even 25%. General publics are quite attuned to this issue, and I think there's discomfort in having this discussed back at home. I think also, the war in Iraq and Syria is a

very different war from many of the post 9/11 conflicts that we've been fighting, which have been fairly low intensity generally, and primarily in rural areas. These are heavy airstrikes, 23,000 airstrikes by the Coalition now, primarily now on urban centres with very heavy civilian populations, and very high civilian casualties. We estimate that certainly, between 900 and 1,200 civilians have been killed by the coalition, just in the siege of Mosul, in the last few months. More than 7,000 deaths were alleged from that particular campaign, from Coalition action, so these are potentially very high casualty numbers, relative to what we're used to, and I think there is a concern about that being something that the media for example, might run with, or certain opposition groups might run with, and so on.

So, the Danish official defence spokesman actually went on the record at one point and said that Denmark was happy to hide in the crowd, when it came to the Coalition, and I think that is the general view of many of America's allies, that they are comfortable to be within a crowd, rather than stepping forward.

Lord Hodgson: do you think there might be a bigger concern about retribution for such events to increase the risk of harm to civilians here at home?

Chris Woods: I think that's a very valid concern. I think national security and operational security issues, you have to take very seriously indeed. So, we did a transparency audit which we published last December, where we worked with a lot of the militaries involved in the Coalition, and it was a question we asked all of them, had greater or less transparency created more or less security concerns, for example. The general response was no. Being more transparent had not put them at greater harm. The Australians for example, until very recently had argued that they couldn't be transparent about the locations of their strikes because it would lead to Daesh propaganda. I think the UK's far greater transparency was instrumental in helping convince the Australians that they could go a lot further and in fact the Australians have shifted pretty close to the British reporting model now. The sky has not fallen in which I think is a very good thing. I think it's worth saying, by the way, that among all the Coalition allies, we actually rate the British as the most transparent. I mean they have actually set a gold standard in terms of transparency within the Coalition. That's a very good thing. The challenge we have is that transparency doesn't necessarily equate to accountability. When it comes to civilian casualties, they are entirely different things.

Q11 Lord Hodgson: does the Executive Order require the US to say to the other states: take responsibility?

Chris Woods: it does. It is within the Order and the Order still stands, that the US must account for civilian casualties, and we've certainly found that. There

has been a significant willingness on the part of the American military to engage with the Executive Order. Sometimes we can have quite a tense relationship with the Coalition and with Centcom, but it's still a productive one. Quite a lot of data gets exchanged backwards and forwards between ourselves and the US military now. We alert them to the locations of all allegations every month now, it's something we are very open to sharing with them. They will share with us on a very regular basis now, the locations of where they have killed civilians, that's actually very helpful information and will ultimately be very important in terms of compensation for example, or reconciliation. So, there's a lot that's happened, I think in part because of the Executive Order. Something also that Larry and I were talking about very briefly before the session, it's also I think about the command cadre within the US military and other militaries at the moment. A lot of folk at the top of the US military went through Iraq first time round, went through Afghanistan, learnt the hard way why not killing civilians is a strategic issue. Say for example, you have commanders like General Votel, the head of Centcom, who has been an absolutely key figure in driving a dominant place for civilian casualty mitigation within his command.

Interestingly, President Trump has delegated power down to commanders so if you've got a commander like Votel who's very much in favour of civilian casualty mitigation, that can be a good thing, civilians may actually benefit from that. The problem comes from the next commander if they are less attuned, and they think that's why the loss of a strategic position is potentially problematic.

Lord Hodgson: so if casualties are reported it will either be attributed to the US or to the Coalition?

Chris Woods: That has happened up until very recently. Unfortunately, when they reported out those eighty non-US deaths, the Coalition changed its reporting mechanism, and the US did as well. So the United States no longer is disaggregating itself from the Coalition data. We're told the reason for that is so the other allies can now start reporting the civilians they are killing, and subsume that within the Coalition tally, because they were withholding their own investigations and their own tallies we understand, to some degree. The downside of that is we have actually lost American transparency, to bring the other allies in, and I don't think that's actually a healthy thing myself.

Q12 Lord Hodgson: you said before that the UK was rated high for transparency. So when last year you called on the MoD to commission an independent review, what additional information were you seeking, why did you do it and what were you hoping to get?

Chris Woods: so, as part of our audit last year we assessed Britain, at that point I think we placed Canada above the UK but the UK was pretty much there. I think the challenge we had with the UK for a while is it was being less

transparent about its drone strikes, but that got resolved. I think also when we reviewed Britain around its reporting mechanisms, its engagement, four year responses, parliamentary questions, answers, the amount of information the British make public about the conflict is incredibly important, and incredibly valuable. So, that's why we say they set that gold standard. Where we think it falls down is this British position where they say they are unaware of having harmed any civilians, because we are now at a point where the UK has conducted more than 1,400 airstrikes. That's airstrikes, that's not munitions. There's this very strange Coalition thing called a strike which can be multiple aircraft, multiple munitions, even multiple locations. The Defence Secretary went on the record just two days ago saying Britain was second only to the United States in bombing Mosul in the recent campaign. 750 targets hit by Britain in Mosul during this recent siege, and we still claim zero civilian casualties.

Now, our view is, based on modelling of aerial conflicts, so for example, you can look at the Obama White House data for the drone campaign, where the official US Government data shows that one civilian was harmed for every seven of those covert clandestine airstrikes. You can look at UN data modelled in Afghanistan, which shows that roughly one civilian is killed for every five to ten airstrikes in Afghanistan. Or, you can just look at the American data for Iraq and Syria today, which shows, according to official US data, they're unfortunately killing 1 civilian for every 40 of their airstrikes. That's their official tally. Then you go back and you look at Britain having conducted 1,400 airstrikes and claiming zero civilian casualties. Now, there are reasons why the British may be harming far fewer non-combatants than the Americans, and that's primarily around rules of engagement and how stepped back the British are, I think that's a very valid point. But I don't think it's possible for the UK to have conducted so many airstrikes and not to have harmed civilians. So, our view is, if the British repeatedly cannot see civilian harm, but all of the modelling indicates that we should be seeing civilian harm, then that suggests that the aerial civcas monitoring that the MoD is using is not fit for purpose. We think the MoD should be taking a very hard look at its civcas monitoring, and seeing why it's not detecting what all the modelling says should be being detected. Also, British officials have stepped back from that very absolute position they had for a while where they said we have not harmed civilians. Now they will only say we are not aware of harming civilians, and I think that is an important distinction.

We just think that to make that claim, on so many airstrikes, given where we are bombing, which right now is Mosul and Raqqa, where extraordinary numbers of civilians are being reported killed every week by the way, it's simply implausible to claim that somehow our munitions are perfect, and don't harm civilians.

Lord Hodgson: I accept what you said about the number being zero, but of course, the step back argument is very prevalent because when you talk about the stress of the drone pilots, our frequent response is, yes it is stressful, the real stress is felt by the commander who's got to wait before giving permission, and it's criminally stressful.

> ***Chris Woods:*** I think there's certainly truth in there, and we do think that you can get these significant differences between nations within a coalition, and under this present administration, for a number of reasons we have seen a very steep, very rapid acceleration of civilian fatalities. According to the coalition's own modelling, 40% of all the fatalities, civilian fatalities in this 3 year war have occurred in the first 4 months of the Trump presidency. 40%. That is, we did not see that coming, we did not expect that to come. So, of the three year war, all the civilian casualties that the coalition has admitted to, 40% have been declared as taking place under the Trump presidency.

Prof Clarke: since January this year?

> ***Chris Woods:*** since January 20th this year. That's between January 20th and May 27th, which is the last fatality they've admitted. That is a very steep, very rapid jump, and the numbers didn't actually start tracking up until March. There was about a six week gap, where they were sort of constant with the Obama administration. Then we hit March, and we saw basically a five-fold increase in civilian fatalities, and it stayed at that new plateau ever since. Now, a lot of that can be explained away by Raqqa and Mosul. We are in the final stages of the war, those two cities are under simultaneous assault, it was always expected that the highest fatalities would occur in this stage of the war. Even so, we think those numbers cannot be explained alone by Raqqa and Mosul. We think something else probably is happening, and it's probably relating to the Americans in particular, based on some modelling that we've done for Syria. So, there's also a challenge I think for countries like Britain with their stepped-back ROEs, the gap between what Britain is prepared to do on the battlefield, and perhaps the United States, is maybe getting wider and wider, and that may create tensions within the coalition over time. Partly because Britain and other allies are going to become implicated with those much higher civilian casualties.

Q13 Lord Hodgson: the US has people flying drones who have not had military experience. If it comes to the situation where the RAF is taking on people who have not flown in combat or anywhere else, to fly drones, are there special dangers we should be concerned about?

> ***Larry Lewis***: I don't know of any armed drone that's flying that doesn't have military personnel.

Chris Woods: I've certainly not heard the British were considering. It's officer only, or had been for a long time I think, on British drones, and in the US it's a mix of officers and the pilots, and non-commissioned men and women are the analysts. I mean, certainly, it's one of the things we know because the British share so much data with us on their drone use in Iraq and Syria, I think at least a quarter of all British airstrikes in Iraq and Syria are still by armed drone. It is a ferocious temper for such a tiny fleet of reapers, and my worry actually is that the UK is not learning from the lessons that the US learnt a very hard way. Of, when you subject the men and women in your drone programme to repeated pressures over many, many years, with a very high tempo of activities, you burn them out, and there are particular stresses involved for pilots and analysts in terms of remote warfare that can have quite challenging consequences for people's personal lives. I think the sheer tempo of those British strikes is something that troubles me.

Prof Clarke: I'd like you both just to make a final statement, very briefly, what takeaway you'd like us to have from this session. What is the one thing you'd like us to take away? Also, if you can, I'd just like to pose to you the big question, to what extent is the UK and US sharing significant assets in this process? To what extent are the US and the UK really sharing material that matters? Larry, can I ask you for a final comment?

Larry Lewis: Okay, sure, so I've been fortunate enough to have a number of conversations throughout the day today too, and being asked a number of times, so the US has gone through all this development in Afghanistan, and at the national policy level. Partially, we did it at the time that we did because we were the lead for the Coalition, so there was a lot of pressure, and we also just felt that pressure more acutely, and I think the lesson that civilian casualties are a strategic issue was really hammered to us because of that role, and because we had so many operations. So, I would expect as the UK continues at a reasonable tempo, this is something that you're also going to experience, just at a later date. So, when I was asked, what can the UK do, and learn from the US experience, I would say a couple of things. First of all, realising that civilian casualties is not just an IHL issue, but it's a strategic, national issue, and you know, consider the US practice of a national policy. What we've found is that developing and using this national policy kind of galvanised different elements of the Government to have these conversations and talk about risk, and talk about trade-off in a way that we just didn't have a at a national level. We delegated it to the military which was, that is part of their business but it's also, this is a foreign policy issue as well. It even has trickled down into, okay, how do we work with partners?

We have different conversations now in how we work with partners and deal with how our interests are affected, and their interests are affected when they cause civilian casualties. Certainly, that has been an issue I know the UK has been grappling with this week, about the Saudi judgement. So, how do you think, hopefully the lessons that the US has learned in this regard can help the UK as you wrestle with these issues.

Chris Woods: in terms of what the UK can learn, I think the United States military has been quite courageous in the wake of the Executive Order. It could have just responded in a pat way, it could have made the gestures, but it has actually ventured into some quite challenging territory. So, if you look at, so the United States has admitted responsibility specifically for more than 100 events in Iraq and Syria. Half of those cases were never publicly reported in the follow up, there was never a report locally by Iraqis and Syrians that those civilians were harmed. So, that was American pilots and analysts coming forward themselves and raising a hand and saying, 'You know what? I think there's a potential problem with this event.' Analysis is then done, harm is admitted, and fatalities and injuries are recognised. That is something very positive to be encouraged I think, and something we're very pleased to see within the US military. My concern with the British military at the moment is, we're so locked into this zero casualty narrative, that it must be very, very hard for a British pilot or analyst to step forward and say, 'There may be a problem.' I worry that we're not creating the space, as the Americans have, for our own pilots and analysts to step forward. We're not saying that these civilians were unlawfully killed, we accept that almost all of these deaths will have been accidental. That happens in war.

If we don't create the space where our military personnel can be open, I think that's a big problem, and that would be my point.

Prof Clarke: thank you very much. On behalf of the inquiry, thank you for your time, thanks for sharing some of your research with us, which was extremely specific and very stark in some of its conclusions. Putting that research into such an expert perspective will help us greatly as we go forward into writing the report.