# **Drone Wars UK submission to APPG Drones Inquiry**

The Use of Armed Drones: Working with Partners

16 March 2017

#### Introduction

Drone Wars UK is a small British NGO established in 2010 to undertake research, education and campaigning on the use of armed drones. We believe that the growing use of remotely-controlled, armed unmanned systems is enabling a lowering of the threshold for the use of lethal force as well as eroding well established human rights norms. While some argue that the technology itself is neutral, we believe that drones are a danger to global peace and security. We have seen over the past decade that once these systems are in the armoury, the temptation to use them, even beyond international law norms, becomes too great.

The APPG's inquiry into how the UK is partnering with its allies in the use of armed drones is to be welcomed. It is a timely and helpful investigation into this rarely examined aspect of the issue.

Our submission concentrates on operational aspects of joint working, rather than on policy or intelligence sharing, and is in three parts. First, we look at the beginning of the UK's use of armed drones (2004 -2014), focusing primarily on their use alongside the US in Afghanistan, while the second part (2015- present) examines current operations in Iraq and Syria. The final part looks at transparency and accountability and highlights, as examples, three particular areas where there could be more information forthcoming from the government. As part of this we have set out some specific questions which the APPG may wish to take up with the government.

Please note that various terms are used to describe the platforms discussed in this submission including Remotely Piloted Air Systems (RPAS), Unmanned Aerial Vehicles (UAVs) and drones. We use all three terms interchangeably.

Chris Cole, March 2017

## 1.0 UK-US co-operation in use of armed drone operations, 2004 - 2014

- 1.1 British RAF pilots first began operating armed Predator drones in 2004 as part of a newly formed USAF/RAF Combined Joint Predator Task Force (CJPTF), undertaking missions in Iraq as part of Operation Telic. According to the Ministry of Defence (MoD), the first strike undertaken by an RAF pilot using a US remotely controlled Predator drone took place in late 2004, striking insurgents near the Iraqi town of Najaf.<sup>1</sup>
- 1.2 The UK acquired its own armed drone capability after procuring three US Reaper unmanned aerial vehicles (UAVs) under urgent operational requirement rules in October 2006. UK Reaper operations began in Afghanistan in October 2007, with the first strike taking place at the end of May 2008.<sup>2</sup> After a UK Reaper crashed in April 2008, additional Reapers were purchased bringing the number of Reapers owned by the UK up to five and then, in July 2014, to ten.<sup>3</sup> A total of 510 weapons were fired from UK Reapers in Afghanistan in roughly 400 air strikes between May 2008 and October 2014.<sup>4</sup>
- 1.3 On 24 April 2013, in response to a question from Rehman Chishti MP, Defence Minister Andrew Robathan stated that RAF pilots had also flown approximately 2,150 missions using US Reapers in Iraq, Libya and Afghanistan between October 2006 and December 2012.<sup>5</sup>
- 1.4 Drone Wars UK submitted a Freedom of Information (FoI) request asking how many of these sorties had launched weapons and in which countries. The reply revealed that as well as operating US Predators and Reapers while embedded in the USAF, British forces in Afghanistan had sometimes borrowed US Reapers for operations.<sup>6</sup> According to the FoI response:

"There were 271 missions in Afghanistan when UK personnel utilised a US Reaper as a UK Reaper was unavailable. During these missions, UK personnel released 39 weapons."

- 1.5 These figures, relating to October 2006 to December 2012 were updated by Defence Minister Mark Francois in September 2014 and broken down by year (see Figure 1). Up to the 31 August 2014, UK forces utilised US drones on 519 occasions in Afghanistan. <sup>7</sup>
- 1.6 Separately from these Afghanistan sorties, RAF pilots have also operated US Predators and Reapers while they were officially embedded in the USAF with, for example, three RAF pilots

<sup>&</sup>lt;sup>1</sup> See Craig Hoyle, 'RAF strikes in Iraq with Predator', *Flight International*, 08.02.2005, <a href="https://www.flightglobal.com/news/articles/raf-strikes-in-iraq-with-predator-193572/">https://www.flightglobal.com/news/articles/raf-strikes-in-iraq-with-predator-193572/</a>

<sup>&</sup>lt;sup>2</sup> Craig Hoyle, 'UK cheers the Reaper UAV', *Flight International*, 16.06.08 www.flightglobal.com/articles/2008/06/16/224622/uk-cheers-the-reaper-uav.html

<sup>&</sup>lt;sup>3</sup> 'MoD: More RAF Reapers Take To The Skies': Ministry of Defence Press Release 03.07.2014 http://www.raf.mod.uk/news/archive/more-raf-reapers-take-to-the-skies-03072014

<sup>&</sup>lt;sup>4</sup> See 'Weapon releases by UK Reapers in Afghanistan by month' (compiled from Fol responses) at <a href="https://www.dronewars.net/">www.dronewars.net/</a>uk-drone-strike-list-2. See also Op Herrick (Afghanistan) Aircraft Statistics, Ministry of Defence, 29 October 2015, www.gov.uk/government/statistics/operation-herrick-afghanistan-aircraft-statistics

<sup>5</sup> Hansard, 24 Apr 2013; Column 906W

http://www.publications.parliament.uk/pa/cm201213/cmhansrd/cm130424/text/130424w0001.htm

<sup>&</sup>lt;sup>6</sup> Fol response to Drone Wars UK available at https://dronewarsuk.files.wordpress.com/2014/02/20130204-cole-reaper-weapons-released-reply-u.pdf See also Nick Hopkins, 'RAF has fired missiles in Afghanistan using US drones, MoD reveals', *The Guardian*, 09.02.2014. <a href="http://www.theguardian.com/uk-news/2014/feb/09/raf-british-crews-missiles-afghanistan-us-drones-mod">http://www.theguardian.com/uk-news/2014/feb/09/raf-british-crews-missiles-afghanistan-us-drones-mod</a>.

Written Question 207734, 8 September 2014, http://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2014-09-01/207734/

flying US Predators on operations over Libya during 2011.<sup>8</sup> The MoD refused to breakdown the overall figure (of 2,150 missions) by country or to provide details of weapon launches when UK forces were officially embedded, partly for national security reasons and partly (for Iraq) as the information is not available.<sup>9</sup>

Figure 1: Written Answer from Mark François to Angus Robertson

**Angus Robertson:** To ask the Secretary of State for Defence, on how many occasions UK forces have used a US Air Force Reaper Remotely Piloted Air System in Afghanistan in each year; and whether each such use was due to serviceability issues with RAF Reaper Remotely Piloted Air Systems.

**Mark Francois:** The number of sorties in which RAF crews have utilised a USAF Reaper to undertake a UK Sortie in Afghanistan for each year between 2008 and 2014 is given in the following table.

Year	Number of United Kingdom Sorties utilising a USAF Air Vehicle
2008	2
2009	21
2010	4
2011	64
2012	180
2013	56
2014-January to August Inclusive	192

For the majority of occasions this was due to short term unserviceability or routine scheduled servicing of a UK Reaper. The increased usage in 2012 was due to an increase in ISAF tasking, coinciding with a period of reduced UK airframe availability. This resulted in reduced resilience to cover short-term unserviceabilities from within the UK Reaper force. The increased usage in 2014 was due to further increased ISAF tasking utilising the crews from the UK Additional Reaper Capability. The additional UK aircrews and ISAF requirement to start the new task lines were in place prior to the additional UK airframes being prepared for operations in theatre. Consequently, while the new UK airframes were temporarily unavailable for tasking, the additional ISAF task lines with UK crews were flown utilising USAF aircraft

Excerpted from Hansard, Written question - 207734, 25 November 2014

1.7 On 4 September 2013 in response to a question from Tom Watson MP on the number of times UK forces flew armed drones over Libya, Defence Minister Andrew Robathan stated that "UK personnel embedded with United States forces contributed to around 200 armed remotely piloted air system missions" over Libya. However we know from information published by NATO in January 2012 that a total of 250 armed UAV flights were conducted

<sup>&</sup>lt;sup>8</sup> Hansard, 15 Oct 2013 : Column 637W

https://www.publications.parliament.uk/pa/cm201314/cmhansrd/cm131015/text/131015w0001.htm#131015w0001.htm\_s pnew18

<sup>&</sup>lt;sup>9</sup> See Fol response in note 6.

<sup>&</sup>lt;sup>10</sup> Hansard, 4 Sep 2013 : Column 405W,

- during the campaign.<sup>11</sup> It is beyond credulity that the three UK personnel embedded in the USAF at that time flew 80% of these missions, so it seems that Mr Robathan was being expansive in his use of 'contributed to'.
- 1.8 In June 2013, Defence Minister Andrew Robathan told Tom Watson MP that while under the US-UK Reaper agreement the USAF could request use of a UK Reaper airframe, the option had not been taken up.<sup>12</sup> In January 2014, Minister Anna Soubry also stated that outside of the launch and recovery phase, UK Reapers had always been operated by UK pilots.<sup>13</sup>
- 1.9 In his autobiography, 'Predator: The Remote-Control Air War Over Iraq and Afghanistan A Pilot's Story', Matt Martin recounts an incident from 2006 when a British crew were flying (presumably at that time) a US Predator over Afghanistan. The British pilot controlling the Predator from Nellis AFB in Nevada "wavered", as Martin put it, from undertaking a strike apparently due to British rules of engagement. Martin, as mission commander, despatched an American crew to the Ground Control Station to take over the controls and the strike was duly launched, which Martin reports killed "four hostiles". 14
- 1.10 On 19 December 2014, the MoD confirmed to Drone Wars UK that all ten UK Reapers had left Afghanistan and been relocated to the UK and the Middle East.<sup>15</sup>

## 2.0 UK-US co-operation in use of armed drone operations, 2014 - present

- 2.1 On 26 September 2014, Parliament debated a resolution to undertake air strikes against ISIS in Iraq following a request for help from the Iraqi authorities.<sup>16</sup> The government motion argued that Iraq's request for military assistance gave a clear legal basis for such action in Iraq but not in Syria. Parliament voted overwhelmingly to support the motion and UK armed Tornado sorties began over Iraq the next day with the first UK airstrike occurring on 30 September.<sup>17</sup>
- 2.2 On October 16, the UK MoD announced that UK Reapers were to be deployed from Afghanistan for operations in Iraq. The first Reaper flight took place on October 22, with the first Reaper strike occurring on November 9.18
- 2.3 On 21 October 2014 the MoD announced that UK Reapers and Rivet Joint aircraft would begin surveillance flights over Syria. When questioned by the media about legal authorisation

http://www.publications.parliament.uk/pa/cm201415/cmhansrd/cm140926/debtext/140926-0001.htm#1409266000001

Letter from Peter Olson, NATO Legal Advisor to Chair of International Commission of Inquiry on Libya, United Nations dated 23 January 2012Available at http://www.nato.int/nato\_static/assets/pdf/pdf\_2012\_05/20120514\_120514-NATO\_1st\_ICIL\_response.pdf

<sup>&</sup>lt;sup>12</sup> Hansard, 12 Jun 2013 : Column 327W,

 $https://www.publications.parliament.uk/pa/cm201314/cmhansrd/cm130612/text/130612w0001.htm\#130612w0001.htm\_wqn32$ 

<sup>&</sup>lt;sup>13</sup> Hansard, 15 Jan 2014 : Column 578W,

 $https://www.publications.parliament.uk/pa/cm201314/cmhansrd/cm140115/text/140115w0001.htm\#140115w0001.htm\_wan69$ 

<sup>&</sup>lt;sup>14</sup> Matt J. Martin, Charles W. Sasser, *Predator: The Remote-Control Air War Over Iraq and Afghanistan – A Pilot's Story*, Zenith Press, 2010, p.285

<sup>&</sup>lt;sup>15</sup> Fol response to Drone Wars UK, 19 December 2014, https://dronewarsuk.files.wordpress.com/2014/12/20141127-foi-cole-reaper-locations-final-respone.pdf

<sup>&</sup>lt;sup>16</sup> Hansard 26 Sep 2014: Column 1255

<sup>&</sup>lt;sup>17</sup> 'RAF conducts first air strikes of Iraq mission', MoD Press Release 30 September 2014 https://www.gov.uk/government/news/raf-conducts-first-air-strikes-of-iraq-mission--2

<sup>&</sup>lt;sup>18</sup> UK deploys Reaper to the Middle East. MoD press release <a href="https://www.gov.uk/government/news/uk-deploys-reaper-to-the-middle-east">https://www.gov.uk/government/news/uk-deploys-reaper-to-the-middle-east</a>. First flight and first Reaper air strike see <a href="https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2014-11-06/213741/">https://www.gov.uk/government/news/uk-deploys-reaper-to-the-middle-east</a>. First flight and first Reaper air strike see <a href="https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2014-11-06/213741/">https://www.gov.uk/government/news/uk-deploys-reaper-to-the-middle-east</a>. First flight and first Reaper air strike see <a href="https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2014-11-06/213741/">https://www.parliament.uk/business/publications/written-questions/written-qu

for such missions, the Prime Minister's official spokesman said the flights did not amount to military action:

"The prime minister and government have made clear that we would return to parliament for a separate decision if we were proposing to take military action. This is about intelligence-gathering.<sup>19</sup>

2.4 According to figures released to Drone Wars UK, around 230 UK Reaper drone flights (25% of Reaper flights to that point) took place within Syria prior to the December 2015 parliamentary debate (see Table 1). Ministers stated at the time that the flights within Syria were unarmed. However this was not the case with the MoD confirming to Drone Wars UK that all Reaper flights into Syria prior to the December 2015 resolution were in fact armed.<sup>20</sup>

Table1: British Reaper missions within Syria prior to Dec 2015 Parliamentary resolution

Month	UK Reaper missions solely in Iraq	UK Reaper missions entering Syria	Total UK Reaper missions	% of UK Reaper missions in Syria
Oct 2014	10	0	10	0%
Nov 2014	47	1	48	2%
Dec 2014	45	4	49	8%
Jan 2015	63	8	71	11%
Feb 2015	59	8	67	12%
Mar 2015	62	14	76	18%
Apr 2015	59	20	79	25%
May 2015	59	25	84	30%
Jun 2015	48	32	80	40%
Jul 2015	50	31	81	25%
Aug 2015	58	31	89	28%
Sep 2015	60	24	84	20%
Oct 2015	45	16	61	26%
Nov 2015	44	18	62	29%
Total	709	232	941	25%

Source: MoD responses to Drone Wars UK Freedom of Information requests (see https://dronewars.net/foi/)

2.5 Intelligence gathered by the UK Reapers in Syria was used by US and other Coalition aircraft to undertake strikes.<sup>21</sup> The Ministry of Defence twice refused FoI requests in 2015 to provide

https://hansard.parliament.uk/Commons/2015-10-20/debates/15102042000019/Syria#contribution-15102042000141 https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/470254/20151021-

FOI08237 Reaper missions in Syria-.pdf. For examples of Ministers saying Reapers were conducting unarmed surveillance missions see Philip Hammond's response to Alex Salmond, Hansard 20 Oct 2015: Column 808, http://www.publications.parliament.uk/pa/cm201516/cmhansrd/cm151020/debtext/151020-0001.htm

<sup>&</sup>lt;sup>19</sup> Rowena Mason, UK to fly military drones over Syria, *The Guardian*, 21 October 2014, <a href="http://www.theguardian.com/uk-news/2014/oct/21/uk-to-fly-military-drones-over-syria">http://www.theguardian.com/uk-news/2014/oct/21/uk-to-fly-military-drones-over-syria</a>

<sup>&</sup>lt;sup>20</sup> For MoD confirmation that British Reapers are armed in Syria see Freedom of Information response 21 October 2015 <a href="https://www.gov.uk/government/uploads/system/uploads/attachment">https://www.gov.uk/government/uploads/system/uploads/attachment</a> data/file/470254/20151021-

FOI08237 Reaper missions in Syria-.pdf. For examples of Ministers saying Reapers conducting unarmed surveillance missions see Philip Hammond's response to Alex Salmond Hansard 20 Oct 2015: Column 808

<sup>&</sup>lt;sup>21</sup> Rowena Mason, UK to fly military drones over Syria, *The Guardian*, 21 October 2014, <a href="http://www.theguardian.com/uk-news/2014/oct/21/uk-to-fly-military-drones-over-syria">http://www.theguardian.com/uk-news/2014/oct/21/uk-to-fly-military-drones-over-syria</a>. See also FCO response to PQ from Andrew Rosindell MP, 23 Feb 2015 <a href="http://www.parliament.uk/business/publications/written-questions-answers-statements/written-questions/written-questions/written-questions/commons/2015-02-11/224326/">http://www.parliament.uk/business/publications/written-questions-answers-statements/written-questions/commons/2015-02-11/224326/</a>.

details of the number of times that UK Reapers directly laser designated strikes by non-UK Coalition aircraft. However the MoD did state:

"A UK Reaper will only laser designate for another nation's aircraft where the UK's rules of engagement are met. Therefore, a UK Reaper will not facilitate an airstrike by another nation outside the parameters for the RAF."<sup>22</sup>

- 2.6 While this may appear to rule out laser designation by RAF Reapers in Syria prior to the December 2015, the RAF did launch a strike, against Reyaad Khan, in Syria in August 2015 and, according to US defence officials, a British Reaper took part in the operation to strike Mohammed Emwazi in November 2015.<sup>23</sup>
- 2.7 In contrast to Afghanistan, it appears that British forces are not utilising US armed drones for operations in Iraq and Syria. In August 2016 the MoD told us:

"The RAF has not flown any US Air Force Remotely Piloted Aircraft Systems in support of operations in Iraq and Syria for the period in question."<sup>24</sup>

2.8 While the MoD insists that its drones are predominately used for intelligence, surveillance and reconnaissance (ISR) tasks, Britain's Reapers continue to undertake strikes at the same rate as the UK's manned dedicated strike aircraft, the Tornado and the Typhoon (see Table 2). According to our analysis of MoD Fol responses, 26% of Reaper sorties have launched weapons compared to 25% of Tornado and Typhoon sorties (although Tornados and Typhoon have launched almost three times as weapons as the UK Reapers).

Table 2: Percentage of UK sorties releasing weapons 2014 - 2016

Aircraft	Location	Total missions	Total sorties*	No. of sorties with weapons fired	No of weapons fired	% of sorties with weapons fired
Reaper	Iraq	1,153	1,153	310	622	26%
	Syria*	544	544	25	48	4.6%
						. 1
Tornado /	Iraq	1,686	3,372	833	1,693	25%
Typhoon	Syria	195	390	62	158	16%
	Total	3,578	5,459	1,203	2,521	22%

<sup>\*</sup> Note: Does not include strike (and possibly other surveillance missions) on Reyaad Khan which MoD states were not part of Operation Shader. For Reaper missions there is one sortie per missions, for Typhoon and Tornado missions there are two sorties per mission as the aircraft fly in pairs. Source Fol data, see www.dronewar.net/foi

2.9 In fact, according to figures released by USAF in June 2016, we can see that the UK is using its armed drones to launch strikes significantly more than the US. Around 17% of US strikes against ISIS have been carried out by US drones (Aug 2014 – June 2016)

<sup>&</sup>lt;sup>22</sup> Fol response to Drone Wars UK, 7 August 2015, available at

<sup>&</sup>lt;sup>23</sup> Missy Ryan, Griff Witte and Adam Goldman, U.S. strike believed to have killed 'Jihadi John,' Islamic State executioner, Washington Post, 13, November, 2015, https://www.washingtonpost.com/world/national-security/us-drone-strike-targeted-jihadi-john-the-briton-linked-to-hostage-beheadings/2015/11/13/8d58595c-89df-11e5-be39-0034bb576eee story.html?utm term=.1805280b3e58

<sup>&</sup>lt;sup>24</sup> MoD Fol response 2 Aug16, https://dronewarsuk.files.wordpress.com/2016/08/20160802-foii2016\_06702\_mr\_cole-1.pdf

while over the same period, 27% of British strikes have been from UK drones.<sup>25</sup> A full summary of UK air missions in Iraq and Syria, complied from Fol data is seen in Table 3.

Table 3: Summary of UK Air Missions in Iraq and Syria 2014-2016, from Fol data.

#### Reaper

	Reaper Missions Flown Iraq	Reaper Missions Flown Syria	Total Reaper Missions Flown	Reaper 'strikes' Iraq	Reaper 'strikes' Syria	Total Reaper 'strikes'	Reaper Weapons Iraq	Reaper weapons Syria	Total Reaper weapons
2014 (Oct-Dec)	107	10	117	25	0	25	38	0	38
2015	643	247	890	162	1	163	273	1	274
2016	403	287	690	136	24	160	311	47	358
TOTAL Reaper	1,153	544	1,697	323	25	348	622	48	670

#### **Tornado**

	Tornado Missions Flown Iraq	Tornado Missions Flown Syria	Total Tornado Missions Flown	Tornado 'strikes' Iraq	Tornado 'strikes' Syria	Total Tornado 'strikes'	Tornado Weapons Iraq	Tornado weapons Syria	Total Tornado weapons
2014 (Oct-Dec)	164	0	164	40	0	40	104	0	104
2015	581	15	596	211	9	220	397	19	416
2016	431	133	564	214	29	243	488	77	565
TOTAL Tornado	1,176	148	1,324	465	38	503	989	96	1,085

#### **Typhoon**

	Typhoon Missions Flown Iraq	Typhoon Missions Flown Syria	Total Typhoon Missions Flown		Typhoon 'strikes' Iraq	Typhoon 'strikes' Syria	Total Typhoon 'strikes'		Typhoon Weapons Iraq	Typhoon weapons Syria	Total Typhoon weapons	
2014 (Oct-Dec)	0	0	0		0	0	0		0	0	0	
2015	37	10	47		29	1	30		37	3	40	
2016	473	37	510		308	15	323		667	59	726	
TOTAL Typhoon	510	47	557		337	16	353		704	62	766	

#### Reaper/Tornado/Typhoo combined

	UK Missions Flown Iraq	UK Missions Flown Syria	Total UK Missions Flown	UK 'strikes' Iraq	UK 'strikes' Syria	Total UK 'strikes'	UK Weapons fired Iraq	UK Weapons fired Syria	Total UK weapons fired
2014 (Oct-Dec)	271	10	281	65	0	65	142	0	142
2015	1,261	272	1,533	402	11	413	707	23	730
2016	1,307	457	1,764	658	68	726	1,466	183	1,649
	•	•	•		•		•	•	
TOTAL UK	2,839	739	3,578	1,125	79	1,204	2,315	206	2,521

Note: Figures compiled from responses to FoI requests to MoD, who state figures are subject to review. Does not include targeted strike on Reyaad Khan in Aug 2015 as MoD does not include in Operation Shader. For monthly figures see dronewars.net/uk-drone-strike-list-2/.

http://www.airforcemag.com/MagazineArchive/Magazine%20Documents/2016/August%202016/0816reapers.pdf; MoD Fol responses, 2015- 2016, www.dronewars.net/foi

<sup>&</sup>lt;sup>25</sup> US Reapers launched around 1,800 strikes out of a total of 10,800 US air strikes till 24 June 2016, UK Reapers launched 248 strikes out of a total of 916 UK strikes till end June 2016. Sources: Will Skowronski, Reapers and RPA Resurgence, Air Force Magazine, August 2016,

- 2.10 Importantly, the vast majority of UK air strikes against ISIS are launched under dynamic targeting procedures rather than being pre-planned. According to a FoI response from the Ministry of Defence in June 2016, out of 414 UK air strikes in Iraq and Syria during 2015, 395 were launched under dynamic targeting procedures while just 19 were pre-planned.<sup>26</sup> Dynamic targeting procedures are used when aircraft are already in the air and either 'targets of opportunity' are spotted or strikes are launched in defence of troops on the ground during direct combat.
- 2.11 As dynamically targeted strikes are launched in a short-time frame and without pre-planning it is generally recognised that such strikes are more likely to injure civilians than those that are pre-planned. Pre-planning of strikes gives time to assess possible dangers to civilians and enable strikes to be launched in a way that can minimise such danger, while dynamic targeting occurs in a much compressed timeline which may see targeting completed in minutes.

#### 3.0 US-UK co-operation on armed drone operations – Transparency issues

3.1 In this final section we want to raise three issues in relation to joint-working where we believe there should be more transparency. Firstly around the independence of UK Reaper operations, secondly on Project Crossbow and analysis of UK and US Reaper product, and finally on the number and location of the UK's deployed Reapers.

#### **UK Reaper Sovereignty**

3.2 Senior RAF officers have occasionally – and obliquely – pointed to the fact that British Reapers drones cannot currently be operated without US support. In November 2015, Air Commodore Jeff Portlock told journalists visiting RAF Waddington, in regard to the use of armed Reaper drones, that the UK was "getting very close to being able to operate on our own as a sovereign nation". He went on:

'We are interchangeable and interlinked with the US capability and our future capabilities will move us into similar interchangeability, but complete sovereign ability to do what we want with our own fleet in the future. 'You can't predict what is going to happen in the future, so if we had a role and we wanted to go and look at a certain area and other members of coalition did not, we would want the ability to go and do it ourselves.<sup>27</sup>

3.2 It is not clear exactly in what way the UK cannot currently operate its armed drones without US support. It may be a technical issue. For example although Britain's Reapers use the UK's Skynet 5 satellite to transmit sensor data and video, it may be that for purposes of command and control of the aircraft itself, the UK relies on US communications architecture.<sup>28</sup> Defence ministers have flatly refused to discuss this.<sup>29</sup> On the other hand it

<sup>&</sup>lt;sup>26</sup> MoD Fol response, 14 June 2016,

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/529297/PJHQ\_FOI\_2016\_05126\_\_\_Number\_of\_RAF\_airstrikes\_in\_Iraq\_conducted\_by\_Tornado\_and\_missions\_flown\_by\_Typhoon\_aircraft\_in\_Iraq\_and\_UK\_airstrikes in Iraq and Syria from 2014 to 2016.pdf

<sup>&</sup>lt;sup>27</sup> Larisa Brown, ISIS fighters are using human shields to protect themselves from RAF drone strikes, The Daily Mail, 20 November 2015, http://www.dailymail.co.uk/news/article-3326442/ISIS-use-human-shields-protect-RAF-drone-strikes.html

<sup>&</sup>lt;sup>28</sup> Jonathan Amos, UK Skynet military satellite system extended, BBC News, 9 March 2010, http://news.bbc.co.uk/1/hi/sci/tech/8556585.stm. See also Philip Swarts, Hughes wins satcom contract for U.K. drones, Space News, 10 March 2017. http://spacenews.com/hughes-wins-satcom-contract-for-u-k-drones/

may be a question of capacity, or even a political issue. This is unlikely to be resolved with the purchase of the new Certified Predator B Extended Range UAV (which has now been named SkyGuardian by General Atomics) to replace Reaper from 2018, as it is based on the same underlying technology.<sup>30</sup>

• In what way is the UK's use of armed Reapers reliant on the United States, and when is this likely to change?

#### **Project Crossbow**

- 3.3 While wider intelligence sharing is not covered in this submission, sharing of analysis of imagery and other intelligence gathered by drones and other aircraft is a key part of US-UK joint operations. A map in the USAF's 2014 'RPA Vector Report' confirmed that Project Crossbow based at RAF Marham in Norfolk is an important part of this work.<sup>31</sup> Operated by the RAF's Tactical Imagery Intelligence Wing (TIW), Crossbow receives and feeds information into the US Distributed Common Ground System (DCGS).
- 3.4 According to the RAF, Crossbow "provid[ed] near real time imagery intelligence analysis in support of UK and Coalition forces in Afghanistan. Analysts receive feed from the US Distributed Common Ground System (DCGS), which provides globally-networked Intelligence Surveillance and Reconnaissance (ISR) capabilities." <sup>32</sup> Air Commodore Gordon stated:

"CROSSBOW is an innovative, affordable and highly effective force multiplier that significantly enhances our combat Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) capabilities; it also serves to demonstrate the close and enduring cooperation between the RAF and USAF."<sup>33</sup>

- 3.5 As well as analysing imagery from UK and US operations in Afghanistan, ministers confirmed that Crossbow was also used for operations in Libya.<sup>34</sup> In response to parliamentary questions from Tom Watson MP, the MoD at first incorrectly stated that Crossbow was only analysing images collected by Tornados. This was later corrected.<sup>35</sup>
- 3.6 In March 2015 Tom Watson MP against raised Crossbow in the House of Commons, asking if images from UK Reapers or other coalition aircraft undertaking operations in Syria were being analysed by Project Crossbow at RAF Marham. Defence Minister Mark Francois stated:

<sup>&</sup>lt;sup>29</sup> Penny Mordaunt response to written question from Tom Watson MP, 17 June 2015, http://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2015-06-09/1522/

<sup>&</sup>lt;sup>30</sup> Beth Stevenson, UK selects Certifiable Predator B as Reaper replacement, Flight Global, 27 April 2016, www.flightglobal.com/news/articles/uk-selects-certifiable-predator-b-as-reaper-replacem-424667 See also GA-ASI Names Newest Predator B Variant, General Atomics, 27 Jan 2017,/www.ga.com/ga-asi-names-newest-predator-b-variant <sup>31</sup> USAF RPA Vector, Vision and Enabling Concepts, 2013 -2038,

http://www.af.mil/Portals/1/documents/news/USAFRPAVectorVisionandEnablingConcepts2013-2038.pdf. Map p.21 <sup>32</sup> Crossbow Capability at RAF Marham, Marham Matters, 28 April 2011, <a href="http://www.marhammattersonline.co.uk/389/33">http://www.marhammattersonline.co.uk/389/33</a> Ibid

<sup>34</sup> Hansard, 20 Jun 2013 : Column WA7,

"Data from UK Reaper missions is not currently analysed at RAF Marham by CROSSBOW. Data from coalition partner missions in Syria and Iraq is analysed when tasked to do so."

- 3.7 While this seems a clear answer, we have recently learned that the Tactical Imagery Wing (at least in part) has been deployed from RAF Marham to RAF Akrotiri in Cyprus.<sup>37</sup> So it is continues to be possible that Crossbow was analysing images from UK and US Reaper missions in Syria before the December 2015 parliamentary resolution, just not at Marham.
  - Is Project Crossbow being used to analyse information from UK and US
    Reapers and other aircraft over Iraq and Syria? Was it being used to support
    UK/US operations in Syria prior to the December 2015 parliamentary resolution
    to support use of force against ISIS in Syria?

### **UK Reaper Deployment**

- 3.8 Drone Wars UK continues to challenge the MoD's refusal to detail the number of armed drones deployed on operations against ISIS.<sup>38</sup> While the MoD is happy to disclose the number of other armed aircraft deployed as well as their location, it wants to keep deployment of its armed drones secret. We believe this is because the government wants the option to use the drones covertly, including for targeted killings.
- 3.9 We will be arguing at an Information Tribunal on this issue in July 2017 that it is in the public interest for there to be proper public and parliamentary accountability over the deployment of armed drones. It is not right that British armed drones are deployed without the knowledge of Parliament or the public. Armed drones are lowering the threshold for the use of armed force and expanding the use of targeted killing. It's vital therefore that there is proper scrutiny of their use. As one of the few countries operating these systems beyond its own borders, the UK should recognise that it has both the responsibility and also the opportunity to set high transparency standards internationally for the use of armed drones. We believe, however, if the UK refuses such basic details as the number deployed, other nations acquiring such systems are likely to follow suit.
  - How many UK Reapers are deployed on operations against ISIS? Are UK Reapers engaged on operations outside of Iraq and Syria?

<sup>&</sup>lt;sup>36</sup> Hansard 11 March 2015, Written question - 226252, http://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2015-03-04/226252/

<sup>&</sup>lt;sup>37</sup> Emma Murphy, Inside the RAF's Tactical Imagery Wing and their role in the fights against Islamic State, ITV News, 23 October 2015, http://www.itv.com/news/2015-10-23/inside-the-rafs-tactical-imagery-wing-and-their-role-in-the-fight-against-islamic-state/

<sup>&</sup>lt;sup>38</sup> Chris Cole, Where are Britain's armed drones? And why it matters we are not allowed to know, Drone Wars UK, 21 November 2016, https://dronewars.net/2016/11/21/where-are-britains-armed-drones/

## Appendix: Analysis of UK Reaper Operations in Iraq and Syria





