



Ministry of Defence

J9 FOI Secretariat

Permanent Joint Headquarters (United Kingdom)
Northwood Headquarters
Sandy Lane
Northwood
Middlesex
HA6 3HP

E-Mail: PJHQ-J9-FOI-Group@mod.gov.uk

Reference: FOI 2018/12155

Mr C Cole
chris@dronewars.net

16 November 2018

Dear Mr Cole,

We refer to your request dated 1 October 2018, which asked for the following information on Operation SHADER:

- 1) *For each month between July and September 2018, and broken down between i) Reaper, ii) Tornado, and ii) Typhoon:*
 - a) *the total number of missions undertaken by these aircraft on Operation Shader*
 - b) *the number of those missions entering Syria*
 - c) *the number of those missions entering Iraq*
- 2) *For each month between July and September 2018, the number of sorties with weapons released by a) Reaper b) Tornado, c) Typhoon, broken down between Iraq and Syria?*
- 3) *For each month between July and September 2018, the number and type of weapons released by a) Reapers, b) Tornado, c) Typhoon, broken down between Iraq and Syria?*
- 4) *The number of UK air strikes in a) Iraq and b) Syria per month from 1st July 2018 to 30 September 2018 broken down between Reaper, Tornado and Typhoon aircraft?*
- 5) *Please can you tell me, for each month between 1st July 2018 and 30 September 2018, how many hours have UK a) Reapers, b) Tornado and c) Typhoon flown on Operation Shader?*
- 6) *Further to your response of 19 December 2014 (FOI 2014/07575) please can you tell me where UK Reapers are located by geographical region?*

Your correspondence has been treated as a request for information under the Freedom of Information Act 2000 (FOIA). A search for the information has now been completed within the Ministry of Defence, and we can confirm that information concerning part of your request is held and releasable. The information requested can be found below:

With regard to questions 1), 2), 3), 4), and 5), please find the requested information at Annex A.

With regard to question 6), Reaper, the RAF's Remotely Piloted Aircraft System is located in the United Kingdom, the Middle East, and the United States of America.

The data contained in this statement is believed to be complete and correct at the time of issue. The MOD operational activity databases are frequently reviewed and any errors and omissions are corrected. It is therefore possible that future statements might not match this statement exactly. The MOD regrets any difficulty that this may cause but emphasises that our aim is to ensure that our records are as complete and correct as possible.

If you have any queries regarding the content of this letter, please contact this office in the first instance.

If you wish to complain about the handling of your request, or the content of this response, you can request an independent internal review by contacting the Information Rights Compliance team, Ground Floor, MOD Main Building, Whitehall, SW1A 2HB (e-mail CIO-FOI-IR@mod.uk). Please note that any request for an internal review should be made within 40 working days of the date of this response.

If you remain dissatisfied following an internal review, you may raise your complaint directly to the Information Commissioner under the provisions of Section 50 of the Freedom of Information Act. Please note that the Information Commissioner will not normally investigate your case until the MOD internal review process has been completed. The Information Commissioner can be contacted at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF. Further details of the role and powers of the Information Commissioner can be found on the Commissioner's website at <https://ico.org.uk/>.

Yours sincerely,

PJHQ J9 FOI Secretariat

Annex:

A. Operation SHADER Data Tables.

OPERATION SHADER DATA TABLES

1. Number of missions

Month	Iraq			Syria			Total		
	Tornado	Typhoon	Reaper	Tornado	Typhoon	Reaper	Tornado	Typhoon	Reaper
July	30	53	60	40	53	62	70	106	122
August	38	53	61	48	55	65	86	108	126
September	38	54	61	47	54	64	85	108	125
Total	106	160	182	135	162	191	241	322	373

Caveat: We do not hold data for all cases of entry into Syrian airspace by RAF Reaper, Tornado and Typhoon aircraft. The data for Syria includes missions that either transited through Syrian airspace or operated within Syrian airspace. The data for Iraq includes missions flown within Iraqi airspace but some of these might have transited Syrian airspace to reach Iraq.

2.

a) Number of sorties with weapon releases – Iraq

Month	Tornado	Typhoon	Reaper	Total
July	0	1	0	1
August	3	0	0	3
September	1	3	0	4

b) Number of sorties with weapon releases – Syria

Month	Tornado	Typhoon	Reaper	Total
July	0	0	5	5
August	0	0	3	3
September	10	12	15	37

3.

a) Number and type of weapon releases – Iraq

Month	Tornado		Typhoon	Reaper		Total
	DMSB	PWIV	PWIV	AGM-114	GBU-12	
July	0	0	1	0	0	1
August	1	5	0	0	0	6
September	0	1	6	0	0	7

b) Number and type of weapon releases – Syria

Month	Tornado		Typhoon	Reaper		Total
	DMSB	PWIV	PWIV	AGM-114	GBU-12	
July	0	0	0	6	1	7
August	0	0	0	5	0	5
September	0	15	18	20	4	57

4.

a) Number of airstrikes - Iraq

Month	Tornado	Typhoon	Reaper	Total
July	0	0	0	0
August	0	1	0	1
September	2	0	0	2

b) Number of airstrikes – Syria

Month	Tornado	Typhoon	Reaper	Total
July	0	0	0	0
August	0	0	0	0
September	5	9	3	17

5. Flying hours

Month	Tornado	Typhoon	Reaper	Total
July	393	612	920	1925
August	520	635	935	2090
September	529	631	969	2129



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Reference: FOI 2018/12155

Mr C Cole
chris@dronewars.net

28 November 2018

Dear Mr Cole,

We refer to your email dated 20 November 2018, which requested the following clarification to our FOI 2018/12155 response dated 16 November 2018:

"I asked where UK Reapers are located by geographical region. Your reply stated that the UK Reaper system is located in the UK, the Middle East, and the United States. Please can you confirm that in your reply you meant that UK Reaper airframes are located in UK, the Middle East and the US."

We can confirm that UK Reaper Airframes are currently located in the Middle East and the United States of America.

We trust this clarifies our original response.

Yours sincerely,

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Reference: FOI 2018/12155(54)

Mr C Cole
chris@dronewars.net

16 January 2019

Dear Mr Cole,

We refer to your email dated 20 November 2018, which requested the following clarification to our FOI 2018/12155 response dated 16 November 2018:

"... [I]n Operation Shader you say that Reapers flew a total of 122 missions in July 2018, 126 in Aug 2018 and 125 in Sept 2018. These seem extraordinary high. As do the total figures for Tornado and Typhoon missions in those months. In figures released to me previously the total number of missions flown per month by Reaper has never exceeded 80. Similarly Tornado missions have previously never exceeded around 70 missions per month and Typhoons have never exceeded more than 60 per month, yet the figures provided detail more than 100 Typhoon missions per month. I would be grateful if these figures could be checked."

We can confirm we have reviewed the data we submitted, please find corrections below with changes highlighted in red.

1) Number of missions

Month	Iraq			Syria			Total		
	Tornado	Typhoon	Reaper	Tornado	Typhoon	Reaper	Tornado	Typhoon	Reaper
July	30	53	60	10	0	2	40	53	62
August	38	53	61	10	2	4	48	55	65
September	38	54	61	9	0	3	47	54	64
Total	106	160	182	29	2	9	241	162	191

When transferring data, the missions recorded as entering Syria were inadvertently substituted for the total number of missions per type.

4a) Number of airstrikes – Iraq

Month	Tornado	Typhoon	Reaper	Total
JUL	0	1	0	1
AUG	2	0	0	2
SEP	0	0	0	0

4b) Number of airstrikes – Syria

Month	Tornado	Typhoon	Reaper	Total
JUL	0	0	0	0
AUG	0	0	0	0
SEP	5	9	4	18

Please note that Weapons Release Events, sorties with weapon releases and numbers of weapons released have been defined previously and are different from airstrikes.

We trust this clarifies our original response.

Yours sincerely,

PJHQ J9 FOI Secretariat